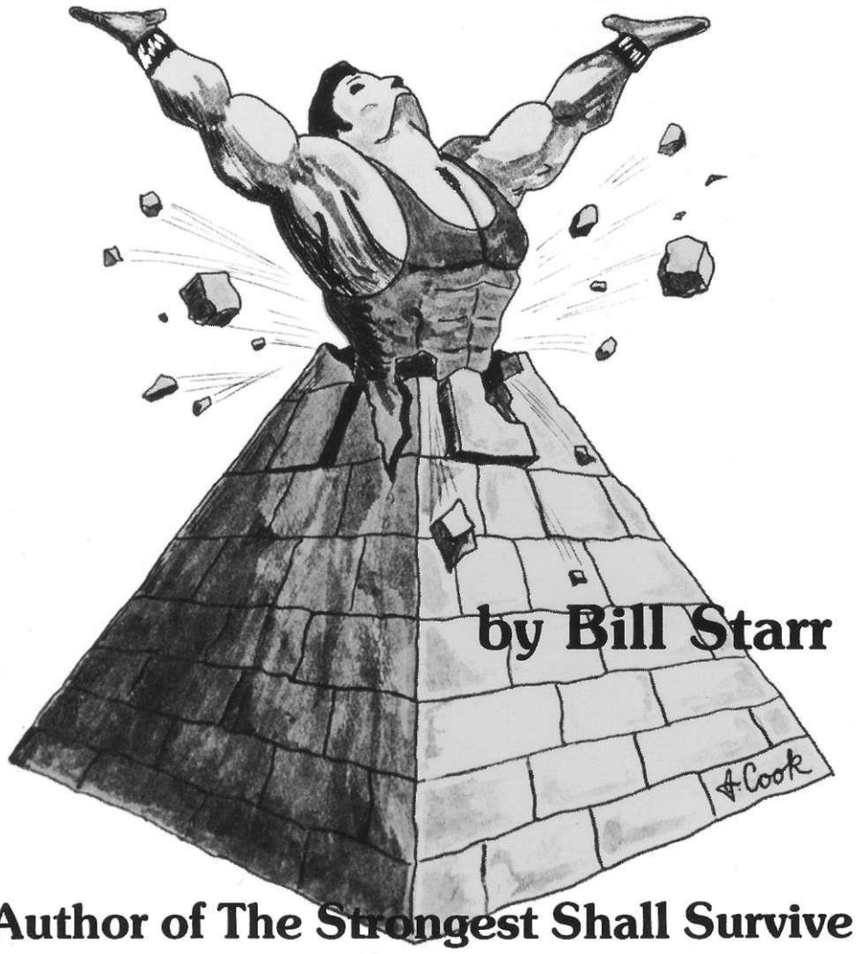
DEFYING GRAVITY

HOW TO WIN AT WEIGHTLIFTING



by Bill Starr

Author of The Strongest Shall Survive

DEFYING GRAVITY

How To Win At Weightlifting

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DEFYING GRAVITY

TABLE OF CONTENTS

Chapter		Page
	Introduction by Dr. Ken Leistner	
One	Final Preparation for a Contest	1
Two	Training the Final Two Weeks	7
Three	Mental Preparation	13
Four	Sex and the Barbell	24
Five	Nutrition Down the Home Stretch	29
Six	Making Weight	40
Seven	The Factor of Rest	48
Eight	Some Old Indian Tricks	54
Nine	The Art of Warming Up Properly	64
Ten	Biorhythms and the Weightlifter	72
Eleven	Dealing with Drugs	84
Twelve	Flotsam and Jetsam	95

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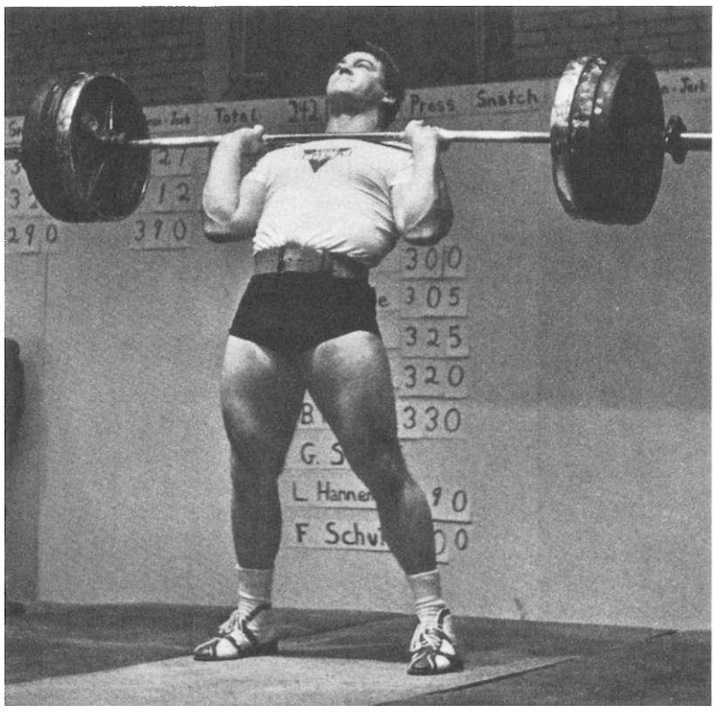
	Buyer's Guide	104
	Listing of Gyms	116
	Listing of Magazines and Newsletters	118

Dedication

One of the genuine treats of going to all the time and effort to write and publish a book is to be able to publically honor a person who has been special in my life.

John Thomas "Super" Suggs, of Oyster Creek, Texas believed in my writing and lifting abilities early in my career. He has stood steadfast beside me throughout the difficult periods and continued to prod, encourage, and assist in whatever manner needed at the time.

The trust he has shown is truly appreciated and sincerely acknowledged.



Introduction

I remember picking up my copy of The Strongest Shall Survive, reading it in one sitting, and having the sinking feeling that I had just read the book that I should have written. Instead of going ahead and writing my own book, a definitive one, a book of interest to everyone who has ever stepped upon the competitive platform, I now find myself writing the introduction to that very book. Alas, Bill Starr has beaten me to the punch . . . again.

Bill and I go back many, many years. Some of them are best forgotten, others to be remembered fondly. Through both hard times and sweet dreams, Bill has remained the ultimate authority on the weight sports in the United States. Perhaps his words would seem more authoritative if he had been named national coach, I don't know. I do know that his words always have, and continue to speak the truth to the guy in the trenches, the dude that heads for the gym three, four, or five times each week to tug on the iron.

Bill doesn't flaunt fancy-assed pedigrees or hold to any political affiliations. He hasn't asked any official body to fund him or his ideas. He goes his own way, does his own thing, and provides all of us with the words of wisdom that puts pounds on our totals. That, my friend, is the bottom line in the game of strength.

Although Defying Gravity takes a different look at the barbell, in comparison to The Strongest Shall Survive, it is no less complete. All aspects of competitive preparation are dealt with thoroughly, and his points are punctuated with wit, humor, compassion, and pathos; for Bill is one of us, he has paid his gym and meet time dues, and he speaks from his heart. Biorhythms to back room bawdiness, hook grips to hookers, vanity to vanilla fudge; yes, all the drama of the competitive lifting scene is presented in a manner which will allow both the novice and elite lifter to avoid the pitfalls that awaits the uninformed.

I can only admit that it is with much pride and a touch of jealousy that I urge every Olympic and power lifter to read Defying Gravity, and then read it again. It is informative, enjoyable, and above all else, it is the real thing.

Dr. Ken E. Leistner
Hewlett, New York
January 18, 1981.

Preface

The idea of writing a book dealing quite specifically with the sport of competitive weightlifting began in the spring of 1979 in Wichita Falls, Texas. Its origin coincided with the giant killer tornado which ripped devastation through that North Texas city. I was in town to be with my daughter, Christi Lou, who was at that time convalescing from a near-fatal auto accident. I would spend my afternoons and evenings visiting her at the hospital, but had little else to do, work-wise. I took care of business correspondence and trained. I began filling in the dead time by writing.

I selected the theme of final preparation for a contest as this seemed to be the most prevalent concern of the competitive lifters who I had visited with during the last few years. I knew that there were many good training programs available on the market and really didn't see the need, at that time, of adding my own. I did feel, however, that there was a gap in the available knowledge. The serious competitive lifter wanted to know how to bring all of his or her strength to a peak on contest day.

After I had settled on the theme for the book, I set myself a schedule of writing a chapter a month for the next year. The various chapters, therefore, were written in many different part of the country. The nutrition chapter was researched and written at Jack King's house in Winston-Salem, N.C. I wrote biorhythms while visiting with my brother Gary and his wife Phyllis in Sparta, N.C. Several chapters were written in my mother's house in Forest Hill, Maryland and some were done in Carmel Valley, California while staying with friends there.

After I completed the final chapter, I spent the next six months rewriting, editing, then rewriting again. This important aspect of producing a finished product was done in Texas, California, and Maryland. This movement across the country allowed me the opportunity to talk to many lifters about their concerns and problems. It gave me valuable insight and aided me in my final editing.

At the beginning of 1981, I started putting the publishing gears in motion and five months later *Defying Gravity* went to the printer.

My overall goals of publishing *Defying Gravity axe.* twofold. I hope the book will enable every competitive weightlifter to achieve a higher level of success and secondly, I hope that each and every reader enjoys reading the book.

Acknowledgements

I wish to thank all those people who have assisted me in the production of Defying Gravity, over the past two years.

Kenny Leistner contributed his time and talent by writing a most flattering introduction. He also proofed the earliest version of the book and has encouraged me on every step of the project.

Without Mark Rippetoe's efforts, I seriously doubt if there would be a Defying Gravity. Rip gently nudged me into beginning the writing of the book, he proofed my first draft of the manuscript, supplied me with photos, and has been most instrumental in the final product.

A special thanks to the following people who supplied me with the photos found in this book; Bob Berry, Penny Stillwell and Kathy Tuite of Women In Power, Bob and Sherry Hise of International Olympic Lifter, Mike Lambert of Powerlifting USA, Ken Thornton, Kevin Allen, Steve Dussia and all the other who contributed pictures.

I must recognize all those who put up with me as I wrote and assembled this piece. Jack and Jeannie King, Gary and Phyllis Starr, Doug and Clay Patterson, Mark and Christi Callender and Elizabeth and Princo. To my mother, Virginia Starr, I give an extra-special thanks for putting up with never-ending phone calls and my presence during the final, hectic days of publishing. Her patience of my strange behavior and unpredictable moods is recognized and appreciated. Despite my weird habits and strange friends, she continues to stand with me. I have a very neat Mom.

I thank my loyal and competent typesetters, Betty Stailey and Terry Massey of Stailey's Composition in Grand Prairie, Texas and my able printer, McNaughton-Gunn of Ann Arbor, Michigan.

Finally, I wish to thank all my trainees, those lifter who have been willing to try some of my formulas and to test out my theories. They are, in reality, what Defying Gravity is all about.

There was a booklet entitled Defying Gravity: Technical Instruction on the Two Hands Snatch, available in the mid-sixties. It was authored by Al Murray, the British National Coach and D.P. Webster, Chief Coach for Scotland. I hope these two strength coaches approve of this effort.

Prologue

"Knowing Others Is Wisdom
Knowing The Self Is Enlightenment
Mastering Others Requires Force
Mastering The Self Needs Strength."

Lao Tsu
Sixth Century B.C.

CHAPTER ONE

Final Preparation for a Contest

This book is not intended to help the competitive weightlifter set up a new training program. Its aim is not to help you to get out of a training rut. Its primary purpose is to help you to do your very best in your next contest. By following some of the ideas presented, you will be able to reach your potential on the lifting platform, most certainly the goal of every lifter.

The guideline presented in ***How To Win At Weightlifting*** will enable any weightlifter to perform better. These little tips come out of my experimenting, testing, learning, and in many cases relearning over a 20-year competitive period.

Most of these ideas I picked up the hard way, a basic characteristic of my personality. Trial and error. Or more often than I care to admit, error followed by more error, until I stumbled into a simplier way. By the time I had learned the majority of the things I'm passing along to the reader I was fairly well beaten up by the barbell. Hopefully, my guinea-pigging will help all lifters who are interested in improving their totals to shortcut some of the problems.

I'll begin this instructional piece two weeks prior to the competition, as this is when the preparation must really begin at a much more intense level. At this point, the lifter should realistically know at what weight he or she will actually be attempting at the contest.

The Mini-Test

One way to help you to select your contest poundages, especially your opening attempts, is to have a mini-contest two weeks before the actual meet.

It is important to go through all the lifts in the exact order they will be contested. Many power lifters, for example, do the max benches on Monday, squats on Tuesday, and dead lifts on Wednesday. They then proceed to add up their top singles and arrive at a total. This is, in fact, a very misleading total. The only realistic way to find out where you really stand, total-wise, is to put the three lifts back-to-back, just as you would in a meet.

I often hear lifters complain that they just can't do their deadlifts at the end of a heavy squat session or clean and jerk after a heavy snatch workout. This is understandable, and it is advisable to separate these movements when the work load becomes extremely heavy.

But, a meet is a different ball of wax. There are no provisions for not being in condition to handle big lifts, in order. So you must get your body ready for the stress. Do the lifts in the same order as they will be contested. Again, many athletes start their daily training with benches or perhaps some heavy pulling. The proper order should really be followed for the final two months, but certainly no later than the final two weeks. This is essential. Those who have been doing priority training to help a weaker lift also need to switch their programs, so that they are doing the lifts in competitive order.

The primary purpose of the mini-test is to check on your weaker points. This will allow you five or six workouts to help remedy the problem, or problems. Most likely it will be a technique fault, or it may be a weak point. Either of these difficulties can be corrected to some degree.

Perhaps, as you are maxing on your bench, you find your difficulty is in locking at the top. The triceps are the weaker link. Two or three extra sessions concentrating on the triceps will enable you to overcome this problem. You don't want to discover this weakness in the warm-up room. Then it's panic city.

Or you find that you are obviously tiring as you get to the final dead lift or clean and jerk. A few choices present themselves. Add a bit

of cardio-vascular work during the next week. Upgrade your nutrition. Start doubling up on the E for the final two weeks. Start working quicker in your training session, pushing the work load up and condensing the time. There will be more on the nutritional aspect later.

When you mini-test, you do not have to actually single out on the lifts, but you do have to go heavy. You could do heavy doubles on the lifts. This would give you adequate feedback and not tap into the mental well as greatly. A set of fives will not give you the same data as a heavy single or double. The groove is much tighter as the weight gets heavier. You can make a technique mistake with a weight which is 50-75 pounds under your max and it will hardly be noticed. Make this same mistake at max and the lift is lost. Breaking a dead lift or heavy clean off the floor too far from the body is a common error. With a lesser poundage, the lifter simply adjusts and pulls it in the correct groove. At maximum poundages, this does not happen. The weight drifts further and further forward and the lift is lost. The maximums for doubles and singles are necessary, then, for the lifter to see what he or she needs to work on more thoroughly the final days.

The primary purpose of the mini-test is to check your weaker points. It also enables you to realistically determine your poundages for the contest.

It also enables the lifter to realistically determine his or her poundages for the contest. Some athletes are able to gear up for a contest and can truly expect to do 15-20 pounds more on contest day than they do in the mini-test. Conversely, others can expect to do the same in their home gyms that they do in the meet.

As a general rule, most bench and squat within 5 or 10 pounds in a meet of what they do in the gym. The deadlift is a different story. This lift can be elevated by 50-75 pounds over what they do in training. The Olympic lifts vary more than the power lifts as they require a greater degree of technique. An Olympic lifter may be quite strong on meet day, but if his technique is faulty, he will be nowhere near his best. Conversely, should an Olympic competitor be "on", he can expect to do 20-40 pounds in the meet than he has been accomplishing in training sessions. Powerlifting is a much purer strength test, although there is no question that better technique does help a great deal.

Projecting Your Meet Attempts

If, in your mini-test for a power meet, you do 425x2, 325x2, and 525x2, you can realistically figure on hitting these top poundages at the meet- 440-460 squat, 340-350 bench, and 560-580 dead lift. If you have hit a 220 snatch and a 297 clean and jerk in the mini-test, you can plan on snatching 231-242 and clean jerking 308-319 in the contest. Note at this point, I leave a range and do not arbitrarily set a hard and fast poundage. This should not be determined this far in advance. There are too many variables that may crop up in the final two weeks (and most likely will). What you are seeking is your range—what you can expect should things not fall in order and what to expect should everything click.

It may appear a bit pessimistic to consider the low end. Nay, only realistic. I have personally salvaged meets by realizing early that it was not one of the good days. Had I gone ahead with my "super" expectations, I would have bombed. This is one rule I learned the difficult way. Especially during my early lifting years, I would set goals for an upcoming meet and not vary, come hell or high water. My feelings, at that time, were that any deviation from my game plan would adversely affect my lifting. After coming home empty-handed (and a bit embarrassed) it dawned on me that it really mattered little just what I had put down as my projected total. The meet was not conducted on a pad of paper. It was the data recorded by the official scorer that mattered in the final analysis. No athlete in any sport is "on" every day and to be able to adjust is one of the greatest assets of the successful competitor.

Too many uncontrollable things may happen. Your children. One is running a temperature the night before. You miss your needed rest. Family problems the final few days will throw your mental preparation out of whack. Injuries. Work. Extra, unexpected duties. The many factors that influence your

day-to-day living can also affect your performance on meet day. Naturally, all things cannot be controlled by the athlete as he or she prepares for a contest. What I'm suggesting is that these outside factors be considered when selecting poundages at the meet.

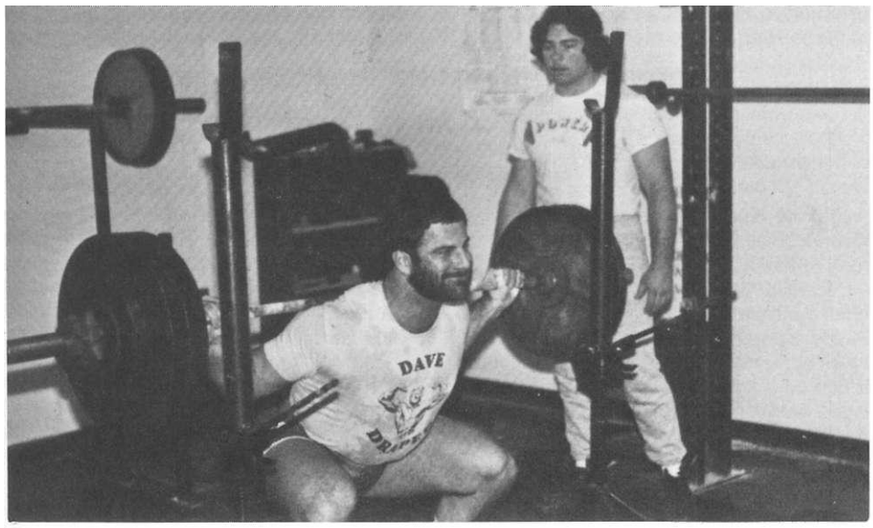
Dress Rehearsal

One of the practices which I've found to be most effective is to go through a dress rehearsal prior to the contest. I recommend this during the final two weeks. Again, the purpose is to cut down on as many different factors as possible.

If you are typical, you train in sweats or shorts and a t-shirt, day after day, week after week. Should you never wear your actual lifting uniform until the day of the meet, it will feel strange. The straps on the lifting suit are bothersome. You suddenly feel drafts that weren't there before. You feel quite naked. The "super-type suits" are especially difficult to adapt to. You need a number of sessions in order to get used to the different feel of these ultra-restrictive suits. All these little things interfere with your concentration. All your mental energies should be geared towards the lifts themselves. By doing your training in your actual competitive gear (or a facsimile) you can bypass this irritation. You may want to save your favorite lifting suit for the day of the meet. Fine, just so long as the one you practice in is of the same material, fits the same, etc.

Go through all the steps in the final days as you would at the meet. Begin checking your time between attempts. I have my lifters go through some workouts in these final days at various speeds. One workout we will move rapidly, taking no more than three minutes between heavy attempts. This prepares the athlete in the event he follows himself on the platform. Should the lifter never practice this procedure, he sets himself up for big problems should this occur, which the odds would certainly favor. You have to face the reality of a missed attempt with no one else selecting the same weight. Or, you may be lifting weights that no one else has chosen. It will happen.

At other session, we deliberately go quite slowly as some occasions call for long waits between attempts. Some of the bigger meets in the east used to be genuine tests of endurance and mental control. At one National Olympic Contest, I had a 45-minute wait between my 1st and 2nd attempts on the clean and jerk. Keeping the mind and body ready is very difficult. By practicing, within limits, naturally, these time differences, the athlete will not be completely blown out when they do happen. I'll comment on some ways in which to handle the extra long waits later.



Mike "Raw Meat" Moore goes through his final preparation for the squat at Bailey's Gym in Seaside, California. Teammate Marinello Rosario waits his turn.

4 / Final Preparation

Same Time of Day

I recommend that lifters do their training during the final two weeks at the same time of day as they will be competing. Once again, we want to eliminate as many aggravating variables as possible. Time of day is very important. If you train consistently at 4 pm and you are scheduled to lift in the meet at 12 noon you are already at a disadvantage.

Scientists have shown that the body actually gears up in preparation for an exercise session. After a prolonged period of training, over months and years, the body becomes educated as to what you are trying to accomplish. We are all creatures of habit and weightlifters even more so than most. Our diets become consistent, our sleep, recreation, and outside activities revolve around training. Vary this and our performance is affected.

Yet, I often see athletes compete in a morning session who never, ever lift weights before 4 pm. There is no possible way for them to do well. The body just does not adapt in one day.

But it will adapt in a week or so. Everyone who has had to switch training schedules knows this to be true. Usually it is a change forced on us by our occupation. The training time is switched from 4 pm to 10 am for whatever reason. The first workout is a disaster. You figure that you'll never get accustomed to the early hour. Three or four workouts later, things aren't so bad. After a couple of weeks, your lifts start moving again. It takes 10 days to two weeks for your body to adapt to a new time schedule.

I learned this simple, but basic lesson when I entered my first Junior Nationals. I always trained in the late afternoon. The weigh-in for my division was 10 am. I got up at 8, had a light breakfast, weighed in and began warming up. My mind was psyched as the adrenaline was flowing, but the weights felt unusually heavy. Not realizing the problem, I did not adjust my opening attempts and got to watch the snatches and clean and jerks from the audience. Over half the competitors in the class bombed, and I would suspect most did so for the same reason. Just a small thing, but in this case it was "the" primary factor. The lesson stuck.

In preparing for a contest, you may not be able to set the exact hour that you will be lifting. Some contests are so poorly organized that they may list a weigh-in for 6 pm and in actuality, you weigh-in at 9 pm. You can, however be ready for the general time of day, that is, morning, afternoon, or evening, and this is the most important point. If you have adapted to morning lifting, then it will not matter if you actually begin at noon, rather than at 10:30. For some reason it also seems to be easier to lift later than you are accustomed to than it does to lift earlier. Once the energy starts rolling, the athlete can usually keep it up, but it's hard to get it rolling at an earlier time of the day.

While it is not likely that you can adjust your weekly training schedule during the week because of your work, you should be able to select the appropriate time for your Saturday workout.

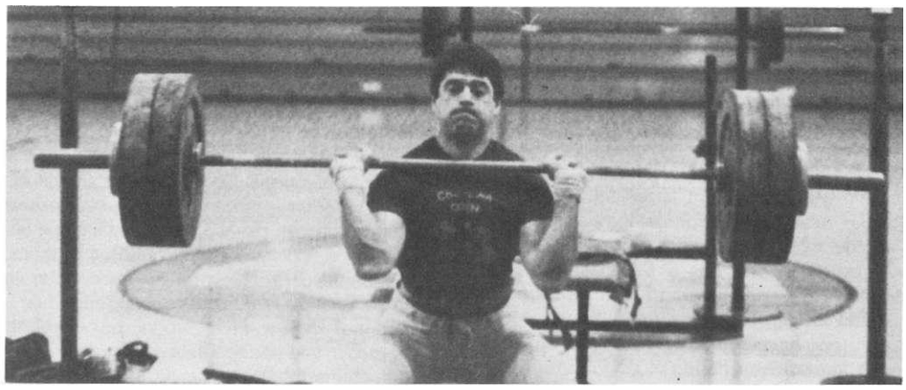
Same Circumstances

It is also to the lifter's advantage to attempt to duplicate the actual meet situation as closely as possible. Do they use an extra soft bench, a bench with narrow uprights, a rubber, spongy platform, a smooth bar? A thick bar? Not all of these factors can be know should you be going to a new contest, but quite often you can discover what is to be expected and prepare for it.

Especially the unusual. Some meets use very unusual equipment and you might as well be prepared for it. I've been to meets that use a wide wooden bench with uprights that hit exactly where I grip the bar. Knowing this in advance, I practice on a hard bench and teach my spotter to give me a staggered hand-off. It helps.

I also suggest changing your training site the last few weeks. If there are other gyms or weight rooms in the area, use them. Get used to lifting on different benches, different squat racks, different bars and platforms. Should you nest in your home gym, you unconsciously get accustomed to the temperature, feel of the floor or platform and all the surroundings.

Be prepared for the unusual.



Ken Leistner in action. Ken is the outspoken feature writer for Powerlifting USA. His views and advice are aimed at the grass roots competitor.

Come into a contest from this safe environment and it's like you entered a foreign country. You are already at a disadvantage. You do not feel secure . . . or confident.

I entered a power meet in New Jersey to qualify for the Seniors. I had been doing squats in the York Gym. It had a stair-case rack facing a concrete wall. The lifting platform at the meet was in the middle of a gym floor. I took my opening squat off the rack and suddenly realized I did not have a focal point for my eyes. No wall for 100 feet. I had not realized how accustomed I had become to fixing my eyes on those concrete blocks. My balance was severely affected. My first two attempts, with a weight some 40 pounds under my best, went over my head. This was very embarrassing as I was receiving many favorable comments from the announcer on being the editor of Strength & Health. As our Team Trainer, Dick Smith, would say, I could have dangled my legs off a dime. Another lesson the hard way.

If you cannot go to other training situations, at least change your position in the gym. Face the opposite direction when you squat or do your snatches. Bench on the cruddiest bench in the gym for a workout or two. Dead lift on a smooth bar or at least a different one than usual for at least one session. Then, if the unexpected happens in the meet, you are better prepared. The less you leave to chance, the better the final results.

The Danger of Mirrors

A word concerning the use of mirrors. If you have been lifting in front of one, definitely drop the practice. You utilize eye cues when performing before a mirror. You cannot plan on the head judge holding one for you at the meet. You must learn to "feel" the movement, not "see" it. More than one lifter has bitten the dust as a result of this practice and never figured out why.

Getting Used To Kilos

If you are headed to a meet in which they will be using kilograms, it's certainly important to become familiar with the conversions before you hit the warm-up room.

If you have a training facility in the area that has a kilo set, go use it once or twice before going to the meet. It doesn't take long to familiarize yourself with the difference.

If not, get a conversion chart and teach yourself how to convert pounds to kilos. A bit of mental drill as you are watching t.v. or driving will help. Do a bit of "test me, I'll test you" with your training partner.

Learn how the kilo set appears when loaded. The base weight with two big plates (44 pounders, 20 kilos) is 132 rather than 135. Four big plates is 220 rather than 225, six is 308 rather than 315. Be aware that they may use a 25 kilo plate for the base (55 pounds).

You can usually work out the even numbers quickly in your head. Knowing that a kilo is roughly 2.2 pounds, it is not difficult to do numbers such as 100, 120, 140 and so forth. Working off a 100 kilo base (220 pounds) you can simply add on: 5 kilos (11 pounds) = 231, 10 kilos (22 pounds) = 242, and so forth to the next base number.

It is a very good idea to have a calculator and conversion chart handy, no matter how acquainted you might be with the kilos, as it

becomes very difficult as you battle for position coming into the final lifts. The kilos can be confusing when you are attempting to figure out what weight you need to move up a place or to stay ahead of another competitor.

In powerlifting you will have a sub-total to deal with and trying to wheel and deal in your head can be confusing. Attempting to figure what you need to move ahead of a competitor who has a 422.5 sub-total (to your 407) and is starting with 222.5 in the dead lift can be a real mind-blower should you not have a pencil and paper or, better yet, a calculator handy to do the math. Add to this the fact that there are six other lifts in a pack and you have to keep tabs on all of them. Without adequate preparation, you will find yourself spending more time doing math than mentally preparing for the next lift.

Be extra strict in your judging during the final two weeks. Honesty is critical. Seek out a training mate who will not pull punches and who has an eye for judging correctly.

Do whatever is necessary in order to be ready. Having a coach or teammate handle this chore is immensely helpful. This can relieve you of this responsibility and allow you to put full energy into lifting weights.

In the same vein, you should also be familiar with the 100 pounders. The base weight becomes 245, rather than 135. Should you never use the big plates, they will look and feel strange. It is a good idea to train on them, if they are to be used in the meet, during the final two weeks positively and longer if possible. It is also important for you to be able to double check the weight on the bar before each attempt. Otherwise, you will be lifting blind and this, once again, interferes with mental concentration. It's a luxury to have a coach to do this, but in the final analysis it is your responsibility. After all, it is your attempt and no one else is as concerned as you are. This is guaranteed.

Preparing For Judges

Begin seriously judging the lifts during these final two weeks. No gifts. Be extra strict. Have a training mate clap for all heavy attempts at every session. I usually give extra slow claps, again in case the judge happens to be semi-spastic. Should you get an old ex-Olympic lifter as your head judge at a power meet, you can usually plan on waiting a bit. Might even pack a lunch for some of them.

Definitely don't patronize each other in these final days. This often happens when a national caliber lifter works out with his trainees. The young lifters do not want to tell the champ that his squats are high or his dead lifts are hitching. They praise every lift. Basic ass-kissing. Nothing could be worse for the athlete. I might add that the champ often brings this situation on himself. Should a training mate criticize his lift, he may become angry and argue about the decision. Let him learn at the meet.

I believe in being extra strict in the final days. It it's borderline, say so. This is where honesty is critical. Seek out a training mate who will not pull punches and who has an eye for judging correctly. One of the best we had at the University of Hawaii Gym was a female, the semi-famous Herculette, Stephanie Ciarelli. She delighted in judging the final training days as she could get revenge for all the static she had been receiving. She was extra critical and this was most valuable to us.

Always, always assume that the judge will be strict and extra harsh. You can adapt to the lenient judge, but it is a strain on the mental power to have to adjust to the official in the front seat who gives the two-second clap, or the side judge who wants to see hemorrhoids pop before passing a squat. Be ready for the worst. Then when everyone else is going berserk with the power-crazed official, you are putting your mental energy into the next lift.

Summary

Winning in any sport is a matter of taking care of details. Many, many details, from a comfortable lifting suit to the pre-meet meal. This requires thoughtful preparation and it begins many weeks before the actual competition.

By taking care of as many of these details as possible, the competitor frees his mind to concentrate on the primary task at hand, i.e. lifting maximum poundages.

CHAPTER TWO

Training the Final Two Weeks

There are probably as many training schedules as there are gyms across the country. Most competitive weightlifters utilize the basic concepts in a variety of routines which have proven successful for them.

In this chapter I will present a few simple rules of thumb, philosophies if you will, that apply to all programs. These basic ideas can be incorporated into any program to help the lifter to peak at the desired time, regardless of what training routine is being followed.

Drop Unnecessary Work

As you get closer to the contest you will want to cut out many of your auxiliary exercises. This includes such movements as leg extensions, calf raises, curls, hyperextensions, chins and any other specific work which is not being used to correct a weak point.

Curls or chins are often included in a strength routine. These are generally cosmetic and serve a definite purpose, except when the lifter is preparing for a contest. At this time (the final two weeks) all energy should be incorporated into the primary movements. The frills have to be dropped. No more lateral raises, lat pulls, or dumbell inclines.

Running is also halted. The cardiovascular fitness will carry over for two weeks for sure and, once again, the energy put into running, racquetball, or basketball, needs to be incorporated into the primary lifts. For the powerlifter, this means everything is geared towards the squat, bench, and dead lift. The Olympic lifter must concentrate on the snatch and clean and jerk.

Perhaps a bit of clarification is necessary as I mentioned earlier that one purpose of the mini-test was to discover weak points so these could be worked during the final two weeks. If you decide that you need more lower back work and/or more triceps strength, then auxiliary movements for these muscle groups can and should be included into the program.

You will have four or five more workouts to add these auxiliary exercises into your program, but all auxiliary work should be stopped by Tuesday the week of the meet, assuming that this is a Saturday meet.

Put the auxiliary exercises into your program *after* you have done your major muscle work and restrict each to no more than 2-3 sets. Do not follow a full power workout with another workout for a weak point or you will severely overtrain and cause even more problems.

Another mistake many lifters make is to attempt to correct all their weaknesses during the final two weeks. They feel they need more work for the deltoids, triceps, trapezius, quadriceps and leg biceps and add extra work for each of these body parts. Its simply too late to accomplish it all. You must be selective and choose the areas that are the weakest. You cannot rebuild the body in two weeks, but you can overcome some of the more obvious problems.

Cut Work Load and Increase Intensity

As you move into the final two weeks it is important to handle heavy weights so as to prepare both your body and mind for the contest. The higher reps will be replaced by lower reps. The tens and back-off sets will be dropped. Nothing over fives, except for the auxiliary movements. All higher reps will be lowered somewhat. If, for example, you have been doing tens in the squats, reduce these to fives. On the day that you are scheduled to do five sets of five with a back-off of ten, you will switch to doubles or triples. Hopefully, you have developed a solid strength foundation through your many months of training so that you can taper into

the heavier weights.

By performing doubles rather than fives, you will be able to use 30 to 40 more pounds. This is important just before a meet. For example. Following your mini-test on Monday, you are normally scheduled to do five sets of ten in the squat, finishing with 400 as your top weight. Change this to a five sets of five. Your program might look like this; 135x5, 225x5, 315x5, 405x5, 465x5.

Wednesday is normally a five sets of five day with a back-off set of ten. It now becomes a triples day, where you handle 485x3 on your final set. Drop the back-off set. Saturday is usually a triple day. It is now a double day, which means you handle 500x2, rather than the scheduled 485x3. An important few pounds difference. What we want to do is to move those top weights higher and higher, adapting the body to the bigger weights, without fatiguing the body in the process.

fatiguing, rather than strengthening effect on the muscle group. The lift will regress, rather than progress.

The Critical Final Week

The primary goal of the competitive weightlifter is to bring all of his or her strength training to a peak on a given day. To set personal records in the gym is gratifying, for sure, but not nearly as rewarding as breaking them in competition when the chips are down. Accomplishing this goal has always been one of the greatest problems facing the competitor. It was certainly one of my greatest headaches and it is the most frequently asked question at the clinics and seminars I conduct across the country. If you stop heavy training too early, the weights will feel heavy on meet day. If you train too close to the contest, you will enter it fatigued. The trick is finding the proper balance of work and rest.

The primary goal of the competitive weightlifter is to bring all of his or her strength training to a peak on a given day.

Note that we do not start this escalated program until the final two weeks. Should you move into this program too early, such as a month or six weeks before, you will peak too soon. You are working off the prior work, the base of the strength pyramid. Once you peak, you must go back and rebuild the strength foundation, so care must be taken so as not to accelerate too early.

The week following your mini-test can be a week of hard work, utilizing the heavier weights, lower reps, fewer exercises and a couple of selected auxiliary movements at the end of each program.

I generally recommend no more than two auxiliary exercises per workout and never more than 2-3 sets. Preferably, two sets of high reps seems to be most effective to help a weaker muscle group.

Should, for example, you decide you need extra triceps work, two or three sets of pullovers, dips, or close grip benches for 12-15 reps work well. You should not increase this to four, five or six sets as this is a

After far too many years of hit and miss, I finally came up with a fairly simple routine to ready myself for the meet. I utilized it during my final few years of competition and have since taught it to hundreds of others. It worked very well for me and for all who used it. I did not always do well at all the meets, but I was always physically prepared. When I performed poorly, it was because of other factors.

The Monday before the contest is a work day. Hard and heavy. Many authorities contend that you cannot gain strength during the final week. I do not agree. If you cannot get stronger the final week, then it follows that you cannot become stronger two weeks prior to the contest, or three weeks before. Logically, then, you cannot become stronger at all.

Nonsense. You can increase your strength if you go about it sensibly. My basic philosophy still holds. Increase the intensity and lower the tonnage load. Work up to heavy triples on benches and squats and

fives in a pulling movement. I do not recommend doing dead lifts in the program during the final week. This troubles some as they feel they need to work this lift. The back will stay strong through this final week and is the area most susceptible to being overtrained. Too many lifters do too much and end up fatiguing the back. The back will thrive with rest.



World Champion Rickey Dale Crain assaults a heavy squat.

You will do some work for the back muscles, but not the heavy demanding movements. I suggest for powerlifters movements such as heavy high pulls off the floor, using straps for five sets of five. An athlete who is expecting to deadlift 600, for example, will be able to work up to 325x5 for his final set. This is definitely hard work, but nowhere as demanding as if the lifter did dead lifts in the high 400s or the low 500s. Typically, in the pre-meet zeal, the lifter will keep going on up and attempt to lift the starting poundage. This is too much for the back at this stage. If you pay attention, you can have your cake and eat it too. You can get sufficient work and yet not tap into the reservoir of strength.

For the Olympic lifter, heavy triples on the clean and jerk and squats are the order for the Monday workout. Do the lifts deliberately, but do not linger between attempts. This is a time to begin using more mental control and refining technique. Be sure to do the jerks with the cleans. Do not do them as separate exercises at this point. I usually have my Olympic lifters do triple cleans and double jerks. This gives them plenty of form work and is very demanding. Since I do not let them go higher than what they can handle for two jerks, the weights used are, out of necessity, limiting. Go directly to the squat rack and perform five sets of five, working up to an absolute max. Aim for a PR. No backoff. Go through the exercises prescribed, stretch out, and leave the gym. No auxiliary work whatsoever. And no hanging around visiting or coaching teammates.

Tuesday is reserved for a bit of final auxiliary training. The powerlifter could do some heavy inclines, perhaps five sets of five. Nothing more. Stretch thoroughly and leave the gym. The Olympic athlete would want to do four or five sets of snatches, in doubles or triples, again going as heavy as possible. As long as the form is sharp. Do not work up to weights with which you are ragged or missing. Making all lifts is critical coming down the home stretch. It is preferable to do 205 for three clean reps than it is to do 225 for a ragged double. You definitely want to leave the gym on Tuesday with a very positive attitude and this can be accomplished with successes. Add one shoulder movement, the overhead press is a good one, for four to five sets of five, spend 15 minutes stretching and beat feet.

Its very important during this final week

not to hang around the gym. Get in and do your work and leave. The time spent talking with fellow lifters, spotting teammates, and, in general just being in the gym atmosphere, is mentally draining. The mental, as well as the physical, energy must be stored.

Wednesday is a rest day. You can do lots of stretching and you should be doing plenty of mental rehearsal.

The Final Session

The workout for Thursday is an original concept. I developed it after analyzing as many facts as possible and discovered that it worked, not only for myself, but for all who tried it. It is so simple it seems devious. But, as I've so often found in this sport, the simple is quite often the most effective.

It is very important that you go through your prescribed workout and leave the gym promptly. No hanging around.

The routine is the same for powerlifters and Olympic athletes. You will do three sets of three exercises, one for each major muscle group, in a circuit. A "Big Three" day. I came across this idea while I was an Olympic lifter. When I entered power meets, I tried it to see if it applied. It did, as the basic rules of preparation are identical for both. Since first utilizing the program, I have applied it to discus throwers, shot putters, any strength athletes. It works for everyone.

The lifts are the Big Three: squat, bench press and power clean, all performed in a rapid circuit. You will not be working for more than 15 minutes, total. If at all possible, set up three stations: one for the bench, one for the squat and one for power cleaning. If you cannot set up the three stations, you will be changing weights quickly and moving the bar as fast as you can. In any event you will do a circuit.

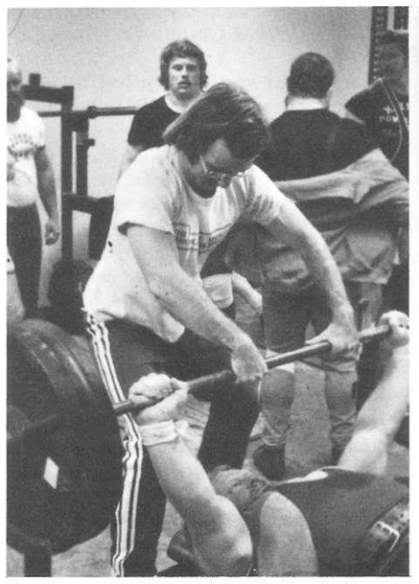
I will use an imaginary lifter, Joe Gano, for the explanation of poundages to be used for a power meet. Joe is expecting to squat with 505-525, bench 395-415, and dead lift 600-625 at the contest. The following is the routine he would do on the Thursday workout.

Stretch and warm-up thoroughly. Squat, 135x5, go immediately to the bench, 135x5, walk directly to the bar on the floor and power clean 135x5. Its an asset to have an assistant as he can be loading the bar just behind each set. This will enable you to move faster as there should be no rest at all between sets. As soon as the bar is reloaded, do 225x5 in the squat, 225x5 in the bench, and 135x5 in the power clean. Reload quickly. For the final set; squat 345x5, bench 305x5, and power clean 135x5.

You are finished. Take some time to do a complete stretching routine plus a bit of abdominal work, shower, and leave the gym.

Our hypothetical Olympic lifter, John Miller, has his sights set of 250-260 in the snatch and 340-360 in the clean and jerk. We also know that John can squat with 425x5 and can bench 350. He would do the following routine. First set: power clean 135x5, squat 135x5, bench press 135x5. Second set: power clean, 135x5, squat 225x5, bench press 205x5. Third set: power clean, 135x5, squat 315x5, and bench press 255x5. Go through a complete stretching program and adios.

Note that the order of the lifts are different for the Olympic lifter. The reason for doing so is self-explanatory. This is basically the only variation.



Ray Verdonck hands off to Tony Fritton at the Hawaiian Invitational.

Substituting the Military Press

As I mentioned earlier, I devised this pre-meet formula while I was competing in the Olympic lifts. 1 utilized the bench press rather than the military so as to work the shoulder girdle, but not in the same direct angle as 1 would be using in the meet. 1 did benches once a week in my Olympic program. If you do not do any benches in your program, then I would recommend substituting the overhead press or the incline for the bench. Also, some power lifters, using the same logic, prefer to stimulate the shoulder muscles in a somewhat different angle and incorporate the military or incline into the program. If the military press is substituted, then 135x5, 165x5 and 185x5 would be in order for our sample athletes.

You have noticed that you never used over 135 in the power clean. Why so low when the projected dead lift is over 600 pounds and the clean and jerk at 360? A truism I've found, and one of the reasons this program does work, is that the muscles of the shoulders and legs recover much faster than those of the back. The back thrives on rest the final week. The light power cleans serve to stimulate the muscles sufficiently without overtraining them. The legs and shoulder girdle are worked a bit higher, but no so high as to tap into the well. Its important at this point not to get too greedy.

By moving rapidly, you will find that the third set will not be all the easy, even though the weight is relatively light. You should finish just a bit winded. If you haven't worked up a good sweat, you have moved too slowly.

When I outline this workout to lifters for the first time, they usually get edgy about the limited weight they are to use. All I can say is "trust me." When they finish, they are quite surprised just how difficult the final set really is. The routine seems to serve the purpose very well. It gets blood into the working muscles, allows the lifter to "feel" the weights fairly close to the meet and is not fatiguing.

Should you lay off training completely for the final week or even drop all training after Tuesday or Wednesday, the weights will assuredly feel foreign in the warm-up room. If you decide to train heavy too close to the contest, then you are lifting on fatigued muscles. Neither produces optimum results.

Fridays Are For The Mind

Friday is reserved for mental preparation and some flexibility work. Ideally, you should isolate yourself and go through a complete rehearsal. Also, spend 15-20 minutes doing shadow lifts and stretching. This the day to get your lifting gear organized. Don't put this off until just before you are ready to go to the weigh-in. Lay out what you are planning to take to the meet. It's a fine idea to make a check list. It's much easier on your mind to have all the things you need ready, 24 hours early, rather than be scrambling for a thermos bottle ten minute before weigh-in. Should you find that you are lacking some piece of gear, you can pick it up on Friday evening without rushing. If you discover that you have left your belt in the gym or need a new set of shoelaces as you are ready to dress at the meet then you have already put yourself in a negative situation.

A truism I've found is that the muscles of the shoulders and legs recover much faster than those of the back. The back thrives on rest the final week.

I should add that this advice holds true whether you are competing in your hometown or have traveled some distance to a contest. If you are staying in a motel, this is a fine place to do your mental preparation, stretching, and double checking your gear.



Powerlifting USA's publisher/editor, Mike Lambert is seen warming up in sunny Honolulu.

Be *Selfish the Final Weeks*

Unusual advice isn't it? Being selfish is never in vogue it seems and I'm not in favor of it much myself, but during the final week things are different. Put Number One up front. I do not mean to imply that you should be rude or unkind to others, but rather that you should avoid getting involved with others unnecessarily at this time.

I advised earlier that you should leave the gym as soon as you finish your program. No hanging around. This may mean that you miss seeing and helping your training mate go through his final preparation. He is your friend, yet it is important for you to isolate your interests completely. It is, or course, most desirable for all the lifters from the gym who will be competing to come in and do their final preparation during the final two weeks at the same time. But, if for some reason this is not possible, you should do what is best for your lifting. He should do the same. Weightlifting is, in the final analysis, an individual activity. It is not a team sport. No team member will help you lock out a maximum bench, no matter how loudly he yells.

You need to store your energy for your own lifts. Shouts of encouragement and assistance in coaching to teammates drains a portion of this energy. In a highly-charged contest, you can feel your adrenaline surge each time you urge a teammate on the platform. All this takes away from your performance. For maximum results on your total, you must isolate yourself. It is a time for self.

Get your lifting gear together well ahead of time. Use a check list and don't put it off till the last minute.

This is another basic concept I picked up the difficult way. As I was usually doing some coaching of the other contestants, I could never completely isolate my own mental processes. Teammates would break my concentration with questions on warm-ups, selection of attempts, form, and so forth. I seldom got to concentrate until I got to the chalk box. I felt this affected my performance, but it was virtually impossible to say no to my friends.

I wanted to see if this was really a variable, or perhaps just an excuse. To check it out, I entered a contest in Virginia, alone. No other members of the York team made the trip. I avoided the other competitors who I did know on a friendly basis. I isolated myself in the warm-up room and actually put a towel over by head between warm-up lifts. It's difficult for even the rudest individual to talk to you through a towel. Some tried, however, but when no answer came, they left.

It helped more than I had guessed. I achieved a much higher total than I had expected. It turned out to be a tight contest and I needed to make all my snatches and my clean and jerks to win. My final snatch and clean and jerk were both beyond my planned attempts. The isolation was the primary difference. It allowed me to concentrate my mental energies.

Selfish? Not really, I was at the contest to perform at my very best. My first responsibility was to myself, to accomplish what I had trained hard for during the last few months. By doing my best, I gave the audience just what they had paid to see. I fulfilled an obligation to myself and in this process, to the people.

When the competition was over, then I took time to visit with my fellow lifters and the fans. I did plenty of sharing, but I did it after my primary purpose was accomplished, that being to do my very best. If this is selfishness, then something is amiss.

Summary

The final week is the critical time to preparing yourself for those attempts on the platform. Storing energy begins during the final five days. Avoid all extra stress and chores. This may mean turning down a member of the family on some request. Mow the lawn next week. Help your neighbor remodel next week. Take your wife on the shopping trip next week. Do your taxes next week.

I fully realize that it may be difficult to slide on all of these things, but the important factor to remember is to avoid all unnecessary chores. Certainly, many things do have to be done, but put aside the "extras" till the meet is over. True friends and family will understand. Even if they don't understand, do it anyway. You deserve time for your own interest without experiencing guilt. Politely say no. It will enable you to do just a little bit better.

CHAPTER THREE

Mental Preparation

Anyone who has spent any time involved in any form of competitive athletics fully realizes the importance of mental control. Hitting a baseball, spiking a volleyball, and catching a football all require a high degree of mental concentration. Tommy Kono, the great Olympic and world weightlifting champion of the 50s and 60s, contented that success in competitive weightlifting was 75% mental and 25% physical. Other authorities give varied percentages, but each and every one does agree that the athlete who gets his mental processes together has an edge.

Observe a Larry Pacifico, Doug Young, Mike Bridges, David Rigert or Vasily Alexeev in action and one is immediately impressed, not only with their awesome physical power and strength, but also with their platform poise and confidence. Quite often, the specific weights they elevate are forgotten, but what remains in the viewer's mind is a picture of their composure and self-assurance.

Achieving Self-Confidence

While it is a fact that this self-confidence grows out of many years of experience, it is not necessarily a function of experience. I have witnessed many veterans completely blow it on stage. They exhibited unsureness from the time they weighed-in, I have also seen athletes competing for the first time in a National Championship who displayed this self-same confidence that the great champions possess. So, while experience is often a positive factor, it is not necessarily "the" reason that these athletes are composed and self-assured. Practice does not necessarily make perfect. If the practice itself is faulty, then the end result will be faulty. So it is with mental control.

What these champions do have in common is an ability to tap into their huge mental reserves. They have learned how to utilize their mental energy on the lifting platform. Everyone possesses this energy, but only a very few take advantage of it. In most cases, this energy is either wasted, or worse, backfires and works against the athlete.

This vast energy is available to all, but how it is utilized varies from individual to individual. Those who learn to put this energy into the lifts achieve a higher level of personal success. Those who do not find that this energy makes them extremely nervous. Their thinking becomes clouded, their concentration shattered, and performance is adversely affected.

This vast energy is available to all, but how it is utilized varies from individual to individual. Those who learn to put this energy into the lifts achieve a higher level of personal success.

Everyone is nervous at a competitive event. It is the nature of the species. Some display it more than others. Some competitors talk incessantly, never sitting still or shutting up. They are like steam kettles about to explode. They are, in fact, blowing off tremendous amounts of energy. The "talkers and pacers." Merely observing them tends to make one tired. I always tried to avoid them as you can get contact high by just being around them.

The other end of the pole is the athlete who is so nervous that he becomes catatonic. He never speaks and rarely

moves. While this may appear to be a desirable posture, it is in fact as self-defeating as the overly-talkative individual. The eyes and breathing of the worry-wart betray him. His pupils are glazed and he looks through people, not at them. His breathing is shallow and irregular. He is not, by any measure, under mental control. Both are burning up valuable juice. The one is externalizing his nervousness and the other internalizing it. Neither is desirable as both are wasting energy.

Handling the available energy

Learning how to control the mental energy in competition is the most difficult phase of the sport. Anyone, given sufficient drill can learn to do a heavy clean and jerk or a maximum bench press in the gym. Not everyone, however, can learn to do a maximum lift under competitive conditions, especially when the pressure is on. The difference between the great and the mediocre is this trademark. To be able to come through in the clutch. To make a lift that is absolutely necessary. To be able to incorporate all the physical preparation along with the mental control to pull off a successful attempt. This is the mark of a true champion athlete.

I might add that I have seen some of the finest examples of this ability at the local level. A teen-ager having to make his final bench, after two consecutive misses. A local lifter having to pull a PR clean and jerk to salvage a bronze medal. The top lifters do not always possess this ability. They often win contests with lifts far below what they do in training. They make PRs in training, but not under the stress of competition.

It should be noted that there are countless weightlifters in this country who do not have the advantages of some when it comes to training time, facilities, coaching, and finances to travel to meets, but who have developed a higher level of mental control than some of the national champions, who do have these advantages. They are able to pull out the needed lift, perhaps only in a state-wide meet, with only a handful of spectators in attendance but, never-the-less, they have the quality so many seek.

Many athletes learn how to utilize this energy unconsciously over a period of time. Others go about learning how to do it systematically much as they have learned to do a physical skill. It can be learned and hopefully, this piece will assist the reader in learning how to do so or at least improve his present ability.

As I said earlier, this is the most difficult skill to learn in competitive athletics. There are a number of reasons why this is so. Learning mental control, practicing mental rehearsal, requires a certain amount of patience, a trait few have developed. One cannot have patience merely by willing it. This trait must be practiced also. So, as the athlete goes about attempting to do his mental preparation, he finds that since his patience is lacking there is little hope that the mental training will be beneficial. It is desirable to be capable of patience ***before*** starting the final mental preparation.

I should quickly add that patience can be developed through mental rehearsal and this is the primary reason that the more you practice mental rehearsal, the better it works. You will begin learning self-control which is based on patience. The process can be learned, but cannot be hurried.

Learning mental control is the most difficult skill to learn in competitive athletics. It is a skill that is mastered through practice.

A lack of information

Another reason this is, or has been to date, a difficult trait to learn is that the information has not been readily available to the competitive weightlifter. Those lifters who did have this ability to control their mental energies did not convey it to the masses. Bill March, Tony Garcy, Tommy Kono, Louis Riecke, Joe Puleo, Norb Schemansky, Ike Berger, Pete George and all the other great Olympic Champions of the past decade had

this ability. They, unfortunately, left no information for the rest of us. What they knew left the competitive stage with them. A great loss in my opinion. I might add that some of our great champions of the past are now contributing to the knowledge stores and I am most happy over this. Doctor Pete George, who I had the opportunity to visit on occasion while in Hawaii, is now participating in clinics and, hopefully, will continue to tell the future lifters what he knows. He is one of the most knowledgable men in the world on the subject at hand.

In general then, the methods of mental control have remained a mystery. Roger Hudson, training alone in the mountains of North Carolina can get advice on how to improve his snatch or squat through the periodicals. He may be fortunate enough to visit a coach such as Jack King and pick up specific pointers on his technique or training schedule, but where is he to learn how to develop the mental aspect of competitive weightlifting? This cannot be taught on one visit. He must resort to trial-and-error and while some do learn how to master their mental processes, most do not.

A lesson the hard way

I will insert a personal reference and I ask the reader for his indulgence. I hope not to emulate so many other writers in this field who seem to have their fingers stuck on the "I", but in this case it will help to illustrate my point better. I know how I felt and reacted and could only guess as to others personal feelings in similar situations. In any event, it is not a self-glorifying tale by any stretch of the imagination.

It took me many years, about a dozen if fact, to finally learn how to utilize my storehouse of mental energy on the lifting platform. I did have some successful meets, but I also blew some great opportunities as it was a hit-and-miss situation. When I did well, I did not really know just why and when I did poorly, I was equally confused. I generally credited or blamed my pre-meet schedule, but as it turned out it was my mental preparation, not my workouts.

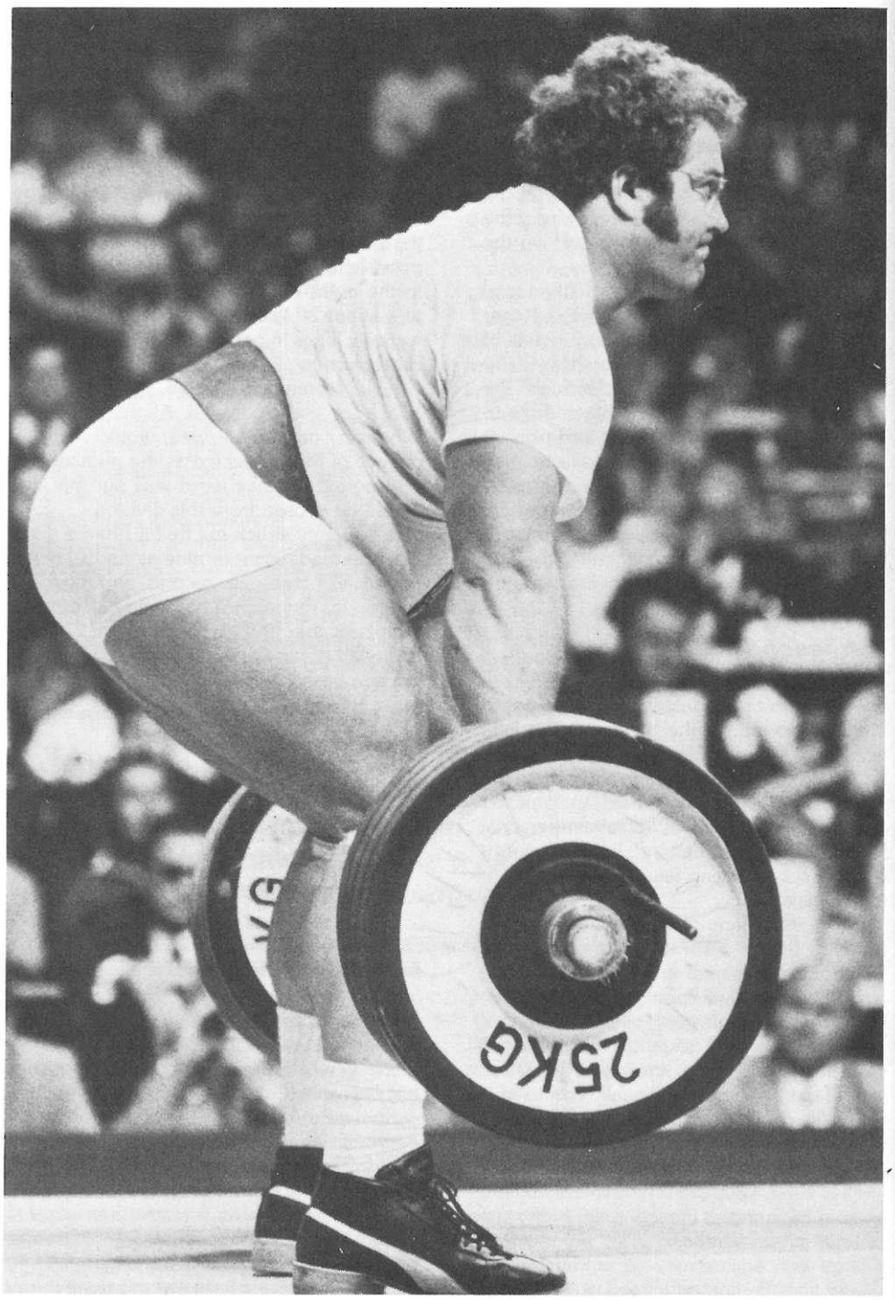
The 1968 Olympic Tryouts are all too vivid in my mind as the low point in my lack of mental preparation. I let my nervous energy work against me, rather than for me. Going into the contest I had lots working in my favor. I had won the Junior Nationals and had placed fourth in the Seniors with my best-ever total. My training leading into the Trials was going great. Personal records were falling at every workout and I was injury-free. I was really thrilled to have qualified for the Trials as this had been my lifetime goal—just to be good enough to compete for the right to represent my country in the Olympics.

I had, in fact, arrived at my goal and was relaxed and content. Then, about two weeks before the contest I sat down and worked up my projected starting attempts and possible third attempts as realistically as I could. My possible total was competitive with everyone in the class, except for Phil Grippaldi. Phil was about 20 kilos ahead of the rest. There were six lifters in a pack: Gary Glenney, Bob Bartholomew, Frank Capsouras, Fred West, Chuck Nootens and myself. All were within a hair of each other in August of 1968. Whoever performed well would have a chance of being selected as the number two 198-pounder, since word was out that two would be chosen from this division.

It suddenly struck me that if I had a good day and made eight or nine attempts I could realistically come in second and be considered for the team. I had made all nine attempts at the YMCA Nationals in Chicago and eight of nine at the Seniors so my thinking was based on realism.

My experience at the trials brings to mind a quote of Napoleon speaking to Josephine, "All things considered, it didn't go well at Waterloo."

That's when it hit me. Supreme nervousness. Up until that time I was relaxed as there was no pressure. I was happy just to have qualified. Not anymore. My training continued to be good as I could convert my nervous energy into the barbell. But I couldn't relax out of the gym. I had to forget about working on the magazine as my spelling and typing became worse than usual. I couldn't sleep and the Thursday before the meet developed a constant ringing in my ears. I was blowing it, but at this point in my career I didn't know how to put on the brakes. I tried reading the mental control literature, but I was too far gone. I tried tran-



Ken Patera was one of the strongest lifters the USA ever produced. A world class lifter and shot putter, Ken is currently a top-ranked professional wrestler.

quilizers but this only made me more irritable when they wore off.

My ears were still ringing in the warm-up room and predictably, I did poorly, making only two presses, then falling completely out of contention with only one successful snatch. By the time the clean and jerks came around, I was relaxed as the pressure was off, and I did a PR in the final lift, proving even more conclusively that I had the physical ability on that particular day. In contrast, Bob Bartholomew came to the contest completely relaxed. He had decided that this would be his last meet, unless he did make the team. He rhythmically made his lifts and won a spot on the squad.

A lack of mental control

It was the mental control that I did not possess and it cost me dearly. Soon after this experience, I seriously began studying the literature to see what I could do about systematically learning this skill. I knew it had to help my performance. I found what I needed in the world of martial arts, specifically Aikido. I adopted some of the principles of this sport, or discipline, and found it served me well.

What I wanted was a method, not just a philosophy. I wanted something I could get my teeth into and actually practice, both before the big meets and in the meet itself. A routine that could be drilled, and taught, so that many could use it. I have since taught this method to many of my competitive trainees and wrote of it in ***The Strongest Shall Survive . . . Strength Training for Football*** Those who have adopted it contend that is has done more for their success than all the training formulas I ever gave them. Those who have seen some of my trainees on platform comment, not so much on the weights they lifted, but more so on the manner in which they lift them.

Steve Gilardi Knight placed tenth in the 165-pound class at the 1978 Senior Powerlifting Championships. It was his first national contest, but observers told me that he was the most composed lifter on stage. He made eight of nine attempts, few seasoned competitors did as well. In '79, Steve placed tenth once again, but in '80 he won the Nationals and came in a solid fourth at the Seniors. In winning the Nationals, he went nine for nine. Steve learned the importance of mental preparation from the onset of his training and made it a point to learn how to utilize his mental as well as his physical powers.

While this article deals with the final two weeks just prior to a contest, the advice is useful year-round. It will prove to be a most valuable skill to have as it enables you to relax, to concentrate on any subject. It will enable you to break stale periods and sticking points in your training.

Learning to breath

Now you are going to learn how to breath properly. This is a basic skill, but few know how to do it properly. Until it is mastered you will not be able to completely relax, and relaxation is essential if you are to practice mental rehearsal. Otherwise, when you begin thinking of the lift to be performed at the contest, you will become excited and this is exactly what must be avoided. Should your adrenaline surge at each mental rehearsal session, you will be exhausted when it comes time to actually perform at the meet.

Those who have adopted a systematic mental rehearsal program contend that it has done more for their success than all the training formulas.

The martial arts have always stressed the importance of breathing in their respective sports, so what I have done is merely taken a page from their book. One of the truisms that every athlete learns is that the mind can only concentrate on one thing at a time. This is basic psychology. Your thoughts may flash from subject to subject, but this is not concentrated thought. What you are hoping to accomplish is to be able to center your concentration on one specific thought and hold it.

This is the idea behind the systematic breathing. When you are thinking and involved in the breathing process, you cannot be getting hyped over the lifts you plan to do at the meet. Herein lies the secret of keeping calm when rehearsing for the meet. As you go through the process of mentally rehearsing each lift and suddenly feel that you are getting excited, you stop thinking of the lifts and begin the breathing exercises until you, once again, reach a calm state.

Deep breathing exercises are doubly therapeutic in that they switch the mind off the subject which is exciting your body and at the same time allows more oxygen to get to the cells, which has a relaxing effect, physiologically, on your body.

Isolate yourself

The first requirement is for you to find a place where you can be alone. You must find a time and place where you can completely isolate yourself. No distractions. No interruptions. Stay away from telephones and televisions. Some like to have music playing and this is fine, just so long as the music itself is not distracting. A tape-deck or record player is better than a radio, as the commercials will break even a guru's concentration.

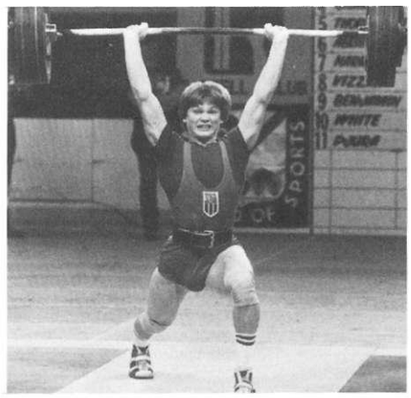
You might just shut yourself in your room, requesting privacy for 20-30 minutes. If family distractions make this impossible and the weather is nice, then find a quiet spot outdoors. Make the surroundings as comfortable as possible. A cool, dark environment is conducive to developing this discipline.

After you master systematic breathing in a quiet spot, you will be able to use it in a noisy, crowded situation, such as the warm-up room. But it is certainly easier to learn when you are isolated. Sit on a soft surface, such as on your bed or a large pillow on the floor. It's best to sit either with your feet tucked under your buttocks or in a position with the bottom of your feet together and your knees turned outwards. This position may be slightly uncomfortable initially, but you should soon be able to relax quite well seated in this manner after just a bit of practice.

The first requirement is for you to find a place where you can completely isolate yourself.

Sit erect with your lower back slightly arched, your shoulders back and your head high. Place your palms on the inside of your knees. This quite similar to the lotus position of yoga, a most comfortable posture to assume.

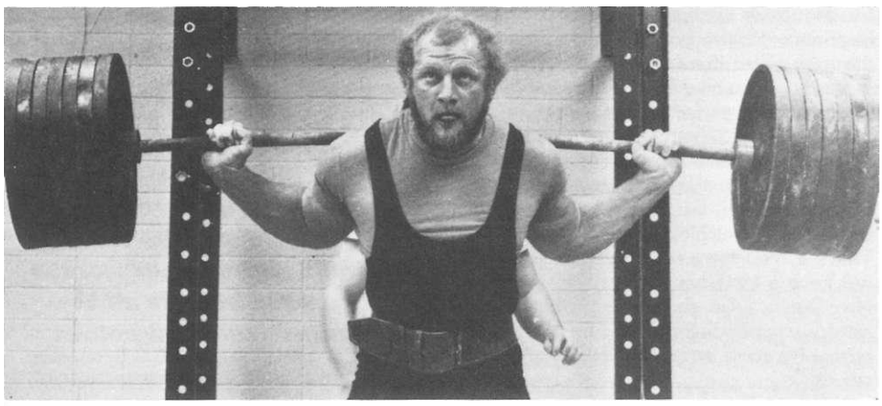
Allow your mind to go blank and begin thinking only of the action of the air as it passes in and out of your lungs. Think of the process in great detail, even to the point of visualizing the oxygen being exchanged in the individual cells.



One of the brightest young prospects in America's Olympic future is Curt White, shown jerking 325 as a 16-year-old.

Hold your head slightly upward and slowly begin inhaling only through your nose. Slowly fill your lungs with air. Let your chest expand full and take in as much air as possible. When you are at 100% capacity—or believe yourself to be—take one more sniff of air and hold it. Count to 10, then, very, very slowly and deliberately begin blowing the air out through your mouth so that it makes a whistling sound. More of a "whooshing" noise. Empty your lungs completely. When you think you have done so, reach deep and blow a bit more out. There's always some left. Hold once again. Don't inhale for another 8-10 seconds. In all likelihood, you will only be able to hold for 5-6 seconds initially, but in time you will be able to refrain from inhaling for 10-15 seconds, and some are able to hold even longer.

At the end of the oxygen starvation period, start inhaling very slowly, once again through your nostrils. The tendency is to gulp the air, but fight this urge and breathe in slowly. The inhalation phase should be about 15-20 seconds eventually, the pause just after inhalation 10-15 seconds. It should be noted that these times will not be accomplished initially, but will come after a short period of practice. And I should add that the times are not as important as learning the rhythm of breathing itself. They are merely guidelines, not hard and fast numbers.



Dean Best of Greensboro, North Carolina, readies himself for a heavy attempt. Dean is currently recovering from a serious leg injury.

Learn to extend the diaphragm when inhaling and contract it when exhaling, such as you when running. Allow your abdomen to relax and extend when inhaling and pull the diaphragm up into the chest cavity, creating an abdominal vacuum when exhaling.

The first few times that you attempt to do this exercise you may find that you become light-headed and will stop the procedure so as to suck up as much oxygen as possible. There is a rhythm to this breathing routine and once you pick up this rhythm, the air will flow in and out quite easily with no stress or discomfort.

It's a skill that must be practiced

In the initial stages of learning this procedure, you may be able to only complete two or three cycles. Do not become perplexed if this is the case. Merely re-organize yourself and do two or three more cycles, trying to relax and allow the natural rhythm to take over. Do not force it. The idea is to relax, not to press. You will discover after but two or three breathing sessions that you are able to inhale and exhale for a much longer time and also be able to "hold" the in-between segments much longer.

You can also perform your breathing exercises while lying on your back in bed. This is useful, as this is the time your mind will wander to the upcoming contest. Lie perfectly flat with your hands resting at your sides. Look slightly upward so that your chin is not down and your airway is not blocked. Begin the rhythmic breathing is the exact same fashion as you did while kneeling or sitting.

After some practice, you will find that you can employ your breathing exercises anywhere and at anytime. Upon completion of the breathing exercises your entire body will be thoroughly relaxed as if you had just received a massage or spent time in a sauna. I do not expect the reader to master this skill immediately or even in a few weeks, but if you are able to accomplish some degree of relaxation, it will assist you in your mental preparation for the contest. Every little bit helps and you will find that the more you practice the deep breathing, the more effective it will become.

Practicing Mental Rehearsal

Now you are ready, or at least more ready, to practice the mental rehearsal. Mental rehearsal is just what the name implies, it is a rehearsal, in your mind, of what you plan to do in the forthcoming workout or contest. You will want to begin to mentally prepare for each and every workout coming down the home stretch. This will assist you in each of the workout sessions and will also help you to develop the skill or relaxation so that it can be more effectively used during the meet.

You have conducted your mini-test on Saturday. You have set up your training schedule for the final two weeks. You know just what you need to work and the weights you plan to use. You have it all written down. Sunday evening you withdraw and find your quiet spot. You begin your deep, rhythmic breathing until you feel relaxed.

It is a time to begin your mental rehearsing

for Monday's workout. Start at the very beginning. Picture yourself as you come in the gym. You dress out. You stretch and loosen up. You take 135 off the rack and do five technically perfect reps in the squat. You load the bar to 225 and do your second set, again each rep is technically correct. And on and on through the entire workout. Don't skip a set or rep. Go, mentally, through the cool-down, stretching, shower, and leave. That's it, you have rehearsed. At first, you will have a tendency to hurry, to skip over lifts. Don't. Take each lift individually and picture yourself doing each one 100% correctly. No form errors, no misses. All successes.

Continue to concentrate on your breathing as you mentally rehearse. This is important. Remember that you are developing a skill to be used at the meet and there will be hundreds of distractions there. You will learn this skill in isolation, but eventually you must be able to practice it in a crowd.

You will quickly discover how much this rehearsal helps. As you go through your Monday workout, you will feel very confident with each attempt. This is because you have made the lifts successfully in your mind. You are now merely following the script.

The evening or night preceding each workout during the final weeks will find you spending 20-30 minutes doing mental rehearsal. Some athletes like to incorporate flexibility exercises into these sessions as they can stretch more thoroughly as their minds are relaxed. This is well and good.

You may not be too adept at this skill during the first few sessions, but by the end of the first week you will find it much easier. Your concentration level is sharper and you can more vividly picture the lifts.

Picking your personal "keys"

Going into the final week, you will want to begin paying more and more attention to the "keys" of each lift. "Keys" are those technical points to remember as you are executing the lifts on platform. Keys are very individualized, but what is important is for each lifter to break down the many keys on each lift to just one or two.

Let me clarify by using the squat as an example. When I squat, I have many technical keys to remember. Placing the bar in the proper position on my back, getting my feet just right, jutting my pelvis back before I descend, going into the bottom slowly and leaning a bit forward, driving quickly out of the hole with my hips first, then quickly bringing my chest to the ceiling and my pelvis under the weight until it is locked out. A lot of keys. Far too many to think of on a competitive platform. So, I must condense these to workable numbers, no more than two. One for the descent and one for the recovery. The two keys will trigger all the rest. If I think of going into the bottom slowly with a slight forward tilt, this will insure me of descending into the proper position. If I think of driving out of the bottom with my hips initially, this will key all the rest of the recovery points.

The mind can concentrate on only one "key" at a time. You want to simplify the movements to the point that one key word or phrase triggers all the other technical points.

Condense the "keys"

The mind can concentrate on one key, but should you flood it with six or eight, then it will short-circuit and all concentration will waiver. The hours of drilling in the gym will make all the rest of the key points respond automatically if you plan it this way. You want to simplify the movements to the point that one key word or phrase triggers all the other technical points. This is even more critical for the Olympic lifter as the lifts are done quicker, allowing little time for adjustments.

Once you have your keys, you can instruct your handler or coach at the meet to give you this key word, or phrase. "Keep tight going to the bottom", or "look up when the bar passes your knees", or merely "explode". Whatever. Everyone's keys are different. I have heard handlers and teammates shout phrases that didn't seem remotely related to either the lift or the sport, but it meant something to the lifter and that's what counted.

After the final Monday workout, your mental rehearsal program switches to the contest itself. Now comes the real test, as to whether you have learned to relax. Begin Tuesday night. The mental scene is the lifting

platform, you care nothing about the surrounding, only the barbell on the platform. Since in many cases, you will not be able to envision what the weigh-in room, or warm-up room is really like, focus your attention only upon the barbell.

You should have a realistic idea of what you will be attempting at the contest, again leaving yourself a range for the top-most weight. I encourage my Olympic lifters to leave their third clean and jerk open and my powerlifters not to put a ceiling on their final dead lift.

Once again, picture yourself dressing out in your competitive gear, going through each warm-up attempt, paying strict attention to those "keys" on each lift. See yourself walk to the platform for each attempt. Envision the loaded barbell, make the lift successfully and technically perfect. Three white lights. Some of my students tell me they also like to incorporate the cheers of the crowd. Built in rewards. Why not?

Calming the nerves

As you begin mentally rehearsing the heavy competitive lifts for the first few times, you will feel the excitement rise in your chest, your pulse rate starts racing and you are hyped. This is what you want to avoid. You want to be able to mentally practice the skills without fatiguing your body. When you feel the nerves react, stop the rehearsal and go into your rhythmic breathing until you calm down again. Then start the rehearsal once again.

This may take a while, but you need to stay with it until you actually go through the entire meet and remain relaxed. The first few times are the most difficult as it is hard to do the breathing and rehearse simultaneously. Soon, however, this can be done. If you have the time, mentally rehearse two or three each day, perhaps taking one lift at a time. I find sitting behind the wheel driving alone an ideal time to accomplish this goal.

By Friday, you will be doing much better at your mental rehearsal. Friday evening should be reserved for a full-on rehearsal session. All the lifts together. If at any time during this last week you find your mind slipping to the contest, then this is when you want to do your rhythmic breathing. You will get phone calls from well-wishers and friends. People will see you on the street and mention the meet. Fellow competitors will quiz you on what you expect to lift. If you travel to the contest, just going to the site to check the scales or facilities will bring on a nervous surge. When you feel the rush, you know that the nervous system has kicked in gear. Start the rhythmic breathing and settle down, regardless of where you might be. Be ready for it as its impossible to isolate yourself completely, no matter whether the contest is in your hometown or if you traveled to another city.

Meet Day

After you have weighed-in and dressed out, find a quiet spot in or near the warm-up room. Designate an area of your own. Do your stretching and begin mentally preparing, not for the entire meet as you have been doing, but for the first lift on platform. Go through your warm-up, as preplanned. After each warm-up, go back to your spot, do rhythmic breathing and relax. You do not want to get excited in the warm-up room. You still want to store the energy.

The first attempt in any meet is the most taxing mentally. All of the pressure of the previous months of training comes to a head at this moment.

In fact, you want to begin storing some cosmic energy at this time. The sport of Aikido refers to this energy as the "ki". It has been called the "white light", energy from the cosmos. It is power available outside the physical self. You want to absorb this energy at this time. Visualize a spot just about your navel. This is where the cosmic energy is absorbed by your body. As you go into your rhythmic breathing, concentrate on allowing this energy to enter your body, and you want to store it to be used on the platform. Think this "white light" into your body. While it may sound as if I've been into the funny crayons, you will discover just how effectively this idea works for you.

As you mentally prepare for your first attempt, you will want to concentrate on the keys, nothing else. Do not get ahead of yourself. If you are opening with 242 in the snatch, do not let your mind skip ahead to your proposed second attempt of 253, or the 242 may have to be repeated.

The first attempt in any meet is the most taxing mentally. All of the pressure of the previous months of training comes to a head so its important to do this lift with control and confidence so as to set the pattern for the day. Success breeds success.

After your final warm-up, go through one more mental rehearsal of the 242 attempt, still remaining as relaxed as possible. Tap once more into the cosmic energy. When you hit the chalk box, start gearing up. You are now ready to put all the accumulated energy into the lift itself. This is an important step that many fail to recognize and master. I have seen lifters calm themselves to the point of lethargy. They become so calm that they can't reverse the process and gear up. You must be able to release the energy.

As you walk to the bar, the juices are in high gear, but still under control. Your entire focus is on the center of the barbell. You have been here before, many times in the last week. Each time you have succeeded. You know what you do and you know you will achieve your purpose.

Entering the euphoric state

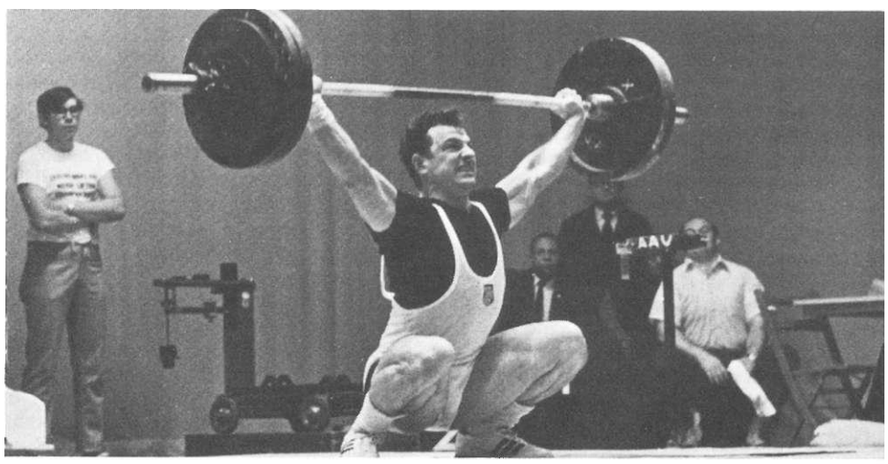
On the good days, when your mental control is really clicking, you will experience a "mental trip" unlike any other. At one Senior National Olympic Meet, I had it humming, due in large measure to Tommy Suggs, who was working with me backstage. Tommy knew my mind and helped to keep my concentration centered. As I stepped up to the bar for each attempt, it seemed as if a spotlight centered on me and the middle of the barbell. I disassociated to the point that I was removed from my body. I was high above the stage looking down, watching myself perform the lift. On a couple of attempts, I only remember chalking up and walking off the platform. The lift was experienced in the second person.

I was in a trance state. My lifting form was more precise as it ever was before. I was completely confident of my abilities. I was, at this point in time, beyond failure. My will was lifting the weights. Only after I had achieved my pre-planned total did I break the trance. Then on my final attempt, I broke concentration and missed the clean.

Up until that moment, however, it was transcendantal, mystical, more mental than physical.

This experience occurred before I had developed any system of rhythmic breathing. My experience was in a large measure due to the proper handling by my friend, Tommy Suggs. He kept my mind centered on the correct keys. He kept my energy flow in proper balance. I was working off his juice as much as my own. I was other-directed, rather than self-directed. It wasn't until Tommy left York that I realized how much I had depended on him. Then, out of necessity, I sought a self-contained method of achieving this purpose.

I have talked to many other competitive weightlifters, as well as other athletes, who have experienced this same sensation. It is not uncommon and the more I survey the literature of other sports, the more I run across like experiences. George Leonard, in



Mike Karchut displays his great position in the squat snatch.

his book ***The Ultimate Athlete,*** mentions a number of examples of this sort of detached experience.

Have a personal area

After you complete your lift, you immediately go back to the sport in the warm-up room, that is unless it's an unusually long distance. In this case, find a "spot" near the platform itself. No visiting. Forget the congratulations. There'll be time enough for this later. You may want to ask your coach or teammate a technical question, but that's all.

Now your mind clicks to the second attempt, nothing else. Perhaps a quick review of the first attempt in order to check as to what went right and what did not feel too right so that adjustments can be made in your "keying". Perhaps you were keying on keeping the bar close and you noted that it did not reach its usual height. On your second attempt, you might want to key on "extension". Do not fall into the trap of listening to unsolicited and unknowledgeable advice. Even if the person offering the information is, in fact, an authority, if he has not worked with you before, then his advice may not be relevant.

When you miss an attempt

In the event you miss an attempt, your mental control is doubly valuable. Do not go into a frenzy after a missed attempt. Quickly calm down, with rhythmic breathing, and analyze what you did incorrectly and, more importantly, how to rectify the problem. I have heard many coaches shout at their lifters, "you hooked the bar over your head". Nice to know, but the lifter is surely aware of this fact. What is needed at this time is keying advice so that it doesn't happen again.

By calming down, and thinking of important, pertinent keys, you elevate your odds to make the next attempt. Do not linger on the missed attempt. Only subjectively analyze it and think positively for the next attempt.

Should you miss your third attempt on a lift, it is important to quickly drop it from your mind and get into the next lift immediately. Everyone has experienced a warm-up room filled with moans and groans of what might have been. "If I only would have made the 440, I would have be in second place." "I really needed that 300 to make class I" . And so on and so forth. "Ifs" do little to help your total.

The time to analyze the missed lift of a series is later. You need to put your mental concentration into future lifts, not past ones. After the snatch or squats are completed, there may be a wait. If it's a short wait, go to your "spot" in the warm-up room and relax with rhythmic breathing. Start rehearsing for the next lift. If it's a long wait, 20-30 minutes or more, leave the warm-up area. Go to the dressing area or some other location, perhaps outside, and just relax. Try to take your mind off weightlifting altogether. If your coach or a teammate joins you, talk of non-weightlifting things. Sex is always a good topic. Everyone enjoys the subject. Or business, or football, anything but the lifts. Save that.

This is the time to let the energy recycle. You do not want to stay wired for 3-4 hours. You want to conserve the juice for when you are on the platform. Start your mental preparation again just before your first warm-up attempt and go through the same procedure for each of the lifts.

Your ability to concentrate and relax will improve with practice. You will find that by being able to draw upon the vast storehouse of mental as well as cosmic energy, to go along with your physical strength, when you so desire, then you will be able to perform much better during the stress of competition.

Summary

The time is drawing near when more and more who are concerned and involved in competitive athletics are beginning to reunite the mind to the body. Only in recent years have they been separated. The ancient Greeks from whom we adopted our love of sports, blended the intellectual and the physical. The three corners of the YMCA triangle; body, mind and spirit, lost in the quest to win at any cost, must once again be reunited in order to obtain an even higher level of personal achievement.

The methods described in this chapter will allow you to explore your own inner space. You will discover the vast reservoir of strength, never before tapped. Once you are able to utilize this energy bank, your personal level of success will be greatly enhanced. Personal achievement, in the final analysis, rests not in the final absolute position you achieve in any athletic endeavor, but rather in how far your advanced yourself from your starting position. The total extent of your personal achievement should be your gauge of success.

CHAPTER FOUR

Sex and the Barbell

I once wrote a piece for the "Behind the Scenes" section in Strength & Health magazine dealing with the subject of sex before competition. I thought that I was quite obviously tongue-in-cheeking the presentation and made the comment that lifters would do well to lay off sex during the final week before a meet. As it turned out, I was not obvious enough as I received numerous letters and a few phone calls from irritated wives. It seemed that many lifters took my advise as gospel and denied their ladies any sexual gratification in the week prior to the contest. I have often suspected that many of these lifters merely used my words as an excuse and most likely were doing a bit of hankey-pankey on the side at my expense.

This response struck me as rather strange, but when I went to do some researching on the subject of sex before competition I found that the athletic community has always advised participants to abstain from sexual activities before athletic performance. At least this was the general philosophy until recently.

A recent Playboy interview with Pete Rose emphasized this concept. Pete felt that sex before a game drained him of valuable energy and would adversely affect his performance on the playing field. I believe that this attitude is prevalent in professional sports. At the base of the concept is that a horny athlete is in fact more aggressive than a sexually satisfied one. That it is best to go into athletic competition with the hormones overloaded rather than depleted. A conservation of life forces, so to speak.

My observations and opinions on the subject differ from the more typical, but they are based on what I consider solid ground. I have studied the subject as much as time will allow. Penthouse, Playboy, Oui are all read with the singular intent of adding to this body of knowledge. Seldom do I take time to look at the pictures. If you buy that, how about a deal on a '69 Pontiac? In reality, there is very little hard-core (no pun intended) evidence on the subject at hand. Whatever evidence I have dug up is primarily from talking to lifters through the past twenty years. And believe me, they are always ready to spend time talking about sex.

Assuming that some professional athletes and advisors are correct in their assumption that a sexually satisfied individual is not as aggressive as one who has his horns up, I do not believe the general concept applies to weightlifting. Hockey maybe. Football possibly, but not competitive weightlifting. Weightlifting is not a sport where aggressiveness is needed in order to perform favorably. That is not to say that the competitor should not attack the barbell, but rather that the attack must be controlled. The weightlifter's role is quite unlike that of a linebacker in football. The weightlifter's control is more mental, he cannot charge without abandon. Each movement must be precise and it must be remembered that the energy expended in the sex act is little more than that expended doing calisthenics. That is, unless you got in a Texas Death Match with a couple of twins. That's a hormone of a different color.

Individual variance

This particular theme is repeated so many times in this series that perhaps the reader is tired of the comment, but I once more need to emphasize the fact that individuals are different. And this concept does relate to sexual activities, just as it does to diet, rest, and training loads.

It holds true that some athletes do perform better if they abstain from sex in the final days before competition. Others definitely do not. For the latter group to abstain is a handicap, not an asset.

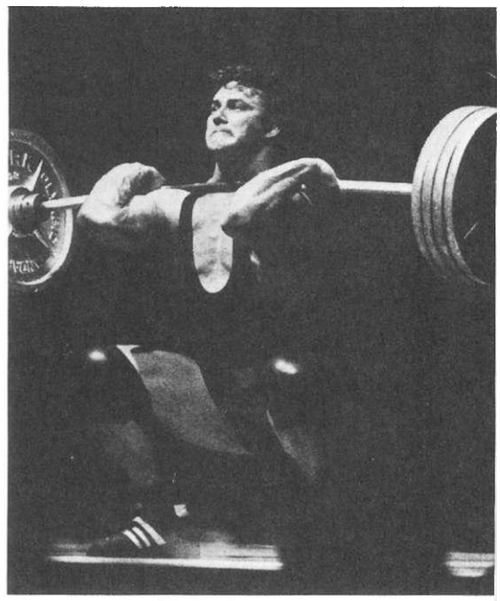
In the late 60's, York was the genuine hub of competitive weightlifting in the United States. There were other centers such as the LA YMCA under the guidance of Bob Hise Sr., the Duncan YMCA with Russ Knipp and Bob Gajda, Joe Mill's Club in Rhode Island, Morris Weissbrot's Lost Batallion Hall in New York, and the Air Force Team, headquartered in California with Homer Brannum in charge. But whenever a lifter wanted to solidify his training program or perfect one of his lifts, then he migrated to York.

During the summer months many lifters would spend their vacation time in York. Some students would move in for the summer. On any given Saturday, there would be as many as three dozen national caliber athletes working out in one session. Crowds of as many as 200 people would come to watch the lifters go through their paces. It has been dubbed the "Golden Era" of American Olympic lifting and for good reason. Never has this country produced so many fine lifters, some of whom are still at the top. Joe Puleo, Joe Dube, Fred Lowe, Chuck Nootens, Mike Karchut, and Tom Hirtz are doing terrific and lifters such as Patera, Pickett, Bednarski, March, Garcy, et al could still be at the top of their divisions, even though one lift has been dropped from the Olympic set. A sad commentary on the so-called national coaching program.

One of the fringe benefits from my standpoint as the editor of ***S&H*** was that I had a constant and bountiful resource at my finger tips-the personal information gained from talking with all the lifters. Understandably, one of the favorite topics among the lifters was that of sex. And why not? Weightlifting, at least to the male participants, is a macho sport. Pardon me ladies. I do not mean this as an affront to your femininity if you lift weights, but in the male mind (and I believe this holds true to the general public also) elevating loaded barbells is a masculine endeavor.

Barski was *the undisputed king*

Sexual conquests were boasted about right behind, or for some in front of, a record clean or squat. The sexual exploits of many of the York Gang are legend. The recognized leader was Bednarski, who at the time was also the finest weightlifter in the world. No one came close to Barski, either on the platform or in the boudoir during the late sixties. He was phenomenal. I dubbed him "The Woonsocket Wonder" and "The Ninth Wonder of the World". He liked these titles and deserved them. I really don't believe the weightlifting world has yet come to appreciate his greatness for like many others of that era, he left York (and hence the power structure of the sport) under a dark cloud. When York was finished with Barski, they simply ignored, and in many cases denied, his great accomplishments.



The "Ninth Wonder of the Weightlifting World", Bob Bednarski.

But his greatness is recorded, not in generalities or abstract opinions, but in hard and fast numbers performed before thousands of spectators. Consider Bednarski, weighing but 247 pounds lifted more weight overhead than any human in history, **486**½ pounds in 1967. He lifted more than the Giant 360-pound Russian, Zabotinsky. He set a World Record in the press , **456**½ . In 1969 he became the first American to win a world title since Ike Berger in 1961. In all, he set 46 American and 12 World Records. And what is not recorded in the record books is that Barski was the greatest performer ever to step on a weightlifting stage. This is not to downgrade such greats as Stanko, the George brothers, Tommy Kono, Ike Berger, Bill March or Norbert Schemansky. But Barski, in his prime, had a

magnetism, a charisma if you will, that no one else in our sport ever possessed. It wasn't just the remarkable poundages he lifted, but the style and class with which he did so. He loved being in front of an audience. Four girl scouts would do. In fact, two Brownies might be even better. Finally, consider this, Bob Bednarski has not even been elected to the Weightlifting Hall of Fame. What a farce that makes that collection of lifters, especially when the reader realizes some of the lifters included in that group. Some never lifted much over bodyweight. But "Some" are still on the York payroll. You got it!!

"It isn't sex that wrecks these guys, it's staying up all night looking for it."

Casey Stengle, Former Manager NY Yankees

The real point of this tale is not so much to bring up the issue of the screwing Barski got from the power structure, but rather to point out the fact that Barski would perform herculean feats immediately after leaving the sack. When I say immediately, I mean immediately. If he could work out a deal on the way to the contest in the back seat of a car, he would do that too. It didn't matter whether it was a home meet or a road trip, Barski wanted to bleed his gland as frequently as possible. We traveled together quite a bit doing exhibitions and lifting as guest lifters in contests around the country. I was invited more for editorial reasons. Barski was the star of the show. Barski would be in the rack all night. He would stagger into the warm-up room with little or zero sleep. He had lots of stories. He loved telling the details. In fact, most suspected Barski got as much joy out of telling of his sexual exploits as actually doing them. We learned to either: 1) double whatever he said, or 2) divide it in half. On sexual matters, we divided. Even with the division, he was rather amazing. Maybe it was the anabolic reaction or being a Pollack. And if one doubted Barski too much, he would invite him along to witness (or better yet participate) or film it or whatever. Strong he was. Shy he was not.

He would proceed to handle tremendous poundages, often under very adverse circumstances. And he always had pressure on him to perform well. He was at the top and people expected him to do super things. He rarely let them down. Barski was a case of a weightlifter who did better if he had sex before competition. Barski was definitely a unique individual, but not rare in his attitude as many others also professed the desire to be sexually fulfilled before a contest. It had a relaxing effect. Took the edge off the tension. The calmness helped to put the mental gears in the proper order.

At the same time, there were national caliber lifters who did not want to have sexual contact before a meet. Some unwisely attempted to emulate Barski's exploits off the platform. It was a disaster. They would stick with Barski throughout the night and be so completely burnt out when they arrived at the meet that their lifting suffered noticeably. There was only one Barski. Many mothers and fathers in York County were thankful for this fact.

Doing what you are used to doing

The bottom line on sexual activity before a contest comes down to being sensible, basic advise. During the last weeks and especially during the final days, you should continue to follow the sexual patterns to which you are accustomed. If you are in the habit of getting laid every night, keep doing it. Your body chemistry is definitely geared for this activity and abstaining will throw it off. If, on the other hand, you haven't tapped the prostrate in a month or so, then you certainly don't want to be looking up old girl friends or hanging out looking for loose leg the night before the contest. A rather famous quote from former New York Yankee Manager Casey Stengle, exemplifies the point. "It isn't sex that wrecks these guys, it's staying up all night looking for it." Good point. Quite often, the villain is not the sex but the loss of rest.

I know a number of lifters who are so hyped when they make a trip to a foreign town for a meet, that they scout and carrouse into the wee hours. Being away from people they know, such as wives, girl friends and neighbors, afford them a freedom that they often cannot handle. They go bananas at the prospect of hitting on some strange fur. The contest is momentarily forgotten once the hormones kick in gear. The conquest in the bedroom becomes more important than the one coming up on the plat-

form. A little too much booze, a highly charged night in the sack, with limited rest and the result is a beady-eyed sub-par performer at the meet. "Should'a never met that broad." The blame should not really fall on the female, nor the sexual activity per se, but rather the total breakdown of preparation.

Take her along

While I may sound as if I'm plugging the airlines, I believe this advice is useful for many lifters. A female, if her head is at all in the sport, is very good medicine for the athlete as he prepares himself for the contest. I am referring to the lifter's total preparation. She can do much to elevate his confidence and self esteem. She can take care of many of the bothersome details. She can be, in essence, an extremely valuable coach or second. Gentle words, physical and mental massages are worth their weight in gold in those final hours before a pressure-packed competition.

variables kept constant, the better. Sex, like food, rest, climate and all the other influencing factors should be kept as much the same as they have been up to the meet. Do what you are used to doing. The problems come when you make changes in your living habits just before a meet.

On the flip side of this coin, if you have a bitchy ol' lady who not only does not care about weightlifting, but vocally disapproves of the sport, then most definitely leave her cheeks on the porch. Just as a considerate female can be a real plus, an inconsiderate one can be one pain-in-the-ass when you are seriously trying to get your head in order. One lifter I know moves out of his house into a motel the day before a meet in his own hometown. The ol' lady starts bracking on him heavy just before a meet, as she knows she can drive him up a tree during the final days.

One final plug for the estrogen-packing sex. They are very sweet to have along after the contest, especially when things didn't go

Your favorite lady can satisfy both your sexual and psychic needs.

I always found it most relaxing to be with members of the opposite sex just prior to a contest. The ladies are not into kilos, but personalities. A lifter can unload his fears, his aspirations, his total concerns much easier to a female than to a fellow competitor. Even if you have a good friend and fellow lifter at the meet, you cannot unload your concerns on him. He has his own frustrations and problems and doesn't really want to share yours at this time. The ladies have the ability to soothe the rough spots, temper the high spirit and act as a balm to the many real and imagined problems facing the competitor.

For some lifters, it's a good idea to budget enough money to take their wives or girl friends on a long trip. For the athlete who is accustomed to being with his wife and family to find himself sitting alone in a motel room for the last pressure-filled days is absolutely nerve shattering. All the previous preparation is shot.

1 definitely encourage lifters to have their favorite lady with them. She can satisfy both his sexual and psychic needs in a manner in which he is accustomed. Again, the point to be emphasized here is that the more

according to plan. A soft shoulder and sympathetic word go a long way at this time. Nothing can soothe a poor showing as well as a quiet dinner, a bottle {or two) of fine wine, and a nice warm friendly body to snuggle against. All the disappointments, failures suddenly seem quite insignificant.

Negative side effects

There is always the danger of negative side effects when one attempts to be a sexual dynamo just before a contest. One danger is that the overambitious athlete will overextend himself for the sake of his manhood and completely deplete his stored energy. I am not referring to that energy stored in the prostrate, but rather his overall vitality. Too much of a good thing. My old friend Bill Clark ran across some interesting research that pointed out the fact that one uses up more energy on a strange lay than on a familiar one. Glad to see that Clark is still interested in such matters. Of course, everyone who has hit on a strange lady knows the level of excitement is much higher than the routine performance at home.

One story out of the York days with no names mentioned. A National Champion was staying at the York Town Hotel prior to the Seniors. He was rooming with one of the more perverted members of the York team. Perverted Lifter suggested that they go together and procure one of the available ladies of the evening for a night of fun. National Champion was happily married and had never messed around on his wife. He said he would pass. Perverted Lifter picked up a choice specimen from the lobby and proceeded to do a variety of feats in the room. National Champion could stand only so much fidelity and jumped in on the show. Orgy-porgy throughout the night. Both lifted well the next day. The exploits had no adverse side effects on their performance. In fact, both agreed that it sort of helped them. The negative showed up when National Champion got home. You guessed it. He brought home a dose. Try explaining that one. A bit of irony, if you like that sort if thing. Perverted Lifter got by clean.

The psychiatrist asks Woody Allen if he thinks sex is dirty. He replies, "It is if you're doing it right."

From the movie, Take the Money and Run

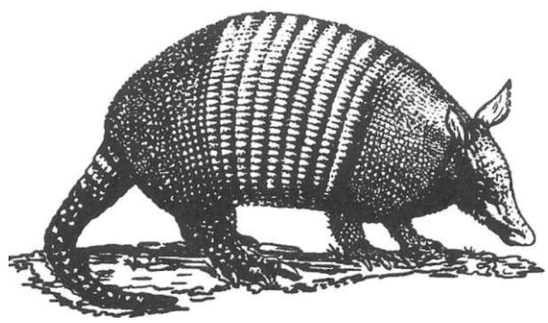
I have tons of other very delicious tales from the York days, but many of my running mates are settled in a more sensible life-style. Some are happily married or re-married for the most part. Some hold responsible positions in the community. Some teach, some even preach, so I will not rattle the closet. That is, of course, as long as the payments continue. Otherwise. . . .

The trained armadillo

This story has nothing to do with lifting other than lifters were involved, but it has been told so many times in weightlifting circles that I decided to chronicle it. A friend and I went to visit a house of questionable repute in the South - the Deep South. It was reported that this lady had a trained Armadillo. Trained to do what you ask? If you have to ask, I wouldn't bother reading any further. Well, we go to this little place on the outskirts of town and are asked to wait in the living room. Kinda weird, but I've been in lots of weird places so I was not uncomfortable. My friend and.I are conversing as to what we might expect to see in the next room. I'm sure our imaginations far exceeded any reality. All of a sudden, the door of the bedroom blows open and this damn thirty-pound Armadillo comes charging through the living room. We both yelled and threw our legs up just as this creature comes by, full tilt. He just keeps trucking, blows a hole in the screen door and disappears into the night. They never did find that animal. We checked the papers for days, but nothing. I do know that he would have scared the shit out of anyone who came across him that night. Sad to relate, we never got to see the act. But, as a great philosopher once said, "Life is full of disappointment."

Summary

The bottom line on this chapter is to go with what you are accustomed to doing. Don't make changes in your sexual behavior as this will alter your body chemistry and you want the hormonal system to continue to work as it has been down the home stretch. Let nature run its due course, don't force or deny anything. If the sexual urge is there, satisfy it. If you feel better by abstaining, then by all means flow with your feelings.



CHAPTER FIVE

Nutrition Down the Home Stretch

Competitive weightlifters, unlike most other athletes, are quite award of the value of nutritional supplementation. They are, in fact, the absolute leaders (along with their bodybuilding brothers) in the field of practical application of the use of nutritional supplements to increase athletic performance. No other athletic group is as hep as the weight users.

With this in mind, I will refrain from spending a great deal of time encouraging the reader to use supplements, but I will explain how the various kinds do work and how to take them so as to lift more weight on meet day. There are also a few hundred misconceptions, as the science of nutrition is certainty anything but exact at this point. I'll attempt to update the information that I have gleaned from my research and pass it along.

I'll present a thumbnail outline as to how the various supplements work. From this outline you can pick and choose the ones that you feel will benefit you in your program. The chapter on "Making Weight" needs to be read together with this chapter on nutrition for a complete understanding of how to set up a dietary schedule for the final two weeks.

Vitamin C

The true friend of the athlete. Vitamin C does so many good things for our bodies performance would be severely handicapped without an adequate supply. For instance, without Vitamin C, collagen cannot be formed. Collagen is the body's most important structural substance. It is the cement of the body. Vitamin C is valuable in fighting minor respiratory problems, bruises, fatigue and has been used to combat such serious illnesses as hepatitis and mono.

During the final two weeks before a contest, when you are training extra hard and both physical and mental stress are building to a peak level, it is critical that you supply your body with adequate amounts of C so that you do not run a deficit. How many times have you seen (or actually experienced yourself) weightlifters coming down with colds two or three days before a meet? Lots, I'll bet. Stress burns up the C and since it is water soluble, it can dissipate very rapidly.

Athletes who utilize mega-dosages have no criticism, only better performance.

My recommended dosages are often criticized as being a bit high, but the criticism comes from non-athletes, arm-chair scientists. Athletes who utilize these mega-dosages have no criticism, only better performance. I should add that the dosages I recommend for Vitamin C and all the other nutritional supplementations do not come out of a dream, but are rather a result of studying research done by renowned scientists such as Dr. Linus Pauling, Dr. Irving Stone, and Drs. E.V. and W.E. Shute.

I take 4-5 grams of Vitamin C daily, and double this amount when I feel the need. Should I overextend, feel a cold knocking or be extra fatigued, then I load up. I find it very helpful to keep some powdered C handy, as this form works so quickly and effectively. I can stop a cold in its tracks with 10 grams of powdered C, administered over a four-hour period.

Limits

How much is too much? Well, this depends upon the individual, but Vitamin C is never toxic; it has built-in safeguards. It is





The Marvelous Marken Brothers. Larry (left) and Dennis wear the colors of the Metro Athletic Club.

water-soluble, which means any excess is passed off. Secondly, should you take in too much at one time, diarrhea results. Not a delightful thought for sure, but you can bet your booties that the bacteria are bye-bye when this happens. You may, in fact, waste a penny or two, but you will not harm your body with large amounts of C. Some researchers have given as much as 50 grams a day to patients with no ill effect.

The point is to keep your C intake up as you come to the meet. You do not want the added burden of a cold, muscle fatigue, or sore spots, so take plenty, up to 10 grams spaced throughout the day.

Take a gram, along with your E, about an hour before training and you will find that your training goes much easier. These two work hand-in-hand to facilitate oxygen exchange in the cells. Simply speaking, you will find breathing easier. Neat.

Take another gram, or two, immediately after training along with some minerals. Recall that C is water soluble, and you have utilized much of your supply in the gym. Replace it quickly so there is no lag time.

Natural or synthetic? Vitamin C is ascorbic acid, period. So synthetic works exactly the same in your body as the natural form. But...the natural form contains bioflavanoids plus enzymes and these substances perform a few added extras, so what I suggest is to take some natural along with synthetic (the synthetic form is more economical). This can also be accomplished by eating some citrus fruit while ingesting quantities of synthetic C.

One final tip. Researchers have found that our bodies use a large amount of C when we sleep. Take 1-2 grams at bedtime along with some magnesium-calcium tablets. There is a bonus in this nighttime supplementation. Vitamin C enables you to dream more, which is very psychologically rewarding, and your dreams will be more vivid. Your own Channel 17.

Be aware that smoking eats up tremendous quantities of C and a fact often overlooked is that a large amount is used even if you are in a room with other smokers. Both legal and illegal type smoking gobbles up the C.

Vitamin E

Vitamin E has always been one of my favorites, as it provides so many pluses for athletes. It is an oxygen conservator. It is a vasodilator. It is an antioxidant. It detoxifies poisons such as those in cigarette smoke, smog, car fumes, and pesticides. It counteracts food additives and preservatives. It facilitates the healing process, helps eliminate scar tissue and, in general, is a terrific supplement for both athletes and non-athletes.

When I am explaining just how Vitamin E works on the most basic, non-scientific level, I relate that it helps you breathe easier. Being a vasodilator, it literally enlarges the arteries, veins, and capillaries so that the oxygen can flow more easily to the muscles. Should you find yourself getting winded in the final tough workouts, start doubling up on your E.

Always take some C with the E as the C works at the very end of the oxygen exchange, in the capillaries. They are a terrific team.

You must learn to be a "label detective" so that you do not get ripped off when buying your E. Vitamin E is the most expensive of the supplements as it is difficult to extract, so many are attracted by the specials and sales on this vitamin. The specials are usually of inferior quality.

I often talk to athletes who tell me they took E for two months and noticed nothing different in their recovery level. Upon investigation, I found that they were taking the synthetic form and the dosage was just too low to have a positive effect. Athletes place huge demands on their bodies and have to use mega-amounts in order to experience a positive effect.

Here's a short course on Vitamin E. It is composed of seven forms of tocopherols: Alpha, Beta, Gamma, Delta, Epsilon, Eta, and Zeta. All Vitamin E is measured by the amount of Alpha Tocopherol, regardless of whether other tocopherols are present or not and irrespective of synthetic or natural sources.

Natural versus synthetic

Clues to determine whether you are using natural or synthetic E. D-Alpha indicates a natural source; Dl-Alpha is synthetic; and Alpha Tocopherol acetate is also synthetic. Does it matter? Yes, very much so in the case of Vitamin E. The synthetic version is 40-50 percent less active biologically than the natural form. This means that if you are taking 400 I.U. of the synthetic form, then you are in reality only getting 200 I.U.

There is currently debate in nutritional circles as to whether the all-Alpha variety is preferred over the mixed tocopherols. Only Alpha has been clinically tested and proponents suggest this is the only tocopherol that work for us. Others feel that the addition of the other tocopherols to the Alpha form is a definite plus, as these may perform functions not yet discovered by the scientists.

Lastly, the mixed tocopherols or D-Alpha in a vegetable oil base is recommended over the Vitamin E preparations which are water dispersible. Nature always makes her E in an oil molecule.

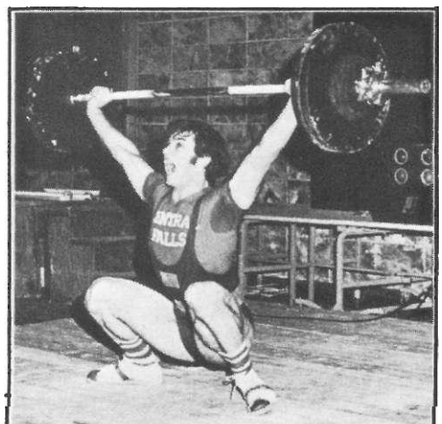
Rather than recommend exact dosages, I'll describe how I use my E. I take 800 I.U. of the mixed form with all of my other supplements following breakfast. I take 400 I.U. with a gram of C about one hour before a training or running session and I take another 400 I.U. at my evening meal. A total of 1600 I.U. during the day and note this is for regular training - I am not prepping for a meet.

Finally, be aware of the inter-action between the various supplements. In general, take your vitamins and minerals, together with foods. A small amount of fat is necessary for the utilization of E and this requirement can be satisfied by taking just a bit of whole milk with the capsule.

The B complexes

When I begin a discussion of the B-complex group, I am always stymied about just what I want to write, as there is such a vast storehouse of information available. So rather than go through all the various B's individually, I'll group them together and give some general information that should prove to be useful to the lifter during the final days.

If you have to remember just one thing about the B-Complex group of vitamins, think of them as "energizers". They help to convert the foods that you eat into usable



Mark Cameron is the hottest young prospect in the country. Trained by Joe Mills, the New England light heavy is seen snatching 270 at the Region I Championships.

One from the past. Taken from the September, 1971 edition of the Weightlifting Journal. Mark went on to become the premier American Olympic lifter of the 70s.

energy. This, of course, is an oversimplification of just how much they do, but it will help you get a handle on their purpose. Thiamine (B1) and Riboflavin (B2), for a quick example, are both essential for the metabolism of carbohydrates. Pyridoxine (B6) aids in protein and fat metabolism, as does Biotin. A great many are involved in the rebuilding process, an important point for the weightlifter as he or she is constantly destroying cells.

As you prepare for the meet ahead, stress builds up. You will be using far greater amounts of the B's than ever before. Should you not supply your body with the needed quantities of the various B's, then your energy will wane. You will have little energy going into the home stretch. They are, in short, an absolute must, and you need to supply them religiously and in mega-quantities.

some personal experimentation to find a brand that makes you feel better.

Here is a mini-guide to check on your product line. There should be the same amounts of B1, B2, and B6, and ten times more pantothenic acid and niacin than these first three. If this is out of proportion, you can bet the rest is also.

Again, unless you are very knowledgeable on the subject, do not take them individually as you can easily upset the balance and create problems. As the meet draws near, increase your intake of the B's. Double up the final two weeks. Be sure to take your B's with food as they will irritate your stomach otherwise. Remember their function, to help you utilize the foods you eat. Since the B's play a critical role in combating stress, they are especially useful as you some into the final days before a contest. And since they assist in utilizing foods, you will be able to derive

There is a synergistic action with the B's. That is, they work closely together and balance is critical.

I do not recommend taking the B's separately, but rather in a properly-balanced formula. There is a "synergistic action" with the B's. That is, they work closely together and balance is critical. You can create a deficiency in one of the B's by taking an unbalanced amount of one of the others.

Lately the vitamin companies have hit on a gimmick to help sales. They have produced the B-Complex vitamins in what they call a high-potency formula, putting 75 or 100 mgs. of most of the B's in one capsule and suggesting that this is superior to the lower potency products. Not so. Typically, they load a tablet with the cheaper B's such as B1 and B2 and come in very low with the more expensive one such as PABA and pantothenic acid.

If you are taking high quantities of your B-Complex and are still experiencing fatigue, then check the label. Try some different formulas until you hit on one that works well for you. Coupled with the commercial gimmicks is the fact that you are an individual and have very specific needs. Not everyone needs exactly the same amounts of the various B's and not in the exact same ratio. The best advice I can offer is to do

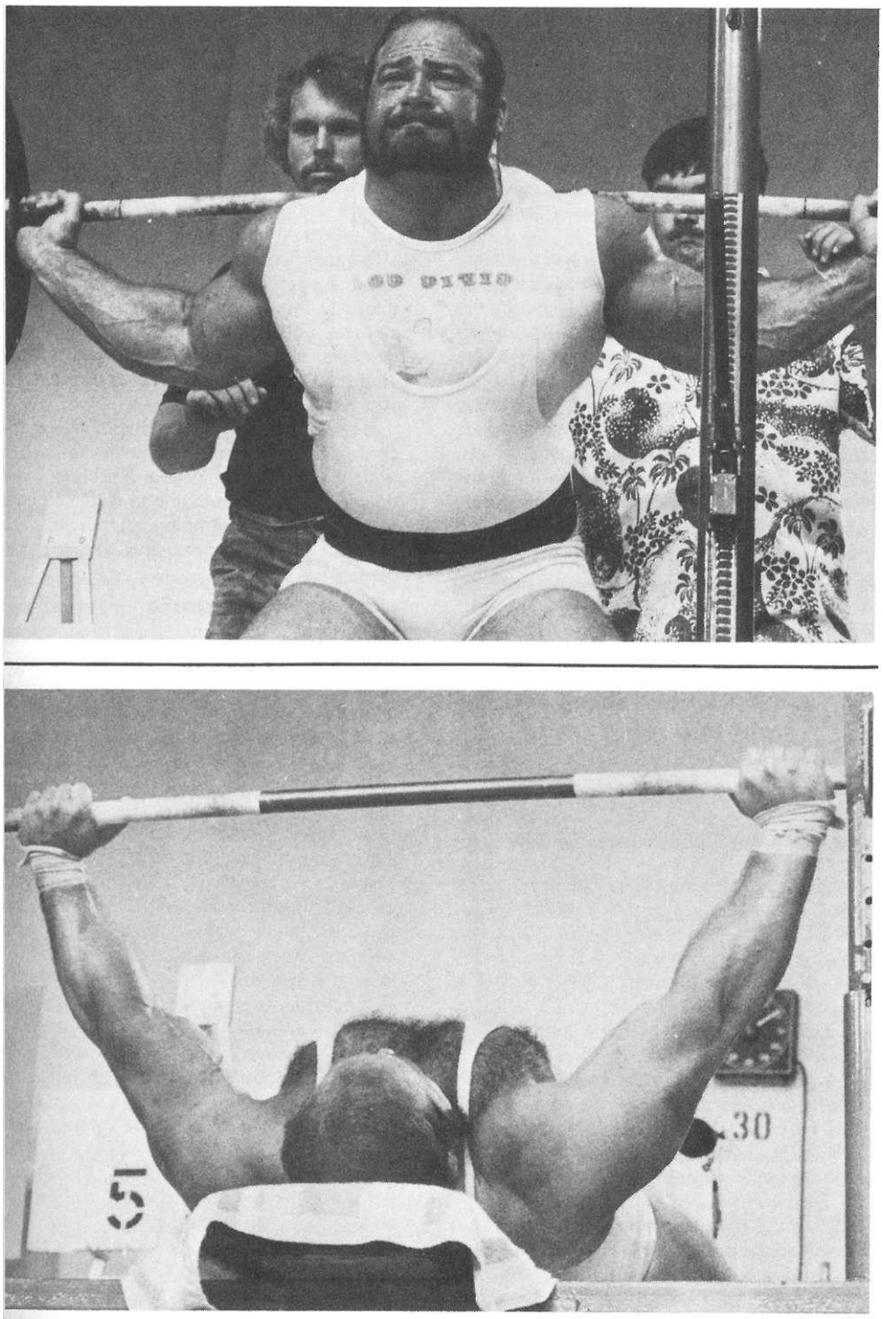
more energy from the foods you eat, ergo you can eat less food and still retain your high energy level. This will allow those who are cutting weight to avoid fatigue as they do so.

The minerals

The minerals, like the B's, often leave me dazed and confused. They do so many good things for the athlete that I have trouble sorting out what is most pertinent in a short piece. They work closely together and must be properly balanced. Without sufficient minerals, our bodies can get into big trouble. For those who use steroids, or diuretics, or any form of stimulant, then the minerals are even more critical for optimum performance.

The minerals do some necessary things, like maintain the boney structure of the body. They govern the contractibility of the muscles, maintain relationships of acidity and alkalinity in the blood and other fluids, and regulate the specific gravity of our blood.

Minerals never work single-handedly, but in partnership with each other, with our hormones, enzymes and all the other vitamins. I'll give one brief description as to how the



Powerlifting's version of the Myth. Doug Young is the ideal of the perfect powerlifting. Twin photos show him bench pressing a World Record and squatting in Hawaii.

vitamins and minerals work hand-in-hand. In order to absorb calcium, the stomach must have adequate hydrochloric acid. If B1 is lacking, then this indispensable acid will not be available. Vitamin D helps to acidify the intestinal tract so that the calcium can be absorbed. As calcium circulates through the blood it joins the phosphorus and is deposited in the bones as a calcium-phosphate salt for future use.

Sad to admit, but I didn't learn of the value of minerals until I did my research for ***The Strongest Shall Survive.*** Had I known the importance of this supplement during my lifting career I could have relieved many of the cramping problems I experienced. Now when I feel cramps coming after a training session or a long run I can get immediate relief with a half dozen of the mineral tablets. Personally, I would rather be without all the vitamins than I would the minerals. They allow me to recover from heavy training and to avoid those bothersome cramps.

Find a balanced multiple mineral tablet and take plenty, especially if you train in a hot, humid climate and sweat a great deal.

As with the B-Complex vitamins, I do not recommend taking the minerals separately. Find a balanced multiple mineral tablet and take plenty, especially if you train in a hot, humid climate and sweat a great deal. We lose a lot of minerals in our sweat, and the sooner these are replaced, the sooner we re-establish normalcy in our body.

A quick check on your multiple mineral label will tell you if its in a proper balance. The ratio of calcium to phosphorus is 1 to 1.5 or 2. There should be a 2 to 1 ratio of calcium to magnesium. If these are off, go to another product line.

I take lots of minerals as I suspect that I am hereditarily a potassium burner. All my family is prone to cramping and all are relieved with potassium. I take my minerals with my morning meal, then immediately after exercise and again with my evening meal. Should I sweat a great deal, which is often easy to do in the high humidity of the East Coast, then I'll load up. Recently, I ran for over an hour in very high humidity and totally depleted my mineral supply. I could feel my entire body about to cramp. Following the run I took 15-20 of the tablets over a 6-hour period. No cramps appeared. Never have I experienced any negatives from the minerals, nor have I ever heard of any athlete who has.

If you are experiencing muscle tightness or a fatigued feeling some 2-3 hours after an exercise session, then I suggest you up your mineral intake. When you are taking steroids, your mineral needs go way up. Little clues, like muscle tremors, twitches and cramping in the hands and toes indicate that you need more minerals.

Be sure to have minerals with you at the contest. Even if you have never cramped in your life, there is always a first time and if you really want something to throw off your game plan, try cramping after a lift. The minerals will help avoid this irritating problem.

Multiple vitamin

The first question to run across your mind may be, "why a multiple, if I'm taking megadoses of the B's, C and E? While it is true that a multiple vitamin will contain some of the same nutrients that you are taking in individual allowance, there are others which are only included in the multiple. Vitamins A and D, for example, which serve extremely useful functions for the weightlifter.

Let's take a quick look at these two vitamins. Vitamin D works closely with calcium, phosphorus and magnesium to provide for a healthy musculature, bone strength, muscle integrity and tooth formation. It is also responsible for the lubrication of the tissues which line our organs-the epithelial tissues.

When Vitamin D is not adequately supplied, phosphorus from foods, even though generous, is not well absorbed into the blood. Phosphorus is a carrier of sugar, taking it through the intestinal wall and from the blood stream to be stored as glycogen. Later, before energy can be produced from sugar, the sugar must again combine with phosphorus.

When there is a lack of Vitamin D, there is also a lack of useable phosphorus. What follows is a lower production of energy. Additionally, Vitamin D controls the enzymes necessary to deposit minerals into our bones, teeth and muscle tissues. In short, it's not a

luxury, but an absolute necessity. I want at least 800 I.U. daily, some of which I obtain from whole milk, and occasionally I do pick up a unit or two directly from the sun.

Vitamin A

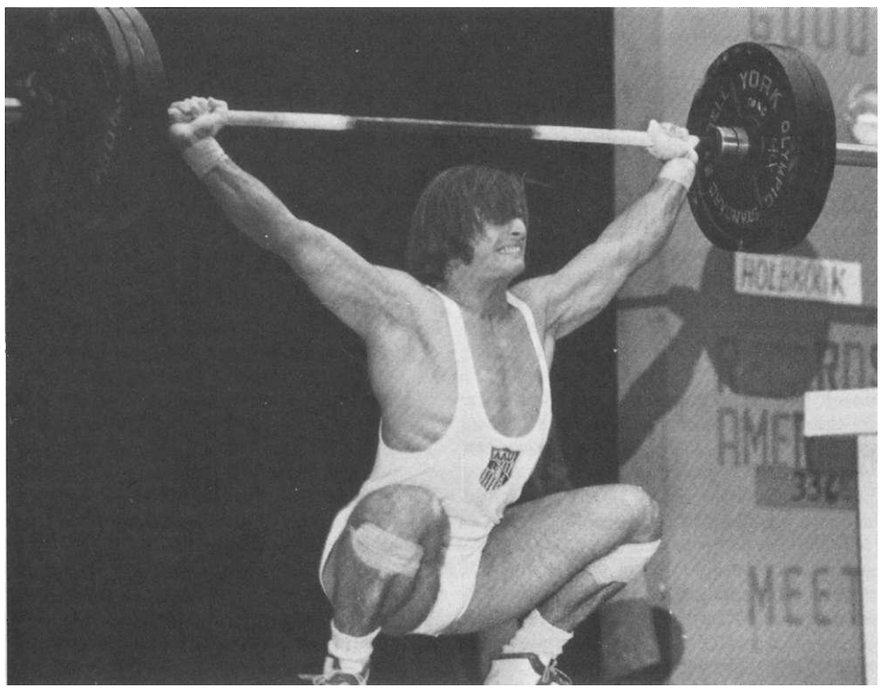
Vitamin A has been most useful to my overall health, and I heartily recommend it to one and all. I have always been bothered with light sensitive eyes and experience visual difficulties whenever I drive at night or do a great deal of reading. Once I learned of the value of Vitamin A and upped my intake, those problems subsided. I was running on a mild Vitamin A deficiency.

While I use it principally for my eyes, it does have lots of other valuable functions. It does many good things for your skin, hair and nails. It also helps to fight infections. Together with C, it can prevent many respiratory illnesses. In addition to its role in maintaining normal vision and resistance to infections, Vitamin A is essential to the development of bones and tooth enamel, good appetite, normal digestion and the formation of both red and white corpuscles.

Both Vitamins A and D are oil-based vitamins and thereby can be stored. The AMA literature is more prone to warn the reader of the dangers of overdose than of the merits of the supplements. Theoretically, an athlete could take too much of either, or both, and run into toxicity problems, but I have never seen it, Personally, I take large amounts of A, 100,000 I.U. daily, and I have been doing this for over 10 years with only positive effects. Anything less and it has no useful effect for me. I also know of other who take this amount and contend they only feel better. I believe athletes use more of everything, including the oil-based vitamins.

The basic idea behind taking a multiple vitamin is to simply cover all the nutritional bases. Since we know how the various supplements depend on each other for utilization, we certainly want to make certain that we do not overlook any and blow the whole process.

Rick ***Holbrook was one of the finest young lifters ever to represent the USA. He set numerous American and World Junior Records and possessed a platform confidence unmatched in recent history. Rick began his lifting under Bill Starr at the Park Ridge Y in 1961.***





In 1969, the author became the first active weightlifter to assume the duty as Head Coach of an American International Olympic Weightlifting Team. Together with Dick Smith, shown on his right, they directed their lifters to a victory at the Tournament of Americas, held in Mayaquez, Puerto Rico.

You will not need large amounts of the multiple. I take one high potency tablet with each of my two meals along with the rest of my supplements. This insures me of not leaving out any of the lesser-known vitamins, such as Vitamin K or Vitamin P, which are just now being studied in depth. How critical are these really? I can't answer that, but they may be extremely important to you. In fact, for you individually they may be the difference between mediocre and maximum performance.

Again, the purpose of the multiple is to insure you of satisfying all of your nutritional needs. You could, of course, take A and D as a separate supplement, as well as all the others. The multiple is just more convenient in this particular case.

Unsaturated fats

The unsaturated fats and oils are quite useful to the weightlifter as they yield twice the energy as either carbohydrates or protein. The energy derived from oils comes slowly, as a secondary energy source, and this is most valuable to the lifter in a long, drawn-out contest.

Fats are often completely avoided by the athlete as the word itself conjures up images of the very epitomy of everything anti-athletic— the fat, overweight person. Yet it needs to be understood that fats serve a critical function in your body. Every cell must be supplied with certain fats. The nerves, brain, hormones of the sex glands and those of the adrenal cortex require particular types



Ken Leistner greets Steve Knight following Steve's national victory.

of fat. The unsaturated fatty acids contain a growth-promoting factor, which is necessary for healthy skin, hair, nails and the sex glands. Without a sufficient supply of the essential fatty acids, Vitamins A and D and minerals such as calcium and magnesium cannot be absorbed. Just one more vivid example of how all the interrelated nutrients work in our bodies.

As athletes, we definitely want the unsaturated type of fats and want to avoid the saturated variety as much as possible. The unsaturated fats and oils (also called polyunsaturated) are found in vegetable oils such as: soybean, corn, peanut, sunflower, safflower, and fish oils. They are also available in egg yolks, whole gran products, nut oils and natural cheeses. The saturated fats are typically from animal sources, such as is found in butter, lard and the fat in meats. All solid fats are saturated and should be avoided.

Of all the unsaturated fatty acids, I put wheat germ oil at the top of my list. It is an excellent source of the essential fatty acid, linoleic acid, Vitamin E, B6, choline and inositol. Vitamin E, being an antioxidant, preserves the potency of the linoleic acid. The B6 converts it within the body to arachidonic acid, which in turn is converted to glycogen, our prime energy source.

You can obtain the oil in either liquid or capsule form. Most weightlifters can handle the liquid with and o.j. chaser without any real trouble, whereas most non-athletes prefer the capsules. I suggest taking a liberal amount of the unsaturated oil each and every day during the final two weeks. The energy will kick in after the carbohydrates have been used and this will prevent the letdown feeling often experienced. The usefulness of either the capsules or a swig of wheat germ oil on the day of the contest should be self-evident.

Take the capsules or liquid after your morning meal, along with all of your other supplements. It is an added bonus to insure you of adequate energy.

Pretest all the nutritional suggestions during the final two weeks in order to get some feedback as to how they will react to your individual chemistry.

It is a very good idea to be pre-testing all of these nutritional suggestions during the final two weeks in order to get some feedback as to how they will react to your particular chemistry. For example, do not take a swig of safflower oil for the first time on the day of the contest. It just may upset your digestive tract. Remember, you want to eliminate, rather than multiply, your problems. Try each idea out to determine 1) how is works on you and 2) how much is necessary for optimum benefit.

Magnesium-calcium tablets

One of the greatest problems facing the weightlifter as he or she goes into the final days before a contest is being able to relax and rest once the training is over. The chapter on mental rehearsal will certainly enable every lifter to learn how to relax more effectively, but in some cases the body chemistry just will not allow total relaxation.

Enter magnesium-calcium tablets, the natural relaxant. Heavy exercise sessions expends huge amounts of these two critical minerals and it's impossible for the body to relax without them. Even though you may be taking a multiple mineral, it in all likelihood will not contain a high enough quantity of these two minerals to have the desired effect.

These are certainly not favorable conditions at any time, but they can be especially damaging just before a contest. It's a good idea to purchase a balanced magnesium-

calcium tablet and take plenty during the final stressful days. I suggest a prepared tablet as the balance between calcium and magnesium is critical. Be sure to inspect the label before you plunk down the cash. There should be twice as much calcium as magnesium. No exceptions.

Most products have 400-500 mg. of magnesium and 800-1,000 mgs. of calcium per tablet. If you are having trouble settling down after a training session and are restless as you go to bed, then add these to your nutritional schedule. Take two or three with a warm glass of milk just after training and again about one-half hour before nitey-nite. Should this dosage not do the trick, then double it. You may have to experiment to find the amount that works for you. It may be 10-12 tablets as your individual needs may be great, especially if you sweat a great deal, are taking steroids, and if you are in the 200 plus body weight category. The larger you are, the more you will need to do the trick.

Magnesium-calcium tablets are safe and should be used rather than the opiates or barbiturates to obtain rest. The latter two are tricky and will create a dependency for sure. "But I may become dependant on the magnesium-calcium." True, but this would be good for you, not harmful. It would be like becoming dependant on fresh air as opposed to smog. Magnesium-calcium will only enhance your overall health, the drugs will slowly destroy it. I'll comment more on the barbiturates in the chapter dealing specifically with drugs.

Personal supplementation schedule

I will give the amounts of each of the supplements which I use. These are meant to be no more than basic guidelines and in no way are meant to be hard and fast recommendations for every reader.

Following the Morning Meal
- 2 grams of Rose Hips C
- 800 I.U. of E
- 1 high potency multiple vitamin
- 3-4 multiple minerals
- 2 high potency B-complex
- 1 unsaturated oil capsule
- 50,000 of A

One hour before training with a piece of fruit
- 1 gram of C
- 400 I.U. of E

Immediately following exercise
- 1 gram of C
- 3-4 multiple minerals

Following evening meal
- Same supplements as after breakfast, except I drop the B-complex vitamins

One-half hour before bedtime
- 1 gram of C
- 4-6 magnesium-calcium tablets with four ounces milk
- additional multiple minerals, if necessary

This sample schedule may assist you in setting up your own program. What you are looking for are principles, not hard and fast amounts. Learn the principles and then you can apply them to your own special needs and develop dosages which suit only you.

This, certainly, is a basic truism in our sport. You must learn to adapt all the principles and rules to your own individual chemistry and personality. Then, and only then, will you reach your full potential on the lifting platform.

Summary

The important point I wish to make in this chapter is that it is most useful for the competitive weightlifter to know just how the various nutritional supplements do work in his or her body and also to begin doing some personal experimentation to determine the "ideal" dosages to meet his or her individual needs.

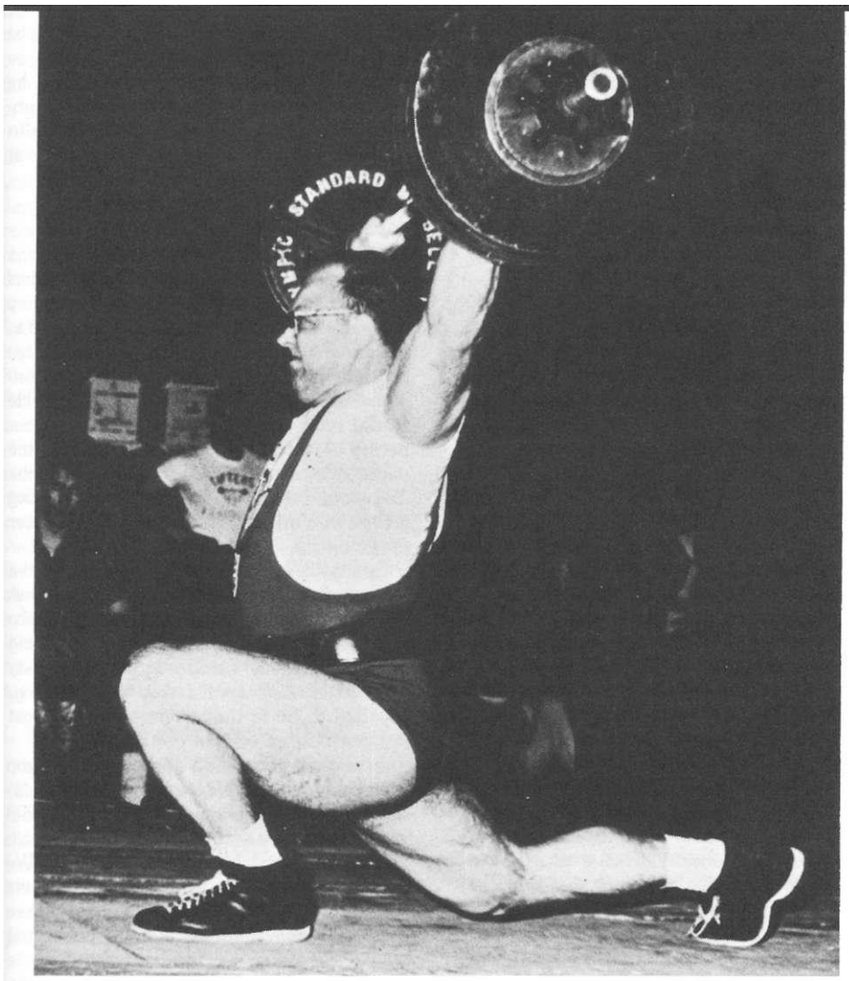
Athletes ask me the arbitrary question, "how much of each of the supplements should I take?" Neither can I, or do I care to, answer this. If I could take a thumb-puncture test and run a mineral hair analysis on each athlete, then I could answer the question much better, but without any scientific feedback, all is mere conjecture.

I found my own dosages simply by trial-and error and this is exactly what each weightlifter must also do. If I add a new supplement to my program, I start with a minimal portion to check for any negative reaction. Negative, at least in my own personal experience, crop up almost immediately, like in twenty-four hours. I know, for example, that I cannot take iron or selenium in any appreciable amounts. The negatives appear in the form of headaches almost instantaneously.

If there are no negatives, then I start increasing my dosage until I achieve the

desired effect. Two hundred units of Vitamin E with a gram of C before running will not assist my breathing, but 400 units does the trick. In the same manner, I also learn of the upper limits, dosages above which do little good. Using the same example, if I take 600 units of E with a gram of C, I note no difference in my breathing over the 400 units.

There are so many individual variables that it is foolish to assume that all people will react in the self-same manner to the same supplement or the same dosage of a combination of supplements. Age, bodyweight, basic hereditary, weather, mental and physical stress, sex (that is, male or female) and on and on. The bottom line is that you, in the final analysis, have to research your own body. Additionally, our individual systems are constantly changing, so the testing never ends. As we grow older, change bodyweight, increase work loads, alter living situation, climates, and so forth, our needs also change. It is a never-ending project to understand just how our bodies ideally function. But to me, this is the fascination. There is no end to the learning.



The Great Norbert Schemansky. His lifting career spanned three decades, he won four Olympic medals, three World Titles, and set over 50 World and Olympic Records. His last World Record, a 352 split snatch, was set when Ski was 43 years of age.

CHAPTER SIX

Making Weight

One of the inherent problems built into the sport of competitive weightlifting is that of being at a certain bodyweight on a given day, or more specifically, at a certain bodyweight at a given hour. Unlike the runner, football player, or swimmer, the Olympic and powerlifter must compete within very specific bodyweight ranges and he or she is not allowed traveling weight. Except for the heavy guys, this lends an added dimension to the final days of training.

This piece will deal with my views of successfully solving the problem. It is based on all I have read in the scientific journals on weight loss for athletes, my personal experimentations on both myself and my trainees, and by watching and visiting with literally hundreds of competitors over the past two decades.

Making weight brings with it another variable which must be dealt with during the final count-down. The mental stress associated with making weight can be far greater than the loaded barbell. I used to be so mentally relieved once I made bodyweight that the lifting itself became almost secondary. All my mental concerns had revolved around food and liquids, not the weights I had to face.

The final two weeks are a time when your patience and self control are tested to the utmost. Everyone is anxious before a contest and the natural urge is to eat, to munch, to drink, to go on intake so as to relieve some of the nervous tension. This is exactly the opposite of what the lifter must do if he is to make weight. Trauma. Lots of woes and mental anguish.

Nearly every competitive lifter trains 4-5 pounds over his class limit. Some stretch this to 6-8 pounds although this is a bit risky. As the meet draws closer, the athlete must contend with those extra pounds. When should they be trimmed? Early? Late? How late? Should food be cut back or should fluids be dropped? What types of foods should be eaten, carbohydrates or protein? These are just a few of the questions I'm asked by competitive lifters in clinics and in the various gyms I train in around the country. I'll cover these and more in this chapter.

A trip with Willie

I learned a great deal about preparing for a contest while traveling with the York lifters just after I had moved there. I learned Very early not to travel with Bill March if I had to make weight. Those who know Bill can appreciate this fact. He could, and would, consume enormous quantities of food. He would add 12-15 pounds in a 24-hour period. My first trip with Willie helped me make the decision to move out of the 181-pound division. I figured that if making weight in York was this traumatic, I'd better move on up.

Smitty, Bill and I drove to Pittsburgh in the spring of '66 to participate in the Pennsylvania State Meet at the Boys' Club. Billy was not in top condition and was going mostly to satisfy Daddy Hoffman. Smitty went where Bill went. I was tagging along, psyched to be in their company and to get my first taste of eastern competition.

I weighed about 183 and needed to drop just a hair. No real problem as I had been doing this for eight years. Bill was around 208 and didn't plan to drop down to class limit. So he ate, and he ate...and he ate. We would stop at a Howard Johnsons on the Turnpike and Bill would get three cheeseburgers, a malt, a large coke, and some fries. He'd eat two and a half of the burgers and ask if I wanted the rest. I was dying a slow death. No food or liquids and the VW was drenched with sweet malt aromas and fragrant coke smells and lovely cheeseburger fumes. I didn't really like any

of this shit normally, but my stomach groaned and twisted the entire trip. To add insult to my dieting body, Bill would throw away food. Parts of cheeseburgers would float by the window and my gastric juices would churn.

Even though I didn't eat a thing, I had one hell of a time making weight. I finally had to resort to driving around Pittsburgh in the VW with the heater on at full blast in all my sweats, as the Boys' Club did not have a steam room. I made the limit five minutes before my class started pressing and since I was only doing about 250 at the time, I had to do three quick warm-ups and hurry upstairs to take my first attempt. I believe to this day that I absorbed calories by osmosis or gained contact-weight from Bill.

Bill was a phenomena to behold when he set his head to putting on pounds. Several years later he and I traveled to the Monroe Jaycees Meet in Iowa and neither of us were concerned with cutting pounds. I was a plump 212 so I decided to let Bill pace me so that I could add a few more pounds on the journey. We ate a full meal on the plane, had a snack at the Chicago layover, then had another as soon as we arrived in Des Moines. I was stuffed and tired of food, but Bill was just warming up. I watched him eat two more full meals and have some munchies before bedtime. I didn't even have room to drink, but Bill just kept eating. His stomach didn't bloat and he didn't go to the crapper. His body just absorbed the food. And he did gain some weight. People eye me strangely when I relate this tale, but I watched him weigh at the York Gym on Friday morning before we left for Iowa. He weighed 208. The following day he weighed in at the meet at 236. Impossible? No, only unusual, but Wee Willie is an unusual creation.

Stay on your basic diet

Weightlifters will do some very stupid things as they prepare for a contest. In their pre-meet anxiety, they will often decide to change their diets, to try something they have just read about or heard about from friends. They begin experimenting and testing either different diets or new supplements. The final two days is not the time to use your body as a research laboratory.

If you should decide to test a mega-dosage of vitamin C or to try out a new line of liver products, do so a few weeks or so before the contest. Get your personal feedback and record it in your training log. If it works, well and good, you know-that you can use the info. If it doesn't work positively and perhaps upsets your digestive tract, then you also are aware of this fact. Done the day of the contest and you have added a negative variable, variable.

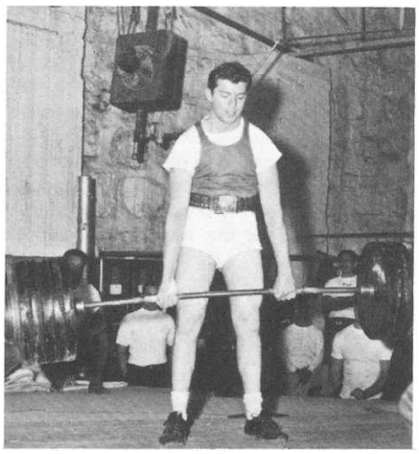
This is not the time to play with nutritional testing; you will be going through enough mental frustration merely cutting the pounds and preparing for the meet. Don't add to your problems.

The Monday prior to the meet is when you seriously begin paying attention to making weight. Everything can be accomplished in this final week.

Needless to state, everyone is unique and can approach the problem of making weight a bit differently, but there are a few guidelines which may prove helpful to most. The Monday prior to the meet is when you seriously begin paying attention to making weight, not before. Everything can be accomplished in this final week. It is best not even to trouble your mind about it until this time. I do not mean, however, that you should allow your weight to soar entirely out of range. You certainly want to have it within striking distance at any given time. I would recommend keeping your weight within 4-5 pounds of your desired class limit at all times. Weights above this amount will give you a misleading indication of your strength. A drop of five pounds is far different to the body than a drop of a six, seven or eight pounds. What I wish to emphasize here is that you should not be cutting back to the class limit until the final week. Use your mental energy for your training lifts. You do not want to drop the weight too early. This will work against you rather than for you.

The final week

The Monday prior to the contest, begin limiting your carbohydrates. Not all of them, only some. Cut them in half. Drop the second piece of toast; only have a half glass of orange juice. Cut out the bedtime treats and all junk. Continue this practice through



Roc-Mo's Ron Chrysler pulls 600 at Colorado State prison.

Wednesday. You should continue eating your normal portions or protein and fats. Especially the unsaturated fats. The section on nutrition during the final two weeks spells out exactly what I suggest. This practice will drop you 2-3 pounds, from 186 to 184 or 170 to 168—within striking distance of your required weight. Again, I am assuming that you do not train more than five pounds over limit. If you are up some six or eight pounds, then the carb-cutting must commence sooner, on Friday or Saturday the week before the meet.

Beginning on Wednesday, drop the carbs to under 40 grams a day or cut them entirely. Eliminating them entirely is tough especially if milk is a part of your diet. "But where will I get my energy?" Don't sweat it. You want your body to reach into the stored fat supplies for energy. This is the bodyweight you want to get rid of. Also, there will be sufficient energy supplied to you via the protein foods and the aforementioned unsaturated fats. Once again I must emphasize the importance of the supplements during this period. Ample B-vitamins will insure you of utilizing all the foods you ingest. Likewise, the fats will be your primary source of energy on these final days. These can be obtained through supplementation also.

Also, be aware of the fact that there will be sufficient energy supplied to you by the protein foods. Meats contain a percentage of fats, which are the highest energy sources. Additionally, and a fact often overlooked, when meat is eaten, we get energy from glycogen, a form of starch stored in our bodies and in the flesh and organs of animals. Liver is the principal storehouse for glycogen and hence is the richest source. Glycogen is changed into glucose in our digestive tract. The juice is available.

What you are wanting your body to do as you are cutting back weight is to call upon the fat stores which do nothing to help you elevate the barbell. Sometimes, just dropping the carbs three days before the meet is enough, the weight will drop to the desired level. In other cases, it will not be enough. For those who are taking steroids, merely limiting or eliminating carbs will usually not do the trick as there is not enough stored fat available to take off the unwanted weight. When the lifter is in excellent condition and carries very little bodyfat, then he must drop fluids in order to make weight.

Dropping fluids

You can lose 3-4 pounds of liquid weight in the final 24 hours by dropping fluid from your body. "But how, since I am doing nothing but sitting around? I'm not sweating or burning any off." You use them internally. Your body needs a great deal of fluids in which to operate. Your lungs use 2-3 pounds of fluid per day; the digestive system, circulatory system all need fluids. You usually do not need to run, sweat or steam in order to drop the unwanted pounds.

By dropping the final few pounds quickly, you will bypass the fatigue associated with long-drawn out dieting. Check your weight periodically during the final couple of days. If it is coming down as planned, then you will have the mental confidence going into the meet. If it is not dropping as rapidly as it should, then you need to make plans. Check ahead to see if there is a steam room available at the meet. It is comforting to know that you have one should it be necessary. If there is not one at the meet site, then do some calling. If there is a YMCA in town, make arrangements to use their facility. It is a good idea to plan ahead just in case the scale is off or the weight does not drop as it should.

Carbohydrate Loading

If your weight has dropped to the desired level, then you can begin a process called "carbohydrate loading" the day before the contest. You can eat a fair amount of car-

bohydrate foods (I do not like the term "loading" for lifters as they will tend to negate all the dieting done the final week) and the sugars taken in are stored in the liver, where they are converted to glycogen, which in turn will be changed to glucose as it is needed by your body. If this glucose is not utilized, which it shouldn't be as you will not be active this final day, then it is changed to glycogen and stored in the liver and muscles. These glycogen deposits are what you want to have available at meet time.

You can eat carbohydrates the night before the competition and the morning of the meet. Do not go nuts and overdo it or you will blow the entire process. A bowl of ice cream or cereal with fruit is what I have in mind. Or a piece or two of pizza or a banana split. The liver and muscles will only store a limited amount of glycogen. The excess, if not used, will convert to fat and you do not want this to happen.

As soon as you are at your desired weight, even if it is 3-4 hours before weigh-in, start replacing your fluids. An electrolyte drink such as Gatorade or Quick Kick is good, but do not overdo a good thing. These commercial products contain a fair amount of sugar and you do not want to go nutsy over your sugar intake. Too much of a good thing will screw you up. A rapid ingestion of sugar in any form stimulates the pancreas into pouring out insulin. The insulin, in turn, causes the liver and muscles to withdraw sugar and store it as glycogen or change it into fat, thus preventing it from being lost to the body through the urine. As digestion continues, sugar keeps pouring into the blood. The pancreas responds with more insulin. It becomes overstimulated and sends out too much. Too much sugar is thereby withdrawn due to the abundance of insulin. And around and around it goes. The end result is nervousness and fatigue.

Everyone has seen the "honey eaters" at contests. They gorge pints of the stuff for "quick energy". They do, in fact, get energy rushes, but they are followed by energy letdowns. The energy rushes come when the insulin hits, then drops down as the sugar is depleted. More honey. Up again. Then a deeper valley. They are riding a sweet roller coaster and as the valleys become progressively deeper and deeper the longer it goes on.

Athletes do not need the addition of mental irritability which comes with low blood sugar. Low blood sugar also means that your reaction time is slowed down considerably and your thinking is confused. Muscular weakness, faintness and blackouts are also clearly associated with low blood sugar. So much for ODing honey.

One thing is for sure, the competitor already has enough nervous tension without adding a new negative variable. The bottom line—go easy on the sugars in any form. Too much orange juice, too much coffee (with or without sugar), too much candy or whatever will set off this reaction.

Breakfast

Assuming that your weight is in order and you do not have to starve yourself on meet day, here is a diet that will ensure you of bountiful energy for the contest. Breakfast will consist of a moderate amount of fats, carbohydrates, and protein. Two or three eggs in any form (if fried, make it in unsaturated oils), toast, and a half glass of milk to help assimilate your supplements. If your weight is in good shape you can add a piece of fruit. You will want to avoid any animal fats as they are more difficult to digest. Your supplements will supply you with the necessary unsaturated fatty acids.

With this moderate meal, digestion takes place slowly and rhythmically. Sugar trickles into the blood, giving you a sustained pick-up hour after hour and insulin production is not overstimulated. Do not have coffee with your breakfast. If you plan to use coffee to stimulate you for the contest, do not start this process till after weigh-in.

As soon as you are at your desired weight, even if it's 3-4 hours before weigh-in, start replacing your fluids.

Breakfast is to be eaten 1 ½ - 2 hours before the contest. These supplements are to be taken with the morning meal: B-complex (2-3 high potency formula), Vitamin E (600-800 I.U.), Vitamin C (2-3 grams), multiple minerals (4-6 high potency formula), a multiple vitamin tablet, and wheat germ oil (6-8 capsules or a tablespoon of the liquid).

The rationale behind each of these supplements is as follows: the B-complex will break down the foods into usable energy, the

C and E work together for ease of breathing, the wheat germ oil will serve as the secondary energy source. The oils will kick in after the carbs have been utilized, approximately 4-5 hours later. This will eliminate the letdown often experienced with a high carbohydrate meal. The vitamin-mineral multiple will insure you of taking in all the essential supplements in at least some quantity. The minerals will satisfy your body's need for these supplements even before the stress of the contest begins. Nervousness uses up a great deal of your minerals and Vitamin C supply so you want it replaced before there is a deficit.

This is based on the idea that breakfast is to be your final meal before the competition. If you are to lift later in the day and want to eat again, I suggest a piece of fruit some two hours before competition. If you have lots of time, say 6-8 hours, you may have a tuna salad and a piece of fruit. Lay off the heavy protein foods however. Tuna seems to set much better than a hamburger as the animal fat is much harder to assimilate.

Test the pre-meet meal

You might recall the advice I gave in the initial chapter, that you should go through a mini-contest to ready yourself for the actual meet conditions. This same advice holds true for pre-meet dietary routine. On the two Saturdays prior to the actual contest, when you will be going through the dress rehearsal for the lifting, you will also want to dress rehearse for the foods and supplements you will be taking in on the meet day.

This will allow you to obtain some realistic feedback on your dietary program. You will know if you have sufficient energy. If not, plan to add some useable carbohydrates or more supplements. Did you experience some cramping towards the end of the session? More minerals are in order. Did the coffee over-stimulate you and perhaps upset you stomach? Was your breathing difficult?

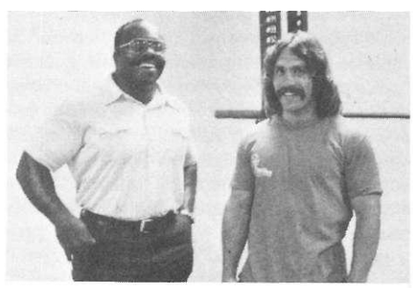
The Saturdays before the contest are the days to discover how the dietary program is working. If at the first mini-test two weeks before the contest, you feel that you need more minerals and E, then you have yet another Saturday to iron out the solution. The main point I wish to emphasize here is that you do not want to be experimenting on contest day. You want to eliminate as many variables as possible. I can assure you that there will be plenty of unexpected ones to give you enough trouble anyway.

Shedding the final ounces

Even with the best laid plans, you will at one time or another run into a situation where you are still above the required weight limit. Every lifter must be prepared to face the reality of dropping a quarter to a half pound in the final hour. I have had to face as much as a pound and a half in the last hour. This may come about for a variety of reasons. One of the most typical being that the scale you have been checking your weight on is not accurate. Or the meet scale is not certified or accurate, but that is the one you have to satisfy. When you step on the meet scale and find you are a half or full pound over what you thought you were, then it can be a genuine mind blower. What to do?

Hopefully, you have followed my advice and tested the scale to check your bodyweight some hours before the official weigh-in begins. In some cases this is not allowed or just not possible. If you have done adequate preparation, you already know whether there is a steam room in the building or the general area. If there is, get to it immediately. If there is no steam room at your disposal, find the shower room and turn on all the hot faucets. Get you body temperature up. Some light calisthenics are OK as they will not tap into energy reserves. Physiologically, you will be benefitting yourself with this early warm-up so don't be concerned over the energy loss. It's a positive rather than a negative.

Hit the bathroom frequently. Your nerves, especially after discovering you are over the limit, will help trigger your kidneys. You will find that you can quickly eliminate 6-8 ounces in the urinal immediately. A healthy bowel movement is a gift from the gods at this stage also.



Dave Shaw and Steve Dussia trade stories backstage at the Hawaiian Open.

Dick Smith used to help us by massaging our lower backs, just over the kidneys. This procedure, coupled with the heat from the steam or hot shower and our nervousness helped to release still more valuable fluids.

Some other emergency measures entail putting on all your sweats and doing some jogging, or rope jumping, or calisthenics. Or bundling up and sitting in the hottest place available. I already related the tale of my driving around Pittsburgh fully clothed in a VW with the heat on at full-blast. Nobody said weightlifters were normal.

Goofy scales

Every weightlifter knows that each and every scale has its own personality. At the better national meets and international shows they will have a highly sensitive computerized scale than can weigh a pubic hair. At some local and state meets, the weights vary some five-six pounds, depending on how you stand on the platform.

This is another good reason to check out the meet scale some 2-3 hours before official weigh-in, if at all possible. Find the soft spot. A matter of moving forward an inch can mean the difference of a half pound. A half pound in the steam room may be an eternity. Leaning, putting all your weight on one leg is also useful.

If you haven't been able to test the scale, often fellow competitors pass on this information. I was having a trauma making the 198-limit at the Cincinnati Open one winter. I was already so dehydrated that there were just no fluids left to steam out of me. Time was running out and my weight was not dropping an ounce. Bobby Hise, who was my chief competition that day, told me of the soft spot. I not only made the required weight, but went on under his weight, a difference of almost 3 pounds. He threw a fit that I had used his information to slide under so as to be the lighter man, but it didn't matter as he beat me soundly anyway.



World Champion, Rick Gaugler grinds out of a squat.

Diuretics

The use of diuretic drugs for quick weight loss was, for a time, quite common among competitive lifters. The practice has diminished a bit lately as the athletes have discovered the disadvantages far outweigh the benefits. I do not recommend them at all. They deplete far too many essential nutrients, especially potassium. Even the so-called potassium sparing diuretics tap into the minerals and adversely affect optimum strength performance.

Your body is already under extreme stress with the restricted fluids, mental pressure, and limited food intake. If you have been using steroids, then the diuretics add an even more severe negative reaction to your body chemistry.

The use of diuretics is a short-cut that will ultimately hurt your performance.

Most diuretics users suffer some degree of cramping, or at least some muscle tightness and fatigue during the contest. I relay this information from sad experience. I used to cramp so severely that I couldn't loosen my fingers from the bar after an attempt. I only tried diuretics once. I lost the weight but suffered so badly through every attempt that I wished I had never seen a barbell. My calves cramped as I extended on the pull for the lifts. Very aggravating and it took me days to recover. To me, it's just poor preparation to have to resort to them. If you get your diet in order, you will have no need for them. It's a short-cut that will definitely hurt your performance.

Once you finally make the class limit, the general tendency is to gorge yourself. You feel so empty that you figure you must stoke the furnace. A sandwich, a quart of milk and a Twinky taste so delicious. You feel very satisfied but soon afterwards become sluggish and would prefer a nap over lifting anything heavy. Perhaps a little t.v. Small wonder. After depleting the digestive system

for days, you suddenly overload it. Wrong.

Do not eat any quantities of food any closer than two hours before competition. If you feel that you must take in something, it's best to make it fruit or liquids. I prefer bananas as they are loaded with potassium, which I use up in large quantities. Be aware of the fact that your digestive processes will take priority except in an emergency situation. The digestive system draws upon one-fourth of your blood supply to do its job. That's blood that you would much rather have working in your muscles.

You will find that you will actually perform much better just a bit on the hungry side, as opposed to being stuffed with food. If you have followed the nutritional guidelines and have taken the suggested supplements, then you will have more than enough energy available. Few competitors have actually fainted from starvation at a contest. They only think they will.

After you make weight and eat whatever you decide suits your needs the best, take another quantity of supplements. A couple of B's, some C and more minerals. Stress uses these nutrients at an alarming rate and you are peaking, stress-wise, just before your first warm-up.

The *magic bean*

Some athletes, including myself, like to use coffee as a stimulant for a contest. I'll cover the use of amphetamines at length in the chapter dealing with drugs, but at this time I want to comment on the "upper of the populace".

I found coffee most useful in competition as it acted as an ideal starter for me. After mentally gearing down for the final week, I often had difficulty in getting hyped for the meet. The coffee helped to kick the mechanism in gear. Coffee, like all stimulants, must be used rationally or it will become your enemy rather than your ally.

Research has shown that two cups of black coffee taken an hour before competition will increase performance. This data comes out of testing done on marathon runners by Doctor David Costill of Ball State University, one of my former Alma Maters. Dr. Costill found that caffeine stimulate the release of fatty acids into the blood, thereby providing the muscles with a fuel supplement. The muscles then burn fats and glycogen that have been stored from the meals eaten the night before and the morning of the contest.

Again, let me emphasize the "Golden Mean". Basic moderation. Too many competitors in their anxiety to perform well, figure that if two cups is good, then five or six is even better. I vividly recall the time Nick Frasca overdosed on caffeine while at the University of Hawaii. Nick was, and is, prone to overdoing everything in life whether it be coffee or Susies. "Begin with an overdose" is Nick's philosophy. He was a wrestler before turning to competitive weightlifting and came to me in regards to taking some sort of stimulant before an upcoming match. I suggested coffee, but made the mistake of not defining the limits in very specific amounts. Those who never drink coffee get a tremendous lift. So Nick made some coffee, a whole pot, and drank all of it, the equivalent of 150-200 milligrams from the best I could figure. It was so thick it resembled black glue, but Nick was determined.

Coffee stimulates the release of fatty acids into the bloodstream, thereby providing the muscles with a fuel supply.

In addition to the caffeine in coffee, there are some potent oils which will upset the stomach, especially when one is not used to drinking the stuff. The end result was that Nick got very sick. He threw up between matches, then he threw up between rounds of matches. After the meet, he threw up a bit more. He was most irate with me for my advice, but I do not recall telling him to drink an entire pot of coffee. So, if there are more Nicks reading this piece, "Basic Overdosers", please be advised, two cups which contain about 50-75 milligrams of caffeine (depending, of course, on how strong it is brewed) provides all the benefit that can be achieved. You can use coffee, sparingly,

throughout the contest to regulate your body chemistry. If you are a regular coffee drinker, then you can use a bit more than if you're a non-coffee person. If you use sugar, be aware that in all likelihood you will be setting off the insulin reaction mentioned earlier and may produce a low blood sugar situation.

Moderate consumption is in order or you will be forced to steadily increase your coffee intake as long as the meet goes on. Recall that I said not to have any coffee with your morning meal. You do not want the caffeine to start working until you are ready.

During the meet

After the first lift, snatch or squat, is completed you should take in a bit more electrolyte drink and perhaps more fruit. Avoid an excess of fruit juices as they are loaded with sugar. An orange or a banana and a glass of Gatorade will give you plenty of carbs. Once again, caution is in order. You cannot overload the stomach as this will divert too much blood from the muscles. If you find, through trial-and-error, that the Gatorade is too sweet, then use the mineral tablets with plain water. This will keep the insulin from flooding into the system. The minerals will help you to avoid fatigue and cramping just as effectively.

The minerals or electrolyte drink are especially valuable for those who are using steroids and have had to cut weight. Cramping is a common problem. Start your mineral intake, as earlier suggested, in the morning and continue to pop them throughout the meet. Prevention beats the hell out of curing cramps when you are in the midst of a meet.

Continue to supply your nutritional needs throughout the contest. If it is a short meet, as most Olympic contests are, just take in minerals and water. You may munch on an orange or eat a banana, but nothing more is required. If it's a long, drawn-out affair, then you may want to eat a bit of something between lifts, but keep it light and liquids are preferred over solids. Fruit juices and fruit are, once again, in order.

After the meet

After you complete your lifting, take a goodly supply of Vitamin C (2-3 grams), Vitamin E (600-800 I.U.) and more minerals. Then get some protein in your body. Some folks just can't eat after a contest. This is due to the adrenaline still pumping, or in some cases the caffeine or amphetamines ingested act as appetite depressants.

Regardless of the reason, your body needs to have the depleted protein replaced. If you can't eat solids, take in liquids. Soups are great. High protein milkshakes are good and just plain milk satisfies some portion of the need. Even the most frenzied lifter can drink something. Drop a couple of B-complex vitamins after you eat. Don't take your B's before you eat, however, as they will irritate your stomach. Magnesium-calcium tablets are also very useful after a contest. They act as natural muscle relaxants and help you to get back to normal.

Also note that the sooner you get the protein into your system after you finish the meet, the better. If you are on the road and in a small town which closes down early, it's best to plan ahead. After being caught short a few times in backwater towns, I learned to stash some food in the motel room. Some meets drag so long that even in large cities, finding food in the wee hours is a pain. A bucket of Colonel Sander's best and a quart of milk looks like a gourmet meal after 10-12 hours in a gym. It's decent quality protein and you can down it quickly. It sure does wonders for a tired body.

Summary

If you plan ahead, dropping to your class limit should not be a traumatic experience. You will be able to systematically shed the unwanted pounds, hold your strength level, and have plenty of energy throughout the contest.

By understanding how the various foods and nutritional supplements work in your body, you will be able to satisfy all your needs without mental or physical stress. Being able to accomplish this goal will leave your mind free to think only of elevating heavier poundages. Once again, my advice boils down to taking care of details. Nothing really new, but this simple advice is often forgotten or overlooked.

CHAPTER SEVEN

The Factor of Rest

Obtaining sufficient rest in the days prior to an important competition is one of the major problems facing many lifters. It was one of the greatest obstacles for me to overcome. I could blow two months of excellent training in one short night of tossing and turning. Rest is extremely important to my performance. I rank it above either training or diet in my program. I can have poor training sessions going into a contest and still do well at the meet. I can neglect my diet and still come out ok on my lifts, but I have never, ever done well coming off a night where I did not obtain sufficient rest.

Rest is very much an individual variable. Needs vary tremendously. It's back to the familiar theme of "individuals differ". Many of my teammates throughout the years, in Texas, Chicago, Indiana, York and Honolulu could do very well with little or virtually no sleep, while I floundered if I did not get enough.

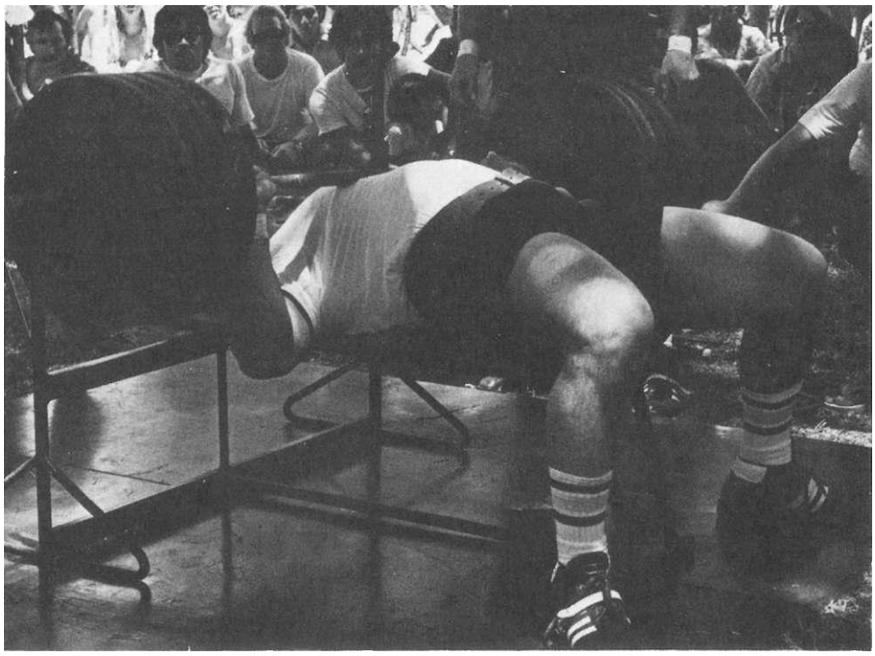
The Unusual John Phillip

While I was at the University of Hawaii, John Phillip, the Giant Tongan whom I met and eventually trained, defied all the rules when it came to obtaining rest. John was, in many regards, a physical phenomena. He had been an All-American Rugby player and ten-times state wrestling champion. He had run the 100-yard dash in high school in under 10 seconds while weighing over 200 pounds. He was in his early thirties when I met him; truly quite a specimen. Just at six feet in height, he weighed a solid 285. John was always in motion. He worked as a guidance counselor at Radford High School during the day and ran his own security company at night. Every night. His company had contracts with all the major facilities on the North Shore of Oahu. Sandwiched in between these responsibilities, he trained, ate, visited friends, ate again, but very seldom did he sleep. He would catch a nap, usually in his car, as he traveled from job to job, but his honest-to-goodness sleep only amounted to about 3-4 hours a night. His body seemed to run on the tremendous amounts of food he consumed, but he did not require much sleep.

John trained hard and heavy. He would do whatever routine I laid out, and I put together some killers as he was preparing for the worlds. He never begged off a set or rep, although he did complain at times that I was trying to cripple him. When the reader considers that John, at the '75 Worlds, weighing just over 280, placed second to the 360-pound Don Reinhoult after training on the competitive power lifts for only 18 months, then the magnitude of his accomplishment can be truly appreciated.

John usually trained at the Brigham Young University of Hawaii near his home in Laie, but before a contest he would drive into Honolulu to train with me and the other members of the University of Hawaii team. John would stumble in looking weary. I would outline his squat program while he dressed out. John had no mental barriers. He was a lifting machine. I would plug in the numbers and he would do the prescribed lifts. I often overloaded just to check out his top-end weight. He would do whatever I loaded up, so I took care not to break him, as he could carry a massive workout load.

On more than one occasion, he would do five reps with a heavy poundage, such as 550, stagger over to the sit-up board and go sound asleep while Steve Dussia and Steve Gilardi loaded the bar for the next set. It seemed impossible that he could actually fall asleep in a noisy gym just behind a heavy set. At first, I thought he was just relaxing with his eyes shut, but when I went to check on him I found he was snoring. Out like a light.



Big John was a legend on the Islands long before I arrived. People moved cautiously in his presence. When the other trainees discovered he was actually asleep on the sit-up board, they stopped all the racket. Now, it's very difficult to train with weights without making any noise, but no one wanted to wake the sleeping giant. Whatever training was accomplished, was done very quietly.

When I figured that he had lingered long enough (usually 4-5 minutes) I would wake him. He would stagger up, take the next poundage, 600 for five, then go back and fall sound asleep once again. Absolutely unbelievable.

John is definitely a rarity. His rest requirements are at the opposite end of the pole from my own. If I only got three hours of sleep the night before a meet, I might as well not suit up. I need 9-10. John does well on 3-4 hours of sleep a night. If John were to sleep 9-10 hours, it would be disaster for him. In fact, he cannot sleep eight hours straight, a fact I learned while traveling with him.

Genes & chromosomes

Sleep requirements are built in at birth. Our needs vary due to such things as higher work load, mental and physical fatigue, faulty diet, and age, but our base needs never change much from infancy. I needed lots of sleep when I was growing up. I still do. My three brothers and parents needed little sleep, by comparison. Of my four children, only the second, Kimie, needs extra rest. The others can go day and night without much sleep and stay in fine fiddle.



John Phillip, Super Specimen, displays his skills at a contest held in Kapiolani Park, Hawaii.

The individual who needs more than the so-called average of sleep is in the minority in our culture. Our society has adopted the eight hours of sleep requirements with almost a moralistic fervor. Thanks to our

puritanical ancestors and philosophers such as Ben Franklin, anyone who stays in the sack longer than eight hours is tabbed lazy. I have double trouble, as in addition to needing extra sleep, I also have an aversion to mornings. I am on a p.m. schedule. 1 like to get up late and stay up late. This, too, conflicts with the norm. But I know it's best for me. Why? Because I feel better when I follow this routine.

For others, this schedule would be disastrous. Again, I refer to my immediate family. All, save myself, are early risers and none like the wee hours after midnight, although my brother Gary and I have done some serious partying into the a.m. Our culture is not geared towards the p.m. person. It took me many years to realize that I wasn't really lazy, only different. I get lots accomplished, but on my own time schedule.

If you find that you are not getting enough sleep, then make it a point to get some extra rest during the day.

I also find that my rest requirements go up when I am in heavy, serious training. I can get by on 6-7 hours of sleep when I do not exercise regularly. As my work load in the gym and track increases, so do my rest requirements. If I try to beat the system, I fail. My performance in the gym drops off, and should I continue to push, I either get ill or injured. So I make it a point to obtain my necessary rest. The point of all these ramblings from my personal diary is that each lifter, in the final analysis, must understand his or her own requirements for rest and not be guided by any other standard.

Satisfy your needs

During the final two weeks, it is imperative that you satisfy your personal rest requirements. All your training leading into the big meet can be cancelled out if you do not pay attention to your body's needs. If you find that you are extra droopy in the mornings as you go to work, then make some adjustments in your routine. Get into bed a bit earlier than usual. As the meet draws near, you can expect to be a bit more restless than usual. You can spend the extra time in the solitude of your bedroom, doing some mental rehearsal and relaxing.

If, because of your nervousness, you find that you are not getting enough sleep, then make it a point to get some extra rest during the day. Maybe you can slip in an hour's nap at noon-time or a short rest just after getting home from work before going to the gym. Naps can help a great deal. In fact, for some like my friend John Phillip, naps are a saving grace. Some folks would rather accummulate their daily rest requirements in small bits, rather than in one large lump.

There are also athletes at the other end of the spectrum who find that too much rest is a negative. Exercise actually reduces, rather than increases their rest needs. For this group extra sleep is a handicap, rather than an asset. Again, an alteration in living habits during the final days is in order. Reschedule your day, so that you get up a bit earlier and stay up a little later.

I have talked to a great number of lifters who tell me their sleep needs go down as their steroid consumption goes up. And since most are steadily increasing their drug intake going into the contest, their sleep requirement goes proportionately downward. Again, be aware of this fact. It's perfectly fine to lie in bed, doing your mental rehearsal and staying totally relaxed. This is helpful. It is not helpful to be tossing and turning and becoming irritated because you cannot fall asleep. It would be far better for your mental outlook to do some reading or watch Johnny Carson on the tube. In other words, don't fight your own system. Flow with your changing needs, as they may change rather drastically just before a big contest. You are peaking out on steroid intake and your training load. Your mental juices are also on double time. Your entire body chemistry is altered and it only follows that your rest needs will also be altered.

Supplementation

For some lifters, going to sleep the night before a big meet is not just a problem, it is totally impossible. So what to do? Some lifters utilize pharmaceuticals while others prefer the more safe, natural route to niteynite. During the heyday of the York Club in the late '60's, prescription drugs were the order of the day. Due to the generosity of a local M.D. and pharmacy, there was an abundance of any type of sleeping aid available.

The drugs did their job, they put the lifters to sleep, but the flip side of the tale is that they always had some not-so-neat side effect. It has to be remembered that barbiturates are extremely habit-forming, even more so than heroin, so extreme caution must be taken if you have used or plan to use these drugs. Forget the reliability of your local M.D. You can always find some medical person to lay out a prescription. One lifter used to get an abundant supply from his eye doctor. Merely because the drugs are obtained through legal channels does not mean that they are any more safe to your body, than if they are bought off the street.

I saw a couple of outstanding lifters at York fall into the addiction trap quite innocently. I want to reiterate that if you are of a mind to use a pharmaceutical to help you rest, use extreme caution. Only take a minimal dosage the night before the meet. Do not start in a week or more before, merely because you are unable to fall asleep. It is an insidious trap. While one capsule might do the trick the first night, it will soon take two, then three to accomplish the same goal.

An international caliber lifter almost snuffed his life with sleeping pills simply because after the first few pills he lost count and overdosed. His wife called me at 2 a.m. I went to his apartment and found him unconscious. It took us some time to get him revived. He had taken, at last count, 16 very potent sleeping pills. Had he not been so healthy, he surely would have pulled an Elvis. Off to the big weight room in the sky.

An additional problem encountered by downer users is that they usually resort to taking uppers during the day to counteract the drowsy feelings induced by the sleeping pills. Comes time to train and the world is viewed through cobwebs. An upper to help the training. More downers to slow down at night. Roller coaster to a dead end.

One's OK, *two is too many*

Again, a tale with no names. A number of York lifters traveled to a contest one summer to tune up for the up-coming North Americans. The meet director was also an outstanding lifter and he mentioned in passing, that he could never, ever sleep the night before a meet. We were friends and I confided that I had the same problem and found that a sleeping pill helped me rest with no serious after effects. He wanted to give the idea a test. I gave him two pills with the following instructions: take one about a half hour before going to bed. I added that some people do not respond to one tablet, so the second is a backup in case one is not enough. So, I advised him to keep the second in reserve to be used in case he was not asleep in 30-40 minutes.

My friend goes home, takes one pill and goes to bed. No sleep. He gets up and takes the backup. But, he did not check the clock as instructed. He had only waited 15 minutes for the first to take effect and not the full half hour. Say good night!

George Hechter, Harford County's first Teen-Age National Champion in any strength sport, pulls on the dead lift that wins him the title in Chicago.



The following day is a blurry nightmare for him. His wife could not wake him at the appointed hour. He was, it should be remembered, the meet director and was supposed to set up the entire meet that morning. No dice. His wife called me for assistance. Cold showers, coffee, nothing worked. He could not sit upright. Finally, his wife drove him to the meet. He looked like he just come off the Bataan Death March. Really sad shape for a guy who had to compete in about an hour. A lifter from California had just what he needed and he did manage to get his act together and compete, but he did not do well.

Be very aware of the hidden stimulants in your diet. Such as coffee, tea, colas, sugar, or alcohol.

The point of the story is that while one tablet would have given him just what he wanted, that is, a solid night's sleep, two proved to be too much for his system. Any pharmaceutical is risky. A couple of other lessons came out of this experience. A person should never "test" a pharmaceutical at meet time. If you do plan to use some form of aid, try it out 2-3 weeks before to see how it acts on your system. Secondly, one should never introduce another to anything as potentially dangerous as a barbiturate. When our mistakes were tallied, the result was a sad day for both of us.

The natural route

Since doing my nutritional research for ***The Strongest Shall Survive,*** 1 have adopted a more natural approach to obtaining the necessary rest before a contest. Four to six magnesium-calcium tablets with a bit of milk just before bedtime works much like a barbiturate. But the minerals are much, much better because there are no negatives as there are with the drugs. It takes 48-72 hours for the body to eliminate a heavy-duty drug, such as a barbiturate from the system. Magical tablets require no such flushing. They do all positive things for your body.

One of the lesser understood negative aspects of barbiturates is that they knock out your dream cycle when you do sleep. Bummer. Dreams are extremely necessary for our psychological well being. They provide a much-needed psychic release. In other words, it is not healthy to disrupt your dream cycle. And just before a contest, you want all your faculties in A-1 order. The magnesium-calcium tablets give you a natural alternative to solving your sleeping problem.

No stimulants

As you are going into the final days before a contest and the excitement level is steadily rising, be extra aware of your food, liquid, and supplement intake. Be sure that you are not taking any stimulants in your system during the evening or late-night hours. I am not, at this point, speaking of pharmaceutical stimulants, but rather the hidden ones in your regular diet. Be aware of coffee, tea, and cola as they all contain caffeine. Cut out the sugars and be wary of alcohol. A beer or two may serve to relax you, but add a shot of liquor and the insulin is kicked into gear. You may get a rush that stays with you much longer than usual because of your nervous state.

Sugars, too, will create momentary rushes, so avoid them especially at night. I had one stretch of about a week where I couldn't get to sleep. I finally diagnosed the villain as the white sugar I was putting on my cereal for my late night snack. I switched to honey and no longer had any difficulty resting.

Be aware of your vitamin intake also. During the final countdown lifters usually megadose all their supplements, so as not to take any chances of short-changing their needs. For some supplements, this works fine. For others, especially if taken at night, this is not so fine. Especially the B-Complex group. Their role is, basically speaking, to help the body utilize protein, fats and carbs. They are energizers. You will not want to load up on the B's in the evening. They keep many people awake as they do have an energizing effect. You can go ahead and take a megadose of your B's, but do so in the morning and no later than at noon.

As is my usual habit, I stumbled into this fact by mistake. I prepackaged my individual allowances of vitamins and minerals for convenience, but what I had failed to remember was that I had a post-breakfast formula, which is very high in the B-Complexes. After a couple of successive nights of not falling asleep as usual, it dawned on me that I was taking too many B vitamins late in the evening. I switched formulas and that night it was

lullabyland.

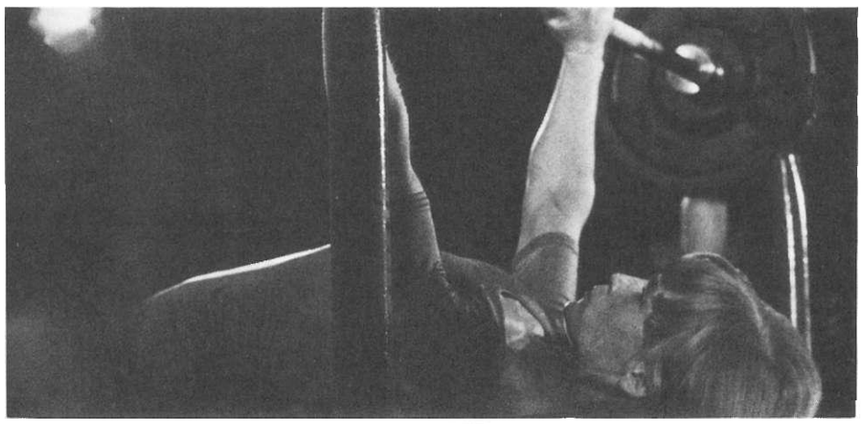
Perils of over rest

A trap which some athletes fall into in the final days is that they feel they need to get an abundance of rest, so they go to bed much earlier than usual, sleep later than normal, they play Slug all day so as to store and conserve energy. This routine is fine, if it is something that you are used to doing. It is not ok if it's the exact opposite of your regular life style. If you happen to be the kind of person who is very active and generally gets only 6-7 hours of sleep, then do not go to the extreme and start sleeping 10-12 hours just before a meet. As was previously mentioned in the chapters dealing with diet and sex, you don't want to make any changes in your living habits prior to a contest. The simple rule still hold true: keep things as close to normal as possible. By normal, I do not mean the average of anything, but rather what is "typical" for you.

Many lifters discover this fact when they travel to an out-of-town meet. They may go in early to acclimatize themselves to the new time zone. Good idea. Now they have to kill two days. They are used to getting up and going to work everyday, coming home, puttering around the house, watching the One-eyed Monster, nibbling in the kitchen, and sleeping in their own bed. Now they find themselves lying around a motel room, watching the soaps. After two days of this foreign routine, they feel like a used sweat sock. No energy. Their mental state drops considerably. Depression starts to creep in.

Make plans for your day if you are going to be in this situation. Take a project along that will keep you occupied. A book helps for some. Others like to spend their time writing, even if it's no more than short notes on how they are feeling or brief letters to their friends and training mates back at the gym. You might work some business into your trip, even if it's unimportant business. A few phone calls may or may not generate any revenue for you but it will get your mind working in some direction other than the weights to be lifted.

Find out what's going on in the city or town you will be staying in. Even the smallest burg has some attraction. It may be a park, museum, or a Little League Game. Anything will do, just so long as you get out and move around. The bottom line is, don't play the Giant Slug if you are accustomed to an active life style. A change in your lifestyle will not in all likelihood upset your strength level, but it certainly can upset your mental confidence and this is extremely important to your performance.



National Champion Karen Gajda possesses the ultimate in mental control.

Summary

Getting the rest that you need in the final few days is a key to many athlete's performance on platform. Adjust your lifestyle to insure yourself that you do obtain the rest that you need. The amount of rest that you need is a very personal matter, so gear your schedule to meet your needs. It may mean missing a family get-together, or a favorite T.V. show, but obtaining sufficient rest should be high on your priorities as you go into the contest countdown.

CHAPTER EIGHT

Some Old Indian Tricks

The experienced competitor often uses a great number of psychological moves to his advantage. Many contests are won, not on the platform, but in the warm-up room. Some are won at weigh-in. I was not really aware of the mental warfare that went on in the sport until I moved to York in 1966. There, lifting with the many national champions, I had the opportunity to see the best at work.

Bill March may have been the most proficient ever at this facet of competition. Wee Willie could totally unnerve his opponents with his attitude. Especially on the press, which being the first lift set the stage for the entire meet. As most students of the sport surely know, there were few equals to Bill March when it came to pure, power pressing. It wasn't just the amount of weight he pressed, but more the manner in which he elevated the poundages. Pure shoulder strength. No gimmicks, no quick starts, no lay-back. Just raw deltoid and triceps strength. He did 390 at the '69 Nationals in Chicago which people still talk about. It was one of the most memorable lifts in American weightlifting history.

Bill and I had occasion to hold a number of exhibitions and demonstrations for high schools, service clubs and the like, and regardless of what else we did with the barbell, it was always Bill's pressing strength which left the greatest impression. He used this to his advantage in the contests.

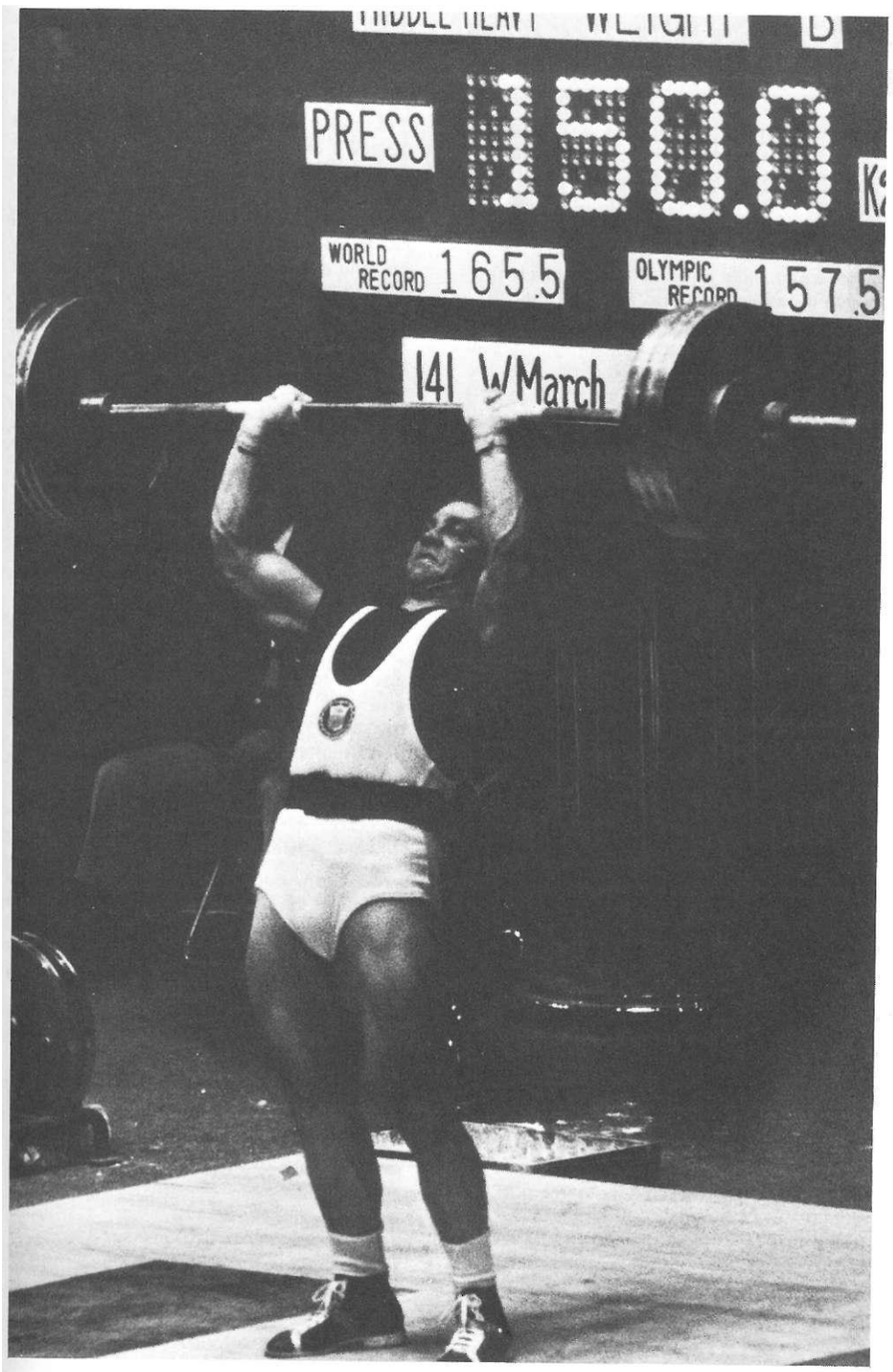
His favorite mental ploy was not to warm up until everyone else had completely finished in the warm-up room. At the big meets such as the Philly Open or the Seniors everyone would be scurrying around trying to get their necessary warm-ups, fearful of missing a turn. Bill would be nodding out in the corner. He would lay out and nap. No one asked, but everyone wondered, "When is he going to take an attempt?" The bar on the platform would move on up, to 300, 315, 325. Still no movement from Willie. In fact, he seemed to be snoring. Damned unnerving.

Unknown to most, Willie didn't really need warm-ups. He could probably do as much cold as he could do after a series of warm-ups. He mostly needed to warm up the cleans as he could press 350 off the rack—cold. He's the only lifter I ever met who could do this and he used it to his advantage. After everyone else had finished their warm-ups and gone out to the on-deck area, he would take two or three warm-ups, but few ever actually saw him.

What you would see was Willie walk out for his opening poundage, usually something in the mid-300s and press it with ridiculous ease. After that it was all downhill. You simply had it fixed in your mind that this guy wasn't quite human. You fully expected him to do extraordinary things. Mentally, you fell in line behind him and this is just where he wanted you to be. There was little thought of actually beating him. Some voiced the intent, but few believed it.

It didn't take me too long to realize the value of using psychological warfare on the lifting platform and I tried to use it whenever possible. Competition in York during the late 60s was quite fierce. At one time there were six or seven 198-pounders training together who were but a whisker apart from each other in total. There were no training secrets as we all trained with each other. There was no financial advantage as we all represented York. We all had the same equipment, the same time to train, the same help from teammates. Any advantage was critical and I quickly learned to use the psychological one.

I might quickly add that this certainly did not allow me to win all the time. My opponents were very good. What it did do was allow me to pick up some critical pounds



Bill March, World Record holder and Doctor of Psych.

which helped me to finish higher in most meets than I would have otherwise.

The Opening Attempt Game

If I knew that my opponent was keying off my starting poundage, then I played with this a bit. I realized that if a lifter is overly concerned with my attempts rather than his own, then I already had him on the defensive. It allowed me to dictate some of his moves and quite often, this was sufficient to move in behind him and take the final lift.

Some competitors begin each contest from the first lift. If they are out to beat you they often want to move out in front on the first lift, feeling that the lead is important. It is not the lead that matters, but the final total that spells victory. ***Juggling your opening poundages because of what your opponent is doing early in the contest is a mistake.*** You are at his mercy.

You simply had it fixed in your mind that this guy wasn't quite human. You fully expected him to do extraordinary things.

Everyone is aware of his competitors in a meet. He knows who is doing roughly what and who he has to overtake to place in a certain position. The unsure ones are asking, "Where are you gonna start?" From this number, they figure their own starting poundage or project where you will go for your second and third attempts.

Knowing that my competitor is keying off me I 1.) do not give my true starting weight or, 2.) do not tell them anything. Usually it's the latter, as I am not certain as to my starting poundage until my warm-ups are concluded. Not telling also adds a bit of mystery and this brings with it an element of doubt. The more your opponent is thinking of you the less he can think about himself. But you know that he knows that you must tell the scorekeeper your opening attempt. When you fail to tell him, he quickly goes to the official's table and checks your card. Aha, he's opening with 440. "Put me in for 445."

What my opponent does not know is that I have little intention of opening with 440. I really plan to open with 460 or 470, depending on how the warm-ups go. On some occasions, when the warm-ups indicated I was off, I would start with less. Either way it completely throws off my opponent's game plan,

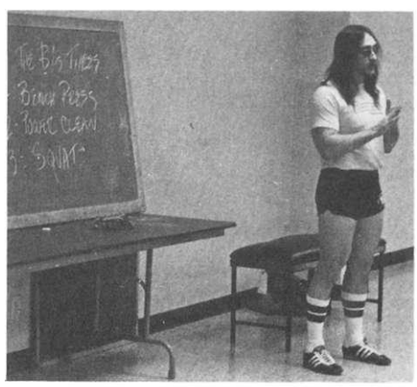
If I really wanted to get on my opponent's nerves, I would change my opening attempt two or three times. Each time I saw him check on me, I moved it up five pounds, and he would move right along with me, staying just five pounds ahead. On one occasion my opponent and I were chalking up together waiting for our opener in the press. I was in at 295 and he had 300 down. I chalked up, then walked over to the scorekeeper and told him I was moving to 305. My opponent was now next up. He was in a frenzy. Since he was already psyched for 300, he couldn't pass, but even if he did it threw him way off, as then he would have to go to 310, which he was totally unready for and he was also disturbed by me — rather than thinking about his own lift.

It goes without saying that regardless of the mental maneuvering, the lifts still have to be made in order to achieve your goals.

Your opponent then begins to distrust you. He starts attempting to figure out what you are trying to do and this is exactly what you want. The energy they spend thinking of my game plan takes away valuable concentration time which they should be spending on their own mental preparation.

Influencing the mood of the meet

As every competitor knows, a warm-up area takes on a personality of its own. Some are super-charged with speed-filled loonies. Others are hushed and subdued, heavy with the pressures of competition. Warm-up area



A clinic in Wichita Falls, Texas.

are ripe for influencing to your advantage. Shamefully, many members of the York Club, myself included, capitalized on this fact whenever possible.

One of my favorites was to take advantage of the long, drawn-out affairs. Some took 10 hours to complete. Seems unbelievable, but I vividly remember Bob Bednarski clean and jerking an American record at the Philly Open at 4 a.m. We had weighed in at 4 p.m. the previous day.

Most of us who trained at York during the late 60s were in good all-around condition. We trained very hard, up to eight sessions a week, and incorporated one or two days of cardiovascular work in the form of soccer, volleyball or racketball into our programs. Actually, a long contest was not as draining physically as it was emotionally. One just got mentally fatigued at the long meets.

Add to this the fact that if I were to place, I had to do it on the final lift, either the dead lift or the clean and jerk, so I needed an advantage at the end of the meet.

1 found that I could drop the mood in the warm-up room with a few choice comments. "Boy, this is going on forever. Seems like we've been here a week." Or "I'd like to pack up and go get some food, this is ridiculous." Suddenly, there would be an entire group complaining of the long contest. Everyone's body would droop a bit. I often had a partner in crime such as Suggs or March and they would add their laments and complain a bit. Soon the lifters would all be depressed. They just wanted to go home.

A healthy, attractive balance of feminity and strength. Kimberly Ann Crain, the blushing bride of Rickey Dale is yet another Sooner beauty.



Meanwhile, we're getting more and more wired, knowing we are physically ready for the home stretch and that we have one leg up on our competition. I have actually moved up a spot in meets because my competitor decided to pass his third attempt because he was just too beat.

It should be recognized that all juggling has to be done within the framework of your own ability. It does little good to lure your opponent to higher poundages and not be able to lift the weights yourself.

Worrying about the judges

Another version of the same technique was to get our opponents to worry about the judges. There are always a couple of lifters who are, at best, borderline on their lifts and they make easy prey. It always works. You can even tell your intended victim what you are planning on doing and it will still work.

Regardless of the mental maneuvering, the lifts still have to be made in order to achieve your goals.

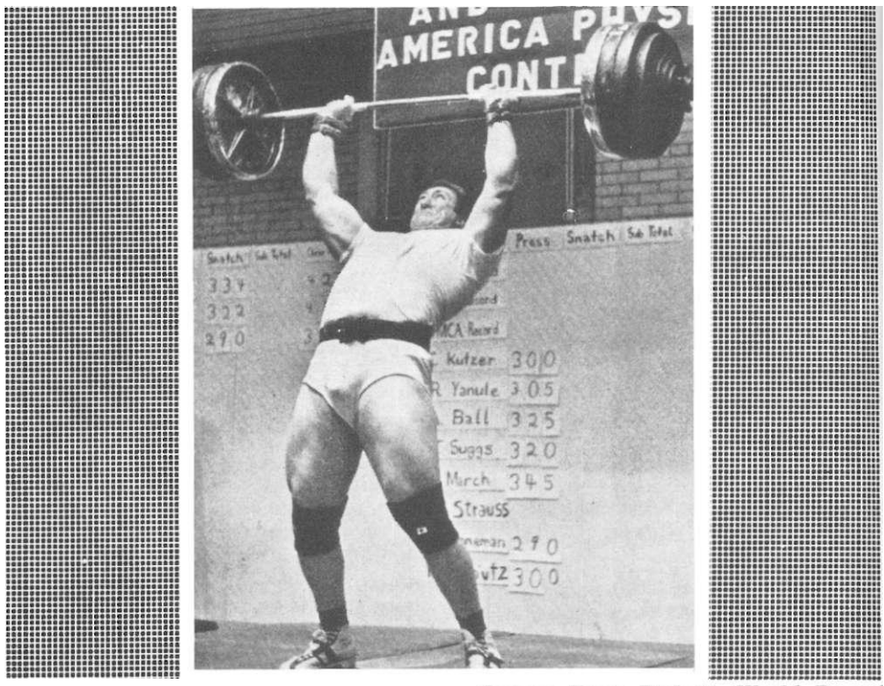
Just walk in the warm-up area and state, "Those judges are burning everyone," or "They are super strict today," or "I'm going to drop my opener to be sure." Immediate panic. A half dozen will run to the scorekeeper and alter their intended attempts. The bottom line in the strategy is to get your opponents off their game plan, to think about anything other than their lifts. A break in their mental concentration is to your advantage.

My opponents (and especially my teammates) soon learned, of course, that I was not to be completely trusted in contests. They began doubting anything I said. This was ok with me as I often told them the truth. "These judges are really lax today." Ok, what's Starr up to? They weren't sure whether I was trying to trick them into moving their poundages up or actually giving them some honest opinion. It got them thinking.

It should be noted that it doesn't work if you pull gimmicks 100% of the time. Lifters are not (at least not all of them) idiots. I also offered honest, sincere, useful advice part of

the time. In most cases, due to a distrust built up from previous experiences, they ignored the advice, often hurting their cause. Sometimes, they would use my advice and it helped. It established trust again. Until the next time.

I was especially helpful to my opponents when: 1.) they had me soundly beaten, or 2.) when I had them soundly beaten. Buddy, buddy. I saved my slider for when I needed it. No sense wasting your best pitch, or something of that nature.



George Ernie Pickett, World Record Holder, Olympian and all-around nice guy.

Of course, I was not the only person involved in this mental chain-pulling. A good many were doing some degree of it. The better ones were subtle. One had to be somewhat cautious as he played this game on the national level because it could backfire very easily. Should a Bill March, Tommy Suggs, Bobby Hise, or Chuck Nootens become aware that you were attempting to play with his mind, then he would take your game and leave you on the short end. Should you spend a lot of time trying to influence others, then you have, in fact, detracted from your own game plan and your own concentration. Again, it's wasted energy and in this case, it's your own energy that goes up in smoke. If you ever were able to pull one over on a seasoned competitor, you saved it for a big meet and figured it would work only once.

Close but no cigar

I only got behind Bill March one time and it was the highlight of my conning career as I consider Willie the master. He didn't let much slip by him in a contest, but since we were good friends he trusted me-up until the '69 YMCA Nationals in New Orleans. After this meet, he never trusted me again,

Bill, Tommy Suggs, Joe Murry and myself were locked in battle in the 242-pound division. Willie was the frontrunner and sewed up first place with his second attempt c&jerk. With my second attempt clean and jerk, I moved over Murry into second spot. Both Tommy and Joe missed their third attempts so the placings were set, or at least that's how it appeared. I stood with Bill in the warm-up room and as Murry failed, I commented that it was a good meet and congratulated Bill on his victory. I asked if he was going to bother taking his third attempt. "No," he said, "there's little reason to do so." "Well, I might as well try one more," I

said. What Willie had momentarily forgotten was that I was 25 pounds back and lighter. As 1 walked out to the chalk box, Willie wished me luck. Roman Mielec was standing with us. He looked up at Willie and said, "I guess you know that if he makes this, you will have to do 440." This was more than he had ever done. The last words I heard over my shoulder were, "You son-of-a-bitch." I made the clean and missed the jerk so Willie didn't have to do more, but he kept a careful eye on me in future competition. I never got that close to him again. He knew that I had influenced him in passing up the weights well within his range and put him, momentarily, in a spot whereby he would have had to attempt a personal best. As I said, you only get one crack and you must make the best of it.

One time in Virginia

In most instances, we stumbled into the mental games without previous planning. It's extremely difficult to pre-plan such moves as the situations change and are unpredictable. Tommy Suggs and I were together so much that we would pick up on the opportunity and work it quickly. We traveled to Hampton, Virginia one year to compete in the Chesapeake Bay Invitational. Tommy made the trip mostly to party with Jack King, Ernie Pickett and myself. He had entered, but really was not sure if he was going to compete. The night before the contest, Tommy, Roy Ridgley and I did a bit for the local t.v. and went out for some dinner. Roy was the ranking 242-pounder in Virginia and since Tommy had come in 2nd at the Seniors in that class, he was especially concerned with Tommy's training and his projected lifts.

Tommy told him that he wasn't sure whether he was going to lift and if he did he might lift as a 198er and not a 242er. I was entered as a 198 but my weight was up and, in fact, Tommy was closer to the middleheavy limit that I. We had tentatively planned to trade divisions for this meet. Tommy was telling the truth, but it really disturbed Roy. He just knew that we were setting him up. Once we realized just how much it bothered him, we really underplayed it. After all, we knew that one of us would be competing against him. Might as well start now.

This went on for a couple of hours, or whatever a full dinner and a bottle of wine is worth in time. Roy finally left totally convinced that Suggs was in top shape and would be going against him tomorrow. He never asked me much of anything. Not my lifts or my bodyweight. Only Suggs mattered.

The day of the meet we blindsided him completely. Tommy decided not to lift and worked as my coach. I left my weight alone and lifted as a 242er. I beat Roy in a very tight contest with my final clean and jerk. I think most of the beating was done the night before in the restaurant and at the weigh-in. I'm certain that he still thinks we did all this on purpose, but we didn't pre-plan it. It just opened up.

An Ernie Pickett tale

The mention of Ernie Pickett brings to mind some of the antics he would pull to daze and confuse his opponents. Ernie is 100% country, corn-bread pure. He was always the nice guy, talked to everyone and enjoyed being liked. Everyone trusted Ernie.

We used to travel to power meets occasionally, just to make the trip and see some new area of the country. Sort of a paid holiday with a built-in workout.

We entered a power meet in New Jersey one summer so as to qualify for the Seniors and also to be able to play at the shore. We were both extra lifters in the meet so there was no pressure. Nevertheless, we quickly noticed that the local superheavies resented Ernie being in the meet. Ernie was the World Record holder in the press and went on to become an Olympian. The locals perhaps thought he should stay in the Olympic lifting end of the sport. It stole some of their thunder. He picked up on this immediately.

The local heroes were upset that Ernie showed up. So he decided to entertain himself at their expense.

On his first warm-up on the bench at 135 (the bench press being contested first in 1968) he shook and vibrated as if the bar were electrified. He bridged, pressed it out unevenly and had me take it before he locked it out completely. He got up from the bench with his head hung low. He walked very dejectedly over to his gym bag and sat looking very sad. I went over and talked to

him in a serious manner.

All the while we're watching the Supers. They are ecstatic. They quickly merged together and while we couldn't hear what they were saying, we could tell by the tones that they were tickled pink. Their entire attitudes changed.

While Ernie sat staring at his feet, they strutted and pranced with their 60-inch chests extended to full capacity. They became very vocal and extremely cocky. They would corner me and ask in a very concerned manner as to what was wrong with my friend. I just shrugged, "Overtrained maybe." They would shake their heads, but it was easy to see the smiles creep to the edge of their lips.

The warm-up bar moved on up, but Ernie hasn't stirred since the 135. When it got to 315, I began coaxing him to try another. He would refuse, "What's the use?" The Large People were all ears. Finally, I pulled him to his feet and led him to the bench and insisted that he try one more. He then proceeded to snap out 10 quick reps as if it were an empty bar. He sat up and said, "You're right, that set did feel better." That's all that was ever said.

The Behemoths melted. The starch was suddenly out of their strut. Ernie continued to be a nice guy throughout the meet, but the Supers didn't quite know what had happened. They did know that they weren't sure about Pickett any longer. It was great.

under the giant Russian Zabotinsky). He also possessed a magnetism on stage unequalled by anyone, before or since. A tremendous showman who truly loved performing. He was sensational and we all knew it. The problem was that Barski never let anyone forget it, even for a day. So we went to great pains to bring him down off Mount Olympus, to reinforce his humanity, as least temporarily.

There were very few occasions that I can point to where I got one up on Barski as he was one strong son-of-a-bitch and no one could casually take him. But I do have one to my credit.

We traveled together to Vancouver, B.C. in the spring of '69 as guests of the British Columbia Weightlifting Association, to lift in their meet and to hold a clinic. Barski had been toying with 500 in training and had a legitimate shot at it. No one had handled this poundage as yet. I suggested the he do but a token press and snatch so as to conserve his energy for the big attempt. This was a common practice of his when he was not in tight competition and going for some record. So he did a 300 press, and a 300 snatch. He opened with a 420 in his quest for the 500. It went ok, but aggravated an old back injury slightly, just enough to throw him off for the big one. He loaded the 500 and tried it, but the back was distracting him just enough.

Meanwhile, back at the meet, I was pushing and pulling like nuts trying to out-total my Canadian friend, Aldo Roy. While I

All juggling has to be done within the framework of your own ability.

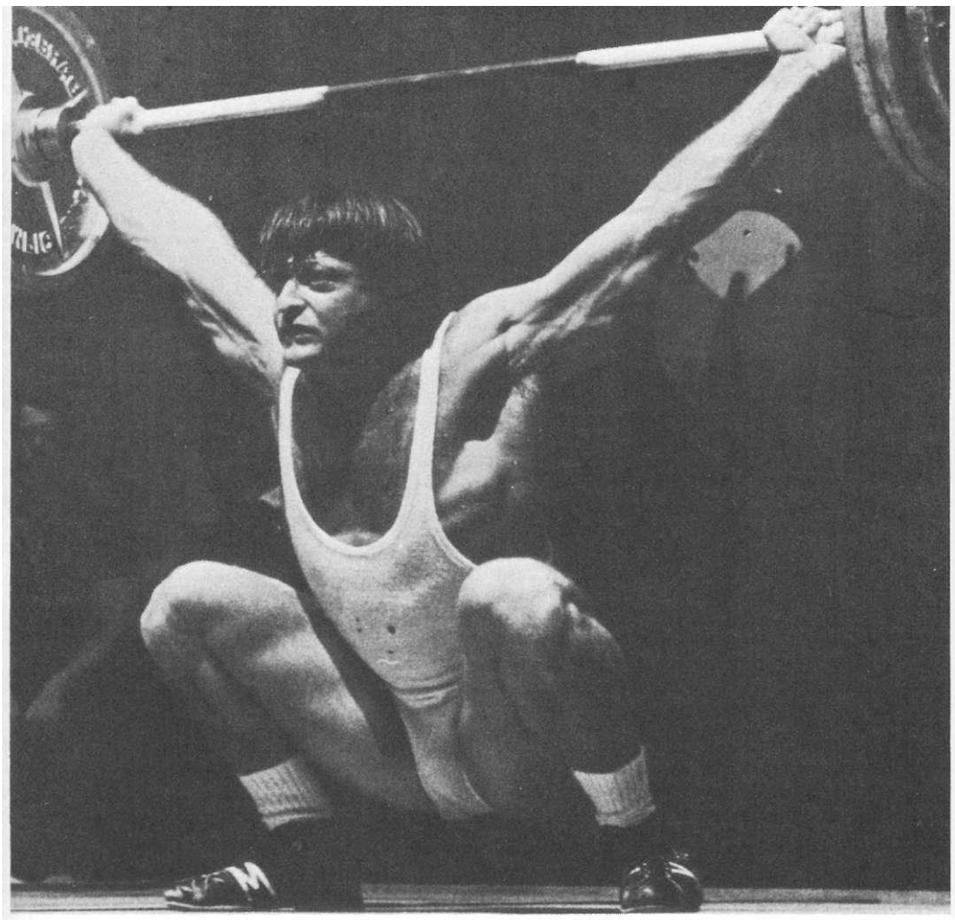
It should be noted that friendship had nothing whatsoever to do with these mental games. In fact, it was more entertaining if you could pull one on a friend. Bragging rights meant much more than any trophy, as bragging rights are forever, trophies rust.

Playing with Barski

It was always most entertaining to toy with Bob Bednarski as he needed liberal doses of humbling just to keep him from being so obnoxious that no one could stand to be around him. Barski was the premier lifter in the world in the late 60s. He had lifted more weight overhead than any other human (486 at a bodyweight some 100 pounds

was in a heavier class, it still mattered for after-meet bragging rights. In the process I was making some decent lifts, enough in fact to out-total Barski. Barski never bothered to check the scorecard. There was really no reason as he was certainly far superior to me and I didn't bother to bring it up. He had assumed that he was well in front of everyone. Not quite. I had him by 5 pounds. His big jump from 420 to 500 had killed his total.

When they announced that he was the runner-up in his division, I thought he would shit right there. It really delighted me to be looking down on him from the victory stand. I assured him that this was the more proper



The surprise lift of the Seniors. Peter Hirtz, formerly considered a mediocre snatcher, drops 314 in the slot for the highest snatch in the class.

This outstanding lifting shot is taken from the now defunct Weightlifting Journal, September 1971. Tom continues to be one of America's best, a decade later.

positioning. Naturally, I rarely brought this meet up to Barski ever again-only when he got excessively cocky, which was almost daily. Needless to add, Barski did his own tabulating whenever we traveled together from then on. Once was enough for my purposes.

March vs. Barski

Bill March and Barski were constantly going at each other in informal contests of all descriptions. March was the premier lifter in York and the US in the early sixties. When Barski arrived from New England in December of 1965, things changed and Barski assumed this number-one role. A period of sibling rivalry resulted. During one stretch of time, they worked together all day in the shipping department and seldom a day went by that there wasn't some sort of bet between the two.

One evening after a training session, they pulled the Cyr dumbell out of the Hall of Fame which weighs 220 pounds and challenged each other to press it. It was a solid, unmanageable bastard. Barski, at the time could press in the mid-400s with lots of technique and Bill could do in the high threes with virtually no technique, unless one could call raw strength a form of technique. They both ended up doing it, after about a half dozen attempts. Barski could elevate more weight, but Willie was in fact stronger in the shoulder girdle.

At one morning coffee break, Barski, Suggs, Roman Mielec and I were sitting on the far side of the York Gym killing time, waiting to go back to work. The lights were out in the gym. March comes in the side

door at the opposite end of the gym, walks over to the staircase squat rack which has a loaded 350 on it. He takes it off and gives it a thrust as if to press it. It goes to the top of his head. He puts it back in the rack and walks on back to the warehouse. No one has said a word.

When March is out of sight, Barski is all excited. "Boy, that looked heavy. Bill must be down today." We all went about our business and the episode was forgotten-almost.

Lunch time meant squatting time for most of us and we were in between sets when March came in with his usual assortment of submarines, french fries and cokes. Barski got in a little jiving with him and when the bar got to 350 he hit him with, "Bet you can't press that cold." March continued his assault on the food. "How much you going to bet?" "A buck." "Not worth the trouble to stop eating for a dollar. Make it five." Barski was bouncing around the gym now. He smelled blood. "Ok, ok, five dollars, you guys heard him, five dollars." Barski already had the money spent.

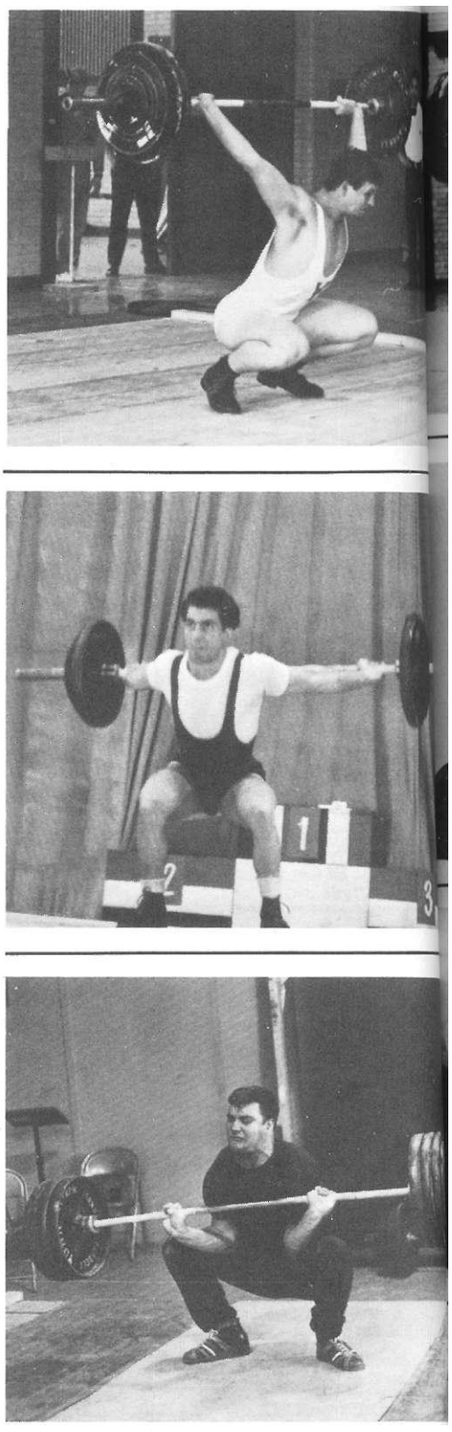
Bill put down his sub, chalked up, still in his work clothes, strapped on a belt, took the loaded barbell off the rack and pressed it. He could have done a double.

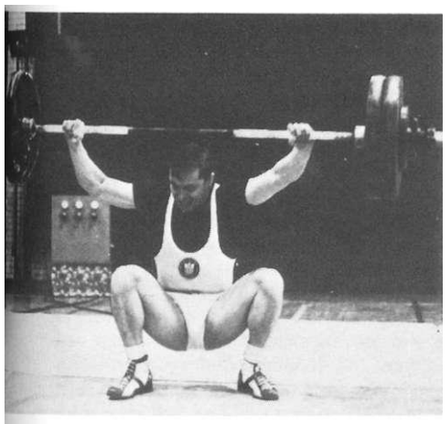
Barski was a mad man. "You tricked me! I saw you miss that earlier. You missed it on purpose." Barski had been set up again. March was fully aware that we were watching and that Barski would take advantage of him if at all possible. Lucky for Barski, he never lived in Vegas.

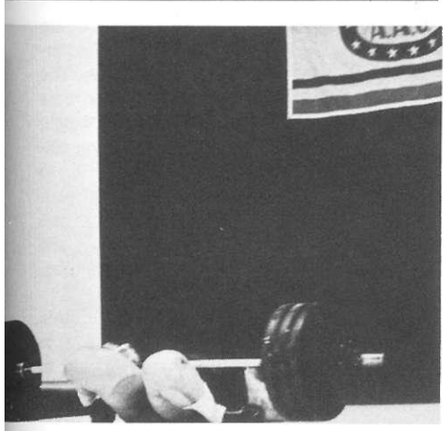
Some help against Jack King

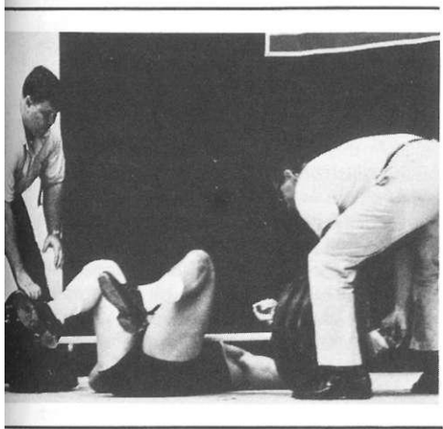
I have to confess that I, too, have sunk to low levels to adversely influence my opponents. Jack King holds an outstanding contest each summer in Winston-Salem and a number of us would travel in and lift. The competition was always good and it was an ideal mid-summer test for our training programs. Not to mention the fact that we were always entertained by countless stories and imitations by our host.

While talking on the phone with Jack prior to the meet, we set up a bet against each other, based on our best lifts with appropriate spots. After hanging up I realized that he had got the better of the bargaining, the odds were in his favor as he had been making rapid progress and he was lifting at









A selection of the disaster collection; clockwise from bottom left: Bednarski, DeSpirito, Hise, Garcy and Riecke being pinned with a heavy clean.

home.

I decided that I needed and equalizer, but influencing him prior to the meet some 500 miles away was going to be difficult. Jack was not an easy guy to trick. If it were done blatantly it would only serve to motivate him even more.

I spent a half a day sorting through the files of ***Weightlifting Journal*** and found about three dozen photos of lifters missing attempts. Not just your garden variety, run-of-the-mill failures mind you, but the head-turning, tragic ones. Lifters being pinned under bars, snatches crashing down behind heads, black-outs, twisted limbs. A classic collection, but very frightening. I sent them off so that he would get them the day before the contest.

They had to be unnerving. I got a bit unnerved assembling them. In fact, it almost backfired as a photo will stick in your mind and I can even yet envision Riecke being pinned with a 380 clean at the '64 Nationals in Chicago, with nothing but lower leg showing. The bar resting across his midsection. I won my bet. A rotten trick, but one of my favorites.

Summary

Knowing both how to and when to influence your opponents is a very tricky business. In many instances, the best laid plans will backfire. You cannot go into a meet planning a certain mental disrupting strategy. This is, in essence, negative thinking. It is a mistake to fill your mind with any form of negatives.

It is not mentally healthy for you to wish ill-will on your opponents. You should not, for example, sit and wish that your opponent misses an attempt. The energy of thinking negatively will linger into your own next attempt and your general attitude for the meet. You should, as in the game of chess, assume that your opponent will make all the right moves and be ready to act upon these moves. You should not plan your game strategy around his misses. If you go so far as to actually vocalize negatives, then the possibility of them backfiring is multiplied even more so.

The mental combat that develops in spirited gym contests or actual competition is usually something that arises out of the situation. The wary and seasoned competitor picks up on it and utilizes it to his advantage. It is a double-edge sword, however. It's fun when it works, but very frustrating when it fails.

CHAPTER NINE

The Art of Warming Up Properly

I have occasion to attend a number of weightlifting meets during any given year and more often than not, I become involved with one or more of the competitors in the warm-up room. I am amazed as to how unprepared some lifters are in regards to planning their warm-up procedure. For many, its strictly a hit-or-miss situation. They will take a warm-up with whatever happens to be on the bar in the warm-up room. In some instances, they will simply follow a competitor who is opening with the same poundage as they are. If their opponent takes 225 for 5, then they will do the same.

I have observed this behavior, not only at local and state-level contests, but also at National and World Championship competition. Even more dumbfounding is the manner in which some lifters pace their warm-ups. Timing the warm-ups may just be the most critical aspect of having a successful meet. You do not want to have all your warm-ups finished (preplanned or otherwise) and then be faced with a 20-minute wait before you step on the platform for your first attempt. Conversely, you do not want to be jammed for time, having to rush your last couple of warm-ups and then dash out to race the clock. Either will throw off your mental concentration and your overall game plan can go down the toilet in a flash.

If you pay attention, or better yet have someone capable pay attention for you, then you can go through your planned warm-ups rhythmically and systematically. You can handle your final warm-up and have 3-4 minutes before your opening attempt. This gives you adequate time to get your warm-ups off, to do whatever wrapping is necessary and to get mentally ready for the lift at hand.

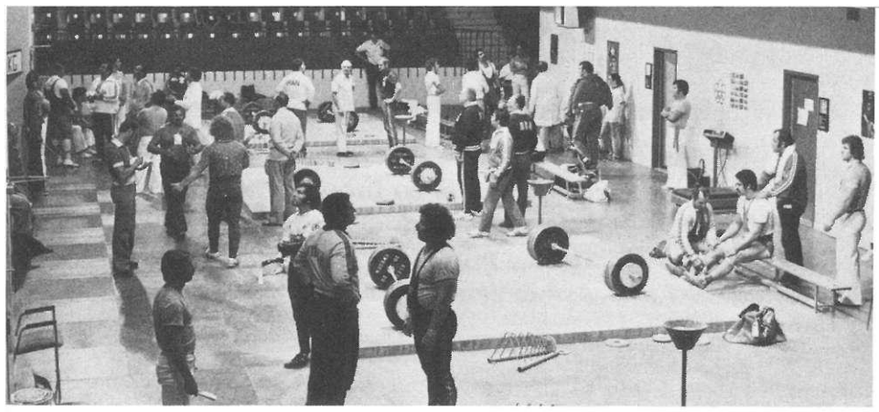
Figuring your pace

Timing the warm-ups so that you are ready when the bar is at your selected poundage is still a mystery to so many lifters. The general rule-of-thumb for most seems to be to keep their warm-ups abreast of the weight on the platform. If a lifter is planning on taking a warm-up with 325, then he will try to do so when 325 is being handled on platform. Occasionally, this procedure comes out ok, but in more instances than not, the lifter gets jammed with this type of planning. Why? An example may help explain.

Let's say that you are starting with 350 in the bench press and your last warm-up is to be with 325. The bar on platform goes to 325, so you take your final lift in the warm-up area and prepare for your opener. Five minutes pass, then fifteen, thirty minutes. You're going nuts. Forget the mental control at this point. "What's holding things up?" Actually, nothing is holding things up. What you failed to check was how many attempts there were scheduled between the 325 and 350. In this case, there are a pack of lifters taking lifts between these two numbers, some fifteen in all. As a result of your inadequate planning, you have put yourself in a poor mental and physical state by not realizing a simple fact: You must gauge your warm-ups by the number of attempts on platform rather than the weight on platform.

Certainly no method is foolproof, but here is a formula that I have used with great success. No method can cover all the possible variables that might pop up in a meet, such as equipment breakdown, basic arguments over the rules, injuries to an athlete, or lifters unexpectedly moving their opening poundage upward or downward, but it's the best I've ever come across.

Before you even bother to check with the scoring table, you must know how many total warm-ups you will be taking. Dean Best of Greensboro, N.C., will be doing a total of six warm-ups for his bench press: 135, 135, 225, 315, 375, and 420. He plans to start with 450, always leaving himself the option of moving the weight up or down depending on how the final warm-up goes. Now Dean checks the scoring table, after everyone has indicated their opener to the officials. Determine how many attempts (not lifters) there are from the beginning of the event until the bar reaches 450 on platform. Some are easier to figure than others. If you see that a lifter is opening with 375, then you can be fairly sure that he will do all three of his attempts before you open. A lifter who is opening with 430 or 435 is tougher to interpolate as he may go to 445 in which case he will have two attempts in front of you, or he may go to 450, in which case he will come behind you. Then too, there's no sure-fire way to figure missed attempts, which invariably throws any plan off considerably. But again, I reiterate, this is not foolproof, only the best method I know.



Warm-up facilities, 1976 Olympics in Montreal.

Upon inspection of the cards, Dean finds that there are 36 schedule attempts before his 450. So when to start warming-up? I use this formula: one warm-up attempt for each three lifts on platform, plus one to allow time to go to the lifting area and ready himself. Dean has six warm-ups to do. Six times three is eighteen, plus three more to cover preparation time, equals twenty-one total attempts. Dean will want to begin his actual warming-up when there are 21 attempts before his 450 on platform. He then continues to take a warm-up at every third lift on platform. If, for whatever reason, the pace of the meet slows down or hurries up, then the warm-ups merely follow that same pace.

The missed attempts will not affect this planning except when they come after you have taken your last warm-up. Then you can certainly get delayed. There is no way to plan ahead for three people missing 445 and having to repeat. It doesn't matter if the lifter who begins with 375 misses as you already have three total attempts figured for him, miss or make. But if you have done your pacing properly, then you are still in the best possible position. You will be coming to the lifting area when there are but three or four attempts in front of you. Should there be a couple of misses, then your delay only extends to five or six attempts and you can hold your mental poise for this time. A fifteen or twenty minute delay is yet another story.

In some cases, unexpected shifting of attempts can squeeze you, time-wise. A case in point occurred at the '79 Master's Championships in Weirton, West Virginia. I was pacing my brother Donald in the powerlifting portion of the competition. I hit close on the squat and bench press and was utilizing the same formula on the dead lift, as there was no obvious reason to alter my thinking.

There were eleven scheduled attempts before Donald's opener with 501, so I had him take his next-to-last warm-up and let him relax while I leisurely went upstairs to keep an eye on the scorecards. As I was about to check, the announcer called Donald's name as the "in-the-hole" lifter. Suddenly, he was but three, not eleven at-

tempts away. What had happened was that four lifters chose only to take their opener, since this one lift placed them as high as they were going to finish. So when four lifters dropped two attempts each, we quickly lost eight attempts in our planning.

Donald heard his name called on the loud speaker in the warm-up room and quickly took his final warm-up before I got back to the warm-up area. He was rushed, but made his opener. There's certainly no figuring all the factors.

Getting delayed between attempts

One of the situations that you cannot control is the time delay between your first and second and your second and third attempts. It becomes a matter of how many attempts lie in between. In some meets, the number of attempts become bunched at certain numbers such as 200, 250 and 300 in Olympic lifting and 300, 350, 400 in power lifting. You may be faced with a 20-or 30-minute wait. What to do? Warm-up again or just get your head together? Actually, a bit of both is in order.

If I see that there is to be a big time gap before my lifter's second and third attempt, I have him relax and work on the mental image of a perfect lift. Then, about three attempts before he's due up, I have him take another warm-up, with a token weight, such as 205 or 225 for a mid-three attempt. This enables the lifter to re-establish his pattern and to loosen the muscles, which may have tightened slightly. If the delay is moderate, that is, of such a length that it would not be feasible to return to the warm-up area, then I have the lifter relax till he's called on deck. Then I have him perform a few quick shadow lifts, once again, to insure the mental pattern and to re-warm the body.

The long delays are a greater burden to the Olympic lifters than they are to their power lifting counterparts due to the higher degree of coordination required for the quick lifts. An Olympic lifter, when faced with a long wait, needs to incorporate a good deal of shadow lifting and flexibility movements into his waiting period. If the Olympic lifter is faced with a long delay, it's also a good idea for him to return to the warm-up area and take a light to moderate weight to keep the pattern open.

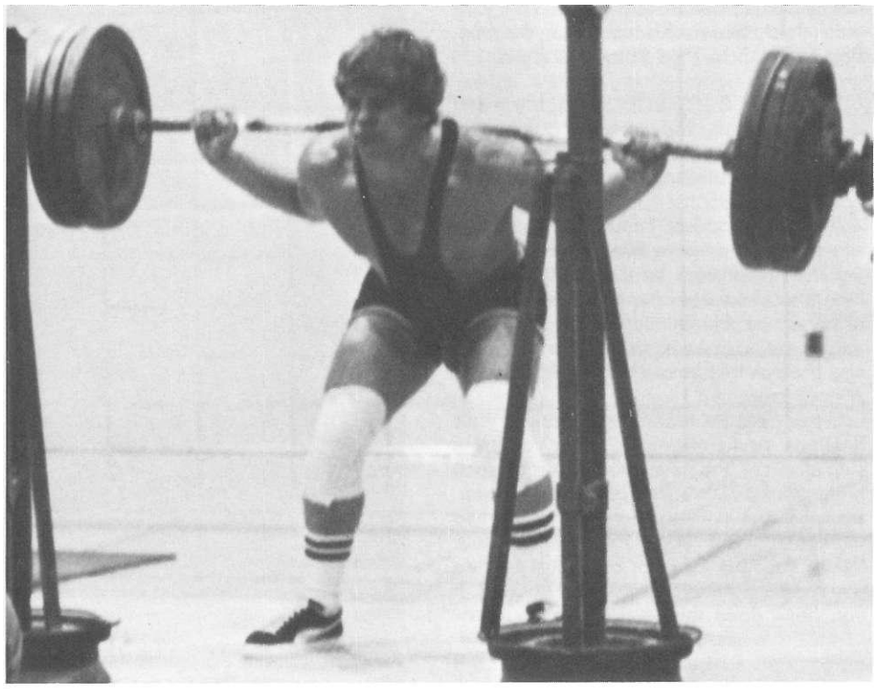
At some of the larger meets, the delays are legend, at the Seniors in Chicago in '69, I had a 45-minute wait between my opening C&J and my second attempt and another 20 minutes before my third. I was able to keep my cleaning motion warm, by doing shadow cleans and squats, but my shoulder tightened more than I suspected and I missed my jerks. I should have spent more time doing shoulder flexibility movements or lots of jerks during the waiting period. By the time I realized my shoulders had cooled off, the bar was falling from overhead.

Short waits or following yourself

Sometime, somewhere regardless of your relative rank in the weightlifting world, you will be faced with the problem of following yourself on platform. It may be because you are far out in front of your group and no one else is handling that poundage. You may fail with a selected weight and, much to your dismay, no one else wants that poundage. How do you handle this situation?

The first thing you must do is to physically and mentally recover from the previous failure. Generally, after a lifter fails, he is either: 1) depressed or 2) ultra-wired. He may stalk the room, cursing himself, thereby burning valuable energy. You must re-orient yourself as quickly as possible. Sit down, get your breathing under control and relax as much as possible. Only after you have relaxed and regrouped will you be able to physically and mentally prepare yourself for the next attempt.

An Olympic lifter, when faced with a long wait, needs to incorporate a good deal of shadow lifting and flexibility movements into his waiting period.



Young Sam Fielder of the Harford Barbell Club.

Sam Fielder Story

Sam Fielder III is one of the finest teen-age powerlifters to come out of the state of Maryland. He competed in the '77, '78, and '79 T-A Nationals and placed first, fifth, and third in his age group. At the Fort Worth Show in his final year of competition in the 79 meet, Sammy opened his bench with 325, a weight far below his best. His coach, the older version of Sam Fielder, had chosen a conservative poundage for his son. Yet, he missed it, due to ragged technique and he had to follow himself. He paced back and forth, visibly irritated. He never set, but went back to the bench after only about 30 seconds rest. He was understandably hyper. He, along with teammates George Hechter and Jim Moser, had traveled 1500 miles, spent a lot of money and had received much publicity in the local press. He had some pressure on him.

Predictably, however, he missed again making different form mistakes this time. Now he was very distraught and under the gun, as he must, once again, follow himself. What makes this situation even worse (and every lifter knows the feeling) is that you have created your own predicament. Your wrath is internalized. If you could blame a faulty bar or an unfair official, it's easier psychologically. You could vent your anger on someone or something other than yourself. But in this case, you know that you have blown it and no one else.

Parent Sam was, at this stage of events, more upset than his son. Pressure on him, too. I was shooting photos and letting Sam Sr. handle his boy, but he asked me to help. I had Sam sit and begin some deep, slow breathing. He was at the point of despair. I've been there and I think it helps to relate. The negatives must be discarded. My comments went something along these lines. "Forget those lifts. This is a weight you know you can handle. Fact is, you can double this poundage. Take your time for this next attempt. When you sit on the bench, think of doing the most perfect bench press you have ever witnessed. Pretend you are Doug Young. Lay solidly into the bench. (He had been sliding slightly, thus causing an uneven extension). Take the bar at arms' length with the idea that you are going to do a smooth

double with it. Lower it slowly and ease it off your chest. No quick motions on this one. Pay attention to your form and the lift will go."

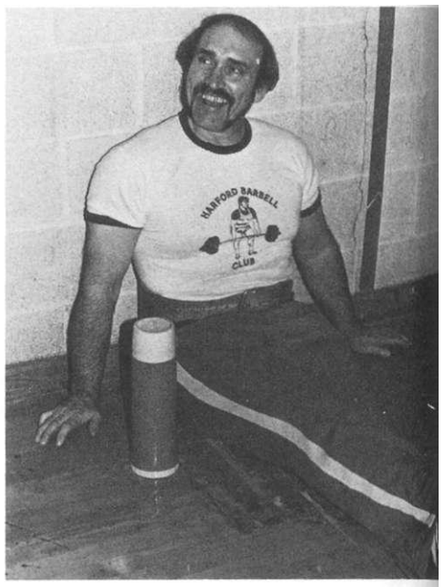
I might add that Sam is a good athlete and is very coachable. I have worked with him on occasion at the Tri-States Meet in Harford County and found that he has the ability to adapt to suggestions — a critical attribute for any successful athlete. I could see his attitude slowly change as he readied for the upcoming lift. I made sure he took all his allotted time, more so for his mental attitude than his physical rest. He calmly laid on the bench and made a smooth, picture-perfect lift. It was obvious that he could have done 20-25 pounds more.

If you have been doing some drill in your final few weeks of training, then you are a step ahead as you have planned for just such a happening. You might recall that I recommended that you go through one or two workouts where you took three or four heavy attempts in quick order just in case you did happen to have to follow yourself. If you have done this, it will give you confidence to make the next lift. If you have ignored this advise and always take 6-8 minutes between your lifts in the gym, then you have put your feet to the fire, for sure.

If you are in any kind of physical shape, then you will physically recover in the allotted time. It is not the body, but the brain which will give you trouble with the back-to-back lifts. You have to wipe out the negatives of the missed attempt and get yourself positively motivated for the lift at hand.

Flowing with the unexpected

There is no question that the ability to adapt to surprises and unexpected time situations is essential to a good performance. No matter how much you plan ahead, you must nevertheless be ready for the curve. I was recently at a contest in Hanover, Pennsylvania sponsored by Bob Miller and his gang from the Mason-Dixon Weightlifting Club. Everything went according to schedule, yet there were occasions when a lifter was faced with unexpected delays that no planning could have foretold. One instance will serve to illustrate the point. A lifter had made his first attempt in the bench with 345, selected 360 for his second. The time between these two attempts was not excessive, but lengthy enough to entail an in-



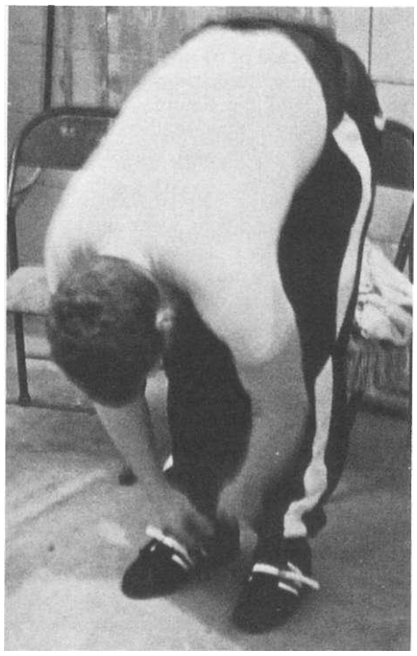
Donald Starr relaxes while waiting his turn on platform.

between set with 225 to avoid cooling off. His name was called for the on-deck lifter. He chalked and readied himself mentally. The lifter on platform missed with 355 and had to follow himself. A two-minute wait. Again, he readied himself. Another miss, another two-minute delay. He mentally geared up once again as the bar moved to 360. He stepped on platform, only to be called off as a lighter lifter moved his second attempt down to the same 360. Another wait. He finally got to the bar some 12 minutes after he had originally been scheduled to take his second lift. He made his 360, only because he knew how to relax during these delays. It would have been quite easy to let irritation creep in, and this saps the valuable juice needed on the platform.

Pre-warm-up warm-up

Most competitors spend some 10-15 minutes prior to every training session doing a series of stretching exercises, abdominal work or general cardio-vascular movements to ready themselves for the task at hand. Yet, many of these same lifters go directly to their first warm-up poundage without any preliminaries at a contest. It doesn't make sense.

If you are accustomed to spending a bit of time warming up your body for a training



session, then it logically follows that you should do the same in the face of handling maximum weights at the contest.

I never train without doing some ab and lower back work before going to the barbell. This insures me that my midsection is thoroughly flushed with blood. It gets my pulse rate up and satisfies me that I'm reducing risk of injury to these critical areas. I do the same at a contest. It should be remembered that your body is a product of your prior conditioning. It gears up to meet the expected exercise. If you break your pattern and go directly to the weights without going through your usual warm-up routine, then your chemistry becomes confused. You throw yourself off stride.

Take 10-15 minutes before you are scheduled to begin your initial warm-up and go through some flexibility exercises. Some like to do some cardio-vascular work prior to touching the barbell. A couple of York lifters used to carry jump ropes. Jumping jacks, free squats, or a short jog around the block will also get the blood flowing.

1 once suggested this idea to a lifter who replied that he didn't do any of his usual warm-ups because he was afraid it would tap into his strength. Are you kidding? If a few free squats and some sit-ups are going to tap into your energy reserves, then you had better go do some more homework. For a competitive weightlifter who is planning on performing a 300 + C&J or a 600 + dead lift to tell me that 10 minutes of warming up will hurt his top lift is totally asinine. It can only help.

Most lifters relate that they seldom get into full gear until midway through the contest. For good reason. Just as the distance runner does not hit his or her best breathing and striding rhythm until he or she is moving for some 35-40 minutes, the same principle holds true for the strength athlete. It takes time for your body to gear up, especially if you have been slugging around more than usual during the final days.

Take 10-15 minutes before you are scheduled to begin your warm-ups and go through some flexibility exercises.

Some top European and Asiatic Olympic lifters used to jog a half mile, then come to the warm-up room and go through a full twenty minutes of stretching exercises. Then, and only then, did they touch the barbell. In short, be certain your body is warmed sufficiently before you begin the lifting movements. It will benefit your overall performance.

How many warm-up Attempts?

I've seen lifters be successful with a tremendous variety of warm-up attempts. Some like to do lots of sets. Others prefer very few. The great Olympic lifting champion from the fifties, Dave Sheppard, would warm up with 135 and then proceed to open with 400+ in the clean and jerk. At the other end of the pole, Mike Karchut, a premier Olympic lifter for over a dozen years, preferred almost a dozen warm-ups and would take his final warm-up within 5-10 kilos of his opener.

The basic idea behind warming-up should be just what the name implies, "to warm up". It should not become a work-out or a strength test. Less is, in my opinion, better than more. The body can be effectively warmed up with light to moderate weights

and low reps. The need to handle heavy poundages (that is weights very close to starting attempts) is more for security reasons than anything else. The most classic example I've ever witnessed was Tom Battles of the Harford Barbell Club. Tommy did his last warm-up with 425 and then proceeded to open with this same weight in the bench press.

Lower reps are in order

I believe that it is detrimental to do either 1) too many warm-up sets and 2) too many reps on the top-end sets. I advise my lifters to keep their warm-ups to no more than 5-6 sets. And for the last event, the clean and jerk or dead lift, I recommend even less, 3-4.

The initial two sets are for warming the body and opening the pattern. These two sets can utilize higher reps as the energy expenditure is minimal. But on the final three sets, only triples, doubles or singles. To do more is to waste energy.

You do not want to tap into the well in the warm-up room. A set of five with 500 translates to 2500 pounds. A double at the same weight is but 1000 pounds. A nice savings to be used on platform. A contest is not a strength-building situation but, rather a strength testing event. Don't get them confused.

Check it out

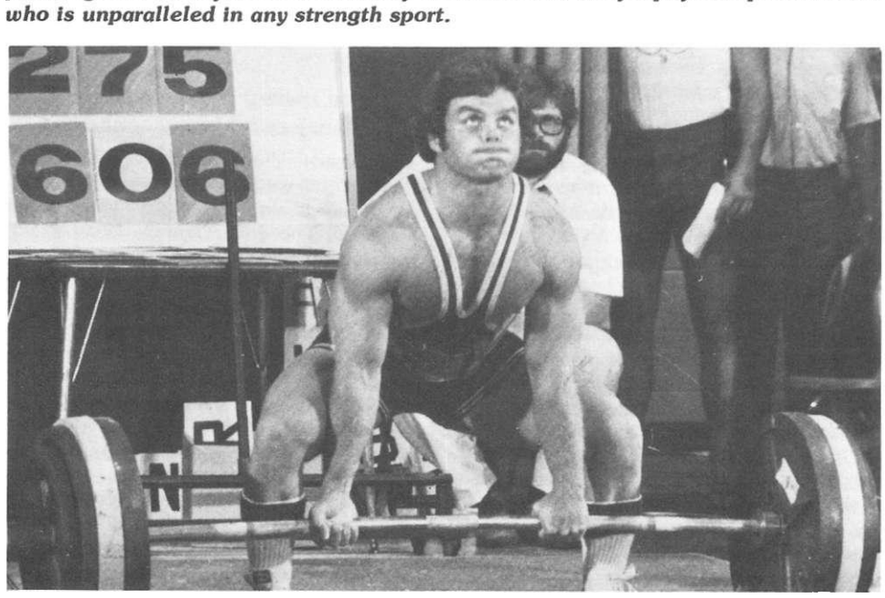
As in the case of all my advise, I suggest you test your warm-up procedure during the "mini-test" and the Saturday prior to the meet. Don't try a "new" method of warming-up on the day of the meet, regardless of who suggests it to you.

If you plan to do: 135x10, 225x8, 315x3, 395x2, 435x1 as your warm-up for your opener with 475 in the squat, then by all means do this same procedure during the "mini-test". This formula, by the way, is how I would approach an opener with 475. The bottom line is that you need to be comfortable with your method of warming up as this helps set the positive mental pattern for the contest ahead.

Write them down

I think it is excellent practice, especially for younger competitors, to write all their intended warm-ups down on a 3x5 card and have it with them in the warm-up room. And stick by your game plan. Don't take a heavier weight than you have intended to handle just because most of the other lifters want that poundage and it necessitates changing plates just for you.

The Cosmic Colossus, Mike Bridges. Beamed in from another planet, he toys with poundages never before considered by mere mortals. Truly a physical phenomenon who is unparalleled in any strength sport.



Taking slightly heavier warm-ups

One final technique concerning warming-up which might be of interest. I used it for the last few years that I competed and find that it fits the temperament of many of my trainees as well. Steve Dussia, who did all the cartoons for ***The Strongest Shall Survive,*** responded very well on this type of warm-up scheme on both Olympic and power lifts.

It works like this. I never take my first warm-up poundage with as light a weight as I usually do during a training session. In the gym, for example, I always take 132 or 135 for my first attempt on any lift (save of course the beach work). But in a contest, I never take this base weight. I take a slightly heavier poundage. How come? I'll attempt to explain.

When I handle 135 in the warm-up room, it feels light, very light in fact. If I take 205, its not so light and sets my brain in gear so as to pay attention to the movement from the onset. With 135 I can fool around, with a heavier weight I am paying attention immediately. In addition, I want to cut down the difference between my first warm-up and my projected first attempt on platform. If I plan to open my squats with 440 and I warm-up with 132, then there is a 308 pound differential. But should I take 220 initially then the difference is but 220 pounds.

Obviously, 440 is still going to weigh 440, no matter how you sneak up on the poundage, but this system works quite effectively for my mind. I think that it makes my pay closer attention sooner and does not allow me to become complacent. I often take my initial warm-up twice, if the first one does not feel just right.

Care should be exercised with this approach. You must be absolutely certain that you are thoroughly warmed-up before going to the bar. If you are the type that goes directly to the barbell without any stretching or cardio-vascular preliminaries, then I would not advise that you utilize this system.

Olympic lifters have benefited from this method of warming up with more than base weight. Again, it should always be preceded with a complete stretching program and some shadow lifting. It helps open the pattern and readies the mind for the heavier weights.

You might give it a trial during your mini-test two weeks before the contest to see how it works for you.

Pre warm-up

I'll present another idea that will enable you to elevate your body temperature and thereby better prepare yourself for the task at hand. This works especially well in cold weather. I accidentally stumbled into this gimmick when I used to have to sit in steam rooms, saunas, and hot showers to make weight. Oftentimes, I would have to rush from the steam room directly to the warm-up area so that I could get in my warm-up attempts.

I found that I would start in the meet with more successes if I had just come from the steam room than if I had not done the reducing routine. If I did not have to make weight, it seemed as if I had trouble getting into gear. This was especially true if I had been deliberately slowing myself down during the final few days. It took a bit of time, often into the second lift, for me to feel in the groove.

I tested the theory a few times on myself and then convinced others to test it also. It worked nicely. I would get in the hot shower for 10-15 minutes before dressing to go through my stretching and warm-ups. It helps everyone who tried it. Sort of like a stationary cardio-vascular trip, elevating the body temperature.

Summary

Every serious competitive weightlifter should spend some time in planning his or her total warm-up procedure. This means more than just deciding on the number of warm-up attempts and the weight to be used for each one. In addition, you should have an overall plan as how to prepare yourself for the warm-ups themselves.

Are you going to do some sit-ups, jump rope, or sit in the steam before going to the bar? When do you plan to take your supplements? When are you going to begin the coffee? Ten minutes before you hit the bar? After your final warm-up?

You should lay out a total schedule for meet day and be as precise as possible in preparing your body and mind for the challenge ahead. For some, its best to write everything down. Little notes of motivation, the exact weights to be performed during warm-up with the exact number of reps for each weight. And other reminders that might help in your overall game plan. All this planning will elevate your confidence and that, as most experts agree, is 70% of the battle.

CHAPTER TEN

Biorhythms and the Weightlifter

I spend a great deal of time in gyms in various parts of the country. I am always needing a place to train while on the road and I also have business in many of the gyms I visit. As a result, I get to meet and talk with lots and lots of weightlifters. They are stashed everywhere. Some of the best lifters in the country train alone in home gyms and I've joined a number in these also.

While on a visit to Bailey's Gym in Seaside, California, I was watching a young lifter go through a snatch workout one afternoon. He was having considerable difficulty in handling weights which he normally mastered. He asked me several points of advice, but nothing seemed to help. I finally commented, "Perhaps you are crossing on your biorhythm." He quickly retaliated, "That stuff's bullshit."

"Why do you say that?"

"Because, its like studying your horoscope or reading palms. None of that nonsense will help me lift more weight."

I have learned through many years of experience that it is futile to argue, so instead, I offered a simple test, in the form of a challenge.

"If we check your biorhythm and find that you are in a crossing state, then will you consider that there just might be some connection? If, however, after we check the figures, we find no crossing, then we'll drop the subject and look for another source of your technique problem". He agreed.

I then proceeded to outline the method to determine his biorhythm for that particular day. He was to do all the math. All I did was give the directions so that there would be no question of hanky-panky on my part. I told him, before we started the figuring, just where the numbers would have to fall to be considered "cross" days. He followed my directions and to his (and mine somewhat) consternation, came up with, not one but two cross days. Two critical days together. Not conducive to practicing physical skills such as the squat snatch.

He was taken aback with these findings and began quizzing me further as to the relationship of the life cycles to weightlifting. This scene, although not always so dramatic, has been repeated literally dozens of times as I meet strength athletes. Competitive weightlifters are perhaps the most aware group of athletes concerning the application of biorhythms to their sport. The primary reason for this fact is that they have been exposed to the subject much longer that any other group of athletes.

Biorhythms and the strength athlete

In 1965, Kenneth Sommer wrote an article on biorhythms for Peary Rader's weightlifting publication, ***Weightlifting News.*** This piece sent many lifters to their pencil and paper to determine where they stood, biorhythmically speaking. The article was most revealing to me as I was an aspiring 181er, training and working out of the Marion, Indiana YMCA. At that time, I kept a training log. I noted everything that I thought might influence my lifting: weather, temperature, rest, work, sex and I had a seven point scale to grade both how I felt and also how I actually performed on a given day. I graded myself from plus 3 down to minus 3 with 0 being my median. I knew that on certain days I would feel like I could lift anything, but my training would go poorly. Conversely, on other days I didn't even want to dress out, yet I would train well, often bettering personal records. I knew something

was working, either physically or psychologically, or both, but I never did collect enough data to be able to chart and predict these cycles.

Doctor Sommer's article sent me to the bookstore for Thommen's book, ***Is This Your*** Day, a complete reference on biorhythms. Terrific. I now had an explanation of why my training varied and why my mental and physical ups and downs didn't necessarily match on a given day. Since this time, there have been numerous articles on the relationship of biorhythms to the strength athlete. Tommy Suggs wrote one of the most informative for ***S&H*** and this brought more national exposure to the weightlifting community. The seventies witnessed a virtual explosion of biorhythmic information, some geared towards the general public while other pieces are directed to the athletic market; even to those who gamble on sporting event.

Yet even with the information readily available, there are still very few competitors who bother checking on their biorhythms. With the almost universal usage of drugs in weightlifting, few athletes bother with such minor technicalities as their biorhythms. If a lifter is going to do any outside reading at all, it is generally going to be the P.D.R. or other drug-related research.

I have talked to some lifters who contend that they do not want to know where their biorhythms stand on a given day. "If I know that I'm going to be emotionally low on the day of the meet, it will psyche me out." This has always been strange reasoning to me. I want to be forewarned on as many variables as possible. I don't want any surprises on meet day. It's like saying, "I don't want to know that I'm going to be lifting in a non-air conditioned building. I like negative surprises." Good strategy.

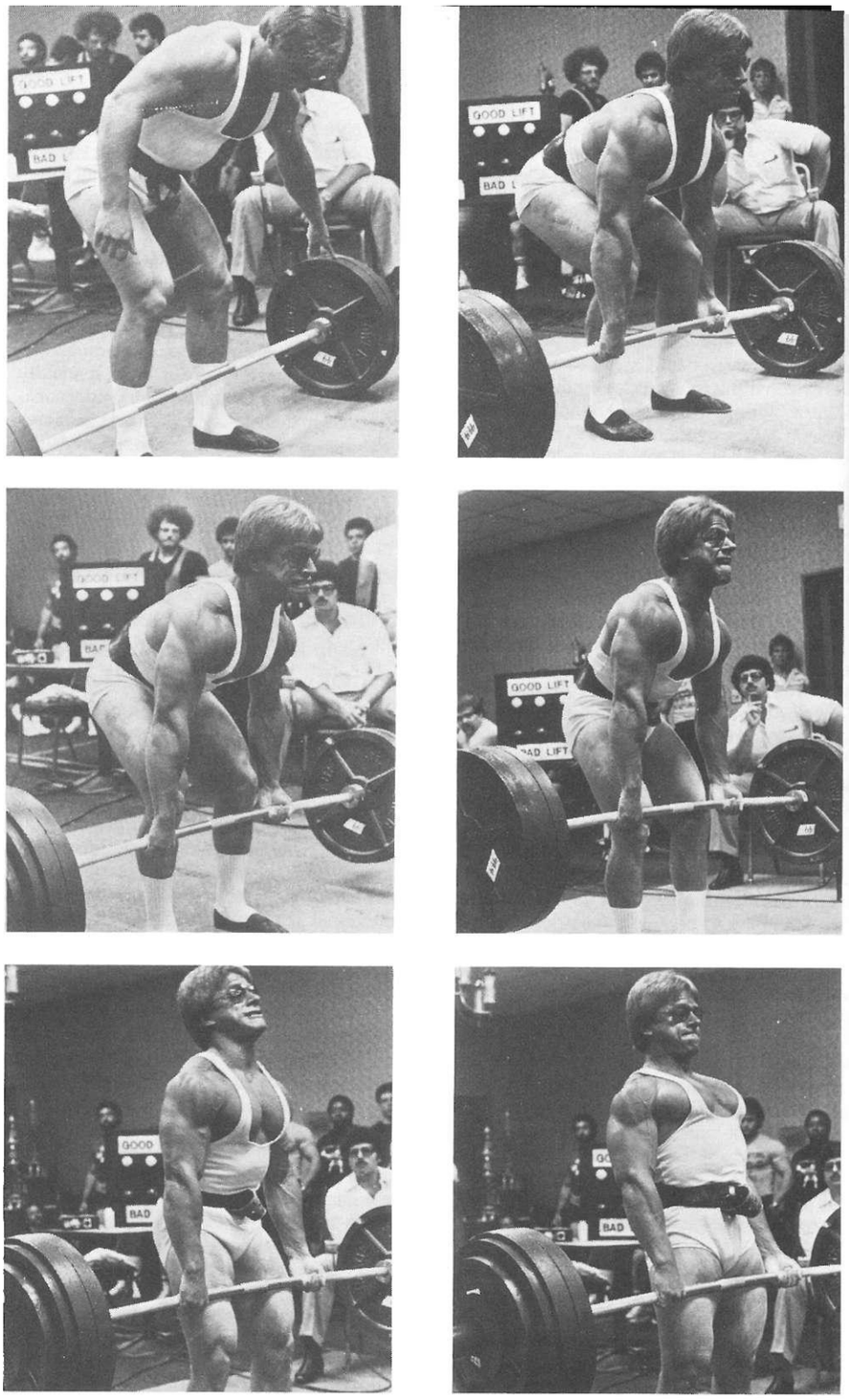
Another comment I frequently hear is, "Why do I want to know my biorhythm? I can't do anything about it so I'm better off not knowing." I do not agree with this philosophy because I think that there are things you can do if one, or more, of your cycles is low or crossing. And I do like to understand why I feel the way I do. If, for example, I find myself going psychologically very low while warming up, or between lifts, and I know I am down psychologically, then I can deal with it. More mental concentration, plus a bit of extra coffee to counteract the down feeling. Should I not know, then I get caught in the wave of depression and can't fight the problem. Alexander Hamilton once commented, "Instead of being ruled by accident, we can govern ourselves by reflection and choice."

Knowing can help

Knowing "why" is important to continued progress, and this means the whys of the successful days as well as the off days. Biorhythms help explain behavior and, in many cases, performance. For some, they seem to influence behavior quite markedly. For others, the influence is barely noticeable. Personally, they have a dramatic influence and this is why I had determined that biorhythms existed long before I ever heard the word. I do not stay on top of my biorhythm chart the way I did when I was in active competition. Now I merely check

Many lifters contend that they do not want to know where their biorhythms stand on a given day. This is a strange reasoning.

every so often to see if it is still on schedule. I can generally tell when I'm in a crossing situation. I can feel my body change. Things are different. This is especially true of my emotional or psychological cross days. When I feel a cross (or think I do) I go to my biorhythm gauge and see if what I felt was a biorhythmic change. I have become very sensitive to my biorhythmic changes, as I have been aware of them for many years and I believe my individual chemistry reacts a bit more dramatically than most. I have, on occasion, woke up in the middle of the night with my heart racing and my body suddenly alert. Almost like a tab of speed kicked in after I went to sleep. I lay in bed for 10 or 15 minutes and it subsides. Next morning I check my biorhythm and, sure enough, I crossed. I have talked to a number of others who experienced similar "rushes" and never really understood just what was happening until they learned of biorhythms. I can really tell when I'm crossing in the weight room. My motivation is poor, my concentration worse, I have to think about each rep on each set. I have to keep convincing myself that the effort is worth the trouble. Training with a group is helpful in this case.



Steve Knight is one of the very few American powerlifters who displays the mental control and confidence of the European Olympic lifters. A pictorial study of deadlift excellence.

Not everyone is going to be affected in the same degree, that's a certainty. Just as a change in climate will not influence all people to the same extent, some are more sensitive to their biorhythms than others. For some, a change in the humidity will quickly alter their emotional mood. For others, a higher humidity has little effect on how they feel. So it is with biorhythms.

The *Steve Knight Story*

Steve Knight trained with me at Jack King's Fitness Center in Winston-Salem just prior to the '79 Senior National Powerlift Meet. His training was soaring, new P.R.s at every session. Steven was paying close attention to his training. He was pushing higher and higher and did not want to plateau before the meet. Three weeks before the contest he blew out his lower back doing a moderate weight (80%) in the halting dead lift. There seemed to be no explanation for this injury, other than his comment that he had lost his mental concentration on the rep that hurt his back. We went through a check list of possible reasons and none fit.

1 asked him, "Where is your biorhythm?" He hadn't checked it for a while. We used my bio gauge and found that he was in a most dramatic biorhythmic situation. Steven was crossing down on both his intellectual and physical cycles and had crossed down on his emotional cycle just the day before. Damn near a triple cross. We had our "why". One of the hallmarks of the intellectual cross is the lack of concentration. In this case, coupled with the other two dropping down, a loss of concentration on one moderate rep did him in.

Knowing that he was going to be low on all three cycles for a period of time also allowed us the knowledge to correct the injury. After having his injury treated with an adjustment, ice therapy and mega-dosages of supplements, we laid out a training routine through the low biorhythm period right into the contest. As a result, Steven's injury recovered nicely and he did very well at the Seniors.

Had he not understood the nature of the problems, he may very well have continued to train at his usual pace, and either his injury would not have recovered or he may have pushed on and sustained yet another injury, most likely in the same area. In that event he would have not even had the opportunity to compete in the national contest.

The *three cycles: physical, emotional & intellectual*

I will briefly describe the three cycles: the physical, emotional and intellectual. The physical rhythm varies every 23 days. Researchers believe that this cycle originates in the muscle cells. Changes in the physical cycle influence strength, endurance, energy level, resistance to illness and general physical confidence. When your physical cycle is "high", or above the midpoint on the curve **(11½** days) you are in the plus or discharge period. You can overtrain without running a high risk of energy loss. You recover much faster and are able to get by with more "extra" work in the weight room It is the prime time for athletes.

The minus or recharging period is the flip side of the coin. You will be lacking energy, your endurance is not as good and you will not recover from a hard workout as well as when your cycle was high.

The emotional or sensitivity rhythm is on a 28-day course. This cycle deals with the nervous system. The first 14 days are the plus or discharge period. On these days you will have a more positive outlook on training. Your psychological mood is good. You will relate much better to others. Your will be optimistic, even ambitious in your goal setting. Spirits are high.



The minus days of equal number (14) find you more negative in thought and action. Everyone experiences relative variances so the highly emotional individual will have "ups" and "downs" that appear as peaks and valleys on a chart. A calmer individual will not show such a great change in behavior. Generally speaking, on the low end of the cycle, your mood is more negative, you do not want to be around others as much. Your attitude is not as positive. Cross days will find you more grumpy. You seem to be more argumentative, ready to battle any challenge. Tougher to take a joke. Note the emotional cycle is divisible by seven, the number of days in a week. This means you will cross on

the same day of the week, every two weeks. This corresponds with the day you were born.

The intellectual cycle of 33 days is believed to originate in the brain cells. Some researchers have tied the action of this cycle to the thyroid gland. Since the brain is directly involved in this cycle, it is understandable that all activity dealing with thinking and learning is affected. During the high segment of the cycle you are able to absorb new material more readily. The "up" cycle is a time to do creative work and to master new material. Students can certainly benefit from this knowledge by doing their term papers and studying new subject material during their high periods. The low portion of the cycle can be reserved for reviewing and practicing previously learned skills.

Most researchers do not feel that the intellectual cycle has as much bearing on athletic performance as the other two. Perhaps, but I personally feel that it does play a role for the competitive weightlifter. A tremendous percentage of the weightlifters success depends directly on the ability to concentrate. The intellectual cycle influences this factor, and should certainly be considered.

Cross Days

The cross days are also referred to as "switch-point" days and critical days. Cross days occur when any of the three cycles begins a new cycle upward or crosses downward into the recharge period. Both of these days are considered critical. Cross days need to be noted as you prepare for the final days of training. They are the most important as they have the most dramatic influence on behavior. These are the days when your body chemistry is changing from plus to minus or vise versa. As author George Thommen states: "Critical days in themselves are not dangerous. Rather, they are days during which the individual's reaction to his environment may bring about a critical situation."

You are also faced with the prospect of double and triple cross days within a given year. Double cross days occur, on the average, less than six times a year and triple crosses only about once every year. The cross days are the ones the safety engineers have utilized to cut down on the number and severity of accidents. In one study of over three hundred accidents it was found that 70% occurred on a critical day. In the February, 1973 edition of the American Society Engineers Journal, R.D. Anderson reported on a survey done on airline pilots, railroad engineers, truck drivers, and traveling salesmen. Of 1000 accidents studied, over 90% occurred on the critical days. An amazing statistic.

A rather interesting finding of the accident research is that the highest degree of accident affinity occurs when the emotional cycle is critical and the physical rhythm is high. Lots of physical energy at a time when mental coordination is impaired. This certainly would relate to lifter's behavior also.

"Critical days are not in themselves dangerous. Rather, they are days during which the individuals reaction to his environment may bring about a critical situation."

Because of its application to accident prevention, biorhythms are being utilized in some very large-scale efforts. The Japanese have a national program in operation. Workers in high-risk situations are given a blue card in their time slot on their cross days and they are relieved of any hazardous work on this day. The result is that accident rates have dropped a remarkable 80% since the beginning of the program.

The Swiss, from whom we acquired the science of biorhythms, also utilize it for safety purposes. The Swiss Airlines do not allow their pilots to fly on critical days. Various American corporations have picked up on the foreign success and have established a biorhythm program of their own. All reports are that the programs have been most rewarding.

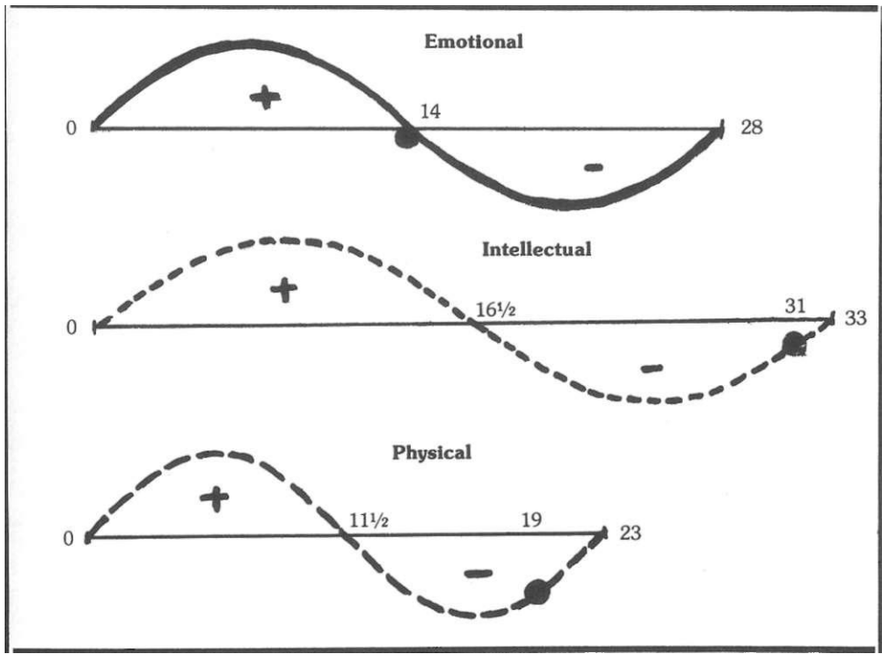
Calculating your biorhythm

I will now present, as simply as I can, an explanation of how to calculate your own biorhythm. You can, of course, shortcut this lengthy mathematical formula by purchasing a biorhythm calculator or a Biomate. The calculator is best if you are dealing with a group whereas the Biomate is handier when you are setting up a program for one person.

To review, the three cycles consists of the physical (23 days), the emotional (28 days) and the intellectual (33 days). In order for you to determine where you are on a given day, you must first determine how many days you have lived. Sounds rather formidable doesn't it? Not really, Just a bit of simple math. Multiple your age by 365. Add in how many leap years you have lived. These are easy for lifters to remember as they are the same as the Olympic years. Total these. Now add in the number of days since your last birthday. Remember to start your addition with your birthday as this is the first day of the next year in your life. Got a total? Now you can figure where you are in relation to each cycle. Simply divide the three numbers: 23, 28, and 33 into your total. You will find out how many times you have been through the cycle in your lifetime and the remainder will tell you where you are on the date you figured.

An example will help. Our sample subject, Christi Lou, was born on May 6, 1960. She wants to find out where her biorhythm will be on August 10th, 1979. She is 19 years old, so 19 x 365 = 7025. She has lived through four leap years (1964, 1968, 1972 and 1976). Note that 1960 was a leap year, but our subject was born after February 29th so it does not count. Add 4 to 7025 = 7029. Next, figure how many days from the subject's birthday, May 6th to August 10th. May (from the 5th to the 31st) = 26 days. June (30), July (31), and August (10), for a total of 97 days. Added to the sub-total of 7029, it gives a grand total of 7126.

Final step is to divide the cycles into this grand total. Physical cycle of 23 goes into 7126, 309 times with 19 as our remainder. We are after the remainders as these tell us where we are on the given date. The emotional cycle of 28 days divided into 7126 leaves us 14 as a remainder. The intellectual cycle of 33 days into 7126 gives us 31 as a remainder. The remainders read as follows: physical 19, emotional 14 and intellectual 31. Our subject's chart looks like this when displayed graphically:



At a quick glance, a few points surface. Most notable is the crossing day in the emotional cycle. The subject is also low in both the physical and intellectual cycles. If I were consulting this individual as to the type of training she should do at this particular time, I would recommend higher repetitions with moderate to light weight. No form work. No heavy work. Squats in tens or light fives, rather than heavy fives or triples. Perhaps she would be wise to drop an exercise or two. You must be prepared to adapt your training on the critical days. Do not arbitrarily force through them or be guided by a predetermined workout schedule.

A weightlifter needs to plan around the critical days. I would not recommend a total avoidance of training, but rather the exercise of caution. This is not a day for testing or a day to practice form with a heavy weight. It would be far wiser to merely do some strengthening work with a moderate or light weight. No force feeding. Remember that you can still get your tonnage in with the lighter poundages. Instead of squatting 400 for three sets of fives, take 350 and do three to five sets across depending how they feel. The actual tonnage with 350 is sufficient work and the risk of injury is much lower than with the heavier poundage.

You should be aware of the positions of all your cycles as you enter the final two weeks of training so that you can adapt and adjust your schedule.

Along the same line, instead of doing heavy triples in the clean, which require a great deal of mental concentration and technique, do sets of high pulls off the floor or go to the power rack and work a weaker position. Once again, you can get the necessary work in without putting yourself in a high-risk situation.

Which cycle is most important to the athlete? Opinions vary, but from my observations they all have a bearing on performance and all should be taken into consideration when planning your program. Most experts feel that the intellectual cycle has little, if any, bearing on athletic performance. I do not agree. Quite often, it is our ability to concentrate that enables us to do well in a training session or a contest. The intellectual cycle influences our ability to concentrate. The influence of the physical and emotional cycles are more obvious. Not only should a competitive weightlifter work around the cross days, but he or she should also utilize the highs and lows to benefit long-range plans.

You should be aware of the positions of all your cycles as you enter the final two weeks of training so that you can adapt and adjust your training schedule. I will go over a few points on the various cycles that should be of benefit to the lifter as he enters the final critical workouts.

The physical cycle

When your physical cycle is high, or above the midpoint, you will have plenty of energy. You will be able to train very hard, recover much more easily. When your cycle is below the midpoint, then you will not be able to carry as heavy a training load and you will find that recovery comes more slowly. While your cycle is down, you will notice the old injuries more. They seem to pop up overnight. Sore spots suddenly appear in overworked areas: the elbows, shoulders, and lower back are especially prone to these touchy spots.

As you enter the final two weeks and are faced with a week or more of "down" days, what can you do? You must handle heavy weights in preparation for the contest. You certainly cannot back off completely. The emphasis should be on personal awareness. You must be finely attuned to your own body. You must be able to listen to the signals it gives off and be ready to respond. Take more time during a session, should you know that things are not on, biorhythm-wise. Generally, I find that my concentration and motivation are the biggest problems and both of these can be overcome with mental preparation, which began in earnest during the last two weeks. You will not be able to waltz through the heavy sets; you will have to concentrate more so that your mind does not wander as you go to the bottom in a squat. It is extremely important to be aware of your out-of-the-gym-activities during this time as it is often the time spent away from the gym that gets the lifter in trouble during the low periods. Cut back or eliminate the partying.

Be sure your nutritional program is complete. Get plenty of rest, the more the better. If you are on a tight work schedule, make sure you get in the sack early. One night of excess will ruin two months of training as you come down the home stretch. In other words, you can counter-balance the negatives of the low biorhythm by paying closer attention to your living habits. All these things will work positively for you anyway, so it's not a bad idea to pamper yourself in the final days, regardless of where your cycles stand.

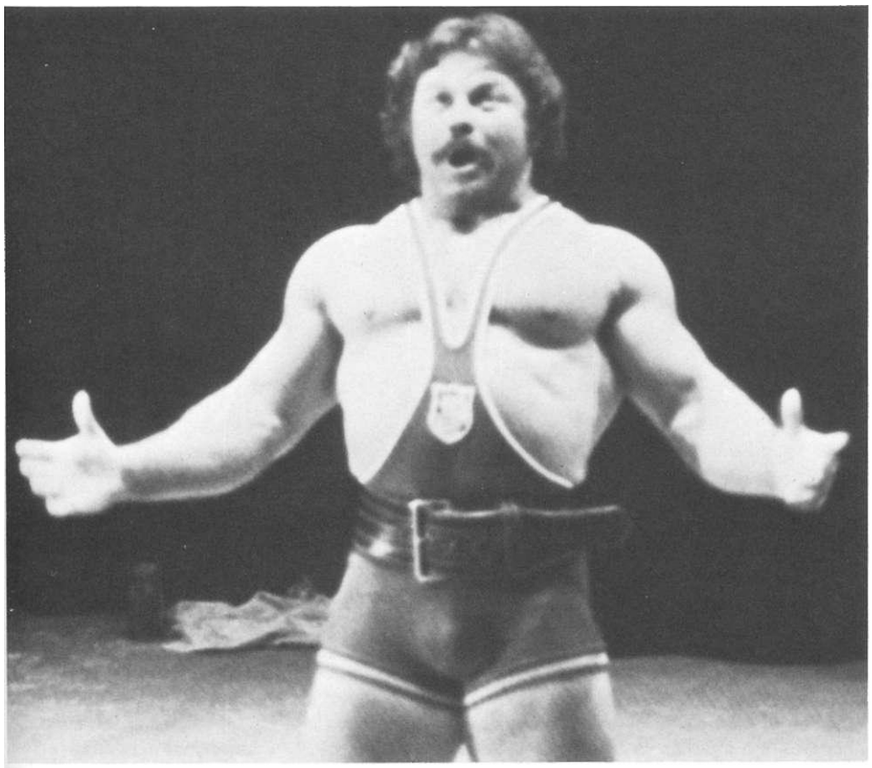
If you should be crossing on your physical cycle, you will want to avoid any limit lifting and form work on that day. Let it become a basic work day. Don't set yourself up to total out or to test any lift. Let's say that you are planning to do heavy doubles in the bench, and had hoped to handle 400 X 2. Instead, after discovering that you were in a physical cross day, just do 2-3 sets with 365. The work load will be plenty and you keep an attitude of success on your side. You will still be able to fit your 400 double into your schedule, but not on a critical day.

The *emotional cycle*

The emotional cycle is, in many expert's opinion, the most influential to competitive weightlifters. My feelings are that in an individual sport the emotional cycle plays a greater role than in a team sport. A competitive weightlifter stands alone on the platform and his or her psychological preparation is extremely important.

The upper portion of the cycle will find you in fine spirits with a very optimistic outlook. Your confidence level is high and you come into each workout with record breaking expectations. When you are in the lower curve, you are prone to blue moods, you find that you become irritated easily and are not as confident with your workout weights.

Cross days are most noticeable in the



Marvelous Marvin Phillips impeaches the lifting gods. He does seem to have a hot line to Mount Olympus.

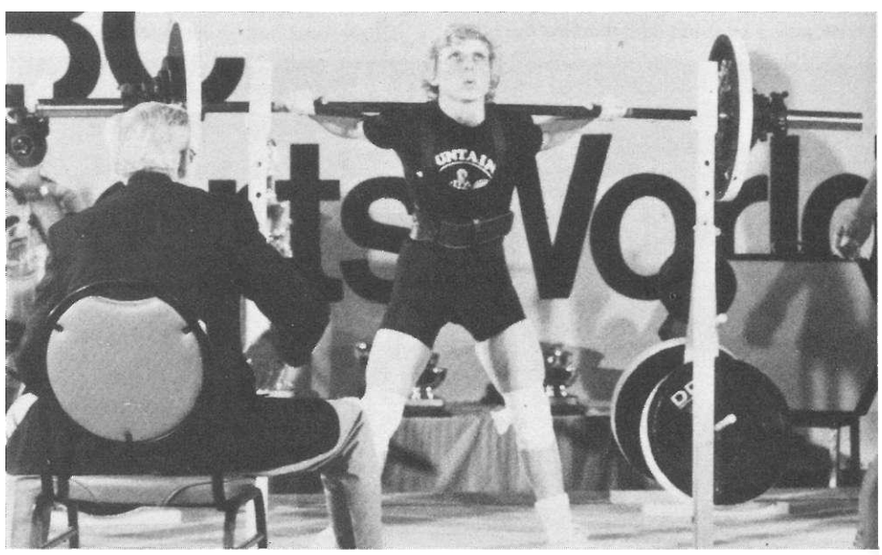
emotional cycle. You- will be more grumpy than usual (for some lifters I've trained with this day is hard to distinguish as they are always grumpy) more apt to make angry statements, and you will find your temper has a very short fuse. If your emotional cross days affect you rather markedly, then I suggest you do as I do—train alone. Keep the weights light and the workout rather short. Again, as in the physical cross days, do not go for limit poundages, regardless of how close or seemingly important it is for the upcoming meet. You can, in the course of an hour's workout, blow your confidence with a lousy session.

Remember also, that the cross days are high-risk injury days. It is far better to take a nice comfortable workout and come right back the following day for a tougher one, than to go ahead with your prearranged program and blow out a back, or shoulder, or elbow (fill in your own bodypart). It often is very much a question of going lighter or going for the ice pack. It's a difficult lesson for the ambitious, fast-gaining lifter to absorb, but "one workout does not a season make".

The intellectual cycle

The low end of the intellectual cycle has not been shown to be as important to the athlete as the lows on the other two, but I believe the cross days on this cycle are also worth noting. Once again, go easy on the cross days. Do not discount them in your pre-meet planning. The intellectual cycle has much to do with your ability to concentrate and lack of concentration can mean all the difference between making the final rep on the final set or putting yourself in a chiropractor's office. When you are "up" in this cycle, you will be more mentally aware, able to think through problems and situations better. It's a perfect time to do some serious planning, such as preparing your training schedule for the next two or three weeks.

You will be better at any thinking job in the upper position; on the other hand, when you are in the low position of the cycle, you will not be as mentally sharp. The cross days will short circuit the mental process. This doesn't mean that you can't do any mental skills, but you will find them a frustrating chore. Try to balance your checkbook on your next intellectual cross and you'll see what I'm talking about.



Joan Fruth is a sterling example of the new wave of accomplished powerlifter in the feminine ranks.

We had a bookkeeper at the Marion YMCA who used to go bananas every few weeks. She just couldn't get her books to balance. I mentioned that she was in all likelihood in the midst of a cross day and most likely an intellectual cross day. She told me, in so many words, that I needed a rest, perhaps in a sanitarium for the looney. I had her do all the math and sure enough, the old broad was crossing. Thereafter, she began

keeping track of her cycles and avoiding doing heavy duty book work on her cross day. It sure helped her mood as well as that of the rest of the staff.

Additional considerations

There are a few more points that might be worthwhile to consider as you organize your training schedule for the final two weeks. We know that you can carry a heavier training load when your physical cycle is high. You can set up your schedule so that the tonnage and limit attempts come during the "up" phase. Conversely, you will back off on both training loads and limit attempts during the cross days and during the "down" part of the curve. This may mean, simply, that you drop a set or two during this "down" stage or that you use a slightly lighter poundage. You can get to the same goal without risking overtraining and injury. This is basically what you want to avoid—overwork. You should be especially aware of how you feel so that you can adapt as you go along. Many lifters report that they do fine at the beginning of a workout during the "low" periods, but towards the end they have problems. So, whereby you can get the most out of your training without sustaining an injury. You may have a "mini-test" on your schedule, but find yourself reluctant to dress and train. No motivation and the meet is just two weeks away. Knowing that you are "down" will help you understand your own feelings. This is also where your mental preparation will prove to be invaluable.

Biorhythms and meet day

The inevitable question in every lifters mind is, "Ok, so I can skip a day or change my program during training, but what if my biorhythm is unfavorable on meet day? What then?" By knowing in advance where your biorhythm stands you will be able to flow with it rather than against it. "We can only dominate nature by subjecting ourselves to its laws." Thus stated Lord Beacon many years before biorhythms, but the advice is forever true.

The odds are that you will be a low cycle in at least one, and possibly more, of the three cycles. The odds also favor a cross-day on at least one meet in a given year. What is to be done with either a low cycle or a cross

Treat all crossing situations the same, regardless of the cycle.

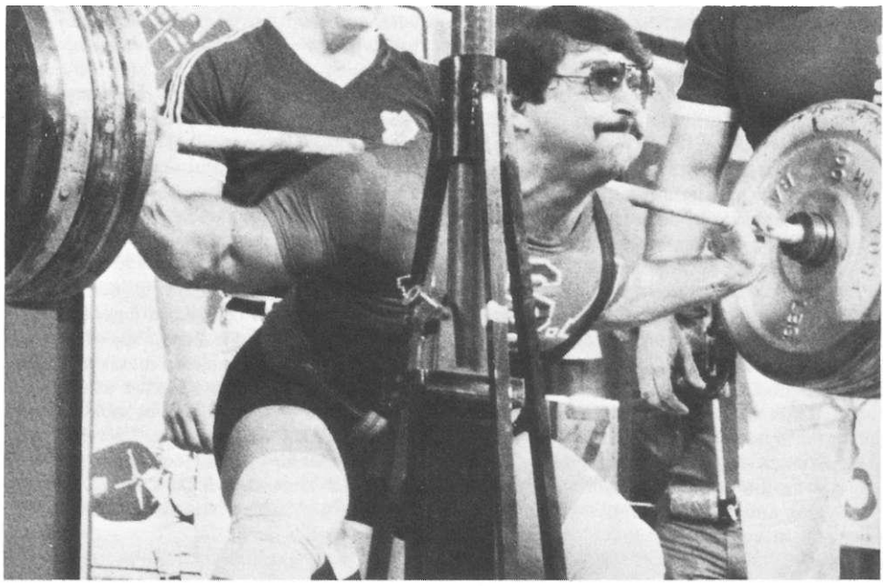
put the primary movement up front and taper from there. It has also been noted that the depression effect of the cycle is more noticeable at the end of the period; you have to be more cautious at this time. This is a result of being in a low state for a lengthy period of time. We are more prone to fatigue, for example, the longer we are in the "down" phase.

Treat all crossing situations the same, regardless of the cycle. Basically, work around them so that you do not build up any negatives in the home stretch. You can still put in a solid workout but avoid form work and maximum attempts. It is not an ideal time to check out the snatch or clean and jerk. Let them slide for a day or a workout and you will come out ahead.

Some lifters panic when they find out they are going to be low during the final week or ten days just prior to the big meet. Being aware will enable you to set up a program day? Simply plan ahead.

I'll deal first with the crossing situation as this is more severe that the lows. If you are crossing on any of the cycles you will need to spend some time counteracting the negatives with some positives. Positives in the form of verbal suggestions built into your mental preparation. Let's, for example, take the lifter who finds he is going to be crossing physically on the day of the meet. What does this indicate to him? His form will be shakey and his endurance perhaps not as good as usual. It should not affect peak strength if handled correctly. In other words, he should be able to total just as well if he goes into the warm-up room prepared.

As the athlete mentally prepares for his lifts, he must spend extra time with the technique involved in each lift. He should avoid distractions, anything that will break his concentration. No visiting with fellow lifters. The old-towel-over-the-head-in-the-



Larry Pacifico is to powerlifting as Babe Ruth was to baseball. Nine times World Champion, member of the Hall of Fame, t.v. commentator. The growth of the sport of powerlifting can be rightfully traced to the accomplishments and efforts of this man.

corner trick. Knowing that his recovery level is being affected adversely, he will make it a point to conserve energy. He will not want to be put in a position of following himself on a platform. He must pay close attention to poundage selection. Between lifts, he should find a secluded sport and get into the mental preparation of the next lift. In other words,

By flowing with, rather than fighting, the situation, the lifter can come out ahead.

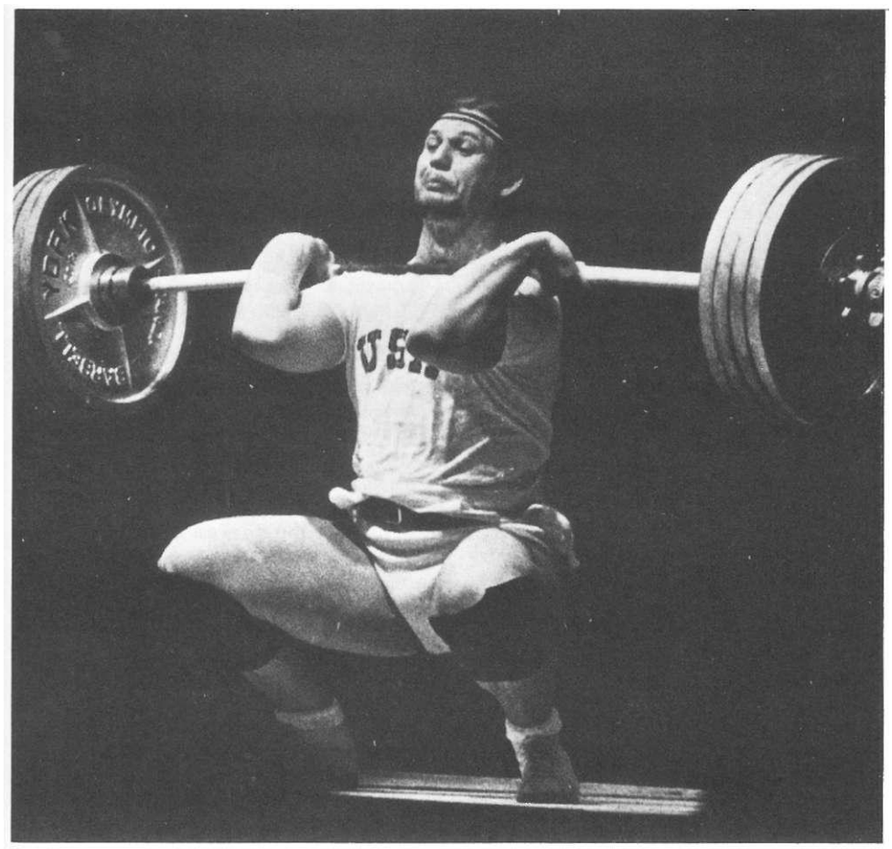
by flowing rather than fighting the situation the lifter can often come out ahead. It's like working around a minor injury. You cannot ignore it, but rather you adjust to the fact. So it is with biorhythms.

The emotional cross on meet day can be the most troublesome to the competitor as the psychological aspects are so critical. Knowing once again, is to your advantage, as you can prepare. Build in a great deal of positive psyching in your mental preparation and be constantly reminding yourself not to get edgy, irritated, or angry as this results in an energy loss. Most lifters find that they perform best on cross days when they are basically left alone. Having a trainer who knows what is happening will help immensely as he can keep your mind on the meet and away from others. Stay out of the gossip sessions in the warm-up room or you will find yourself in heated debates over extremely foolish matters.

Keep a lot of positives on your side. Be absolutely, totally prepared as you come to the meet as the slightest frustration can build into a massive problem. Have your gym bag ready and have your warm-ups figured. Leave little to do on meet day but concentrate on the lifts themselves.

I use caffeine on my cross days. It elevates my mood and if I stay away from others I can control my mental disposition. If I know I'm low or crossing, I really overload my supplements, especially the E and C. I can counteract the lack of reserve with nutrition as a weightlifting contest is not an endurance feat, but is an accumulation of peak efforts.

Many lifters have broken personal records on cross days and also during their low



Bob Hise racks a heavy clean in perfect form. Bob and his Dad publish International Olympic Lifter, manage Mav-Rik Barbell and coach many young lifters in the L. A. area.

periods, so the odds are not stacked totally against you should your biorhythm show negatives on meet day.

I must emphasize that biorhythms should be considered as a variable to the competitive weightlifter. It is certainly not the only variable and this is a point often overlooked. Lifters are usually of two camps; those who believe almost religiously in biorhythms and those who discount it entirely. Biorhythms should be considered, just as rest and diet are to be considered. Just because your biorhythms are in a triple high does not necessarily mean you will break P.Rs. And in the same thought, merely because you are crossing does not mean that you will have a bad day on the platform. It is yet another factor to plug into your personal computer.

Summary

The study of biorhythms has a place in the world of the competitive weightlifter, as he or she needs to be aware of any and all factors which may influence athletic performance.

The knowledge of where you are in a particular cycle will help you more systematically prepare for a contest, and it will also help you to perform better at the contest itself.

Knowledge of all the factors which influence behavior and hence our athletic performance is to our advantage. The individual who utilizes ***all*** the information available is going to increase his or her total on the platform That increase may be but 5%,but a 5% increase on a 700-pound Olympic total is 35 pounds, and on a 1500 power aggregate, 75 pounds. Quite a bonus for merely paying attention and doing some sensible planning.

CHAPTER ELEVEN

Dealing with Drags

Rev. Jim, speaking to Alex on the T. V. series, Taxi:

"I know a pill that will help, but it has a terrible side effect."

"What's that?"

"It wears off."

I was talking to my friend Nick Frasca on the phone from San Francisco and mentioned I was putting together a chapter of drug usage. He suggested I entitle it, Better Lifting Through Chemistry." Maybe so. The modern strength athlete who is successful in his sport is the lifter who knows how to use drugs to his best advantage. It was said of a former World Champion that it was not so much his knowledge of training or technique that elevated him to the top of his sport, but rather his knowledge of drug usage.

The wholesale use of various drugs to help improve lifting performance is a rather recent occurrence, but only because it has only been recently that the various pharmaceuticals became available. The old timers were not of a higher moral fiber, they just did not have the anabolics or amphetamines to use. I believe they were as competitive as the newer generations, for sure. Lifters in the thirties utilized a formula of aspirin, coffee, and coca cola to perform better at meets. There are substantiated reports of strength athletes injecting testosterone in the early fifties.

And when would you suspect the first episode of drug usage occurred in the Olympic Games? The Seventies? Sixties? Nay, not even close. It was in 1904 at the St. Louis version of the Games that a marathoner, Thomas Hicks, was given strychnine by his handlers to dull his pain so he could finish the race. He won. The use of chemistry for athletic gain is certainly not new. Not by a long shot. Rest assured, the old timers were as competitive as the following generations.

The drug explosion did not occur in sports, however, until the mid-sixties. Their introduction in to the sports world can be traced to Doctor John Zeigler of Olney, Maryland. I have no intention of placing Doctor Zeigler in the villain's role, but merely point out the fact that Doctor Zeigler was the first to test certain pharmaceuticals to determine their effect on athletic performance. Doc Zeigler, was, and still is, a pure research scientist. An eccentric genius. But allow me to clarify a point. While I know for a fact that Doc Zeigler brought anabolics to the attention of the weightlifting world, I also know that he was the first voice speaking out against their misuse. He was, in effect, just performing another experiment, as he had done with isometrics, negative resistance training, and his highly sophisticated exercise machine, the isotron.

The *iron guinea pigs*

The two earliest test subjects (performed under the auspices of the Hoffman Foundation) were Bill March, a young 181-pound Olympic lifter from York, Pennsylvania, and Louis Riecke, a 36-year-old veteran from New Orleans. They were excellent choices as one was a young beginner and the other a seasoned competitor.

The results were startling in both instances. March became National Champion, a World Record Holder in the press (352 as a 198er), and America's premier international lifter for half a decade. Riecke, seemingly far past his prime, recorded a World Record in the snatch (325 as an 181er, split-style) at the tender age of 37, and achieved international status as a lifter for the first time in his long career which spanned over 25 years of competition. He was chosen as one of the two middle heavy-weights for the 1964 Olympic Team. The other? Bill March.

The isometric farce

The use of anabolic steroids was a closely guarded secret in the early sixties. The credit for March and Riecke's meteoric rise in the sport was attributed to a new form of exercise, "isometric contraction". This was also a development of Doc Zeigler, although he received little credit for his work.

No mention was ever made of a corresponding connection with CIBA pharmaceuticals. How come? Let's talk economics. The Hoffman Foundation employed Doctor Zeigler in those days and the York Barbell Company had much to gain with this new information. One, it gave York team members a tremendous edge over all their competitors, both nationally and internationally. And secondly, it enabled the York Company to market countless power racks and courses on isometrics to the public.

When the isometric explosion ripped the country, I was an aspiring 181er, lifting with the Dallas Y Barbell Club. Like many other lifters across the nation, I hoped to duplicate some of Riecke's and March's success, so I, too, pushed and pulled on a stationary bar in prescribed position for the recommended sets and reps. It helped in some areas, but in general, I did not get stronger. Strange.

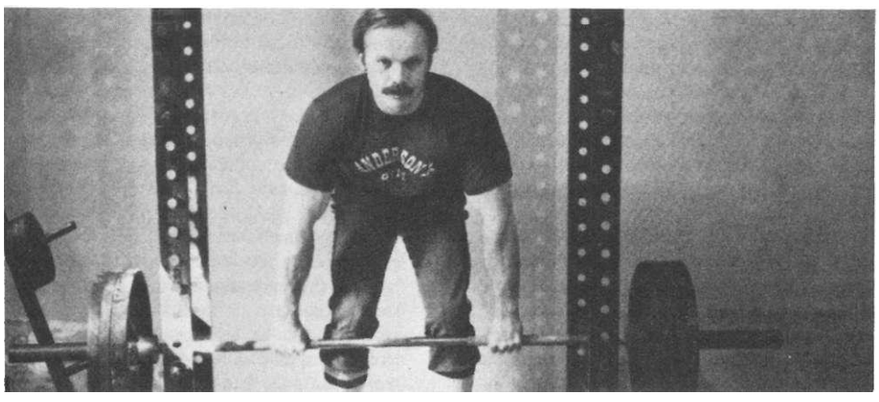
The truth was kept secret for a surprisingly long time. Kept from the mass of lifters that is. Some individuals picked up the "secret" from visits to York or from friends, but overall, the lifting population fully believed isometrics was doing the trick. Should a lifter in some part of the country suddenly make quick progress, he too explained his success through isometrics. So the cover-up remained covered up.

The secret leaks out

But nothing remains secret forever and word began seeping out about the "magic pink pills" (Dianabol being pink rather than blue in the early sixties). Bednarski discovered them, went from a mid-900 total to an astounding 1100 within a year. He was promptly lured to York. Anyone who knows Barski realizes that it is impossible for him to keep a secret. He spread the word. Suggs became Managing Editor of ***Strength & Health*** at that same time and after Terry Todd departed, Tommy brought me to York as his assistant some two months after Barski's arrival.

I was so excited to be in this situation as I wanted desperately to learn the so-called "York Secrets". I found the secret my first day on the job. I was instructed to go to a local M.D. and pick up my prescription for dianabol. That was the secret. York had the knowledge of the pharmaceuticals. An

Dave Anderson works on the rack. Dave owns and operates his own facility in Wichita Falls, Texas, which has become the training center for serious lifters in North Texas.



unbelievable edge. This was in January of 1966.

Suggs, Barski and I were all in agreement on one thing. Keeping the information secret, that is unavailable to the lifting population, was truly unfair. And while we could not print the truth in ***S&H*** we would convey what we knew to fellow lifters at meets, clinics, seminars, and exhibitions in various parts of the country. Some have mentioned that we were responsible for much of the drug usage during the late sixties and that may be true, but we did not push their usage. What we did do was answer the questions as honestly as we could. From there each lifter was left free to make his own choice.

Goon Juice

The uppers were abused most often, or at least the overdosing was the most visible. In 1966, there was a liquid form of amphetamine available called syndrox. It was nicknamed "Goon juice" and aptly so. The recommended dosage was one capful of the fluid (which tasted much like cough medicine). This was the equivalent of 20-30 mgs. of amphetamines and that's a lot of cups of coffee. No one ever settled for one capful, however. After 45 minutes to an hour the initial rush had worn off and the lifter would feel a let-down. Back to the bottle for more juice. Another hour, another let-down (relatively speaking of course),

The use of drugs in weightlifting became a Pandora's Box. Once it was opened, there was no stopping the rampant use.

The late sixties saw an explosion of the drug culture across the nation, and the influx of all types of pharmaceuticals into the sport of weightlifting closely coincided with the national trend. The use of drugs in weightlifting became a Pandora's box. Once it was opened, there was no stopping the rampant use. Step one was usually the steroids. Next the lifters became acquainted with amphetamines to increase performance on platform, barbiturates to insure adequate rest before a contest, muscle relaxants following a hard workout or contest. This often gravitated to the "recreational drugs": marijuana, acid, THC, mescaline, and on and on through the PDR and even a few not listed.

Doctor Zeigler was the first medical person in the country to publically condemn this drug overdosing. But it was too late. Once a lifter had used steroids to get stronger and uppers to lift better, there was little chance of turning back.

Overdosing became the order of the day. If 20 mgs. of D-bol a day put 5% on a total, then wouldn't 50 or 100 mgs. produce 10 or 15% gains? Such was the logic. Instead of one upper for a meet, an unsure athlete would drop three, or four, or would you believe 30?

another hit and it was off to Loo-Loo Land. Lifters would stalk the warm-up area shouting, cursing, screaming. Some would appear deranged, their pupils the size of quarters, their mouths so dry they couldn't spit on a bet. Some formerly mild-mannered types would Jekyll-and-Hyde-out and become complete, raving idiots both on and off platform. Super Circus.

Some lifters stayed awake for days following a contest. My first introduction to goon juice was a nightmare. I used it at the Philly Open in 1967, my first big Eastern competition. I lifted better than I had ever done, placing second behind Frank Capsouras. I was very pleased with myself until I got half way back to York. While sitting in the back seat I began cramping. These were not everyday, garden variety-type cramps as I usually experienced, but severe ones that took my breath away. Not only did every major muscle group lock up, such as my lumbars, quads, and traps, but every minor group got in the act. My abs, fingers, toes, behind my ears, even small muscles in my face began to cramp. I stayed in a painful sweat for over an hour. I had shot my potassium level all to hell and threw my electrolyte balance out of wack. I had put my

body in an extremely dangerous position. I wasn't too far from having my heart muscle cramp, and that would have been bye-bye Billy.

What really amazes me when I look back at some of the severe drug abuse by so many top lifters in those days is that someone did not get killed. I can say that some gave it their best shot.

Strange, but true

Consider these little tidbits. 1 traveled to a Teen-Age Nationals to cover the meet for S&H. A member of the York Team was competing and asked me to work with him backstage. As 1 was instructing him between attempts, he appeared to be looking right through me.

"What in the world are you on?"

"I'm tripping on Sunshine."

Now if you were to try to tell an outsider that a teen-age athlete was attempting to perform squat snatches and clean and jerks with maximum weights while on acid, he might suggest that you go occupy a rubber room. But its true, and to add to the absurdity, he won the meet and set a couple of national teenage records.

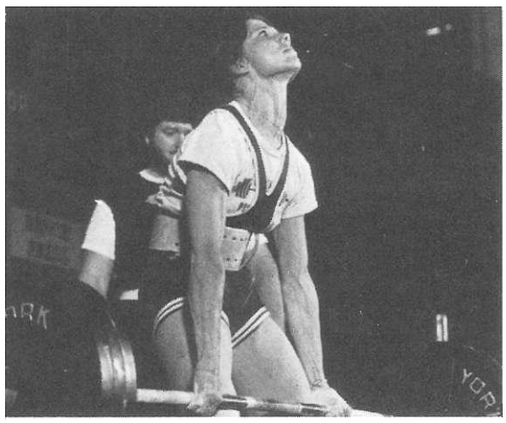
Another member of the York Club won a Senior National Title after injecting epinephrine into his system. Epinephrine is used only to revive an individual who has sustained a heart attack and is generally shot directly into the heart. In other words, it is VERY potent and certainly is not to be toyed with. I have asked doctors what would happen should an athlete inject this drug and they all replied that it would kill him. It did not kill him although he did not perform up to his usual level.

One of the more absurd tales concerns my buddy in Fort Smith, Arkansas, Charlie Herring. Charlie went to the local slaughterhouse every day for a week and drank a glass of cow's blood, directly from the jugular, in hopes of gaining strength. Charlie is not normal, even by weightlifters standards, but then again, he's not much more looney either.

The point of these stories is not to highlight the insanity of drug abuse in weightlifting, but to illustrate the fact that competitive lifters will do anything which they even remotely suspect might help them elevate another pound. Maybe even another gram.

The period of overdosing in Olympic lifting peaked in the late sixties, coinciding closely with the peaking of the drug culture, per se, in this country. This was followed, not by abstinence, but by a more sane approach. Lifters discovered that larger quantities were not always the answer to higher lifts. More often than not, it was a certain type of anabolic or amphetamine that worked best for their particular chemistry, and larger and larger amounts did little except bring on negative side effects.

The present day powerlifter seems to be going through the same cycle as the Olympic athletes did. Word comes to me from various parts of the country of powerlifters completely overdosing their systems. The more experienced powerlifters have wisely learned from the mistakes of the sixties. Moderation and a bit of logic go a long way.





Terry Dillard is the top of the line of America's female corps. Larry Pacifico presents her with the Best Lifter Award at the Worlds.

Handling the problem

I have never been of the school that politicked to abolish the use of drugs in weightlifting. I do believe the sport would be ahead if the same energies that explored the various drugs would be channelled into testing various mega-dosage supplement programs, but I am realistic enough to know that a weightlifter will not relinquish his strength gains. And I really think the officials can forget about policing the drug problem. The athlete, armed with an almost unbelievable knowledge of drugs, will always stay one step ahead of any tests or rules.

I believe that most athletes would endorse a natural route over a chemical one.

It should also be stated that many of the officials who are constantly formulating rules and regulations to control drugs in weightlifting are directly connected with the problem. The York Barbell Company paid the tab for all the drugs the lifters wanted during the late sixties. We merely went to the local pharmacy and picked up what we wanted. The bill was forwarded to the YBC. One Doctor, who has been selected by the International Selection Committee to serve as Team Doctor on several of our international teams, supplied us huge quantities of drugs by mail. No prescription, thank you. Officials who are coaches and also fathers turn the other way while their trainees and their sons drop the pills. They they go to an AAU meeting demanding all athletes found guilty of drug usage to be booted out of the sport. Hypocrisy in its purest form.

My ideas on solving the drug problem are somewhat different. Forget the testing and the rule making. Spend some time, and yes, maybe a little AAU money, on finding a natural alternative to the steroids. I truly believe its sitting right in front of our collective eyes, but not enough testing has been done to formulate a program. I believe that most athletes would endorse a natural route over a chemical one. Every athlete is concerned with his health and would certainly not risk the potential side effects of a drug if he had a natural alternative.

Since doing the research for ***The Strongest Shall Survive,*** I have advised many lifters on a mega-vitamin/mineral program. Especially the younger lifters. I try to get them to hold off from taking steroids as long as possible. Some have made such remarkable progress with mega-dosages of supplements that they never bother testing the steroids.

The Mark Rippetoe story

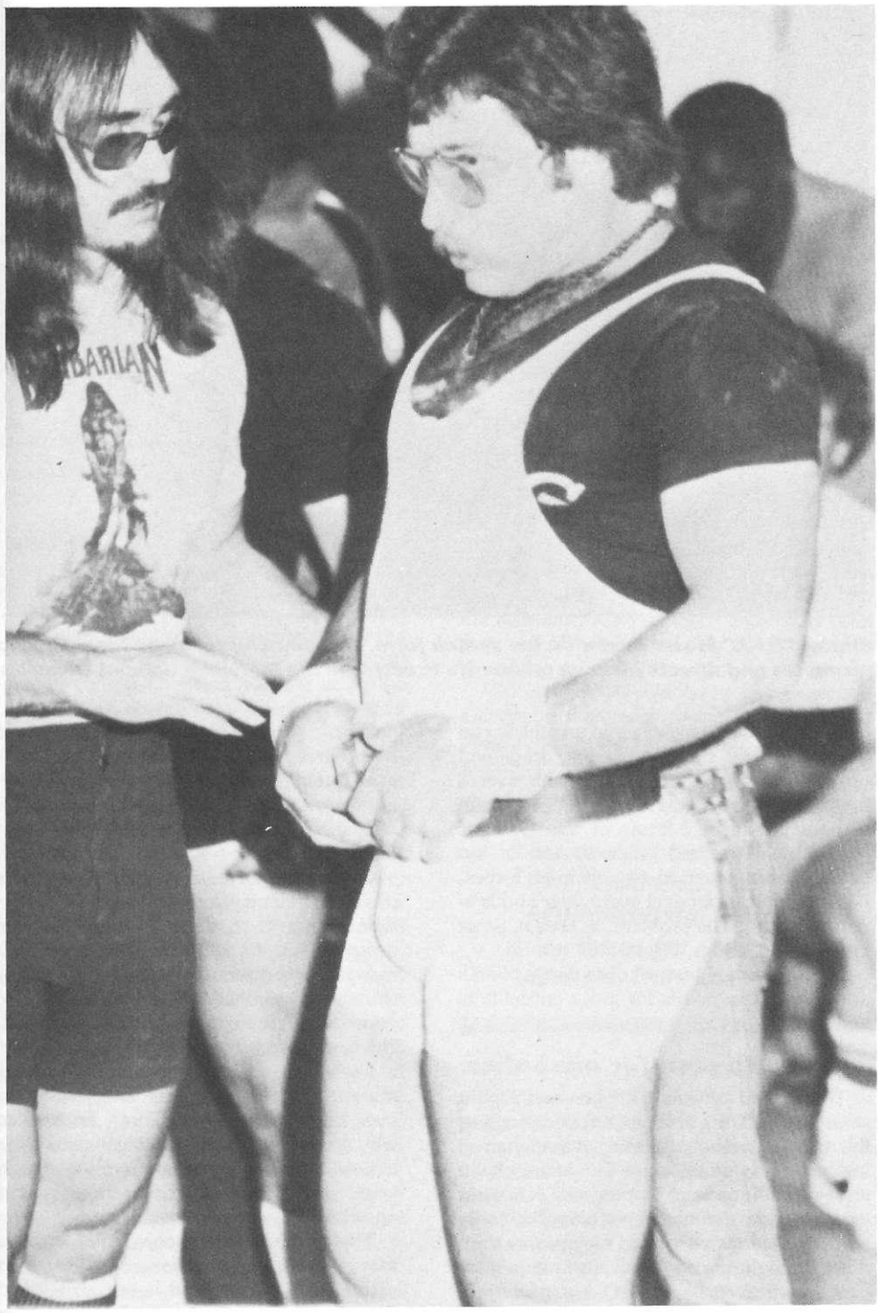
The most remarkable example of obtaining anabolic results from a nutritional supplementation program that has come to my attention has to be that of Mark Rippetoe of Wichita Falls, Texas. I've had the opportunity to party and train with Mark on several visits to Wichita Falls and during those times we talked a great deal on nutrition, drugs, training programs, and Odin over some Lone Star and ribs at the Bar-L.

Rip's progress had stalemated and he was wanting to go on an anabolic program to break out of the rut. Since he is in his early twenties he is definitely old enough to make such a choice, so I advised him as best I could on dosage, lay-off periods, etc. But he was unable to obtain any anabolics, so settled on a mega-vitamin program until he could find a source for the anabolics.

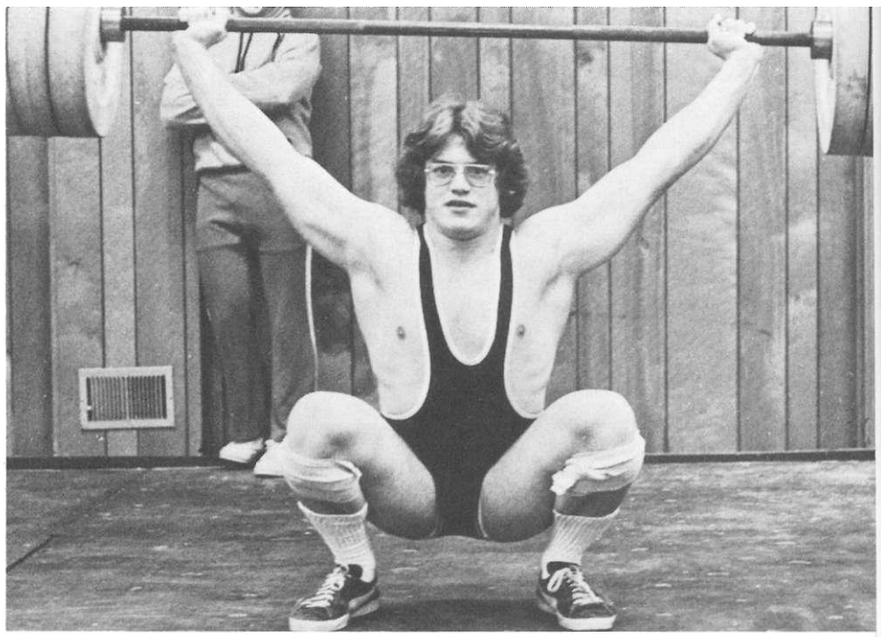
When he embarked on the nutritional schedule he was doing just over 400 in the squat weighing 184. In less than two months he was doing a 500 squat in competition. He had put on 10 pounds of bodyweight, which accounted for some of the gain, but he had weighed up near 200 before and had never moved his squat much past 400. Tremendous progress which I have never heard equalled with an anabolic program.
Readers might be interested in the fact that Rip was running 6-7 miles, two or three times a week while his squat climbed to the quarter-ton mark.

What I suspect he did was find the key nutrient which his system lacked (we suspect B6) and when this was included in sufficient amounts his body responded anabolically. I firmly believe if we could do similar testing, in a more scientific controlled manner, we could come up with a natural anabolic answer for a large majority of the population.

I am also realistic enough to know that until the natural alternative is available, the lifters will continue to utilize anabolics. I believe coaches would do well to spend time advising their athletes as best they know how so that they do not damage their health over



Mark Rippetoe gears up for a maximum lift. The Wichita Falls, Texas native has developed a superb platform confidence. At this contest in Arlington, he made eight out of nine.



Jimmy "B. J." Moser works on his snatch form. A promising teen-age lifter, Jimmy promotes and directs his own meets. He is active in the Maryland Special Olympics program.

the long haul. I do believe that an athlete can use the various strength building drugs and uppers for a meet and not harm his overall health. I have seen too many lifters use them without ill effects. I know of one Olympic lifter who never laid off anabolics for ten years. I mean never. He is now in his forties, has a complete physical every year and is in perfect health. The problem, as I see it, is not in the use of drugs, but in their misuse.

I'll present my ideas on drug usage overall and then a few points for those critical final two weeks.

A yearly plan for anabolics

The key to obtaining higher and higher strength levels lies in the controlled usage of the various anabolic steroids rather than in unabandoned overdosing. The lifters I have known who continue to progress year after year all follow a similar game plan.They only utilize the steroids two, and never more than three times during any twelve-month period. This was true for the top Olympic lifters of the sixties and the prominent power lifters of the seventies.

I am referring to basic longevity in the sport. Undoubtedly, one will make greater gains in a given twelve month period should he progressively increase his anabolic intake during that time. But what about the following twelve months? More yet? And the year after that? There's a dead end somewhere, that's an absolute certainty.

One of the secrets of continued progress is prolonged layoffs from the steroids. The insidious trap is to depend entirely on the drugs for any strength improvement. Far too many competitors only begin to make strength gains while they are on a drug program. When they go off, all progress ceases. This is accepted, but it really should not be.

Each and every competitive weightlifter made significant progress long before he ever heard of steroids. True? True. Then why does it not logically follow that this same athlete can once again improve his strength level without pharmaceutical aids. The answer is, he can. Positively.

The typical modern competitor assumes that a lay-off period means he is to recycle with lighter weights and lower work loads. Partially correct. Immediately following a major contest, this is sound advice. A recycling period allows the sore spots and injuries to mend and the mental juices to rejuvenate.

But this recycling stage should not continue throughout the entire abstinence period. The athlete must begin laying the foundation for the next contest, which could be four to six months away.

Hard training, rather than laying back, is the order of the day. Gradually increase the work capacity and tonnage. Aim for personal records in some of the assistant movements, especially those which are noticeably weak. Build a strong cardiovascular base. Then, when you add in the steroids for your next program, you will move up another notch on the strength ladder.

You should not, by contrast, depend entirely on the drugs for all your strength improvement. The greatest strength gains come to those athletes who are the most fit when they include steroids into their programs. It's back to the theme of the rewards come to those who work the hardest.

You need an alternate schedule

Another point. You cannot always use the same training schedule when you are off steroids as you do when you are using the drugs. This is often a pitfall lifters get trapped in, especially during their first couple of programs on the steroids.

Why is this? The steroids enable the lifter to train harder and to recover faster. Therefore, a heavier work load can be handled. Without the steroids, the body becomes fatigued more easily and recovery comes slower. To force-feed the body at this point is inviting: 1) illness, 2) injury, or 3) both.

So a different game plan is in order. I do not care to dwell on the specifics of this theory, but two points might suffice to clarify my thinking. One, more attention must be paid to nutrition. The proper utilization of mega-dosages of supplements will help immensely to keep your training load up and your recovery level higher. Secondly, you must rearrange your program to accommodate your altered chemistry. As I suggested, gains are still very possible, but must be achieved from a slightly different approach. Different assistance exercises, split training sessions, a variation of both sets and reps are in order, but rest assured that you are capable of improvement without the magic pills. If you cannot make strength gains without anabolics (at least in some assistance movements, if not in the primary lifts themselves) then your lifting career will be short-lived.

Check around you for evidence to bear this out. The female members of our sport do not utilize steroids (at least most do not) and they make tremendous strength gains. The majority of the teen-age competitors (sadly, not all) do not use drugs and they achieve almost unbelievable strength levels. And finally, think about your early days in weightlifting. You made gains without drugs, did you not? In many cases, it may be wise to revert back to your old tried-and-true methods during the lay-off periods.

Countdown

Here's a few ideas coordinating your drug intake with all the other advice presented in this piece. In most cases, the strength athlete is peaking on his anabolic intake during the final two weeks. Often, in his anxiety, he doubles, triples, or even quadruples his intake dosage. A national caliber lifter from California took 30 dianabol the morning of the nationals. I asked him if he really thought they would help. "Probably not, but it was worth the risk."

"Surely not" would have been a better answer, as there was no way the drug could possibly help his strength until the following week.

You should not fall into the dead end trap of depending entirely on drugs for your strength improvement.

One of the "techniques," if you will, we at York discovered to be most useful was to peak out on the steroids a full week before the competition, then taper back during the final six days and be completely off by weigh-in time. This idea was formulated, as were a great many others, as team members sat around the gym after their workouts. There were numerous such gab fests, and more knowledge was conveyed at these sessions than has ever been recorded in research journals.

Time after time, lifters would notice how strong they were the Saturday following a

meet, a full week later. We checked with knowledgeable medical folks, read all the literature we could obtain, and surmized the following. When your body is being flooded with synthetic hormones, your own hormonal system shuts down as it is not being needed. Supply and demand.

When the pills stop, the body kicks back into gear, so what happens is that the full effect of the steroids is still there plus the natural surge of hormones from your own system. A natural booster. You cannot achieve this sort of reaction through more injections or higher oral dosages as your body has built in overdosing safeguards. But when your own body manufactures the extra, then it is utilized.

Competitive weightlifters will do anything which they even remotely suspect might help them elevate another pound. Maybe even another gram.

The dropping back on your anabolic intake, some seven days before a contest has other benefits. You will be able to control your bodyweight much easier. You will find that you are not as irritable. You can rest easier and you will actually be stronger on contest day.

Check your liver

All smart athletes who use steroids have a liver function test performed on a regular basis. Note that I state all "smart" athletes, as certainly not all do so. Some have this test done before they embark on a drug program, others want their livers checked after a program, while yet others do it both before and after. If you are only going to be having one test done, I recommend you do so after a prolonged schedule of heavy usage.

I strongly suggest that every lifter be conscious of the potential danger of anabolics to his liver. Of all the negative side effects from anabolic usage, the greatest danger is to your liver. But this is as they say in show biz, "a Biggie". Big enough to send a few of my lifting friends to the hospital for extended visits. And recovery from liver ailments is slow-painstakingly slow if you are head-over-heels into weightlifting. A malfunctioning liver can send you off to that Big Weight Room in a matter of days. You don't last long without a functioning liver.

A liver function test is simple enough and you generally can have it run through on your medical insurance. They tap some blood from your arm, then inject some dye. They wait an hour and drain some more blood and test it. The purpose is to see how effectively your liver cleans up the foreign agent, i.e. the dye. A wise precaution for anyone concerned with their health, but especially so for those who have had a prolonged anabolic program or who have loaded up for a major meet.

Obviously, you don't want to play games with your liver because you will always lose. Bad odds. So, instead of spending time talking and worrying about whether you are taking too much steroids for your own good, go to a physician and ask him for a liver function test. It's also a sound idea to inform your doctor that you have been using steroids and ask him to check on other possible problem areas such as the prostrate, kidneys, and so forth. Why not? It's far better to be safe than sorry, and in this instance it can very realistically mean the difference between continuing your training or laying in bed with tubes connected to all parts of your body.

Of the 100 people who take anabolics, only one may develop liver trouble because of them. But you just may be the one. The choice is definitely yours-totally yours-as to whether you decide to use steroids or not. But as in all decisions of this nature, there is a flip side. The flip side in this instance is that you must be aware of the potential dangers and do what is necessary to prevent them.

Amphetamines

As long as there are competitive lifters, there will be amphetamines in the warm-up room. For most lifters, they do improve performance, but not until he or she learns how to use them properly. They can not be taken indiscriminately.

Every body chemistry is different and every drug acts on every individual in its own unique way. Sounds reasonable, doesn't it? But its amazing how often this simple point is overlooked. "Which one works the best"? "How much should I use?" The answer is, purely and simply, that it depends entirely on you.

I'm not trying to be evasive, only pointing up an established fact. And I might add, one

which is so frequently overlooked. Lifters pass around uppers to their friends in the warm-up room much like they were M & Ms. While a certain type might work well for Thor, it may prove disastrous for the Hulk, or Spider Man, for that matter.

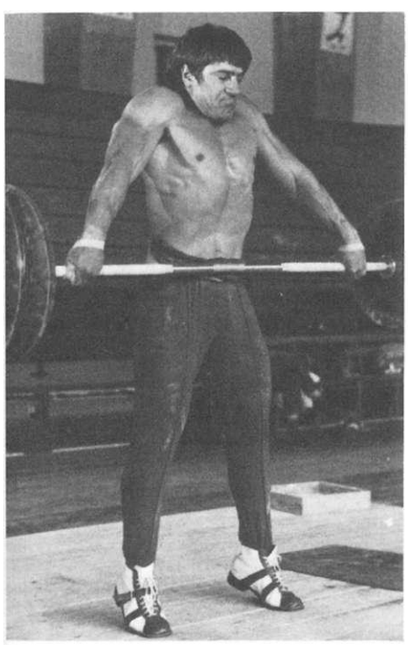
Depression in the Queen City

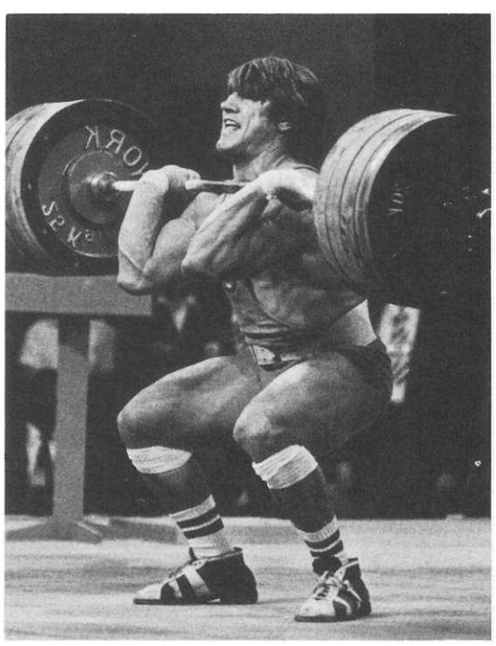
As is so often the case, I learned this fact the hard way, backstage at the Cincinnati Open. I made the mistake of testing a new upper during the contest. Wrong! In this case, very wrong. The drug was Ambar, a combination of amphetamine and tranquilizer. The idea behind the formulation was sound. The tranquilizer was to take the speediness out of the amphetamine. Sounded great on paper and the York teammate who recommended it had performed extremely well with it. Since I knew that I lifted better when I was not so wired, I tried it out.

Barski, Suggs, and I had made the trip to Cincinnati for their annual meet. It was always a fine contest and almost like a homecoming for me. I had lifted out of the Marion Y for three years before going to York and had always made the trip to the Queen City from Indiana. On my last visit, I had done 780 as an 181er. On this day, just a year later, I was knocking on my first 900 total as a 198er and doing so in front of many of my old Hoosier lifting buddies.

I pressed and snatched well so I needed but a 350 C&J for my first 900 total and, more importantly to me, my first victory over my close friend Tommy Suggs. He had always defeated me when we competed in Texas and this was my first real chance to turn the tables. I really wanted those bragging rights and I was humming. That was until the tranquilizer phase of the Ambar kicked in. I had just finished my final warm-up for the C&J and it hit. Utter depression. I was nearly in tears, over I'm not sure just what, but it was heavy. It felt like someone dropped a huge, wet blanket over my body. I didn't want to be at the Cincinnati YMCA, and I certainly didn't want to lift any more weights. Predictably, I missed my first two attempts and didn't even want to try the third.

If it hadn't been for Barski, I would have bombed. He gave me what was essential—a





David Rigert is one of the greatest Olympic lifters ever to step on platform. His tremendous muscularity is evident in these photos of him shrugging and cleaning 496.

royal ass chewing—and literally pushed me on the platform for my third attempt. Barski was on my case, as our three-man team needed my points for the team trophy. Barski really wanted that award to go with his other 200. He might have been a strange character, but he provided the impetus I desperately needed.

I shook off the depression just long enough to accomplish my task, but immediately fell back into the depths of despair. I really felt shitty. There was no joy for me on the night of one of my better lifting performances.

The moral in this tale should be self-evident. Should you plan to use any form of stimulant from coffee, to No-Doz, to any amphetamine, then you had better do a test day before using it in a contest. I would suggest checking it out two weeks prior in case it does not jive with your chemistry, then you will have time to make adjustments.

A final word on amphetamines. Be careful, as in very careful. Do not get into the habit of relying on uppers for training sessions, not even training sessions leading into a major meet. I do not think the risk is great to adult athletes who use stimulants during contests 3, 4, or 5 times a year. Some, such as ritalin are given to children and to heart patients, so I really do not see the health danger to strength athletes, unless they begin leaning on them more and more.

As with all the other drugs, there were episodes of overdosing at York. A couple of fine lifters began utilizing them for "heavy days", then for exhibitions and soon they couldn't go through a normal squat workout without them. The pills finally took their toll and destroyed some fine careers.

The golden mean

My personal observations of athletes who use various pharmaceuticals has led me to the following conclusions: those who use them in moderation, i.e. taking long layoffs between steroid programs, only using "uppers" during contests, taking resting aids only before major meets did not have any health problems, and had a long and productive lifting career. Those who abused the usage of any pharmaceutical did develop health problems and shortened their lifting careers.

I saw one of America's greatest lifters slowly deteriorate before everyone's eyes as he fell into the drug trap. I saw two or three more highly talented athletes overestimate their capacity to handle drugs and fall by the wayside.

I would hazard an educated guess that every top lifter in both Olympic and powerlifting has either used drugs or will do so in their future. I omit the ladies, for the time being, from this statement. The sport, at present, is locked arm-in-arm with the Physicians Desk Reference, and that will not be changed until someone comes up with a natural approach to gaining strength which can equal or better the pharmaceuticals.

What every lifter must determine is how much he wants to risk in order to improve in his sport. Moderation and large dosages of common sense are the best advice I can give. But, in the final analysis, the choice is yours.

I'll close with a favorite Chinese proverb, "Man who rides tiger must go where tiger goes."

Rewards in the sport of weightlifting will continue to come to those who work the hardest.

CHAPTER TWELVE

Flotsam and Jetsam

The final chapter of this book will, hopefully, cover a number of topics which have a bearing on a weightlifter's performance that have not been touched on in previous chapters. Not earth-shattering, bone-jarring subjects for sure, but rather those little important extras which can spell the difference between a successful contest and a not-so-successful one.

Improvement in the sport of weightlifting, as well as in life, is a matter of being aware of the many small details, those forces that influence behavior and thus, performance. By acknowledging these facts and flowing with the events that do occur, rather than negatively reacting to them, an athlete can achieve his or her goal much more readily.

Jet Lag

The phenomenon known as "jet lag" can, and often does, have a very direct influence on performance. When you travel considerable distances, over 500 miles as a general rule, your biological system is placed in a state of flux. It takes a period of time for your system to adapt to the new geographical setting. This knowledge has been with us for quite some time. Jet setters are onto it. Pilots are regulated by it and athletes are generally attuned to it.

I have read many pieces dealing with the effect on the body of changing time zones, but I have not come across any research dealing with the effects of longitudinal changes. I believe a geographic change in any direction, East to West, South to North, and so forth, of any considerable distance affects the biological system and, therefore, athletic performance.

When I travel from the East Coast to California, I recognize an immediate difference in my training, most notably in my recovery power. My running is more labored and I must take more time between sets in the weight room. The top-end weights do not seem to be as influenced as much as my ability to recuperate.

Within three days everything clicks back to the previous level of fitness, but training during those three days is more difficult and I find myself more fatigued, even from a light workout. I recover more slowly during this time and require more rest than usual.

And I find that this same phenomenon occurs when I travel North to South. I visit my friend, Jack King, two or three times a year. Winston-Salem is 400 miles South of where I stay in Maryland, an eight-hour drive. During my first three days in Winston-Salem, I experience the same feelings as I do when I travel cross-country. Breathing is more labored, recovery slower and I feel wasted after a workout. But, after three days in town, everything is back to normal.

Get in early

My advice to the lifter who is traveling a considerable distance is self-evident. Get into the meet town a few days before you are due to compete. I also strongly recommend that you have at least one training session with the weights in the meet town. This session may be little more than a token workout, much like the one recommended earlier, but it does wonders to acclimatize your body to the new geography.

My experience with geographical changes has been substantiated by numerous other lifters. They all relate the same "strange feelings" during the initial workout after traveling considerable distances. A lightheadedness, loss of breath, and sensation of not being in top shape.

One important point which every lifter

should not overlook is that top-end strength is not really affected to any significant degree. Recovery, yes, but you can still move the heavy weights. As long as you recognize that the geographical changes are making you feel "different", rather than a lack of proper preparation or an oncoming illness, it should not alter your game plan.

If, for example, you are not able to go the the meet a few days early, but fly or drive in the morning of the contest, does this mean you are doomed to a poorer showing? Not at all. Just so long as you recognize the situation, you can adapt to it and work through it.

How? Knowledge helps me a great deal. If I know that the travel will make me feel lightheaded after a heavy set, I merely pace myself, accordingly. Since I know my breathing is going to be adversely affected, I load up with vasodilators such as vitamins E and C. I use ammonia before going on the platform to clear the cobwebs and I relax as much as possible when I'm not actually involved in lifting.

Climate

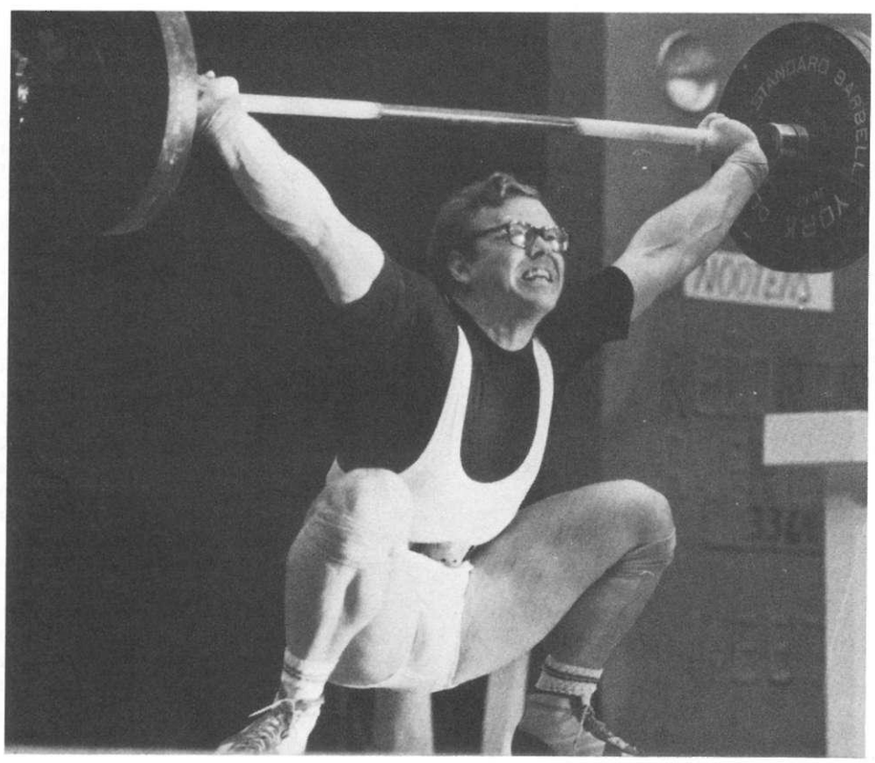
A change in geography may also bring you into an entirely different climate. You may travel from the chilly Northeast in mid-winter to a meet in Southern California or Florida. Or vice-versa. A quick change in temperature can be a shock to your body, and it takes some adaptation.

Learning how to train and compete in cold climates is a totally different experience that it is in the temperate or warmer zones. In the chilly climates, your sore spots surface quicker. It's more difficult to break a sweat and to set a rhythm in your lifting. Your muscles don't seem to respond to signals as readily. It takes a period of adjustment to train and lift comfortably in the cooler areas.

Once again, looking ahead is extremely valuable to the serious competitor. Should you be headed to a meet in an area of a different climate, then by all means be aware of the potential problems and plan ahead. Headed to a hot, humid area? Then be sure

Bill Ennis divides his time between Weightlifter's Warehouse and the lifting arena. He displays perfect technique in the photo.





Chuck Nootens lifting career has spanned four decades. Graced with a natural strength, he has added his own ingredient, perserverence. He continues to be at the top of his division.

that you select an air-conditioned motel and take plenty of fluids and multiple minerals to the contest. Is the lifting area going to be cold and drafty? If you think it might be, then bring a blanket to wrap in between attempts. There are few things as mentally distracting as sitting in a draft while attempting to psyche up for the next lift.

The most difficult adaptation might be going from a moderate climate to a hot, humid situation such as occurs so often in the East and around the Gulf Coast during the summer months. The best advise I can give is to try and duplicate the worst during your final training days.

I take a page from the distance runner's log. Should they be preparing for a marathon in a hot, humid climate, they acclimatize themselves by running in heavy sweats for a few weeks prior to the competition. The body learns how to deal with the adverse conditions and this same principle hold true for the weightlifter.

Injuries

I seriously doubt if there is any nationally-ranked lifter in either Olympic or powerlifting who has not competed while nursing some sort of injury. Injuries are part and parcel of our sport.

To constantly push and pull higher and higher poundage is merely inviting the inevitable—some form of injury. Every lifter gets injured. The injury may be as simple as a sprained finger or as severe as a torn muscle or dislocated joint. Every injury has a bearing on preparation for the meet and actual performance.

Prior to the meet

It is mentally disturbing to be going into a contest with any sort of injury. The mental juices are directed to the damaged area rather than to the upcoming contest. Confidence is often shattered and expectations drop considerably.

This is definitely a case of advising being easier than doing, but rest assured I have been there more often than I care to relate. My primary advice is to get the best medical counsel possible. This does not always mean going to your family physician. It may mean that you dig information on your specific problem from available literature. Some of the best information I gained came from friends who had similar injuries. I related this information on to my medical advisors and it helped in their treatment.

If there is a problem dealing with your spine, I recommend you consult a reliable chiropractor or osteopath over an M.D. I prefer adjustments over injections and medications. Cortisone injections and potent oral anti-inflammatory drugs such as butazolidin and indocin were used rather indiscriminately for joint problems at York. Sometimes the treatment caused additonal difficulties.

Be wary of cortisone

Cortisone injections were especially tricky. The timing for getting the injection is very critical. Should you get an injection too early, then the value wears off before the meet. Get it too late and the medication will not have time to do its designated function.

My final experience with cortisone injections tipped the scales in finally putting me out of Olympic-type competition. I had damaged my right wrist during my first year of learning the Olympic lifts. This was at the Wichita Falls, Texas YMCA and besides having to learn the lifts via photos in magazines, I worked on a bent bar that would freeze every so often. The problem re-occurred periodically throughout my career, but really came to a head when my bodyweight went over 210, and I continued to pound my wrist with cleans and front squats.

I taped it, wrapped it with a protective wrist strap, but it still took a great amount of shock. Finally, I resorted to cortisone injections before the major meets and used indocin for regular heavy training. Two days prior to the '70 Nationals, I got my final injection. It was a mistake. I had not paid close enough attention and took the shot too close to the meet. The drug did not have sufficient time to dissipate from my wrist by the time 1 had to lift and actually accentuated the problem. When I racked my cleans, my wrist took even more shock because of the additional mass in the damaged area. I experienced no pain, as the drug relieved this, but once the effect wore off, it was all over, finished.

Heavy, prolonged usage of anti-inflammatory drugs such as butazolidin, indocin, or cortisone is potentially quite dangerous to your overall health. Any drug which relieves deep joint inflammation works within the bone itself. Prolonged usage can effect red blood count, as this is where your body manufactures red blood cells.

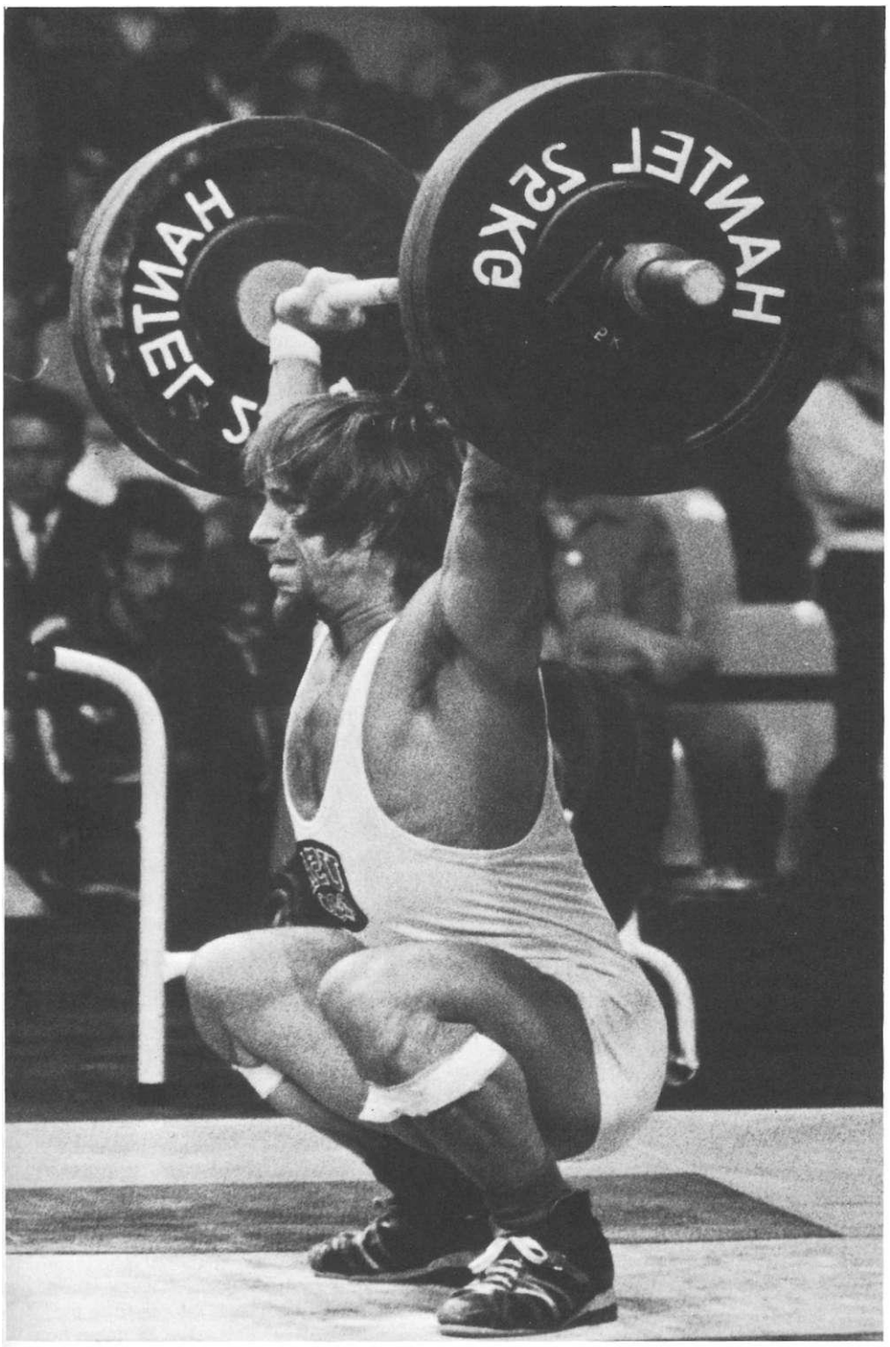
Should you be going into a contest with an injury, limit your pain killers to aspirin, excedrin, anacin or some of the other over-the-counter products. Don't get exotic. You should also be very wary of mixing a wide variety of chemicals as you may get some rather unique and strange reactions. Anabolics + amphetamines + caffeine + aspirin +_____. Could be quite a combo.

Heavy, prolonged usage of anti-inflammatory drugs is potentially quite dangerous as any drug which relieves deep joint inflammation works within the bone itself.

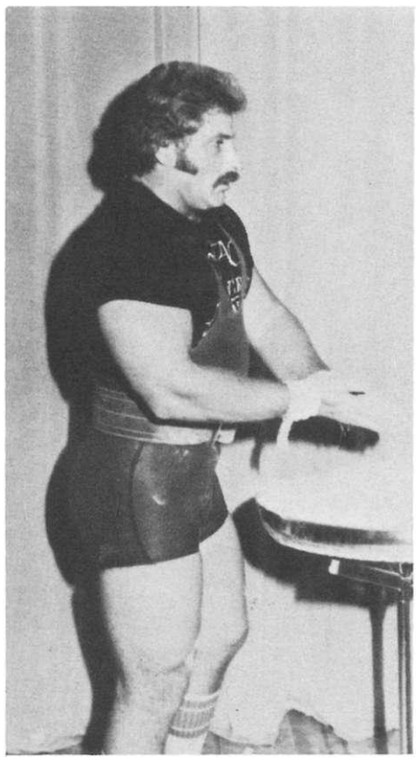
Ice

If the injury is in the muscle, treat yourself with ice therapy before the meet, then use muscle rub or some other form of heat to prepare the area for the contest. Remember, ice is always OK for an injury, heat is not. So many lifters have called me and mentioned that they applied heat rather than cold to a new injury. "Why"? "Because it feels so good." "But afterwards, it hurts a great deal, did it not?" "Yes, an awful lot". And the injury will not heal as quickly or as well.

I know all too well how it feels to put an ice



One of the finest of the late sixties, Fred Lowe. Fred switched from wrestling to competitive lifting and within four years became a member of the Olympic Team.



pack on my lower back just after a workout. RUSH! It would feel so nice to apply warm, moist heat to the area, but I also know that I am promoting healing with the ice and causing more damage to the area when I use heat.

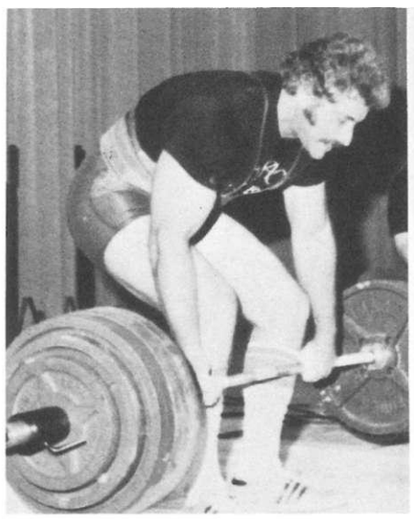
During and after

Should you sustain an injury during the contest, I once again advise you to treat the problem with ice, regardless of its severity.

Should the injury be minor and you feel you can continue on, drop some aspirin and utilize the ice therapy between lifts. Do not apply heat, no matter how uncomfortable the ice may feel to a new injury.

If it is an old problem which you brought to the contest, then its OK to apply heat.

After the contest, more ice therapy, megavitamins and minerals and more aspirin if there's pain. No pain—no pain killers. As soon as possible, get the injury checked by a medical person so that it does not plague you throughout your career. It's often the "little" injuries that you neglect that will eventually end your competitive days.



The younger, larger half of the Patterson brothers show. Everyone's vote for Mr. Texas Gentleman, Doug competes on the national level, promotes contests, owns and operates the Metro Athletic Club and recently began the MAC Barbell Company.

The "hunting reaction"

Since I have been advocating ice therapy so wholeheartedly, I must add a precautionary note. It's back to "too much of a good thing." In this case, I'm referring to the amount of time you apply the ice to your injury.

Twenty minutes is best and never more than thirty. How come? The value of ice therapy is that it acts a a vasoconstrictor, keeping additional blood from flooding into the damaged area and seeping through the cells into adjoining tissues.

When ice therapy is applied for over thirty minutes, it no longer acts as a vasoconstrictor, but becomes the opposite, a vasodilator, expanding the circulatory channels. Prolonged ice therapy acts as if you applied heat to the injury. This is referred to as the "Hunting Reaction" and takes its name from the condition hunters often face after standing for long periods in cold water, ice, or snow. I

thank my niece, Diane, who brought me this information from her physical therapy studies.

Too bad that I didn't learn this fact earlier as I could have saved myself some problems. I made this error on myself and realized that I must have overlooked something in my research. I tore a muscle high up on the inside of my right leg when my foot slipped doing a jerk off the rack. I was in the Baltimore Colts weightlifting room at the time so I quickly went into the training room and got an ice pack from Eddie Block, the team trainer, and applied it to the area. I decided not to change clothes, but instead put the ice pack in place and drove home to Pennsylvania, an hour's drive. When I did undress, I nearly fainted. My entire leg from my knee to the top of my thigh was black. Very unnerving. The "Hunting Reaction" had taken place. It was just as if I had placed a heating pad on the injury.

You may use ice therapy as often as you like on an injury, but be sure to allow thirty minutes to an hour between applications so that the "Hunting Reaction" does not take place.

Callouses

The eternal nemesis to all weightlifters has to be torn callouses. They can be totally unsettling to the most seasoned athlete and dramatically affect concentration and performance. Every lifter has experienced them. I've had them and seen some nasty ones that rip the flesh from the callous right down the palm of the hand. Some bleed profusely. It was always upsetting for me to grip the bar behind someone who had torn a callous and to see the spots of blood on the bar and platform. Aaaargh!

There is no question that when you do tear a callous before or during a meet, you have added a genuine obstacle. In this case, an ounce of prevention is worth a few hundred kilos cure. Once they tear, you are in for quite a few painful workouts and/or unsettling attempts on platform. It's far better to prevent them from building up and thus magnifying the risk of tearing. The callous build-up is a natural by-product of gripping the bar rep after rep. You may avoid them by using gloves in your workouts, but this does not adequately prepare your hands for the stress of the sharp knurl on the competitive platform. Should you go into the contest with baby-soft, unconditioned hands, then the odds are even greater that you will tear open your hands.

The secret is not to let them get out of control, that is, not so large. A bit of a callous does no harm. It is the large ones that are prone to rip under a max effort or an extra-sharp knurl. They need to be checked periodically, especially going into a contest. Make it a ritual to check them out each morning after you brush your teeth. Should they be getting too large, remove them. Steve Dussia used a pumice rock nightly to keep his callouses in check. One nasty tear during the state championships was all the warning he needed. An emery board works fine or even a nail file. Some merely bite them off. The best time to trim your callouses is just after you have had your hands in water and the callouses are soft.

For anyone who has never torn a callous, this advice may seem a bit silly, but remember this section the first time it does happen. You will quickly find out what I mean when I say they are very discomforting and often difficult to heal.

The secret is not to let your callouses get out of control, i.e. to become too large.

If one (or more) does tear, what to do? Get ice on them immediately, plus pressure to check the bleeding. Tape or gauze does not work too well on this type of injury. Callodium (this is the substance they use to close boxer's cuts) is most useful as it forms a protective film over the wound. Benzoic acid, generally known as "Toughskin" is also good, but it cannot be applied to a fresh injury as it burns too much. It does make a fine protective coating once a new layer of skin has formed.

Should you tear a callous just before a contest, then by all means protect it during your final workouts and do everything possible to help form a new layer of skin before the meet. Those taking steroids are at an advantage as the anabolics help new tissue to form. Wear a glove or protect the tear with a piece of sponge covered with tape. Ice it as often as possible and apply an antibiotic ointment to insure that no infection takes place in the wound.

At the meet, protect it as best you can from reinjury. Gloves during warm-up or a protective wrap up until your first attempt on platform. I cannot overemphasize the fact that you must baby this type of injury. No tough-guy, gut-it-out approach as you will surely lose. I can guarantee you that a torn callous will distract from your overall performance.

The *art of adapting*

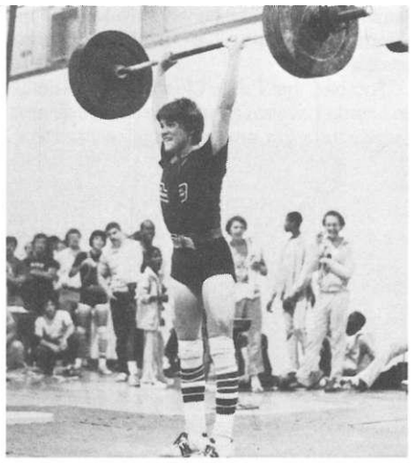
Throughout this book, I have advocated preparation, as in TOTAL PREPARATION. Everything from checking your life cycles to the color of your socks. All this helpful, for sure, but I also know from twenty years of competitive experience that "the best laid plans often go astray." My bottom line advice is to plan ahead on as many factors as you possibly can and then expect the unexpected.

Plan ahead on as many factors as is possible and then be prepared for the unexpected.

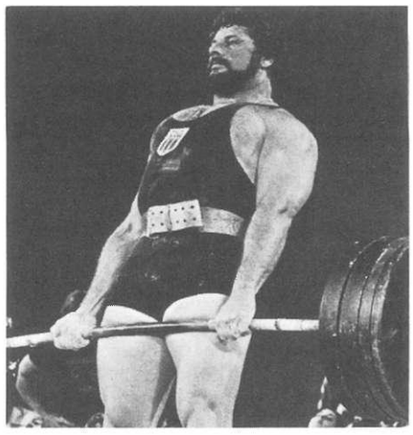
No matter how well you have taken care of your homework, you can fully expect a curve or a knuckler to come your way. It may come in the form of a goofy judge, a strange piece of equipment, or an injury. Be assured that, in most cases, something strange will happen.

One of my Harford County trainees, Jim Moser, recently lifted in an Olympic meet in Baltimore. While warming up for his clean and jerk, the warm-up bar (and the only warm-up bar) broke. He had to curtail his well-devised warm-up attempts. Jim adapted nicely and won the meet. Perhaps the most recent group curve came at the '79 Senior Power Meet in Mississippi when the air-conditioner broke on the second day of competition. No amount of preplanning could have helped because everyone KNEW the meet was going to be held in an air-conditioned building. Some adapted. Some did not.

And every lifter has experienced a poorly-organized contest that drags into the wee hours of the next day. Or one where it is impossible to know how may attempts before your opener or where you stand in the competition. Or where the warm-up room is cold, drafty, poorly equipped, or a city block from the platform.

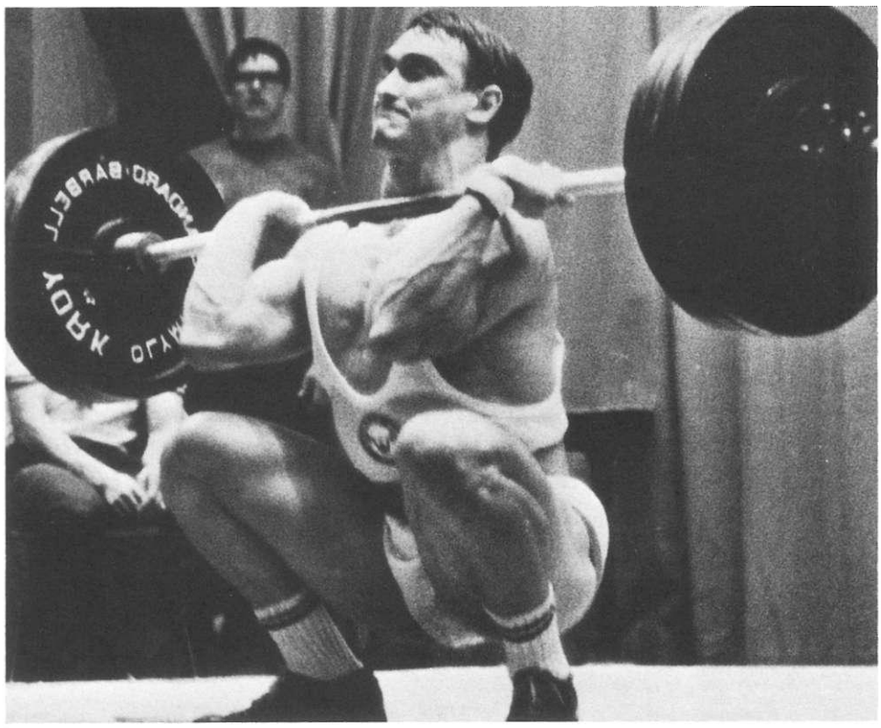


Tommy King completes a State Record C & J. One of the finer young prospects, he is trained by his father Jack King in Winston-Salem, North Carolina.



Clay Patterson, World Record Holder and World Cup Champion. Clay has been the IPF Secretary since 1973 and has been the guiding force behind the growth of international powerlifting.

And shitty equipment. I've been to National power meets that had the contestants bench on board benches covered with strips of rubber. Uneven footing on the platform, slick knurl on old bars, uneven plates, squat racks which make it impossible for anyone



A photo from the '68 Seniors. My first 1000-pound total.

over 5'10" or under 5'8" to take the bar off the racks without assistance.

Judges. I could do a chapter of judges. Old Mullet-type Olympic lifters who love to burn power lifters, especially in the squat. Power-crazed judges, who keep their thumbs on the red switch. Drowsy and Dopey, your ex-Mr. Neighborhoods acting as side judges, who fall asleep in their seats. Assholes who rule out a lift because they just don't care for the lifter's attitude. Or the opposite, Mr. Nice Guys who pass everything, thus allowing your opponent to pick up pounds with illegal lifts. Or . . . you get the point.

So what can you do when lightning strikes? You must, and this is certainly much easier said than done, flow with the situation and not battle it. You can release more energy trying to get a meet director to remedy an equipment situation than you would in performing a max lift. You can become so upset at a judge's poor decision that you completely blow all your mental and physical preparation of the previous two weeks.

When the feces comes blowing out of the fan, it's time for you to really put your mental relaxation techniques to the test. Instead of fighting the official's decision, convert the anger into the next lift. Don't expel it through anger. Internalize it and then let it explode into the barbell. After all, you should know how to convert anger, stress, and frustration into a bar. Every lifter alive has done plenty of that.

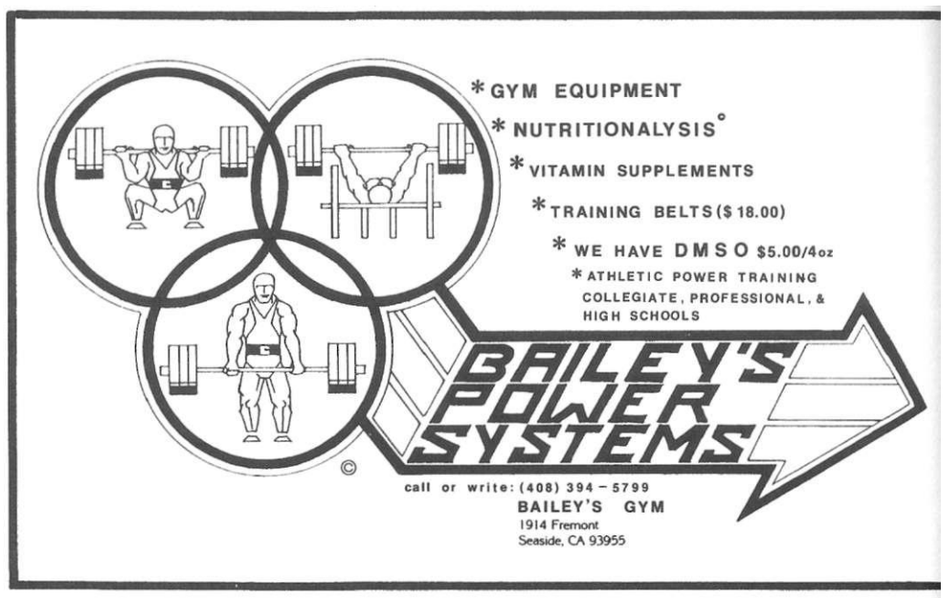
Summary

The basic point I wish to convey is that you must be adaptable. Adaptability is a trait which is directly linked to your overall confidence and belief in your genuine abilities. A lifting platform is a microcosm of life itself. You can expect many bad decisions and a few accidents and even an injury or two if you stay in the game for over a few months. You won't be the first to encounter problems, nor the last.

The successful weightlifter is one who believes enough in his or her own abilities to overcome the obstacles and, in the final analysis, that is the mark of a true champion.

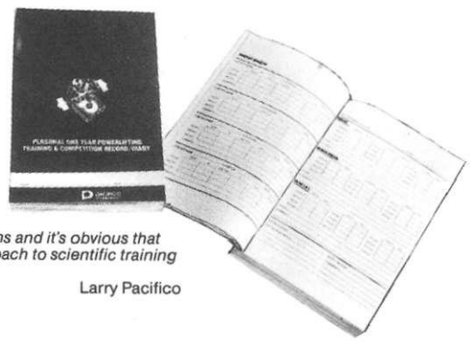
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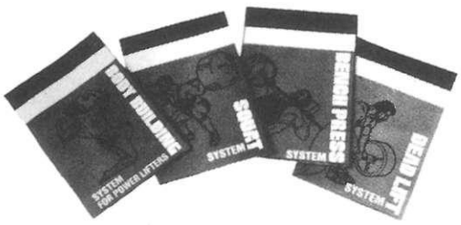
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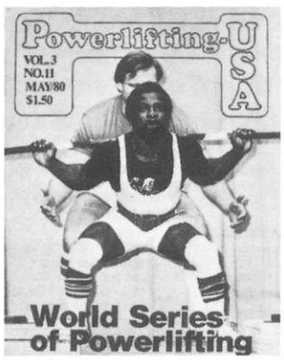
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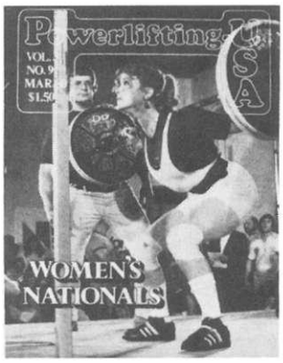
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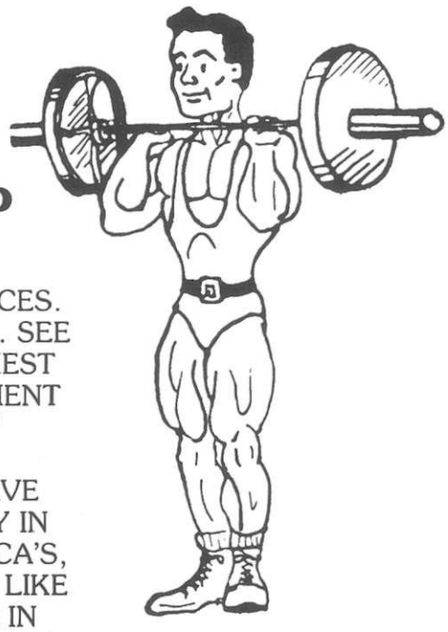
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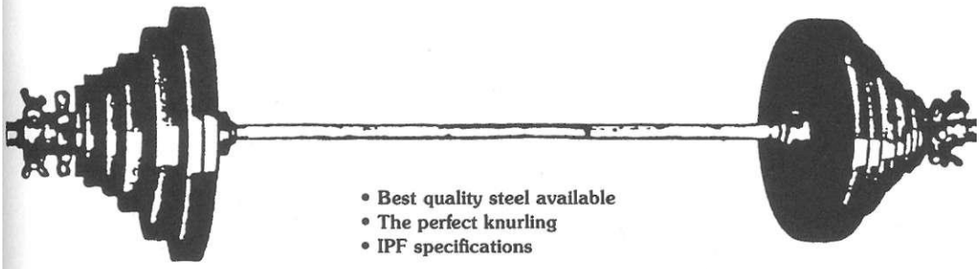
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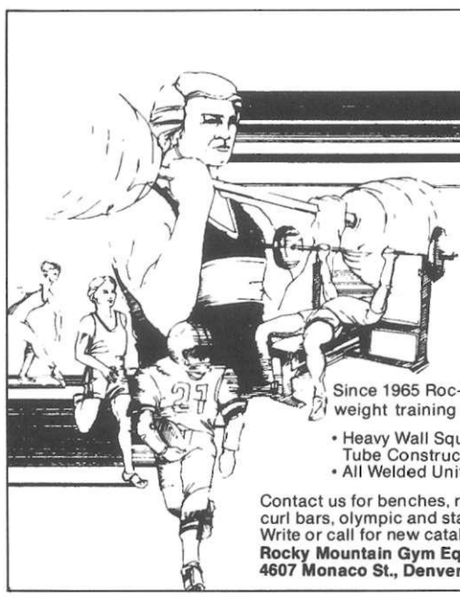


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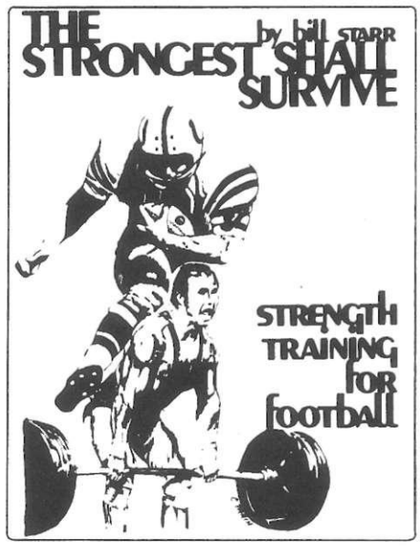
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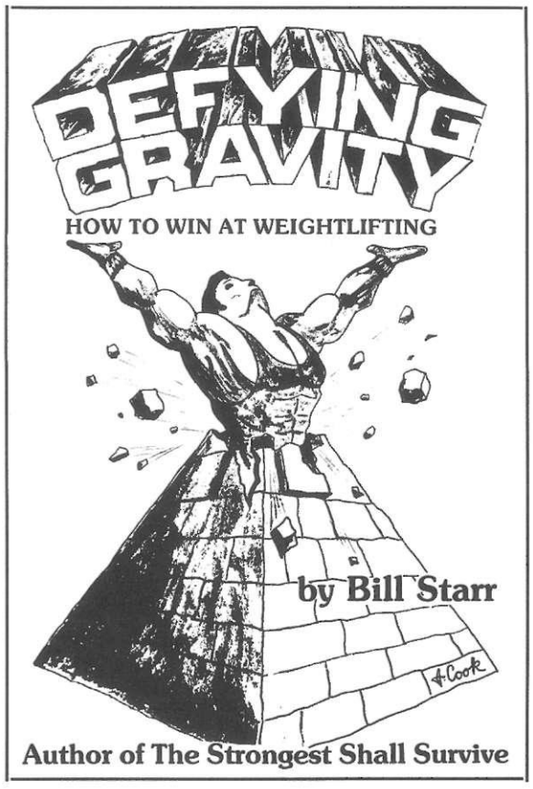
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Epilogue

No one said it was going to be easy.



Then again, I could be wrong.

The Author

Defying Gravity is the second book written by Bill Starr. His first, The Strongest Shall Survive, has been widely acclaimed by athletes, coaches, teachers and parents.

Bill's writing background includes editing several of the more popular weight training publications in the country: Strength & Health, Mr. America and Muscle Builder. He published Weightlifting Journal and Vitality magazines and conceived and edited Feminine Fitness. He currently freelances for several national publications.

A former Olympic and powerlifter, Bill turned his energies to the coaching profession and has served as Strength Coach for the Baltimore Colts, Houston Oilers, the University of Hawaii, and the University of Maryland. He is currently the Director of Strength Training for the United States Sports Academy which is located in Mobile, Alabama.

Bill divides his time between bases in Texas, North Carolina, Maryland, and California. He publishes and distributes his own works through Five Starr Productions and Fitness Consultants and Supply.

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