BUILDING THE GYMNASTIC BODY

THE SCIENCE OF
GYMNASTICS STRENGTH TRAINING

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Building the Gymnastic Body

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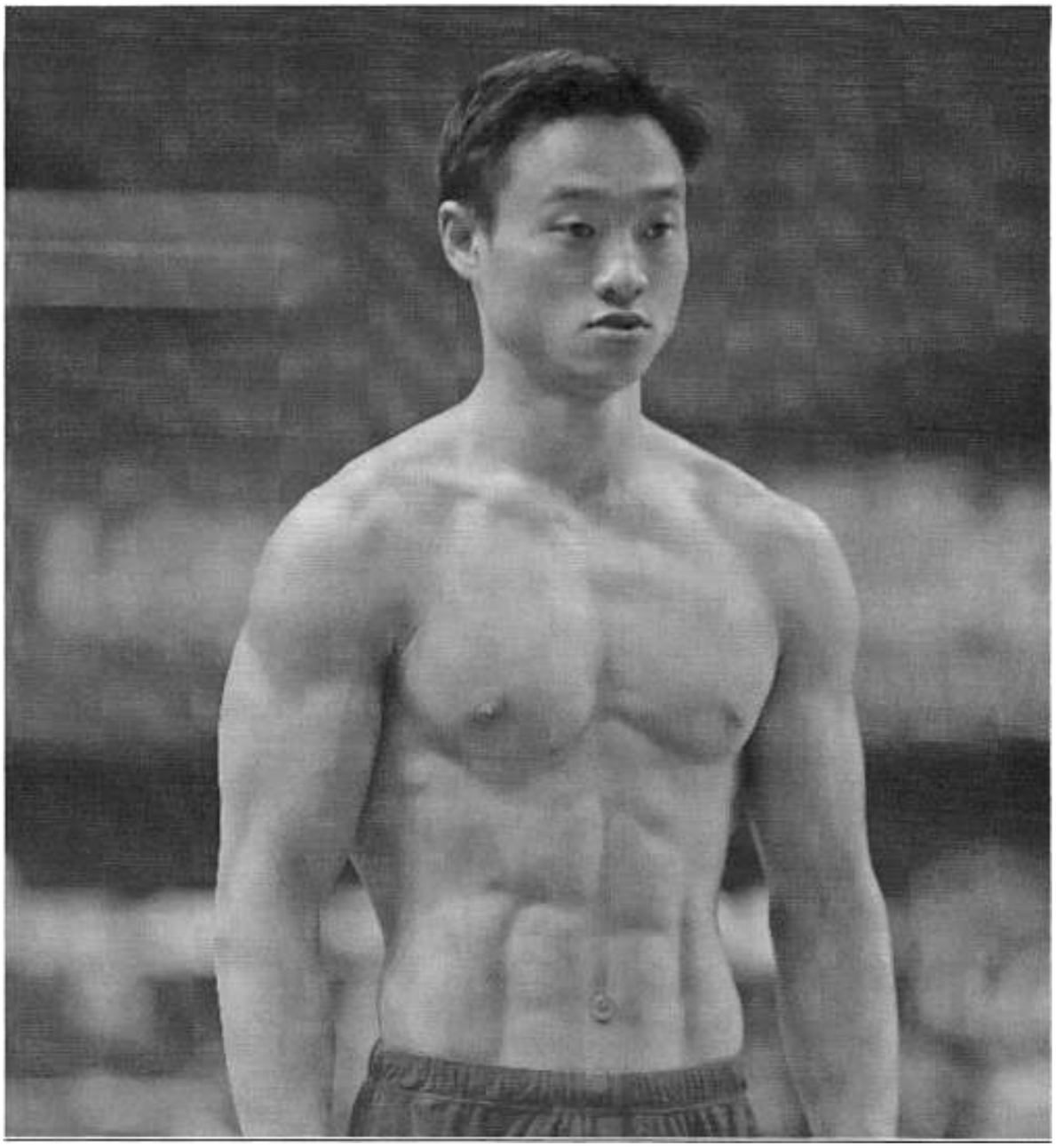

Cover photo: Yang Wei at 2003 World Championships, ©Steve Lange

Building the Gymnastic Body

THE SCIENCE OF GYMNASTICS STRENGTH TRAINING

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DISCLAIMER

First and foremost to my family,
without whom nothing else matters,
and to all of my students - past, present and future,
from whom I always learn so much more than I manage to teach

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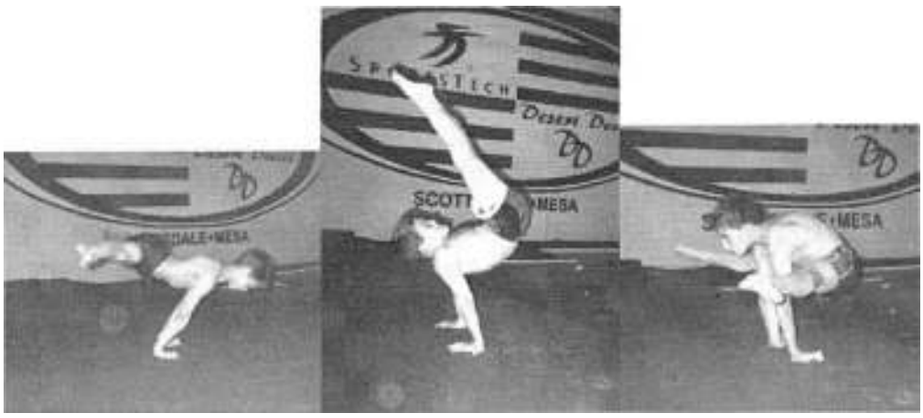
Introduction



We have all seen them on television during the Olympics; these massive powerful men performing amazing skills with ease and grace. Watching them perform, the question inevitably arises - are they as powerful as they appear to be? And the answer quite simply is - yes. What will probably be even more surprising to you is that they build their strength and physiques almost entirely with various bodyweight exercises. There are of course some supplemental exercises where weights are utilized (i.e. weighted leg lifts), however the central premise remains; these amazing athletes have built the vast majority of their strength and power through the use of bodyweight conditioning.

The list of physical training requirements is long and can be rather daunting to prepare a world class athlete: passive flexibility, active flexibility, joint preparation, static strength, dynamic strength etc. etc. and in the past has only been interesting in detail to those of us involved with the physical preparation of champions. It appears that times have changed. This book and its companion volumes are in response to the enormous interest in the area of advanced bodyweight conditioning. Information, which in the past has only been available to a few select elite, is now available to all.

Now another question that we should ask ourselves - is the body weight training of the gymnast also beneficial to the fitness enthusiast? And if so, is it possible to apply at least some of it to those without a professional instructor to guide them or tens of thousands of dollars of specialized gymnastics equipment? And the answers are once again - yes and yes. There are some of our specialized exercises that are relatively easy to learn and require little or no equipment beyond a chin-up bar, pushup bars and some floor space. Other higher level elements will require more of an investment in equipment. However you will almost certainly be more muscular, powerful, agile and flexible than ever before from successfully following this training.

Why bodyweight conditioning?

Now before continuing further into our training, let's first regress and consider the question of why to do gymnastics bodyweight conditioning in the first place? A common misconception is that bodyweight exercises do not build substantial strength but are rather more suited for building endurance. For most people this conjures images of endless pushups, sit-ups or for the strong, perhaps pull-ups and dips; great maybe for general fitness or endurance, but of little value in building real strength.

First of all, exercise is exercise. Period. The name of the game is resistance. A muscle contracts against resistance and, with perseverance, becomes stronger over time. For strength to increase, the amount of resistance or load worked against must also increase over time. Hence the problem with bodyweight conditioning - as the resistance (weight of the body) is fixed, is how to continue increasing strength? Surprisingly, the answer is simple - by decreasing the amount of leverage it is possible to exert on an exercise, the resistance of an exercise becomes increasingly greater. For example, a hanging straight leg lift is much harder than a tucked leg lift. In both exercises the weight of your legs remains constant; however by reducing your leverage (i.e. in this case straightening your legs) we are able to greatly increase the resistance. By straightening the legs we have effectively doubled the difficulty of the exercise even though the weight of the body has remained constant.

With experience and creativity it is possible to learn or design exercises that, done correctly and with the proper progressions, are so lacking in leverage that even at bodyweight levels of resistance it is possible to build staggering amounts of strength. In addition to strength, the athlete will also develop excellent balance, coordination, agility and exceptional core strength. Perhaps that is why spectacular film athletes like Jackie Chan and Mark Dacascos always include gymnastics training in their physical preparation.

How well do the progressions that I am going to share with you work? Well, consider that fact that when Mr. Mas Watanabe visited my men's gymnastics program and he was astounded by the levels of strength and development he saw. For those of you outside the gymnastics community, Mr. Watanabe has been, for the past 30 plus years, one of our primary leaders of men's gymnastics here in the United States and has personally worked with and evaluated every Olympian, World Championship, National and Junior National Team member which our country has produced during this time.

After observing my athletes completing their daily bodyweight conditioning program, Mr. Watanabe informed me that they were the strongest most physically prepared group of athletes he had ever seen. In fact he went so far as to state that he had never even seen another group come close. Now the main point that I would like to emphasize here - is that their physical development was procured almost exclusively through consistent progressive bodyweight conditioning.

How strong is it possible to become with gymnastics exercises? Amazingly strong. In fact I would go so far as to say, done correctly, far stronger than someone who had trained for the same amount of time with free weights. Want some concrete examples? One of my former students, JJ Gregory (1993 Junior National Champion on the Still Rings) developed such a high degree of strength from my gymnastics conditioning program that on his first day in his high school weightlifting class he dead lifted 400lbs, and this at the scale breaking weight of 135 lbs. and a height of 5'3".

JJ Gregory in a 'Maltese' on the Still Rings

After this I was curious and wanted to measure JJ's one rep max on weighted pull-ups. We started fairly light with 10 lbs. or so. I continued adding more weight while JJ performed single rep after single rep. Unfortunately I didn't know about chinning belts and chains at that time and the cheap leather belt we were using broke at 75 lbs. Once again, I repeat, at 75 lbs. and JJ had never performed a weighted pull-up in his life. But he had performed years of my specialized gymnastics conditioning exercises. How much could JJ have chinned that day? We will never know for sure, but I will tell you that at 75 lbs. JJ was laughing and joking with me and did not appear to be noticeably bothered by the weight.

And JJ, while the strongest, is not an isolated case. For example, over the years I would occasionally (once a year or so) allow my athletes to test their one rep max on weighted chins (an exercise we never perform as part of our regular conditioning) simply so that they could have proof positive of the enormous measurable strength gains which they were enjoying. My own son at the age of 13 and a bodyweight of around 110 lbs. could chin 50 lbs. for 8 reps and it was not at all unusual for a 60 lb. younger athlete to perform 5 or more reps with 25 lbs.

In addition to his amazing strength, look again at the incredible physique that JJ built solely through various bodyweight exercises. Also look at the pictures of some of my current group of athletes. Pretty buff for boys who mostly range from 7-17 years old and have never lifted weights. As well, consider the fact that as competitive athletes, they never train for cosmetics or appearance. Their physiques are solely the result of their training their bodies for the function of becoming better athletes. In other words, their physiques (and anyone else's who trains in this manner) are functional first and ornamental second.

Why does correct gymnastics conditioning work so well? There are several reasons; the first is contraction. Basically, the harder the contractions, over a greater part of the body during an exercise, the more effective the exercise. For maximum improvements training to failure is not necessary, but maximum contraction is. One of the main advantages to these advanced bodyweight exercises is that they require a complete full body contraction. In fact at advanced levels, they are so demanding that it is simply not possible to complete them any other way.

Another primary reason for their beneficial results is the nature of the gymnastics components themselves. Take static holds for example; by holding the bodyweight in a disadvantaged leverage position, we are effectively multiplying the resistance of our bodyweight. Or more simply stated, we are supporting a heavy weight in a locked static position. This has tremendous positive impact on the strength of the joints and connective tissue and aids greatly in overall strength development. Many great weightlifting champions have sworn by the benefits of holding heavy weights in a locked position. Two that immediately come to mind are Paul Anderson and John Grimek, who both made heavy supports a regular part of their early training.

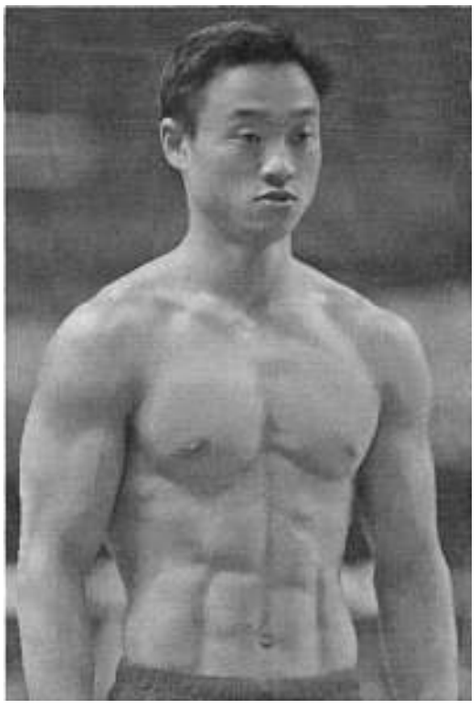
Success at these exercises requires consistent incremental improvements. Do not seek improvement quickly or become frustrated after only a few weeks. You would not poke a seed into the ground and then jump back waiting for the plant to explode out instantly. You must be patient with physical conditioning also. While you may become more skillful or feel more powerful while performing a new exercise relatively quickly, this is due to becoming more neurologically efficient ("greasing the grove"), rather than experiencing an absolute gain in strength. It takes approximately 6 weeks to establish the first concrete strength gains. In other words, **make haste - slowly.**

Be prepared to spend at least six months at these exercises to work through the various progressions. What?! Six months?! Yes, that's right, at least six months. In fact some of the progressions, the manna for instance, may take you several years to work through. You wouldn't expect to bench press 300 lbs. right away. Nor should you expect to build high level bodyweight strength instantly either. Be consistent, be patient and soon you Too can be enjoying the benefits of greatly increased strength and athletic ability.

CHAPTER ONE

Gymnastics As Conditioning

Gymnastics as Conditioning;
The Journey



To my knowledge, and I have worked with and learned from many World and Olympic Caliber coaches from around the world, I am the only high-level US gymnastics coach to approach gymnastics as primarily physical preparation rather than skill training. This is not to say that my athletes do not train high-level skills; I am a USA Junior National Team Coach, have produced several National Champions and, at the 2005 U.S. Junior National Championships, one of my athletes became the youngest National Medalist in the history of USA Gymnastics.

However, my success as a competitive coach has been completely dependent upon my philosophy of first building the physical structure. Then once having developed a body that is capable of performing at a high level; I layer the required technical training upon it. In essence, my training methodology is first physical structure, then skill training. In my opinion, without a body capable of handling the pressures and demands of high level gymnastics, advanced skill training is usually a haphazard affair with unpredictable results as well as a multitude of unnecessary injuries.

Now before we get into the specifics of my gymnastics training philosophy, I would like to share a question with you; a question that I have spent nearly twenty-five years asking myself. In fact, the search for the answer to this question has shaped my entire professional career. That question is simply - How? Or more specifically - "How did my gymnastics specific training lead to substantial levels of general physical preparation across a wide range of other, non-gymnastics related, athletic modalities?"

You see after my "retirement" from competitive gymnastics, I did what I thought you were supposed to do to stay in shape - I began to lift and I began to run. Now for the sake of this discussion, it is important to remember that none of results for the following events had been specifically trained for. Prior to this, I had engaged in no structured weight lifting or running. In fact during my day, most of the gymnastics conditioning in the USA was a haphazard affair at best where a couple times a year my coach would say "Do 50 pull-ups" or something else equally unstructured.

It is also important to note that as a gymnast I was not particularly strong. Many of my teammates were far stronger than I. These were some of my initial results when I began lifting and running:

- Double bodyweight dead lift
- Military press with 110% bodyweight
- Chins + 50% bodyweight for reps
- Dips + 60% bodyweight for reps
- 75 pushups in 1 minute
- Wrist curls with 110 % bodyweight
- 5:37 mile/ 11:30 two-mile run
- Ran 20 miles on the spur of the moment

Wow! I was pumped up. I was smoking the vast majority of lifters around me, guys who were much bigger than myself. If I was doing this well right off the bat with no specific training whatsoever, how much better could I do with more training? So I jumped in with both feet. I trained very hard, doing everything the 'experts' said that I should do to perform at higher and higher levels.

And the results? I got sore, stiff, slow, tired and my athletic ability, after initial gains, was not only not improving, but beginning to slip. (Pause here for the sound of grinding teeth.) Well the answer was obvious, I must not be training hard enough, right? So for the next ten years I trained my rear end off. If one program wasn't giving me the results I was seeking then I explored another, either separately or in combination: weights (in all their various incarnations), calisthenics, running, swimming, cycling, circuit training, low repetitions, high repetitions, high intensity, low intensity, linear periodization, etc. etc. etc.

And what were the results of all that consistent long-term dedication? The bottom line is that none of the training methods which I employed were able to give me the overall level of physical performance that I had previously enjoyed; if my strength improved - my endurance went down, if my endurance improved - I lost agility, vertical jump etc. In fact it seemed that the only constants that I could count on were that as the years went on I got even sorer, stiffer, weaker, more exhausted and, on top of being far below my previous performance levels, I now had an impressive collection of injuries to show for it as well.

Obviously I was missing something. Finally, after having literally exhausted all conventional avenues of conditioning, on review it appeared as though only gymnastics training would give me back the excellent athletic abilities that I had previously enjoyed. However that no longer seemed feasible; with work, family and other commitments, I simply no longer had

twenty hours a week to spend training in the gym. There was however something about gymnastics training that gave athletic results completely outside of what was being specifically trained for.

Further reflection on the main question of 'How?' in turn led to the following secondary questions of "Why": Why doesn't a high level of traditional mainstream general physical preparation automatically impart a high degree of gymnastics specific strength? Why is the reverse not also true? Why does it appear to be a one-way street?

And that is when I began to look at gymnastics not as primarily skill training - but as a method of physical preparation.

In contrast to the conventional gymnastics training philosophy prevailing in the US at the time, I started to allocate 1/3 of my athletes' training time to physical preparation, at the expense of our technical training time. Now what is especially interesting here is that, as soon as I began focusing on building the physical foundation first, my athletes' level of technical skills increased exponentially. I was definitely on the right track.

I continued to consider "How" and "Why", attempting to analyze the core elements of what made gymnastics training so effective athletically, even when applied to sports outside of gymnastics. Within the workouts, some type of synergy was obviously taking place between the physical preparation and the technical event training.

Correctly applied gymnastics training primarily involves whole body movements that force the body to perform as an integrated unit, over a wide range of specific training stimuli. But what elements or components inherent in gymnastics training were missing in contemporary training protocols? How, and to what extent, was it possible to separate these gymnastic specific training components from the competitive aspect of gymnastics? Could these components then be integrated into an overall conditioning program applicable to all who were interested, not simply to elite high-level gymnasts?

Literally thousands and thousands of hours of practical experience in the gym coaching high level athletes, - studying, experimenting, implementing and refining - eventually led me to distill gymnastics training into four main components and, more importantly, to design the subsequent progressions necessary to develop them safely, thoroughly and with seamless integration between the components for both gymnasts and non-gymnasts. And even more spectacular was that rather than requiring 20+ hours a week in the gym, distilling the training into the core components, and utilizing my specialized progressions now reduced workouts for the fitness enthusiast to an average of two to three hours per week. Although I had one gentleman who took my training recommendations in a direction I had never anticipated and made astonishing gains on only two minutes of work per day!

Joint preparation and handstand work both begin on day one of

training and will continue throughout an athlete's career. Dynamic strength is inclusive of all movements that contain a dynamic, plyometric or ballistic element. It is of supreme importance in gymnastics, as well as to athletics in general, and its development also begins on day one; however dynamic strength will remain a secondary focus until after an adequate foundation of maximal strength has been laid. The development of maximal strength will be a two-tiered process starting with the fundamental bodyweight movements and then continuing with advanced ring strength work

A special aspect of the Gymnastic Bodies program that I have not mentioned is that a proficiency in gymnastics is NOT required to enjoy the conditioning benefits of the dynamic components. For those without gymnastics specific skills, an extensive range of substitute movements and highly effective exercise progressions are provided in The Dynamic Physique.

The following are the relevant Gymnastic Bodies volumes wherein these components are discussed in depth:

Maximal Strength
- Beg to Int - Basic Strength - Building the Gymnastic Body
- Adv - Ring Strength - All Muscle, No Iron

Joint Preparation / Active Flexibility - Liquid Steel
Handstand Work - The Handstand Chronicles
Dynamic Strength - The Dynamic Physique

The rest of this first volume, Building the Gymnastic Body, is an in depth exploration of Basic Strength and its two components, fundamental static positions and fundamental bodyweight exercises.

CHAPTER TWO

General Information

Tools of the Trade

For this first volume in the Gymnastic Bodies series, the following tools will either be necessary or helpful in developing the basic strength exercises.

Xtreme Rings®

Rings are the single greatest tool ever made for developing upper body strength. They are also the only piece of equipment that is absolutely essential in your training. Strong, light, portable and incredibly versatile, these gymnastics rings can be used anywhere there is any kind of an overhead support (high bar, chin-up bar, or even a tree branch).

Rings are capable of far far more than simple dips, chins or muscle-ups. Gymnastic Bodies provides the technical progressions for a multitude of advanced bodyweight exercises to develop the upper body completely and thoroughly. With the correct knowledge at your fingertips, literally the only limitation with ring strength training is the depth of your commitment.

Parallel Bars

If you have access to a set of competitive gymnastics parallel bars then you will have the best of all possible options. However, if not, there are still many choices. In your local area, outdoor parallel bars are sometimes available at parks that contain Par or Fitness Courses. A dip station will also suffice as a partial substitute for parallel bars for many of the variations, although for some of the movements a dip station with extended bars will be necessary. And if all else fails there is always the fall back option of two chairs facing back to back.

Competitive PBs

Outdoor PBs

Dip Station

Parallets

There are many types of parallets to choose from. Which is most appropriate for you, will depend upon your long-term training goals. If only training simple pressing and static hold positions, something as basic as a set of pushup bars may be adequate for your needs. If you would like to add a substantial amount of handstand work to your training, a set of homemade PVC parallets will serve you better, as their wider base and greater length (12"-18") greatly increases stability. And finally if you would eventually like

to progress onto more advanced handstand work (single bar handstands and pirouettes etc.) then the far greater strength and longer length (48") of a set of commercial parallets will be necessary.

Pushup Bars

PVC Parallets

Commercial parallets

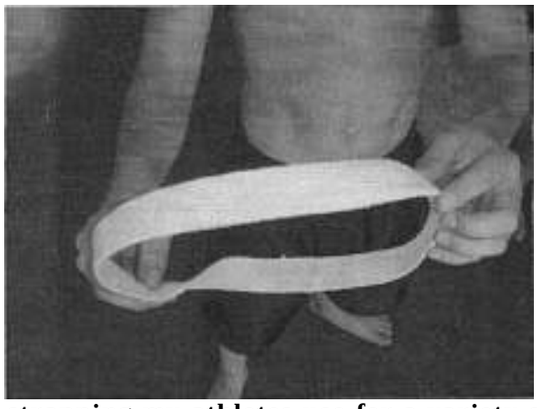
Stall Bars

Stall bars have been tremendously popular in Europe for many years and for good reason. They have a multitude of uses, especially in the areas of joint preparation and active flexibility. Stall bars are generally 8' high x 3' wide and come in single, double, triple or quad sections. The lower rungs are 5.5" apart while the top rung is 8" higher and offset 3.5" out from the others.

Stall Bar - Double Section

Nylon Straps

The straps that we use to hang the weights on are sections of nylon strapping (available at Home Depot or Lowe's for about $.12 a foot) sewn into circles of 22"-25" circumference with a 1" overlap on each end. Keeping tension on the nylon strap by pulling the ankles slightly apart will help to prevent the weights from sliding around during leg lifts and other weighted exercises.



The nylon strapping my athletes use for a variety of exercises

Fractional Plates

The reason that most people fail to make progress on when adding weight to some of the leverage disadvantaged bodyweight exercises (i.e. hanging leg lifts) is simply that they try to use conventional plates during their training. For example, let's say that you are using the smallest conventional weight plate available; a 1.25 lb plate. You build up to three repetitions in the Hanging Leg Lift (HLL). Your training is going well and it is time to progress to the next level and you add another 1.25 lb plate. You are now attempting to train with 2.5 lbs of extra resistance - an increase of 200%. It doesn't require a great deal of imagination to see that in only a very short time, gains in this movement will quickly grind to a halt as the jumps in added resistance are simply too great for such a leverage disadvantaged movement.

On the other hand, fractional plates will allow training to progress in increments of .251b guaranteeing continued long-term gains.

Fractional Plates

Basic Gymnastics Positions & Terminology

In order to have a clearer understanding of many of the exercises used in the Gymnastic Bodies program, I will need to introduce you to some gymnastics terminology. Nothing too complicated or technical, just some basic body position references.

Supports

Straight-arm

Bent-arm

Upper-arm

In gymnastics conditioning a great deal of time is spent in various supports. The three main support positions we will use in this volume are straight-arm, bent-arm and upper-arm.

Hangs

Over-grip **Under-grip**

As a general point of reference an over-grip is what is used during a pull-up and the under-grip is what is used during a chin-up. It also bears mentioning that the type of grip is independent of the shoulder angle position.

Obviously there is the straight body hang (pictured above), however we will also be utilizing some other hanging position variations; an inverted hang (the body straight while in an upside down position), an inverted pike (self explanatory) and the German hang (generally arrived at from an inverted pike).

Inverted hang **Inverted pike** **German hang**

Shoulder Angles

Open Shoulders **Closed Shoulders**

With regards to the shoulders, their being in a "closed" or "open" position refers to the angle between the upper arms and the torso. The axis of the angle would be the armpits. A smaller angle would be referred to as closed. A completely closed shoulder angle would be with the arms next to the sides. A larger angle would be referred to as open. A completely open shoulder angle would be with the arms next to the ears and extended up over the head.

Hip Angles

Open Hips **Closed Hips**

Like the shoulders, the hips may also be in either an open or closed position. In reference to open or closed hips, the hips themselves will be the axis of the angle in question.

Basic Body Positions

Tuck **Flat Tuck**

For most of us seeing a tuck brings back memories of youth. A tuck position is relatively simple and something that all of us have done since childhood in one form or another. The primary difference between the two main variations shown here is that a regular tuck has a tightly rounded back and that a Flat Tuck has a straight or what in gymnastics is referred to as a flat back. You will quickly find that exercises or static holds performed with a flat back are significantly more demanding than those done with a rounded back.

Open Pike

Closed Pike

An open pike indicates that the legs are straight and the torso is relatively straight with an angle of closure of approximately 90° at the hips. A closed pike is simply an extreme example of closed hips performed with straight legs. The two photos above demonstrate different degrees of closure during the pike. It should also be noted that referring to a position as "piked" does not always indicate sitting on the ground. This position may also be done hanging, in support or jumping.

Standing Straddle

Semi-closed Straddle

Closed Straddle

A straddle refers to the legs being open from each other; this could be while the body is in a standing, hanging, prone, supine or sitting position. The straddle may be large or small, but regardless will still be referred to as a

straddle. The variations shown above all have straddled legs, but have differing degrees of hip "openness".

Half Lay

The half lay is especially helpful in back lever, front lever and planche work. It is that intermediary step when a straddle is too easy but the completely extended straight body is still out of reach. In the illustration above, due not be concerned with the shoulders or arms, but focus solely on the knees and hips. Notice that in a correctly executed 1/2 lay, the knees are bent but the hips are completely open.

The Selection of These Exercises

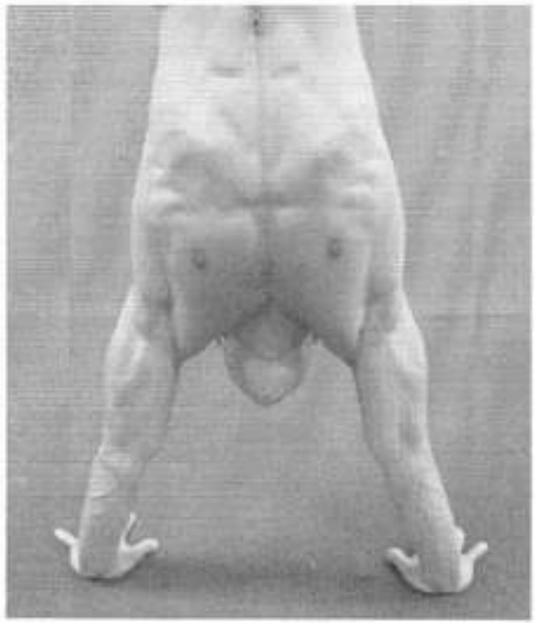
The lists of exercises and progressions incorporated in this book, while extensive, are by no means meant to be an exhaustive collection of all the possible gymnastics exercise variations that exist, are pertinent or beneficial for the development of Basic Strength. Rather the emphasis has been on providing a reasonable series of progressions and exercise choices to aid you in your quest for a high degree of fundamental static and fundamental bodyweight strength. There are a multitude of other bodyweight exercise variations available; a great many of which relate to the other components of the Gymnastic Bodies program and will be discussed in detail in my other volumes.

It is important to note that no joint pre-habilitation, technical handstand or technical press handstand work, dynamic or advanced ring strength exercises are included in this volume. This volume will focus solely on the acquisition of Basic Strength. In cannot be overstated that acquisition of fundamental static positions and fundamental bodyweight strength **will be the foundation from which all the other higher-level strength progressions will proceed.** Once an adequate foundation has been established, you will be better able to progress and prosper with more the advanced component variations as presented in the other Gymnastic Bodies volumes.

In addition, a difficulty rating of 1 to 5 is provided for each of the exercise variations throughout this book. These ratings are not meant as an overall difficulty rating in comparison to all other gymnastics exercises, but only as a relative level of comparison between the other variations in that particular family of movements; i.e. comparing regular dips to XR dips.

Difficulty rating: 

Handstands & Press Handstands



Handstands and press handstands are essential elements in the development of the exceptional upper body strength and power of my gymnasts. In my opinion, handstands are quite simply the most effective of all of the static strength exercises, with a tremendous carryover to other athletic endeavors. I believe that a great deal of my prior athletic ability was due to my college coach requiring me to perform thirty minutes of ring handstands every day.

I focus more on the development of press handstands than any other single exercise, especially with beginning and intermediate athletes. Why? I have found that press handstands impart athletic ability far in excess of what one would assume for such a seemingly simple exercise. In my experience, a gymnast's overall gift for high-level elements can often simply be measured by their proficiency in press handstands. My top champion

athletes have all been capable of 16-30 technically correct straddle press handstands in a row.

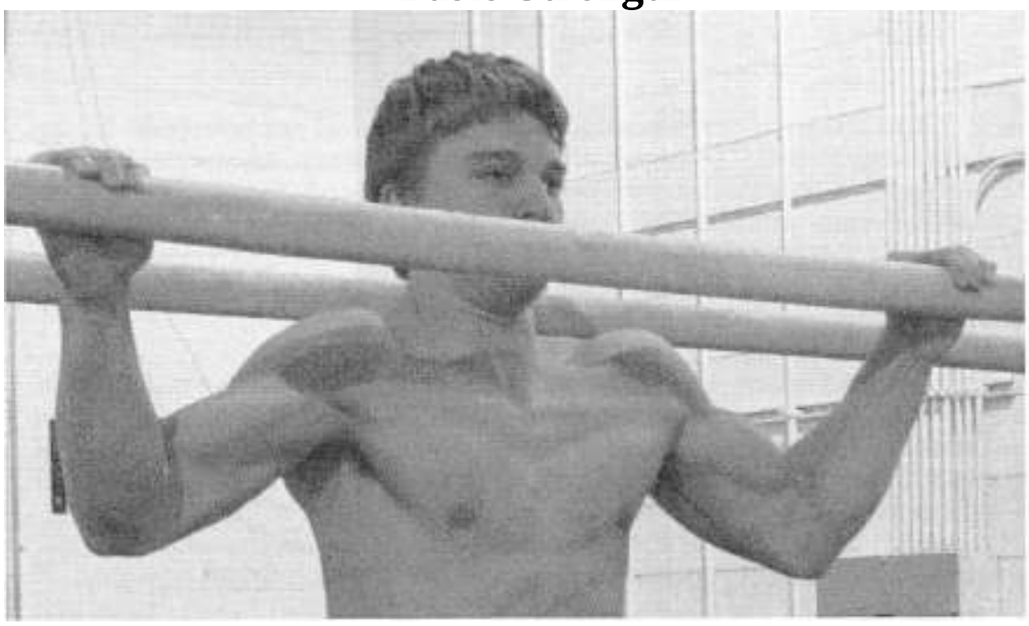
It is difficult to make an accurate analogy; however for the gymnastics-training enthusiast, press handstands, in all of their incredibly difficult variations, are the upper body snatch of bodyweight movements. There is no other single bodyweight exercise that demands more strength, focus, tension, stability, coordination, balance and active flexibility over a greater range of motion.

Truly handstand and press handstand training yields amazing results, especially when trained in combination. However the necessary specific physical preparation and technical training progressions for these two elements far exceeds the space allowable in this volume. My program for the complete development of handstands and press handstands is therefore presented in a separate volume, The Handstand Chronicles; which quite literally contains the most complete and extensive information ever presented on the subject. Everything necessary is provided to develop a rock solid static handstand and to master the many intricacies of press handstands. Everything that is, except for the sweat; that is up to you.

CHAPTER THREE

Basic Strength

Basic Strength



Strength is the foundation from which all forms of athletic physical expression become possible. In this respect, gymnastics is no different than any other sport. We do, however, have our own specific requirements. In the strength training of my athletes, I am primarily concerned with building two facets of strength: maximal and dynamic.

The development of gymnastics maximal strength will be a two-tiered process; building basic strength is the first step, as well as initially being our main training focus. Basic strength is composed of two components; fundamental static positions (FSP) and fundamental bodyweight exercises (FBE). Fundamental static positions and fundamental bodyweight exercises are "fundamental" in that they are the initial building blocks from which all other gymnastics training progresses.

Increasing maximal strength will directly relate to our ability to execute ever more leverage-disadvantaged bodyweight exercises. Once proficiency of the FBEs has been achieved, our journey towards higher levels of gymnastics maximal strength will continue through the use of the advanced ring strength exercises and progressions discussed in All Muscle, No Iron. Advanced ring strength training is extremely potent and will yield astonishing strength gains, IF the correct preparatory foundation has been laid. Simultaneously with our transition to advanced ring strength, a significant shift in our strength training protocol will also occur; the continued acquisition of maximal strength will no longer be our primary training focus, but will shift to a secondary role.

After the 'basic' foundation is achieved, the primary focus of our Gymnastic Bodies training will shift to the development of "power" utilizing gymnastic dynamic strength exercises, as outlined in The Dynamic Physique. However until that time occurs, our primary focus needs to remain on establishing a solid foundation of basic strength through the use of FSPs and FBEs. It should also be understood that the vast majority of athletes fail in establishing an

optimal surplus of basic strength and prematurely focus on dynamic strength training.

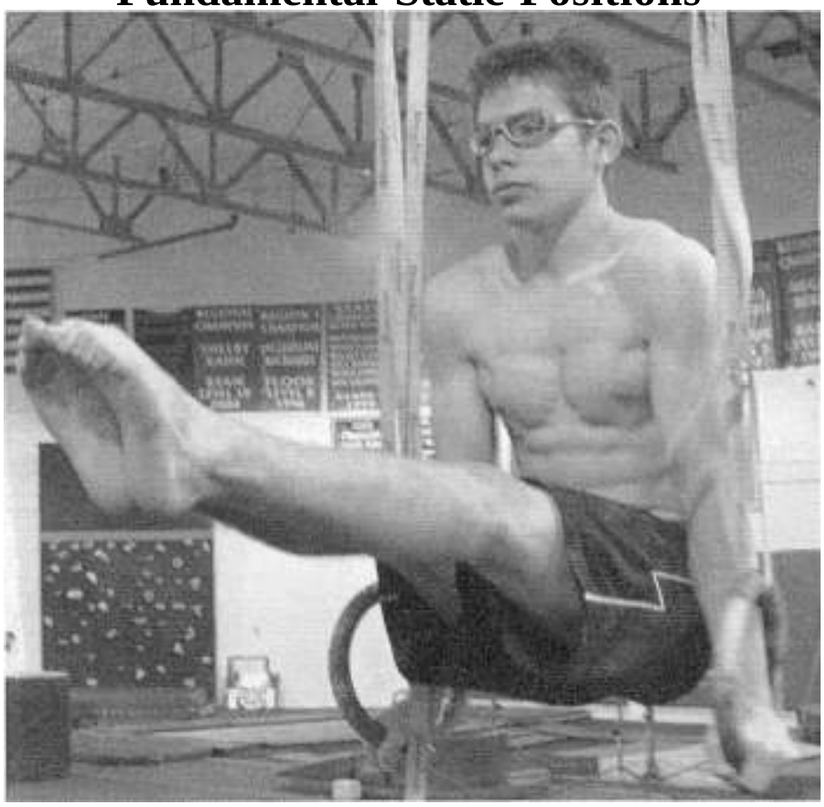
This is not to insinuate that dynamic strength work will not take place in our initial training, it will. Dynamic strength is an essential component in the development of gymnastic abilities and is explored thoroughly in the Gymnastic Bodies volume, The Dynamic Physique. However, to ensure the most efficient development of the athlete, dynamic strength training must remain a secondary focus until an adequate foundation of basic strength has been established.

What about relative strength and developing a high strength to bodyweight ratio you may ask? As gymnasts, it is literally impossible to neglect this part of our training. It would be like asking a fish to not get wet. Due to the fact that we are working with bodyweight progressions, all of our maximal and dynamic strength training already occurs within a matrix of relative strength. With the Gymnastics Bodies Program, all increases in maximal and dynamic strength will automatically equate to increases in relative strength as well.

CHAPTER FOUR

Fundamental Static Positions

Fundamental Static Positions

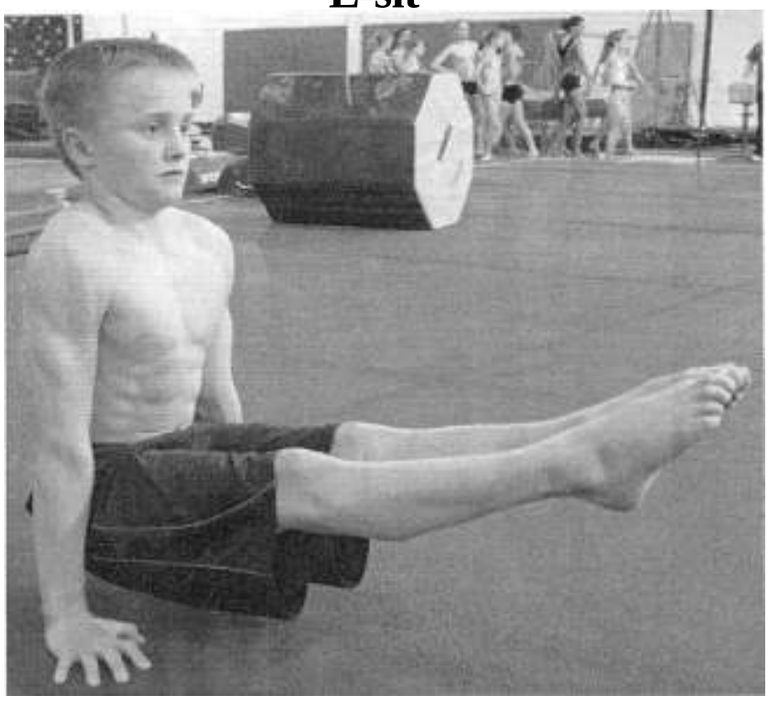


Gymnastically speaking, static strength is the ability to hold or maintain the body motionless in an often mechanically disadvantaged position. L-sits, front levers and planches are all examples of static strength elements. I have found static strength training to be invaluable in building the ligament and tendon strength of the joints, as well as having a profound effect on core strength development. The static exercises help to build amazing strength which quite frankly cannot be developed any other way.

A caveat is required here; training the support static strength positions can be quite taxing on the wrists; especially without an adequate developmental foundation. The wrists will consequently require special physical preparation to be able to adequately handle the new training load. As mentioned previously, the wrist specific preparation series that I use with my athletes is quite extensive and is covered in great detail in the Gymnastics Bodies volume, Liquid Steel.

Following are the basic static strength positions in men's gymnastics. Complete descriptions as well as progressions for developing all of the basic positions are provided.

L-sit



The L-sit, or half lever as it is sometimes called, is one of the most basic gymnastics elements and, seemingly, the simplest of all abdominal exercises. How hard can it be to simply stay in one position? It must be the easiest thing in the world, right? Wrong. Correctly done, the L-sit will make most other conventional abdominal exercise seem like child's play.

Way back when, when I was a beginning gymnast, my first coach had us do no specific abdominal exercises; only lots and lots of regular L-sits. A 60 second L was the expected standard.

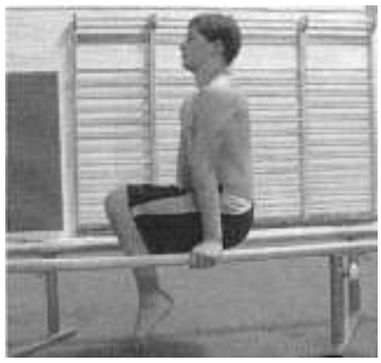
One day, one of the senior gymnasts challenged me to a hanging leg lift contest on the stall bars (These bars are directly anchored to the wall and do not allow you to lean back at all or to pull down with your lats - all pure core strength). I cranked out ten repetitions without ever having done the exercise before.

The Progressions

L-sit - PB tuck

Center yourself on a set of parallel bars (PB), parallets or pushup bars. If your abdominal strength is very low, you may also begin on two chairs, as this will allow you to start with you feet much lower and make the exercise more accessible.

Tuck your legs and attempt to lift them until they are parallel with the floor. At first it may not be possible for you to lift your legs up to a completely parallel position. That is fine, simply work with your knees at the height that you are comfortable. Sit up straight and be sure to keep your elbows locked (straight).



Difficulty rating: 

L-sit - PB low

The primary difference on this variation is that the knees will now be straight. As the leverage is much less on this exercise and the difficulty is higher, you will probably find that you cannot hold your legs as high as you did in the tuck L and that you need to work on two chairs or elevated bars. In the beginning, it is perfectly acceptable for your feet to be far below horizontal.

Be prepared for some exceptional cramps in both your hip flexors and the rectus femoris (the muscle in the upper middle of your quadriceps). If the cramps become too intense, stop the exercise for some stretching and massage before again continuing the day's workout.

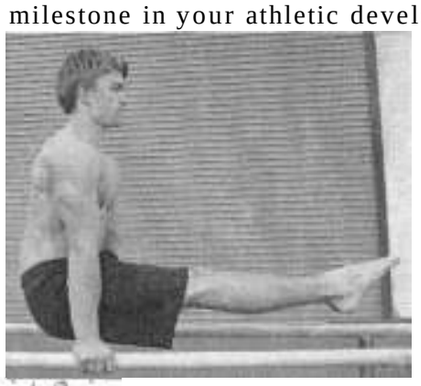
Difficulty rating: 

L-sit - PB

Once you can hold the Low Straight Leg L comfortably, it is time to progress to the Horizontal L. The difference between this and the prior version is

simply that your legs are now high enough during the static hold to be parallel to the floor.

As you will now be holding your legs horizontal and parallel to the floor you will have enough height and clearance to, if you wish, work this exercise on the floor as well as on the bars. Work hard and persevere in the pursuit of excellence with this position. Achieving the horizontal L-sit for substantial time will be a major milestone in your athletic development.



Difficulty rating: 

L-sit - PB advanced

For more advanced athletes, the regular L -sit may be made much more difficult by transitioning to the Advanced L-sit. In the advanced L-sit the legs are still straight and level and the arms are locked, however now the back is held flat with no hunching or curvature allowed. Do not allow your chest to cave in. Now while maintaining this "flat backed" position, attempt to push your hips forward in front of your hands while continuing to hold the legs straight and level.

Be prepared, this is an extremely difficult variation even for advanced athletes. Even as small an adjustment as one inch forward of the hips in front of the hands will cause most athletes to fail at this version.

Difficulty rating: 

L-sit - XR
The L-sit on the Xtreme Rings is everything that the PB L-sit is - squared. Due to the tremendous instability of the rings, you will probably find it exceedingly difficult to maintain the same good body position that you have developed on the PBs. Be patient. Generally your stabilizers will adjust to the new demands being placed on them over the course of a few weeks.

The normal performance criteria that you developed on the PBs for your L-sit still apply here. Performed correctly, the back should be flat, the elbows locked and the chest up with the back flat.

In addition, you will also now be working on correctly turning out the rings during a support for the first time. For information on executing a correct support position on the rings, see the XR support entry in the section on dip variations.

Difficulty rating:

L-sit - XR advanced
To adjust your regular XR L-sit, push the hips forward until they are next to the hands. Do this while continuing to maintain the flat back with chest out, arms locked and the rings turned out that you mastered during the regular XR L-sit.

Difficulty rating:

Straddle L

The straddle L is a graceful and elegant movement. It is an excellent combination of abdominal strength and active flexibility; which develops a great deal of stability within the hip joint. I injured my left hip some years ago and I have found that training straddle Ls several times a week greatly relieves the discomfort within the joint.

Straddle Ls, as well as L sits, are also easily integrated in the training of other skills. This simplifies your training and increasing the effectiveness of your conditioning program. Press handstands, pull-ups and dips are especially amenable to its inclusion.

The Progressions

Straddle L - PB bent

For the beginner, this exercise will need to be done on the PBs, high parallets, or even in-between two chairs as they will probably not as yet have developed the appropriate hip strength necessary to perform it on the floor. Unfortunately pushup bars will not work for most beginners, as the height of the bars is simply too low.

Place yourself, so that you are standing or sitting in a straddle with your hands in-between your legs. With your hands comfortably spaced apart, lift your buttocks up and attempt to bring your legs up in front of you. Be sure to keep your legs bent in this first variation of the straddle L. Unlike the regular L, the straddle L should have a forward lean while in support; the higher the straddle L, the more substantial will be the forward lean.

It is a grave error to allow the legs to rest on the arms during this element. While it will greatly reduce the intensity of this movement, it will also greatly reduce the very strength gains that you were seeking in the first place.

Difficulty rating:

Straddle **L - PB** low

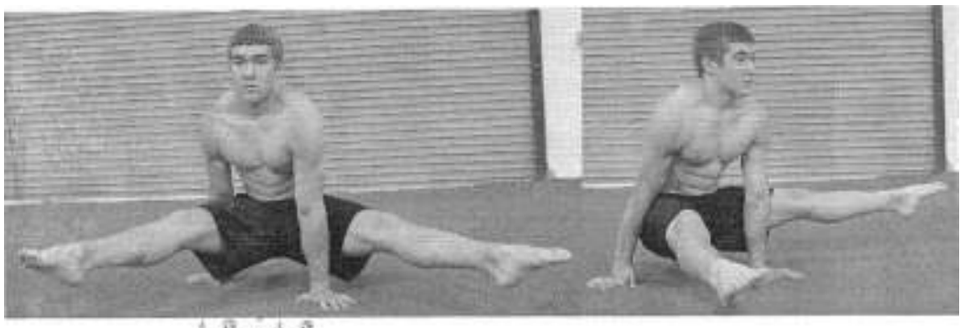
With this variation it is perfectly fine to continue to allow your legs to hang below parallel; our major change will now be the straightening of the knees. Do not be overly concerned if your now straight legs are far below horizontal. Your strength will continue to improve with consistent practice.

Difficulty rating:

Straddle **L** - one hand center

This variation requires vastly less flexibility than both hands in the center and yet allows you to continue building hip and leg extension strength.

Sitting on the floor in a straddle, place one hand in the center and the other hand outside of your leg just in front of the hips. Push up and attempt to hold the straddle L. Lower to the ground, switch hands and repeat.



Difficulty rating:

Straddle L - partial roll

Technically this is not a pure static strength element, but rather an embedded static strength element. However it is not uncommon for a beginning trainee to have a great deal of difficulty initially with lifting into the horizontal straddle L. This rolling version helps to alleviate that problem by utilizing momentum. For additional information on utilizing the excellent technique of embedded statics in your training, they are discussed thoroughly in the Program Design section.

Begin from a straddle sit on the floor. Partially roll backward then quickly roll forward while simultaneously attempting to push up into the straddle L with both hands in the center. There will be a momentary hold of the straddle L at best. Adjust the intensity of this movement by increasing or decreasing the speed of the roll forward.

Difficulty rating:

Straddle L - PB

For a correct straddle L position, the legs should be parallel to the floor with the feet slightly above the knees. The hips in height should be somewhere in-between the wrists and elbows. The legs should not be touching the arms. The shoulders should be slightly leaning forward. It may be performed either on the floor, parallets or parallel bars.

Difficulty rating:

Straddle L - XR

Like regular L-sits, straddle Ls are much more difficult when performed on the Xtreme Rings; the inherent instability of the rings themselves greatly increases the muscular demands of this movement. For beginners on the rings, it is often easiest to begin from a bent leg straddle L and then extend out to the straight leg position.

When performing a straddle L on the rings always attempt to lift the legs above the rings. Do not bend the elbows, you should feel the biceps pressing forward strongly. Also strive to keep the thumbs turned out during the support. Remember that unlike L seats, straddle Ls must lean forward in order to preserve balance. This of course causes the hip flexors and rectus femoris to cramp strongly during the maintenance of the position, especially for new trainees.

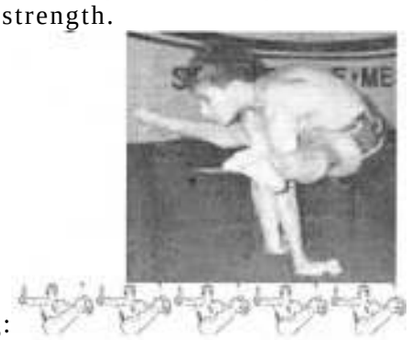
Difficulty rating:

Straddle L - high

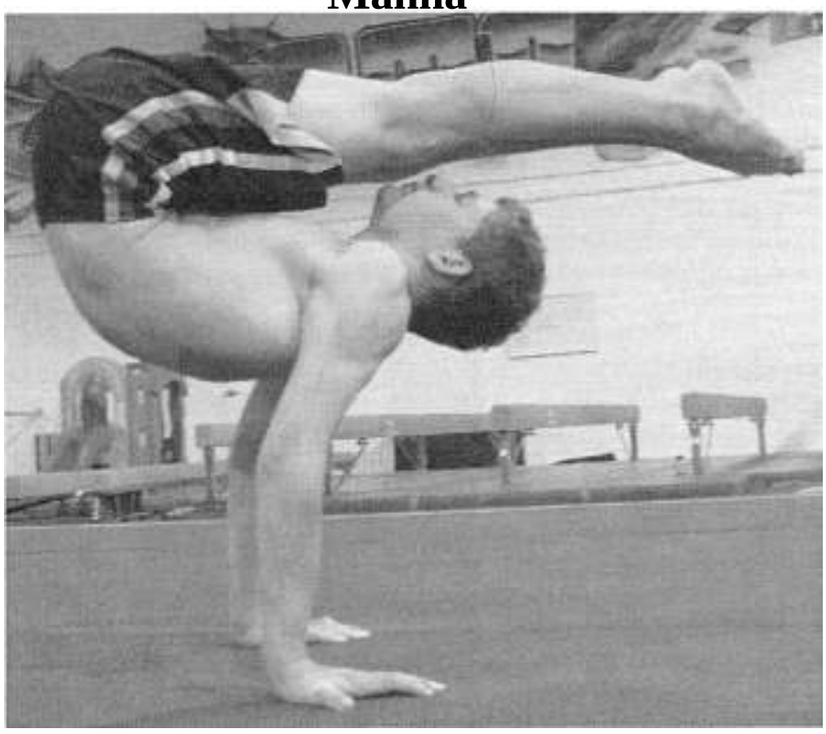
The high straddle L is exceptionally difficult and very few athletes will ever possess the combined strength and flexibility of the back, hip and shoulder girdle to be able to successfully perform it. Out of the thousands of athletes I have trained, only two were able to execute this element. Once in a regular

straddle L, now attempt to lift your hips to shoulder high by pressing your hips back and up. Your forward lean will increase as your hips go higher. Upon reaching the correct position, your knees will be higher than your elbows.

Be sure to maintain the correct position for your legs, if you feet start to drop below the level of your knees, you are attempting to go too high for your current level of strength.

Difficulty rating: 

Manna



Watching someone perform a manna seems to blur the boundaries of what we had thought was physically possible. In fact, in most gymnastics programs around the country the manna is a relatively rare skill and considered somewhat exotic. Even among our U.S. Olympic level athletes there are only a few who can do the manna correctly.

As I mentioned, the manna is generally a rare skill; except in my program. About 75% of my senior athletes can perform a manna; with several of those also working on developing a solid high manna. Are they all exceptional athletes? Unquestionably some of my athletes are incredibly talented, however most are simply persistent with average talent and, most importantly, a solid work ethic.

Rather than all exceptional athletes, what I have developed is an efficient and effective method of building mannas. The best way that I have found over the years to build a manna also happens to be the simplest and most straightforward. It does however require great dedication; for most people 1-2 years of consistent practice will be required to develop the manna. However, with patience and a lot of sweat, many of the people who follow my program diligently will indeed succeed in developing a manna.

The reason most people fail to develop a manna is due to a flawed understanding of the actual movement itself. The common belief is that a V-

sit is a preliminary step along the road to a manna. As such, they build up the strength necessary for the V-sit, which is essentially a leg lift on the hands and then subsequently fail to build up the extension strength necessary to succeed at the manna. In my experience, the correct primary focus for developing a manna is forward extension of the hips in front of the hands; or more simply stated - pushing the hips forward in front of the hands, not on lifting the legs.

Quality work on the various progressions is essential for being able to eventually build up to this skill; for a manna there are no shortcuts. You must go through the progressions patiently and thoroughly.

The Progressions

Manna - MSH bent

The main developmental exercise for building a manna is the middle split hold (MSH) held in a horizontal position. However, for most people the HMSH is a very challenging position and will need to be built up to gradually. For that reason, we will begin our quest for the manna, with the bent leg middle split hold. At first you may not be able to move the hips forward off the hands and wrists, especially while maintaining straight legs. Therefore we will ignore the straight legs for now and focus solely on building our introductory support strength for this skill.

Using the end of the parallel bars, parallets or even two chairs sit with your hands directly behind your glutes. Now lift off of the bars while simultaneously attempting to push the hips forward off of your wrists. Do not allow the knees to lift above the hips, but keep them both parallel to the floor at all times. At this time, raising the knees may only be done with an accompanying lift of the hips. Constantly strive to push the hips further and further forward in front of the wrists while maintaining the parallel position of the knees and hips.

It is essential on this movement as with all of the progressions in the manna series, to keep the back as flat as possible at all times. Keeping the back flat allows the chest to remain elevated, which is essential in eventually achieving the top position of the manna.

Difficulty rating:

Manna - MSH low
Once you are able to press your hips forward off your wrists in the bent leg middle split hold, you may move on to the straight leg version.

Initially, do not be overly concerned about your feet being below horizontal (sometimes far below!) with this variation. You will find that straightening the knees greatly increases the strength demands on your hips. Accommodate this by allowing your legs to drop as low as necessary in order to succeed in your static hold. As your strength improves, gradually attempt to perform this static hold with higher and higher legs, until you achieve nearly horizontal legs.

Difficulty rating:

Manna - MSH horizontal
The horizontal middle split hold is the position that you will spend at least 90% of your developmental manna time in. Most people will fail in the development of a manna simply because they were too impatient to spend the requisite amount of time developing the HMSH.

Be sure to work in a clear area, where you have room to roll backward if necessary. Now simply sit on the ground with your legs straddled (apart), the wider the better. You should actually feel your hips actively pulling your legs as wide as possible and then striving to pull them wider still. Continue to feel this "pulling" during the entire movement. Be prepared for major cramps in your hip flexors, however the wider and more stable your legs are, the easier and quicker the development of the manna will be.

Now from the straddle sit on the floor, place your hands behind your legs right next to your hips. With the arms straight, once again strive to push the hips forward off the wrists. When done correctly, your legs will lift off the ground as your hips move forward.

On lifting you will naturally want to allow the feet to lift above the hips. This is incorrect. It is essential on attempting to rise up into position that the hips and feet stay level with one another. Under no circumstances allow the feet to either raise above or drop beneath the hips, they should remain level in relation to each other at all times.

Difficulty rating:

Manna

Now that a basic foundation has been laid, work on the Manna itself can begin. This is a very challenging position and can take years to develop. It is, however, worth the effort. The majority of the champions I have developed over the years have had solid mannas. The strength that this position develops is transferable to a wide range of gymnastics skills.

Allan Bower in a Manna at 7yrs old
Allan is now 13 years old and a 5 year veteran member of the US Jr. National Team

In appearance, the manna resembles an inverted L- sit. To execute a manna correctly requires tremendous triceps and shoulder strength as well as excellent lower back strength and flexibility.

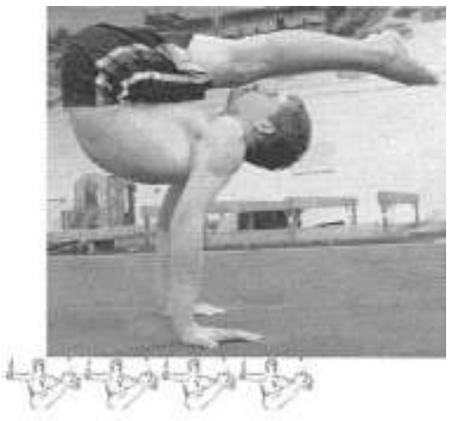
Start with a HMSM on the floor. Emphasize hips in front of the hands. A common misconception on the manna is to think that the position is achieved by leaning backwards while attempting to lift the legs. Actually the main focus should be keeping the hips pressed forward. Great pressure will be felt on the triceps and back of the shoulders; initially severe cramping of the triceps is not at all unusual.

As your strength improves, continue to press your hips further in front of your hands. This will result in your hips gradually rising higher and higher. Attempting to raise the hips by leaning back rather than pressing the hips forward will result in a total lack of progress on this skill

Do not lean back, nor should you allow your head to fall back. This is ineffective and will result in a great deal of wasted time and effort. To increase the height of your manna, simply push your hips forward. Keep your legs pulled as wide apart as possible.

Do not try to lift your legs at the expense of pressing the hips forward; this will simply stop your motion at a V-sit. As you continue pushing forward and your strength increases, your legs will naturally rise higher.

As time passes, you will achieve a straddled 1/2 V position and then finally a vertical straddled V. Do not give in to the temptation to focus on lifting the legs, continue to focus on pressing the hips forward; this is essential. Do not bring your legs together until you have reached a horizontal manna position. Bringing your legs together prematurely increases the difficulty of the element and will greatly increase the time required to master this position.



Difficulty rating:

Manna - high

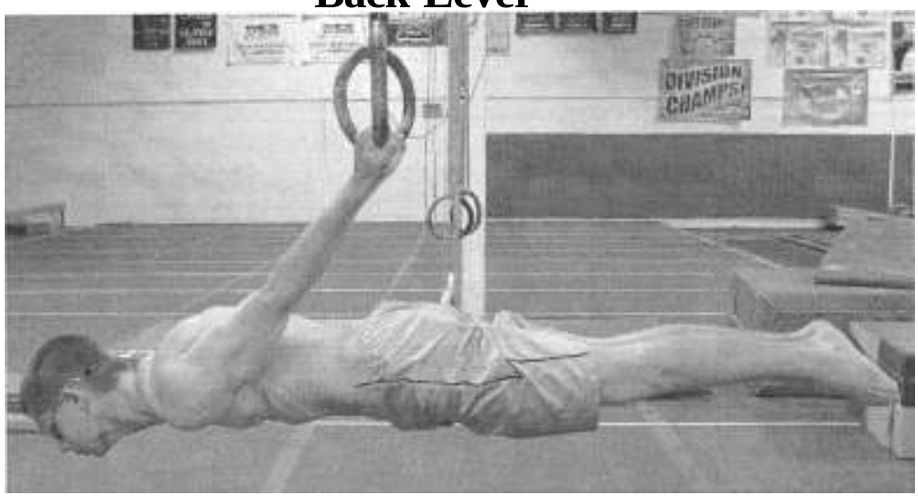
If the manna is a rare skill, the high manna is nearly non-existent. In fact, other than my own athletes, I have personally only seen one other in competition.

An extremely stable manna is a mandatory requirement for even attempting

the high manna. To proceed to the high manna from the manna, focus on lifting the legs while also simultaneously lifting the hips. The tendency is to concentrate on the leg lift only and, while it is true that the legs do travel farther than the hips, the hips must rise also in order to enable the manna to lift higher than horizontal. The higher the legs and hips lift, the farther forward the shoulders must press in order to compensate for the change in the center of gravity.

Difficulty rating:

Back Lever



The back lever is usually one of the first "real" gymnastics strength positions that most people are exposed to. It is a little bit exotic and forces your body to exert strength in a position that most people didn't even know they could get into. It is very good for building shoulder girdle strength and will absolutely crush the core and lower back of the beginning gymnastics strength trainee.

The back lever is also a necessary stepping-stone toward building the straight leg front lever and eventually the straight leg planche. In fact, in my opinion the back lever needs to be established before a planche will be successful. Once a strong back lever is developed, the planche progression will proceed much more rapidly.

The following progressions may be performed on the Xtreme Rings, a single rail of the parallel bars or even any overhead single bar. Just be careful that the area you are working in is safe and appropriate for this training.

The Progressions

Back Lever - tuck

From an inverted hang, while keeping your back rounded with your knees held tightly into your chest, attempt to lower your hips behind you to a horizontal position. In all probability, at first, you will only be able to drop down slightly before being at the basic of your strength. Attempting to lean forward during the back lever variations will greatly aid you in maintaining the back lever.

In the beginning, squeezing inward with the arms into your lats will also be of great assistance to you. This practice however should only be used in the beginning when necessary and should be discontinued as soon as possible. A common mistake by beginners is to squeeze one lat harder than the other

resulting in a body position that is skewed sideways.

As for the grip, this is a personal choice, however I recommend palms down rather than palms up; unless there is an injury that needs to be taken into account. It is true that palms up will place less stress on the biceps, but the palms down will build greater biceps strength in addition to allowing the athlete to transition into and out of the back lever from other positions more efficiently. And more importantly, this palms down grip also helps to prepare the biceps for the strain later on of XR planches and iron crosses.

Difficulty rating:

Back Lever - flat tuck

To initiate the flat back, from the tuck back lever extend the hips back while simultaneously lifting the shoulders and pushing backward with the hands. Be careful to maintain a horizontal position.

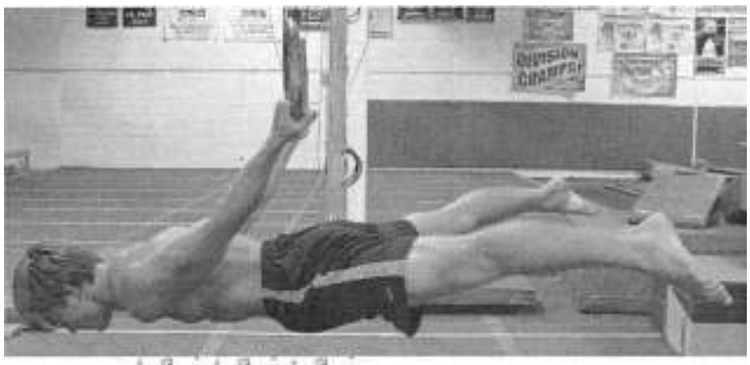
Difficulty rating:

Back Lever - straddle

There are several options for entering a straddle back lever. Probably the easiest for beginners is from the flat tuck back lever simply extend the legs out and to the side. Make sure to continue to lean forward strongly when

extending the legs behind. Keeping the head neutral (neither tucked down nor lifted up) will aid in maintaining a flat back during the straddle back lever.

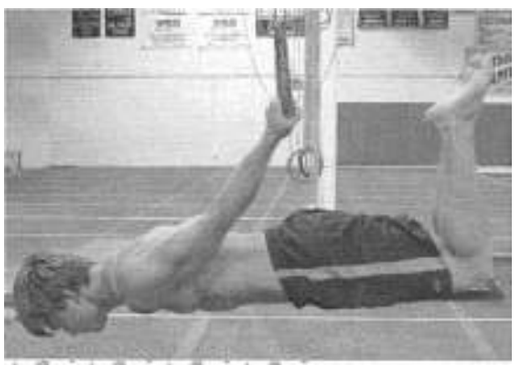
As progressing to the tuck back lever substantially increased the intensity of the load on the back, the straddle back lever will once again be a quantum jump in intensity of load. Do not under any circumstances, allow yourself to train the SB with less than a totally flat back. If at anytime, the flat back position is lost, immediately return back to the 1/2BL to prepare for the next attempt.



Difficulty rating:

Back Lever - half

From the straddle back lever, bend the knees while simultaneously bringing the legs together. In the final position, a half back lever will continue to maintain a flat back and hips, but now the calves will be vertical with the feet pointing at the ceiling. The tendency here is to allow the hips to close, thereby reducing the strain on the lower back, but also greatly lessening the strength gains from this movement. Focus on maintaining a flat back with completely open hips.



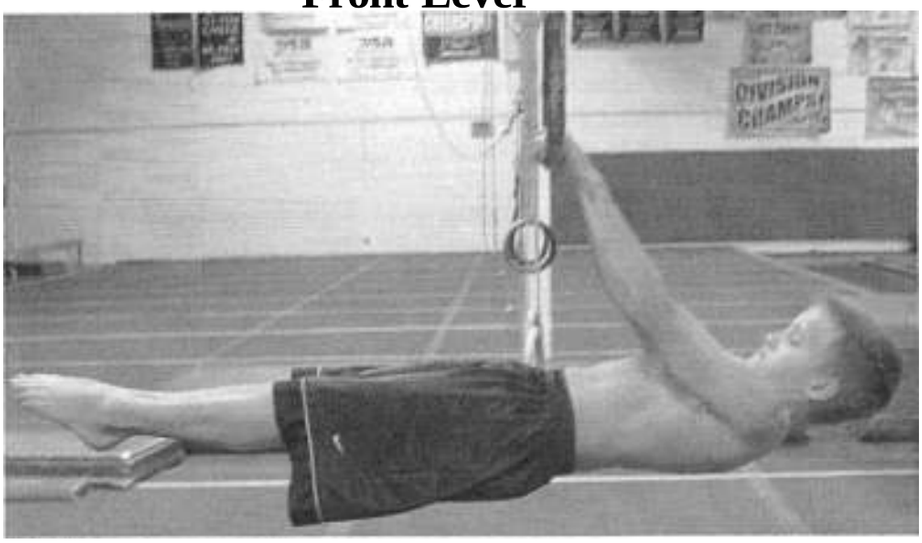
Difficulty rating:

Back Lever

From the half back lever begin to gradually extend and straighten the knees. Once again the hips will struggle to close during the extension, do not allow this to happen. There is no need to immediately go to a fully extended position. Build up to this over time as small shifts of even a few inches greater decrease the leverage of the movement, subsequently greatly increasing the training load on the shoulder girdle and lower back.

Difficulty rating:

Front Lever



Becoming proficient at front levers will have a strong carryover effect to many bodyweight skills; especially skills involving core and pull-up strength. The reverse is however not true.

One evening I had a static L-sit contest with my some of my athletes. Allan held a 60-second L that night; despite our never working extended hold L-sits by themselves. We do however focus strongly on front levers. Allan is quite proficient at them and can hold a 10-second front lever. Another athlete, Josh, has a strong straddle planche (19 seconds), but not a strong front lever, and the attempt at the 60-second L-sit crushed him.

For the front lever series make sure to use a shoulder width overhand grip (fingers pointing away) as this will increase the amount of lat power you can exert during these exercises. Also, as with the upcoming planche series, it is very important to keep the elbows straight, as bending the elbows will greatly lessen the intensity of these exercises and thereby dramatically lower the subsequent strength gains.

Cool Carryover from Front Levers

Coach, I substantially reduced my (Chinese) pull-up volume over the course of the past couple two weeks and focused on doing GTG with tuck levers. Nailed a 2-rep bodyweight chin PR, 25 up from 23. I don't think it was simply a matter of backing off from overtraining, since I was training chins only moderately hard and moderately frequently before the layoff. Ross

The Progressions

Front Lever - tuck

While hanging in an overhand grip (i.e. with fingers pointing away from you), bring your knees to your chest and then strive to lift your hips in front of you while at the same time leaning back with your shoulders. At this time it is fine to allow your back to curve as you learn and build strength in the movement.

Your goal is to eventually be able to pull your hips up to horizontal or level with your shoulders with an approximately 45 degree angle between the arms and torso. This is however, a very difficult position for beginners and you will probably need to build up to it gradually. At first, simply lift your hips as high as you can.

Difficulty rating: 

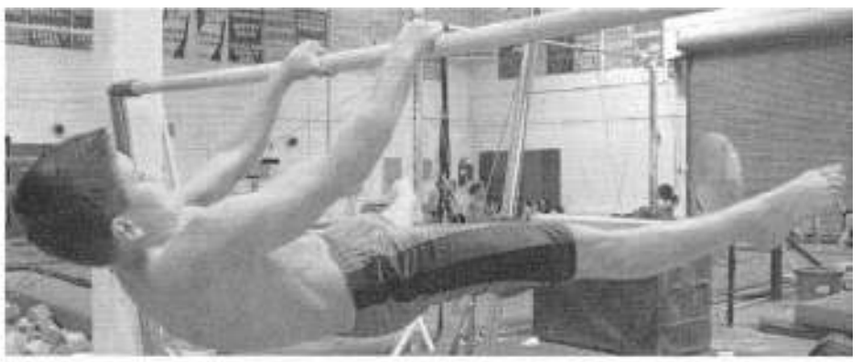
Front Lever - flat tuck

Once the tuck front lever feels firmly in control, it is time to move on to the flat tuck front lever. As with the flat tuck planche, the main difference here is the "flat" back. This position will cause all of the muscle fibers in your back to fire as they struggle to handle the load of your bodyweight. The contraction will be intense. Your goal is to eventually be able to pull your hips up to horizontal or level with your shoulders with an approximately 45° angle between the arms and torso while maintaining your "flattened" back. To achieve this position, think of pulling your shoulders back away from your hands while at the same time pressing your hands down towards your hips. Be sure to remember to keep hips shoulder high and elbows tight and straight.

Difficulty rating: 

Front Lever - straddle
From the flat tuck front lever position, begin to carefully and slowly extend your legs out from your chest. As with the planche, the wider your legs are spread, the easier the transition from the flat tuck front lever to the straddle front lever will be.

Strive to maintain your "flat" back position. If you are unable to do so, you are too far extended forward and need to pull your legs back a bit. Don't forget to keep the shoulders pulling back and the hands pressing down.



Difficulty rating: 

Front Lever - half
For many trainees there is significant jump in intensity when progressing from the straddle front lever to the front lever. The half front lever is an excellent intermediate step.

As with most of the preceding variations, the half front lever continues to be held with the hips and back flat, however now the legs are brought together

but with the knees bent at 90° (in this position the feet will be pointing downward to the ground). Bringing the legs together greatly increases the work-load on the lower back and shoulder girdle, however it is still significantly less than that of the full front lever.

Straightening the angle of the knees, while continuing to maintain the flat hips, will, over time, gradually increase the difficulty of this movement.

Difficulty rating:

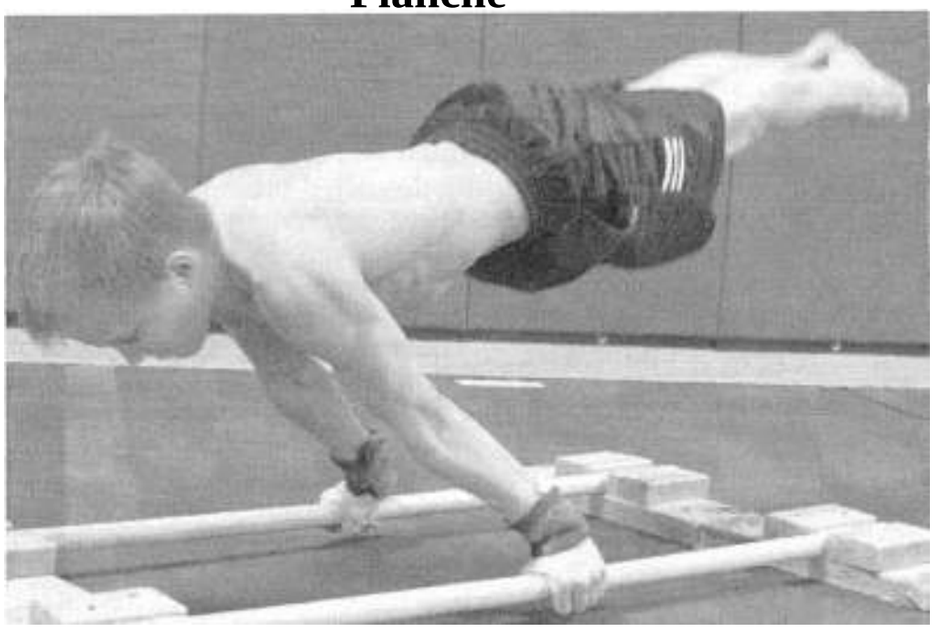
Front Lever

Depending on your individual strengths, yes it is quite common for front levers to completely trash your core. Remember that you are supporting the entire weight of your legs and mid-section with an extremely disadvantaged lever.

In both instances of either core or shoulder/girdle failure, the feet will sink down towards the ground. The primary difference is that when the core fails, you will unable to maintain a flat back (straight body) position resulting in either an arched back or pike in the hips. In the case of shoulder girdle/lats failure, you will be able to remain straight & flat but unable to keep your feet elevated.

Difficulty rating:

Planche



Obviously, for those of us who are mere mortals, it is not possible to simply remove the legs from the floor and go directly to the planche. In addition, there are those who would quibble with the planche being included in a list of fundamental static strength positions. However it must be noted that this is a not a ring planche and that with the proper progressions and patience, this position is attainable by a reasonably fit, hard working athlete.

While working the various planche variations, strive to hold the hips level with the shoulders. As with the front lever, make sure that the elbows are straight. Bending the elbows greatly lessens the intensity of these exercises and will significantly slow your progress. Arms that are almost straight are still bent, so be diligent and keep them straight.

Patience and perseverance are potent tools. Progress on the planche is most often measured in months, not weeks. Don't get too caught up in minutiae or trying to progress as quickly as possible. It is also important to remember that straight-arm strength is a completely different animal than bent-arm strength and the only way to develop it is to progress through various straight-arm movements.

One final general note on planches; when training on the floor, **hand positions on the planche series exercises are completely optional.** Some prefer fingers forward, others to the side, still others feel that fingers pointing backward at a **45°** angle to be best. Some swear by support on fingertips (my personal favorite) and others with the hands completely flat. Just experiment and find the grip that you prefer. If you find that a flat hand support on the floor is too uncomfortable for your wrists, these progressions can also be performed on

parallets, on pushup bars or even on a set of kettlebells.

The Progressions

Planche - frog stand

Begin this position by assuming a full squat and placing your hands on the ground directly in front of your feet. By directly, I mean right next to your toes. Arrange yourself so that your knees are resting against your bent elbows. Now gradually lean forward taking your weight both unto your hands and also unto your knees by leaning them on your elbows. Using your knees on your elbows will allow your legs to help your shoulders bear the load of your bodyweight. As you continue leaning forward you will eventually be able to remove your feet completely from the floor and hold yourself up with only your hands on the floor and your knees on your elbows for support.

Balance is also a key to this exercise. As you first begin to learn how to lean forward in this position, you will often probably overextend and fall forward. Don't worry, have fun with it and enjoy some new training. Some pillows placed in front of you will help to cushion any crash landings.

Notice that this is the only static position in our planche progressions with bent elbows.

Difficulty rating:

Planche - advanced frog stand

For many trainees, advanced frog stands are a necessary intermediate step to the prior to beginning to successfully train the tuck planche. Initially frog stands are much easier than tuck planches due to the fact that utilizing the knees on bent-arms allowed the legs to support a great deal of the body's weight. With the future tuck planche, the majority of the stress will go directly to the shoulder girdle. For many non-gymnasts, the jump in intensity between these two exercises can be extreme. Advanced frog stands help to ease this transition considerably.

In an advanced frog stand the knees continue to be braced on the arms;

however the elbows have progressed from a bent to a straight-arm position. In this position the amount of help that the knees can provide is minimized as you are simply leaning on the straight-arm rather than being propped up by the bent elbow. Utilizing the advanced frog stand also allows the increase of intensity on the shoulder girdle to be more gradual.

It is important to emphasize keeping the arms completely straight during the advanced frog stand. Allowing the elbows to bend removes stress from the shoulder girdle & elbow joint, which is exactly where it needs to be in order to continue making progress through the planche progression.

Difficulty rating:

Planche - tuck

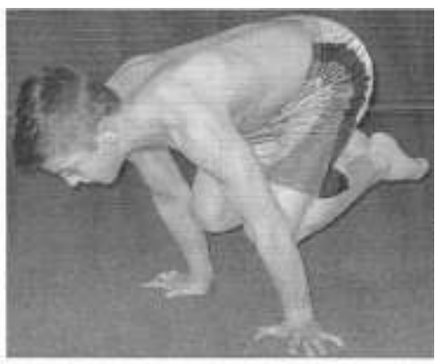
The main difference between an advanced frog stand and the tuck planche is that your weight will now be borne solely by your arms and shoulder girdle; the knees are no longer allowed to provide additional support. Once again begin in a full squat and place your hands next to your toes. Now, as in the frog stand, lean forward taking all of your weight on your arms and shoulders alone. Do not use your knees on your elbows for assistance. Holding the knees tightly to the chest will make this exercise easier. At first you may only be able to briefly rise off the ground. Do not be overly concerned. It will pass with time and continued persistent training.

It bears re-mentioning however, that a correct tuck planche is executed with the hips shoulder high. Depending on your initial strength levels, it may take quite some time to reach this level of development. Simply continue working the position, striving to lift your hips to shoulder high. With consistent practice it is possible to increase your strength in static positions relatively quickly.

Difficulty rating: 

Planche - flat tuck

Once you feel comfortable with the tuck planche, you can increase the difficulty of this exercise by progressing on to the flat tuck planche. The primary difference between the tuck and flat tuck planche is the position of the back. Note that in the tuck planche the back is curved, while in the flat tuck planche the back appears flat. While holding your hips shoulder high, try to extend your hips back behind you until your back is flat. This "flattening" will greatly increase the intensity of the tuck planche. In fact, I think you will be extremely surprised at how much harder such a small movement can make the tuck planche.



Difficulty rating: 

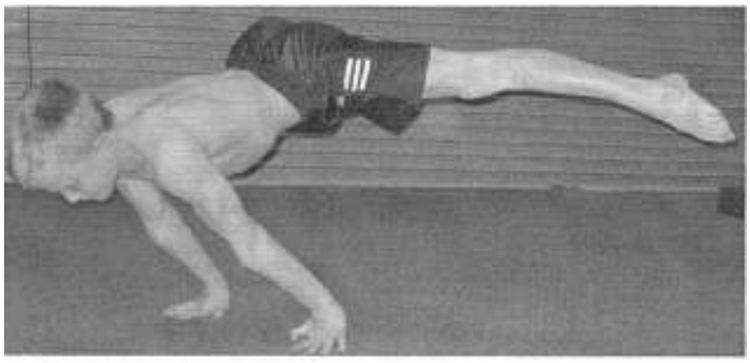
Planche - straddle

Once you have mastered the flat tuck planche position you are ready to work on the straddle planche. Finally! After months of hard consistent work the end is now in sight. As with the other planche variations, while learning the straddle planche, it is also beneficial to practice tuck planche push-ups at the same time; one will build upon the other.

From the flat tuck planche position, begin to extend your knees behind you from their position on your chest. Balance is critical here. As you extend your legs farther behind, you will also have to lean a little farther forward to compensate. The wider your legs are, the easier the straddle planche will be. However for those planning to progress to the straight planche in the future, as you get stronger in the straddle planche, you should increase the difficulty by bringing your legs closer together.

Make small adjustments from workout to workout trying to either increase the length of your static hold or the extension of your position. Do not try to increase both at the same workout. BE PREPARED - just a small movement will greatly lessen your leverage on this exercise and make the movement much harder.

Advanced athletes may enter the straddle planche either from a straddle L or lowering from a handstand.



Difficulty rating: 

Planche - half

The 1/2 Planche will greatly intensify the stress on the lower back while in the planche position compared to that of the straddle planche. It will still, however, be significantly less than that of the planche. The same general performance guidelines for the previous planche variations continue to apply here; lean forward strongly, keep the elbows locked with the hips and back flat. The primary difference of this variation is that now the knees will be bent with the calves in a vertical position with the feet pointing at the ceiling.

Difficulty rating:

Planche

The planche may either be arrived at from a straddle planche or a 1/2 planche. If from the straddle planche, simply bring the legs gradually together. Be diligent to avoid letting the hips pike as you bring the legs together. From the 1/2 planche, slowly extend the knees toward a straight body position. Once again, do not allow the hips to pike during the extension.

Many will find that the lower back is the weak link in extending the legs during any of the more advanced planche variations (straddle, 1/2PL and PL). Many lower back exercises are provided in the section on core strength training.

In addition, I have found that kettlebell/ dumbbell swings are also an excellent supplement to planche training. This was something I discovered quite by accident; I used dumbbell swings to rehab the lower back of one of my athletes and after a 6-week period we found that he could now perform a solid straddle planche; where previously this had been beyond his reach. In retrospect, he had the shoulder girdle strength, but not the lower back strength necessary to reach full extension.

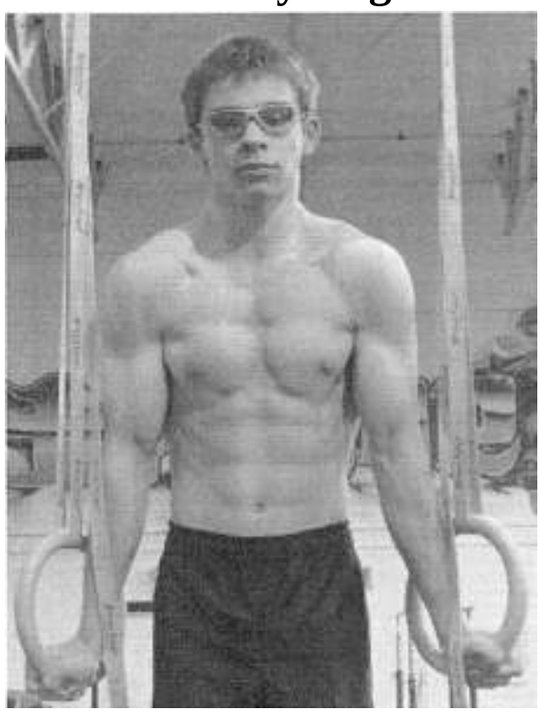
The protocol used on the dumbbell swings was quite simple; perform a set of 10 dumbbell swings on each arm followed by several minutes of rest, for 3-4 sets, 2-3 times a week. This was of course in combination with the rest of his training.

ing: 

CHAPTER FIVE

Upper Body Pressing

Fundamental Bodyweight Exercises



This 14-year-old physique has been developed solely with gymnastics conditioning

Basic strength is the ability to generate maximum physical force utilizing a movement that is non-inclusive of a dynamic, plyometric, ballistic or advanced lock arm strength element on the rings. Gymnastically, within the limitations previously specified, it is the ability of the body to exert force throughout a full ROM and all primary planes of movement. The fundamental bodyweight exercises (FBE) in the remainder of this first volume have been selected to help establish a balanced foundation of basic strength.

When engaged in the development of basic strength, I strive to make my athletes so strong in training, that even operating at 70% of capacity, they are far stronger than anyone else on the competition floor and capable of handling much higher levels of technical gymnastics. For the fitness enthusiast, rather than success on the field of play, a solid foundation of basic strength will be the gateway whereby they may safely and effectively access the tremendous benefits inherent in dynamic and advanced ring strength work.

As the primary purpose of the exercises presented in this volume is to build basic strength, I have found adhering to a set scheme of 2-3 sets for 3-5 reps to be the most beneficial in achieving my training goals. Once an athlete is capable of performing more than 3-5 repetitions on a given exercise, the exercise being performed is no longer developing basic strength. After an appropriate window of adaptation to consolidate gains, the athlete should progress forward to a more difficult variation.

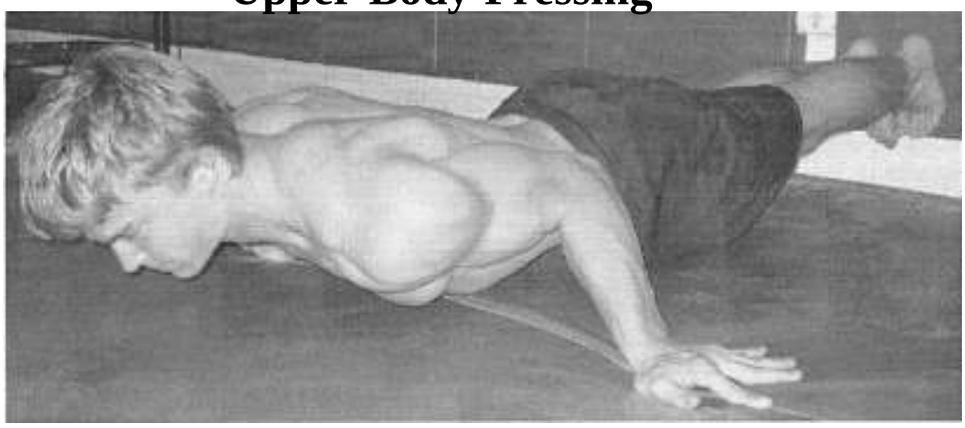
As always, it is impossible to distinguish what everyone's starting level of

strength will be. If the initial variations listed are too easy for you, simply proceed through the variations until you find one that suits your current strength level. Once you have found the appropriate starting point, I recommend waiting until the desired number of sets can be consistently performed throughout the period of adaptation (see section on programming), before moving on to the next harder variation in that family of movements.

In the interests of achieving at least a small measure of brevity in this volume that following abbreviations are used in exercise descriptions:

FX - this exercise is performed on the floor
Wall - this exercise is performed using a wall to assist the movement
PB - this exercise is performed on the parallel bars or similar apparatus
XR - this exercise is performed on the Xtreme Rings

Upper Body Pressing



Initially, years ago when I published my first training article, many non-gymnasts struggled tremendously with proceeding directly to tuck planche pushups. Since then, for the many fitness enthusiasts who follow my program, I have developed a nice progression with a great deal of variety to help to ease the difficulty of the transition from standard pushups to the more advanced planche pushup variations.

Pushup Variations

Pushups - FX

Standard pushups on the floor are a fine exercise; however I tend to focus on the more difficult Parallel bar and planche pushups variations that require more overall strength and much less endurance rather than on high repetition regular pushups. That being said, a few times a year, I will have my introductory Level 4 athletes (generally 6-8 years old) compete in a Pushup War with each other.

A Pushup War begins with my dividing a group of 10-12 young athletes into 3 groups. The first group begins doing pushups in synch following my rep count using slight work/pause method to allow everyone to stay synchronized. Correct execution is mandatory, if an athlete fails to do a rep correctly, he may re-attempt it. The athletes gradually drop out as they fail to execute an acceptable repetition with the winner being the final remaining athlete in that group. After a short rest (10-30 seconds), the champion of the first group now takes on the entire second group in another pushup war. With the goal being to see what athlete can win the most pushup wars consecutively. It can get quite competitive, with most everyone having a great time.

Our record to date is 350 consecutive pushups. Second place is 300 pushups. I know, I was shocked as well, as were the other coaches in the gym (we had quite a crowd of spectators around us during this last battle). The interesting point here is that the 350-rep athlete is quite strong overall; however the 300-

rep athlete is only very strong at high rep pushups, and remains average at best with other exercise variations that require much higher levels of strength.

The lesson here is that high levels of strength endurance are not necessarily an indication of high levels of maximal strength. Once you reach and sustain a reasonable level of proficiency with a movement, move on to the next harder variation.

Difficulty rating:

Pushups - XR

Assume a front support on the rings with your arms turned out to approximately 45° and your feet either on the ground or placed upon a stable surface (box, bench etc.) that is the same height as the rings. Make sure that the elbows are completely straight in the front support prior to beginning the pushups. If you find yourself unable to maintain a straight-arm support, I recommend that you first take the time to develop this necessary strength prior to engaging in the actual XR pushups themselves.

Without allowing the body to sag or arch, perform a regular pushup. The rings may turn inward during the descent and ascent. In all likelihood you will discover what thousands and thousands before you have discovered; that anything performed on the rings, even something as elementary as a regular pushup, is substantially harder than the same variation performed on a stable surface and will quite likely challenge your stabilizers and core with an intensity that you have never encountered before.

Difficulty rating:

Pushups - XR **Bulgarian**

To perform Bulgarian pushups on the Xtreme Rings start in a regular front

support position and then go out very wide (as far as you feel comfortable) as you descend to the bottom of the repetition. On pushing back up to the starting position pull the rings back in.

Be conscientious in not allowing the body to arch during the bottom of the repetition. A flat back must be maintained at all times.

Difficulty rating:

Pushups - XR **PPP**
Begin a pseudo planche pushup **(PPP)** on the Xtreme Rings from a normal front support. From there the shoulders lean forward while simultaneously pulling the hands as close to the hips as possible without actually touching either the hips or your sides. Now strive to maintain this precarious position while performing a pushup.

Do not allow the shoulders to drift back or the hands to drift forward during either the descent or ascent. It will help to focus on a single spot on the floor below your face and strive to remain directly above it at all times. Unlike the previous Xtreme Rings pushup variations, the hands now stay turned outward at all times.

Remember to not allow the hands to pinch inward on the hips at the bottom of the repetition, the rings should remain clear of the body.

Difficulty rating:

Pushups - XR **PPP plus**
These are a nice opportunity to begin to erode the boundaries between a foot-supported planche pushup variation and a completely free balancing one.

The primary difference with the XR PPP and the XR PPP plus is that at the bottom of the descent, you will now lift the feet momentarily clear of the floor. After a brief pause in the air, return the feet to the floor and continue with a normal XR PPP ascent.

At first you will probably find it necessary to use momentum from the descent to swing the feet up off of the floor while keeping the arms strongly bent, the hands near but not on the hips and the chest clear of the floor. If initially the swing up is too difficult, it is acceptable to lightly tap one foot on the ground to initiate the lift. As your strength improves, discontinue the use of momentum and perform your repetitions more deliberately using only strength to pull your feet smoothly up off of the floor.

Remember to not allow the chest to contact the floor at any time during this movement, nor should your hands pinch inward into your sides. The fingers will again either be pointing forward or sideways depending on your personal preference.

Difficulty rating:

Pushups - XR PMP

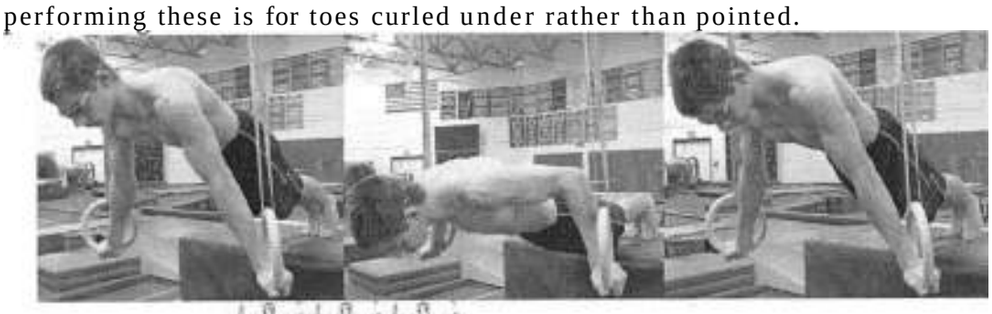
These are extremely challenging. Most people will fail to complete even a single rep correctly. Begin from the regular XR PPP position with your fingers pointing backwards. Now widen your arms. Ideally your arms should be out at approximately a 45° angle from your sides. Initially however you may find it too difficult to immediately go out to 45° wide, so adjust the angle inward as needed, attempting over time to widen your arms gradually until you have reached the proper position.

Strive to lean your shoulders forward until your hands are just in front of your hips, all the while maintaining your wide hand placement. In reality, initially a lean of only an inch or so will have you desperately struggling not to fall unto your face. The goal during this movement is to maintain this forward lean with the hands just in front of the hips and a tight hollow body position at all times. Now maintaining this wide arm position and forward lean, perform a pushup.

Do not allow the shoulders to drift backwards during the ascent. As with XR PPP, this can be remedied by placing a chalk mark directly under your face in the beginning of the movement and then maintaining that position over the

mark throughout all of the repetitions.

Do not arch or sag during this movement. My personal preference when performing these is for toes curled under rather than pointed.



Difficulty rating:

Pushups - XR PMP plus

Remember that the primary difference between these and the XR PPP plus is the angle of the arms to the torso. Both variations are performed with the hands back near the hips, however the XR PMP plus are done with the arms spread out at approximately a **45°** angle to the torso. This is however a small difference that causes a giant leap in intensity.

If you are not yet strong enough to smoothly lift your feet up, remember that vou may utilize a slight rocking motion until such strength is developed.

Difficulty rating:

Pushups - wall planche

This is a challenging variation to rate in terms of difficulty as it is quite easy to perform this movement incorrectly and subsequently greatly lessen both its intensity and effectiveness. When performed incorrectly (i.e. shoulders behind the hands), in terms of difficulty the wall planche pushup should actually be listed just after regular pushups on the floor. However when performed correctly, it is more difficult than all but a few variations.

For maximum benefit when performing a wall planche pushup, the shoulders must at all times remain in front of the hands. At no point during a wall planche pushup may the shoulders drift back either over or behind the hands. Ultimately your goal is to lean so far forward (and to remain there during the

entire repetition!) that your hands are just in front of your hips.

Simply lessening the pressure of the feet against the wall and thereby correspondingly reducing the amount of assistance provided easily mitigates the degree of assistance provided by the wall.

If you training situation allows it, it is also possible to perform these on the Xtreme Rings.

Difficulty rating:

Pushups - wall maltese

The same performance parameters of a wall planche pushup apply here with the addition that the arms will now be placed at a 45° angle to the body.

Do not allow the body to arch or sag during this movement.

Difficulty rating:

Pushups - planche

You could consider the planche pushup a super bench press or a full body press. If there is a part of the body that is not tense and under strain during these, I have yet to discover it. In addition to working the triceps, chest and front delts, you also have a full contraction of the lats, middle back and lower back as well as the traps. The triceps and the forearms are also working hard stabilizing the elbow joint. Core strength is extremely taxed as the upper and lower abs, obliques, serratus and hip flexors all struggle to maintain the elevated body position.

The description of a planche push-up is fairly straightforward; while in the planche position of your choice, simply attempt to perform a pushup. To receive the full benefits of this exercise, be sure (or at least try!) to maintain the hips level with the shoulders during the descent and ascent of this movement; be aware that it will be quite a struggle to do so. Don't forget to fully straighten the elbows at the top of the movement.

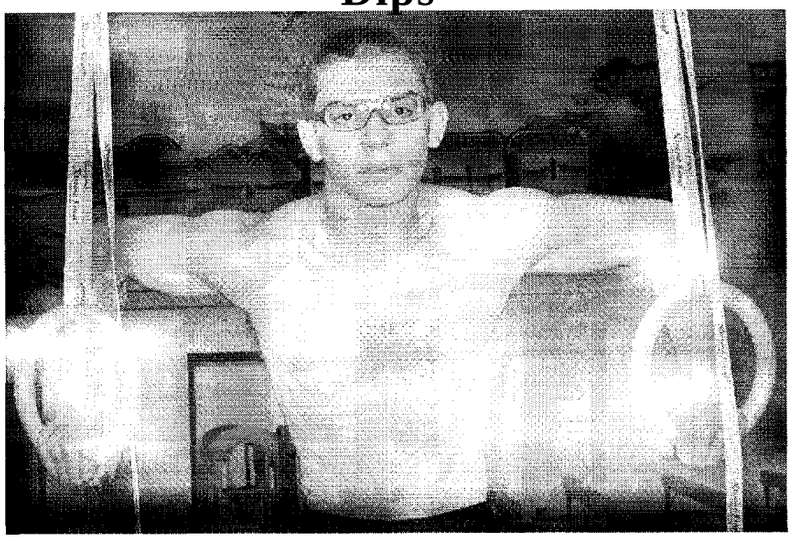
If hand spotting this element, be sure to hold the athlete at the waist. Do not spot by holding the legs, as this removes the stress from the lower-back which is one of the primary areas which we are attempting to condition with this movement.

Also notice the degree of forward lean; he is leaning so far forward that his hands are nearly in line with his hips. This establishing of the correct balance is a key component for the correct execution of planche pushups and other planche skill variations.

Planche pushups may be performed in a tuck, advanced tuck, straddle, 1/2 lay or even a straight body position. In addition, they may also be performed on the Xtreme Rings. On the rings, they will, however, be tremendously more difficult as during the ascent, due to the instability of the rings, the arms will have a tendency to attempt to pull inward making it very difficult to attain a completely locked horizontal planche position; regardless of the body position being used.

Difficulty rating:

Dips



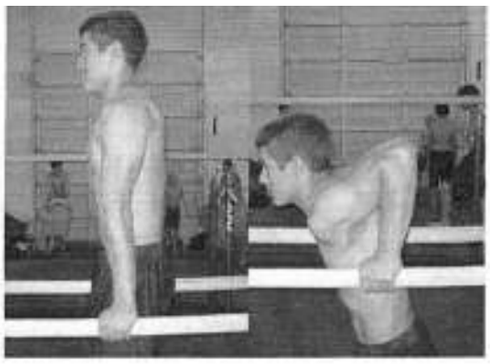
Many notable trainers consider the dip to be the equivalent of an upper body squat. For my athletes, dips are an essential movement and work an incredible range of the upper body from the triceps to the shoulders to the traps.

If this is your first exposure to gymnastics style full range of motion dips, proceed patiently on expanding your range of motion. Rest assured that there is absolutely nothing wrong with exercising the joints of a normal healthy body throughout their normal range of motion. If however, you have been inactive for some time or exercising with an artificially limited range of motion, it will be necessary to ***gradually*** extend that range of motion under stress (i.e. the weight of your body). For athletes with flexibility issues preventing the pain-free use of this excellent exercise, my active flexibility program for the shoulder girdle as presented in Liquid Steel will aid greatly in alleviating this problem.

Dip Variations

Dips - PB negative

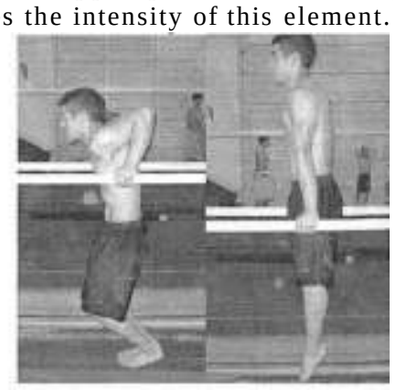
Assume on straight-arm support position and then, as slowly as possible, lower to a bent-arm support position.



Difficulty rating:

Dips - PB jumping

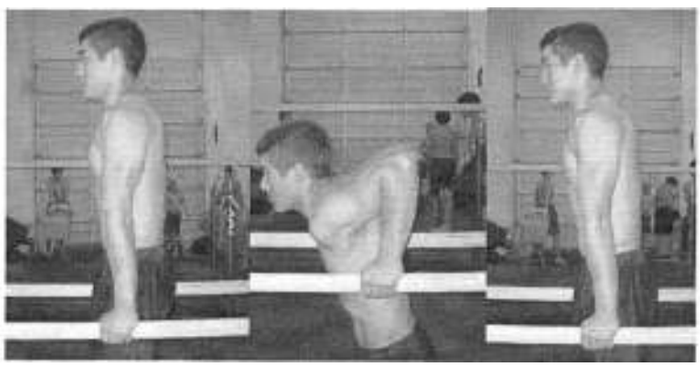
Set up the height of the parallel bars or dipping station so that at the bottom of the dip position your feet are in contact with the floor with enough knee bend to allow a jump back up to the support position. Decreasing the assistance of the jump easily increases the intensity of this element.



Difficulty rating:

Dips - PB

A full dip is one in which the shoulders are lowered to the hands. These may also be done with added weight via a dipping belt, weighted vest or ankle strap.



Difficulty rating: 

Dips - PB Russian

To execute this drill will require either extended bars on your dipping station or a set of parallel bars. Be careful not to dip too low during the upper arm support and exceed your current level of flexibility as you may injure yourself by overstretching your sternum.

You will probably find that initially the underside of your upper arms are extremely tender and will make this exercise most uncomfortable. Do not worry; the excessive sensitivity will soon pass and may be alleviated in the meantime by the use of knee pads at first, followed by wrist bands and finally you will discover that nothing at all is required to be comfortable while performing this exercise.

Initially it is fine to train these in a fashion similar to the jumping dips so that the legs provide assistance as needed. Strive to use as little assistance from the legs as possible. From the jumping variation progress to using momentum to carry you from the upper arm position back to the bent-arm support position. Once you have mastered using momentum to complete the movement, then you may finally move on to performing this exercise deliberately and slowly without excessive bounce or speed.

As a side note, Russian dips are excellent preparation for the rigors of the transition phase of muscle-ups. For extensive information on the development of muscle-ups, see the section on Combined Pull/Press exercises.

Difficulty rating: 

Dips - PB Russian L

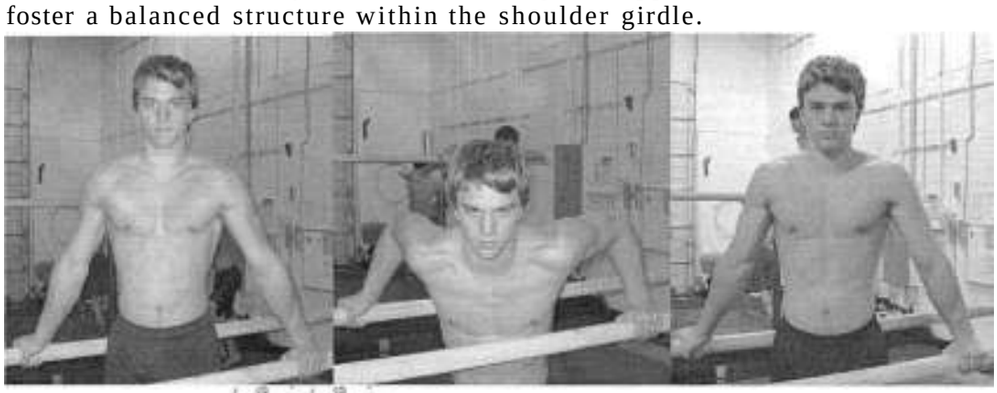
Perform these as regular Russian dips, however the addition of the L-sit makes them a great deal more difficult. Do not be overly concerned about your inability to maintain a horizontal L-sit during this movement. This is a natural consequence of the nature of the movement.

Difficulty rating:

Dips - PB Bulgarian

To establish the correct position for a Bulgarian dip (so called because it was taught to me by my friend Krasimir Dounev of Bulgaria, the 1996 Olympic Silver Medalist on High Bar), begin by sitting on a single rail of the parallel bars. Take the left hand and place it next to the left hip in an under-grip position. Maintaining your natural shoulder width distance and keeping your torso parallel to the rails, reach directly across to the other bar with your right hand and grasp it with an over-grip. Now simply slide your rear off of the rail into a support position. You will find that your body automatically turns to a 45° angle. Perform the desired repetitions.

On the next set, while getting into position, be sure to reverse the movements of the hands so that you are now facing the opposite direction. This is to foster a balanced structure within the shoulder girdle.



Difficulty rating:

Dips - single bar

Assume a front support position (hands in front of the body) on a single bar with hands approximately shoulder width apart. Do not lay on the bar with your stomach; your hips and abs may brush the bar lightly, but all weight should be born completely by your arms. Dip down as far as you are able, aiming to descend to the bottom of your sternum. Press back up to a support.

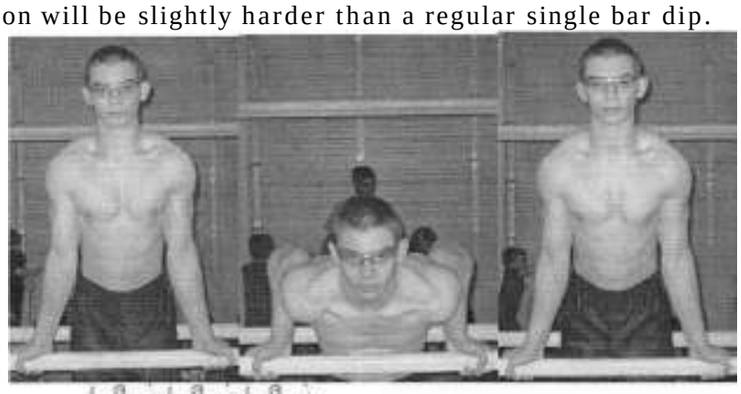
This movement is excellent for teaching how to remain upright during the dip. In addition, these single bar dip variations now allow dips to be trained

without a traditional dipping station. Single bar dips can be done anywhere that you have access to a single bar such as on a single rail of the parallel bars, on the top of a high bar, on a chinning bar, or even on the bar of a smith machine.

Difficulty rating:

Dips - single bar with under-grip

For this variation, simply turn the hands to an under-grip. For most people this variation will be slightly harder than a regular single bar dip.



Difficulty rating:

Dips - Korean

Assume a rear support position (hands behind the body) on a single bar. Do not allow yourself to sit on the bar. Perform a dip.

These are a wonderful movement and are especially useful in two ways;
1) The position of the body in front of the bar makes it impossible for the athlete to lean excessively forward without falling off. There is literally no escape from using correct technique during this movement.

2) It provides a substantial active flexibility element for the shoulder girdle.

This will be especially apparent with those athletes who are extremely strong due to tight shoulders.

With Korean dips, the body has a tendency for the legs to rotate back under the bar during the descent. This is natural and quite acceptable. During the ascent, strongly keep the hips pushed forward to assist the glutes in clearing the bar.

Difficulty rating:

Dips - Korean with under-grip
Utilizing the under-grip will once again make this variation slightly more difficult than regular Korean dips.

Difficulty rating:

XR support position
Although not technically a dip, XR support holds are a necessary first step for effectively training XR dips.

Basically a support hold is simply holding the body up on top of the rings with straight-arms. Eventually, to perform these in the most productive manner, they should be done with elbows straight (remember that almost straight is still bent) and the hands turned out to 45 degrees. To visualize this, simply put the hands overhead in a chin-up grip and, keeping that grip

position, lower the hands to the side and then let them turn in slightly.

Initially there will almost certainly be a great deal of shaking and instability during the support hold., especially with those who are new to strength training on the rings. This is a natural occurrence and will pass with continued training.

Dips - XR
Ring dips, correctly executed, are a very challenging movement. However the following tips will help to make their practice somewhat easier and more productive.

At first, you may find it necessary to keep the rings pulled in very close to your hips during the movement. Turning your thumbs inward will make the support position easier, however it will lead to the forearms rubbing on the straps as you may already have noticed. Also, at first you may find it very difficult to "lock out" or completely straighten the elbows at the top of the dip.

In time, as your strength develops, attempt to make the following modifications to the ring support position at the completion of the XR dip:

1) Completely lock & straighten the elbows at the top of the movement. This may be done while leaning forward and holding the rings very tightly into the sides, but must be accomplished before attempting to move on the next improvements.

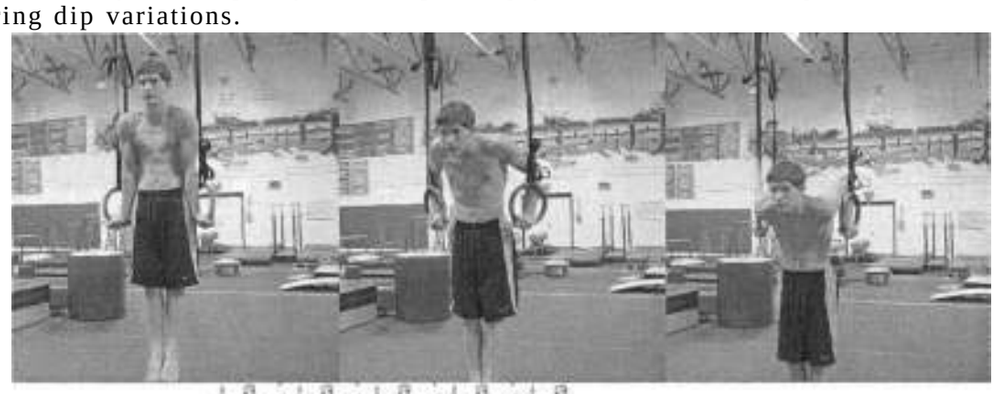
2) Sit up straight with no forward leaning or pike in the hips. Do not "hunch"; shoulders should be pulled back, with the back flat and the chest slightly pushed forward.

3) Rotate your thumbs outward so that the inside-bend of your elbow is partially pointing forward. This will be by far the hardest modification to make as it takes the assistance provided by leaning on the straps away, but it will greatly improve your ring strength and balance.

4) Push the rings farther out from your body so that your arms can no longer

"lay" on your lats. This will also greatly increase the difficulty of this position, but is a necessary strength development prior to successfully working the iron cross as is detailed in All Muscle, No Iron.

For those continuing to experience trouble with XR dips, and in this category I would place anyone who cannot perform a ring dip and turn the hands out as described above after a reasonable period of time, back up and again work on static support holds or at least be sure to work on them concurrently with the XR dips. Unless you can come close to achieving a correct static hold, you will find that you are pretty much spinning your wheels working on the harder ring dip variations.



Difficulty rating:

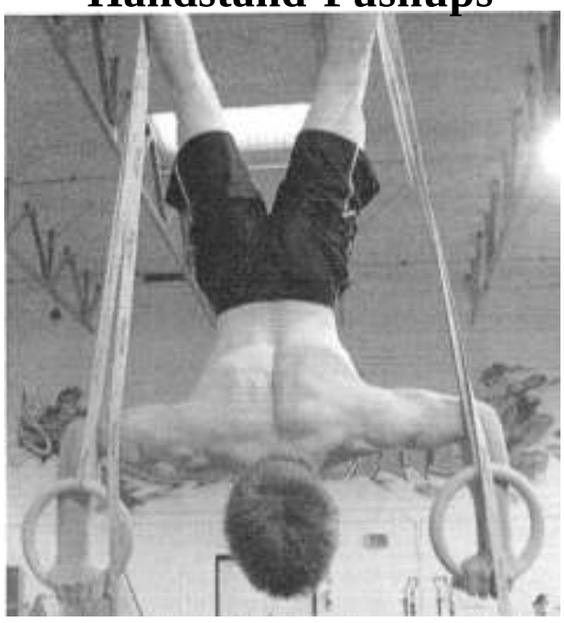
Dips - XR Bulgarian

Start with a regular support position on the rings. As you lower, push the rings as wide out to the sides as you feel comfortable (the wider the better to help prepare the shoulder girdle and arms for the rigors of iron cross training later). To facilitate the wide arm position, during the descent allow the thumbs to rotate inward toward the torso and the elbows to press outward.

Your ultimate goal with this movement is to be able to lower to a 90° bend in both the elbows and the shoulders. In addition, both the elbows and the shoulders should remain in line with each other in the same vertical plane of movement.

Difficulty rating:

Handstand Pushups



Handstand pushups build tremendous physical power, unfortunately most people merely dabble with this movement due to its extremely challenging nature. However, for those few who persevere, the benefits are both deep and widely applicable to an incredible range of athletic activities.

The vast majority of non-gymnasts confuse a headstand pushup (HeSPU) with a true handstand pushup (HSPU). The confusion is quite understandable as the two movements are identical except for the range of movement (ROM) involved. A headstand pushup begins or ends either with the head in contact with the floor or when the hands in line with the top of the head. In a true HSPU, the ROM will require the hands to lower all of the way to the shoulders. Thus a HeSPU is in actuality only a partial range HSPU. It should be clearly understood that a HSPU is several orders of magnitude more difficult than a HeSPU.

It is also important to note that all HeSPU and HSPU work should be done with hands approximately shoulder width apart, as this is the distance that our freestanding handstand work will be done with. Yes, it is noted that many people initially find it much easier to perform HeSPUs with hands wider, sometimes much wider, than shoulder width and often this excessively wide stance is all that allows them to complete even a single repetition. However, it should be recognized that this is only a short-term concession to necessity and all efforts should be made to narrow the stance of the arms to their normal width for a freestanding handstand as soon as possible.

HSPU Variations

HeSPU - box
Done correctly, this is a very beneficial variation that allows the development of a headstand pushup without immediately being exposed to the rigors of full bodyweight.

Elevate your feet on a box of such a height that your feet are horizontal with your hips when your hips are piked 90 degrees and your arms are completely straight. At the same time, the hips should also be directly over the shoulders. Now simply lower down and touch the head to the ground for the desired number of repetitions.

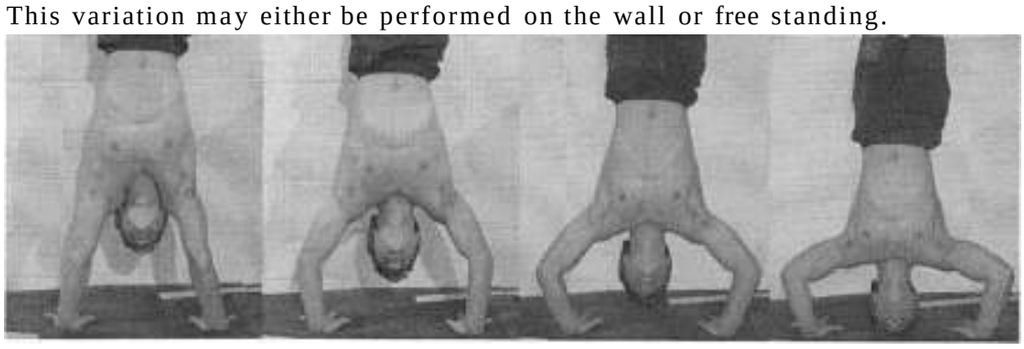
Do not allow the shoulders to "scoot" forward in front of the hands during the Ascent, but maintain their position over the hands at all times. Also, the head should remain between the arms during the entire movement. The easiest way to maintain this "neutral" head position, is to keep the ears next to the arms.

Difficulty rating:

HeSPU - negative
More people have probably employed this drill to develop a headstand pushup (HeSPU) than with any other. It is extremely simple and yet quite effective.

From a handstand, simply lower your head to the ground. Attempt to lower slowly and with control. The slower the negative, the greater the strength required. Upon reaching the ground, stand and kick back to the wall handstand for the next repetition.

This variation may either be performed on the wall or free standing.

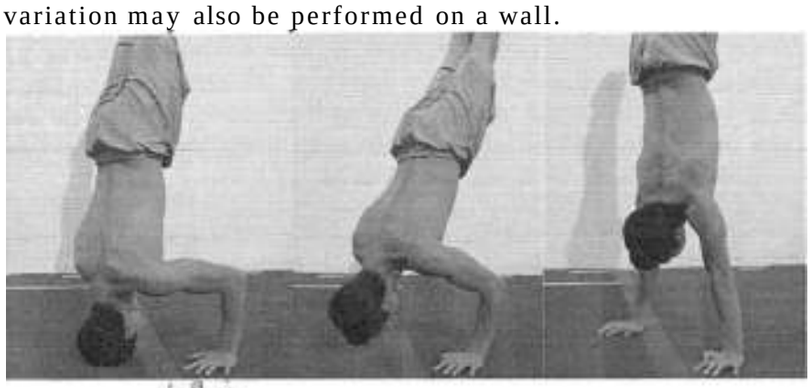


Difficulty rating: 

HeSPU

This variation of HeSPU only requires enough balance for a controlled ascent, a controlled descent is not required. At the top of the movement, you may roll out, pirouette or step down. Kick back up into another headstand and continue for the desired number of repetitions.

This variation may also be performed on a wall.



Difficulty rating: 

HeSPU - elevated

Up until now, the focus has been on developing enough strength and stability to safely and competently perform headstand pushups. Now it is time to begin develop true HSPU strength over a full range of motion. Increasing the range of motion (ROM) of the HeSPU by only a few inches will result in a substantially more difficult movement. Using a panel mat or series of books will gradually allow the development of the HSPU ROM from a HeSPU rep to the full rep HSPU.

Typically, I prefer to gradually and comfortably increase the range of motion on this exercise. Find the range of motion at which you are currently comfortable, and then seek to increase that by one inch each month.

These may be done either on the wall or free balancing.

Difficulty rating:

HSPU - Korean
With a normal shoulder width grip, kick up into a normal handstand on a single bar. Descend into a full ROM HSPU with the shoulders lowering completely to the hands. Press back to HS.

These may be done either on the wall or with the assistance of a partner. If you have the advantage of assistance from a partner, the partner spotting at the hips rather than the legs will assist in learning to balance better during the HSPU.

Also it should be clearly remembered that the purpose of a spotter is to provide just enough help to make the repetition barely possible, not to carry you through the movement. Over-assisting, while an often pleasant respite in the middle of a difficult workout, will in the long term completely derail your strength training program.

Difficulty rating:

HSPU - Korean with under-grip
With the exception of now utilizing an under-grip, perform as a standard Korean HSPU.

These may be done either on the wall or with the assistance of a partner.

Difficulty rating:

HSPU - PB Bulgarian

These are the HSPU variation of Bulgarian Dips. Begin facing both bars from the side. Maintaining your shoulder width, reach your left hand forward and grasp the far bar in an over-grip. Position your right hand on the near bar in an under-grip. Now kick up to HS with the assistance of your partner. If you have positioned your hands correctly, you will find yourself in a HS that is 45° offset from being parallel to the bars.

Descend into the HSPU allowing the elbows to flare out to the sides. Pause at the bottom and then press back out to a HS. Perform for the desired number of repetitions.

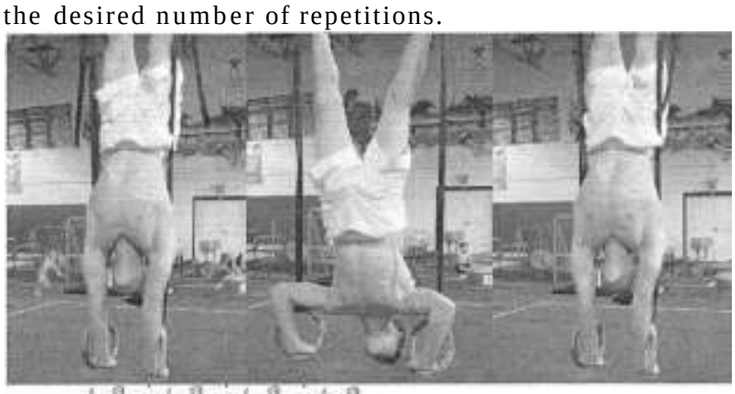
Difficulty rating:

HSPU - XR using straps

Initially it will be quite helpful to perform these with the Xtreme Rings adjusted quite low to the ground. This will make it much easier for you to jump up to HS rather than having to press up into the HS. Straddle your legs during the jump, so that your legs will contact the straps upon arriving in the HS position. Maintain your balance by gently wrapping your feet around the straps. Do not wrap your feet around the straps too tightly, as this will make sliding up and down the straps during the HSPU more difficult.

To perform the strap XR HSPU, begin from a locked arm HS with the rings turned outward. If this turnout has been correctly executed, the forearms will

be clear of the straps. Descend into a HSPU (allowing your feet to slide down the straps with you as your upper body descends), pause and then press back out to HS. The rings may turn inward somewhat during the descent and ascent, but should turn outward once more upon the arrival back to HS. Repeat for the desired number of repetitions.



Difficulty rating:

HSPU - XR Bulgarian using straps

From a regular handstand support, allow your arms to go out as wide as comfortable as you lower to the bottom of the HSPU. As you press back to handstand pull the rings back in to the starting position.

Difficulty rating:

HSPU - **PB**

Coach Mako Sakamoto (former 1960s US national Champ and personal coach of Olympic Gold Medalist Peter Vidmar) set his record of 163 consecutive (full range of motion, free balancing on the parallel bars) handstand pushups when he was 50 years old. No, he is not a genetic mutant; I have spoken about this extensively with Coach Sakamoto. What he is consistent. With daily training, he increased his HSPUs from 19 reps at 38 years old to those superhuman 163 reps at 50. Today at 60+, he continues to train every morning and can still perform 75 HSPUs easily.

HSPUs are really an incredible exercise; they build amazing strength and are easy to do just about anywhere.

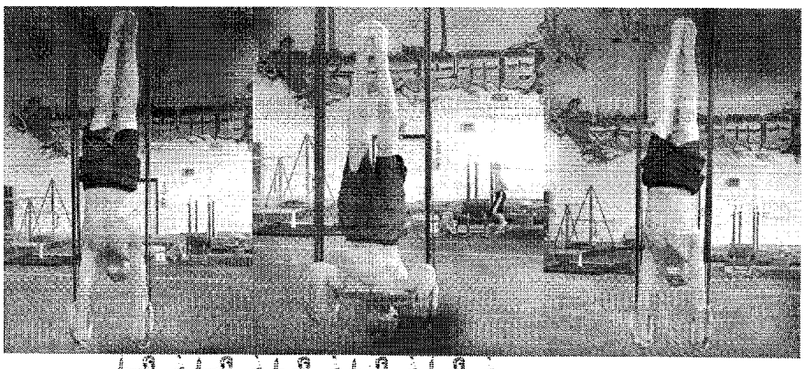
Begin from a freestanding HS on the parallel bars or parallets. As you descend into the HSPU, it is most helpful to allow the shoulders to move slightly forward while allowing the legs to drop slightly behind you. This adjustment in position will greatly aid in maintaining your balance. Pause at the bottom and then press back up to HS, pulling the shoulders and legs back into line as you ascend.

Difficulty rating:

HSPU - **XR**

Now in addition the body being unsupported as in PB HSPUs, the intensity of the HSPUs is exponentially more difficult due to the completely unstable nature of the rings themselves.

Begin from a freestanding HS on the Xtreme Rings. The rings should be turned outward with the straps clear of the forearms while in the HS. Descend into the HSPU allowing the rings to turn somewhat inward as necessary. Pause at the bottom and then press back up to HS. Remember that this is a freestanding HSPU; at no time should the legs come into contact with the straps.



Difficulty rating:

Multi-plane Pressing

These are pressing movements that deviate from the traditional up, down and horizontal pressing classifications; but contain at least two of these directions and sometimes all three! As such they are especially beneficial for developing a heightened sense of kinesthetic awareness and coordinated power.

Multi-plane pressing (MPPr) movements are remarkable exercises and are especially effective for opening the chest and upper back on those who have had their normal range of motion severely curtailed from years of over-emphasis on the bench press. Essentially they build balance, agility, active flexibility and strength - all simultaneously.

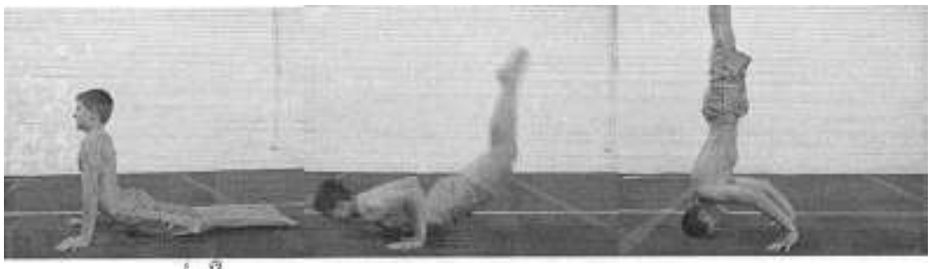
The following multi-plane pressing variations will only be demonstrated on either the floor or the parallel bars. However very advanced athletes may also perform many of the following variations on the Xtreme Rings. Where deemed appropriate, specific guidelines for performing an element on the Xtreme Rings will be provided. It should be noted however that the instability inherent in ring work will make performing any of these variations on the Xtreme Rings especially demanding and possible for only a very small minority of gymnastics strength athletes.

MPPr Variations

Chest roll - HeS

Technically these chest roll progressions, as well as the forthcoming Bower progressions, are press handstand variations and should not be included in this volume. However due to the bent arm nature of these movements and their propensity for building a high level of bent-arm pressing strength, I have decided to include them here. They are also quite fun to work and are a fitting introduction to some of the more difficult variations that you will be exposed to in other Gymnastic Bodies volumes.

Begin from an arched front support. Now forcefully and which as much speed as you can muster, roll down your body and up onto your chest while pressing up just enough to make it to a headstand. Pause in the headstand, then press your head up slightly and roll back down to the arched front support position.



Difficulty rating:

Chest roll - HeSPU pause
For this variation, after arrival in the HeS (headstand) press on upward into a full HS (handstand). From the HS either lower back to a HeS prior to the roll down to support or lower directly to the roll from HS.

It is not unusual for it to take quite some time to become comfortable exerting force while moving through these positions. At first you will be convinced that you have rolled to an inverted position, when in reality you are probably only a little above horizontal.

Difficulty rating:

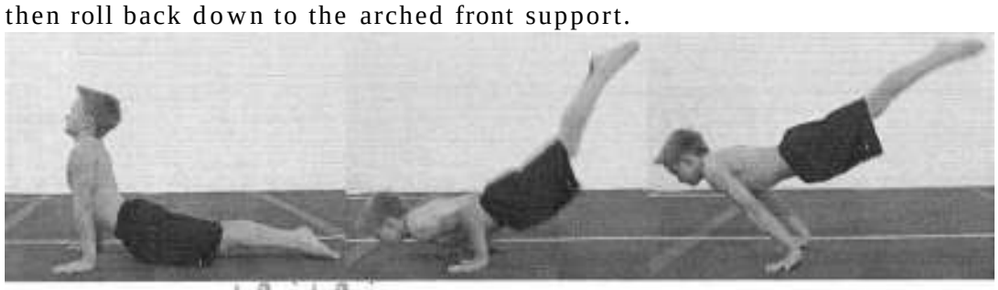
Chest roll - HeSPU
After initiating the chest roll, now press directly up to a HS without the intermediate step of stopping in the headstand.

Initially it will be necessary to perform this movement with a big roll and a lot of speed. During the ascent of the HeSPU, it will aid greatly to think of pulling the shoulders under the hips as the arms are extending. As your strength continues to improve, focus on gradually reducing the size and speed of the chest roll to HS.

Difficulty rating: 

Chest roll - planche

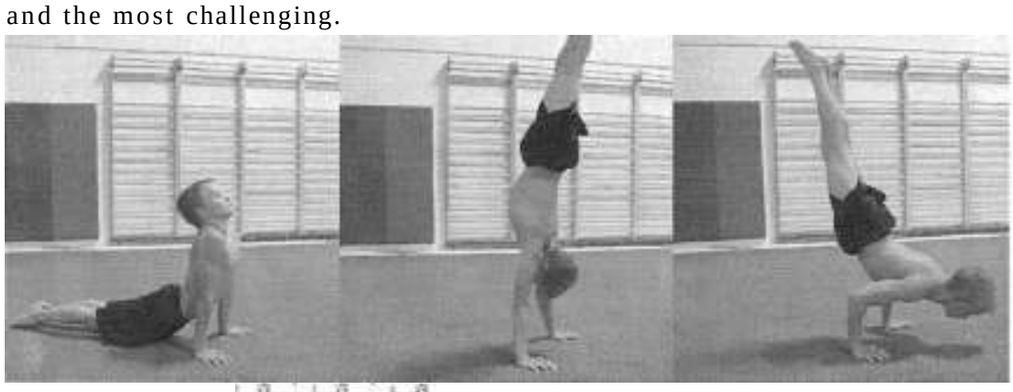
Even though the momentum of the roll will be enormously helpful, it will still be necessary to correctly lean forward and extend the arms fully in order to successfully reach the planche position. Attempt to pause in the planche and then roll back down to the arched front support.



Difficulty rating: 

Chest roll - HeSPU with negative

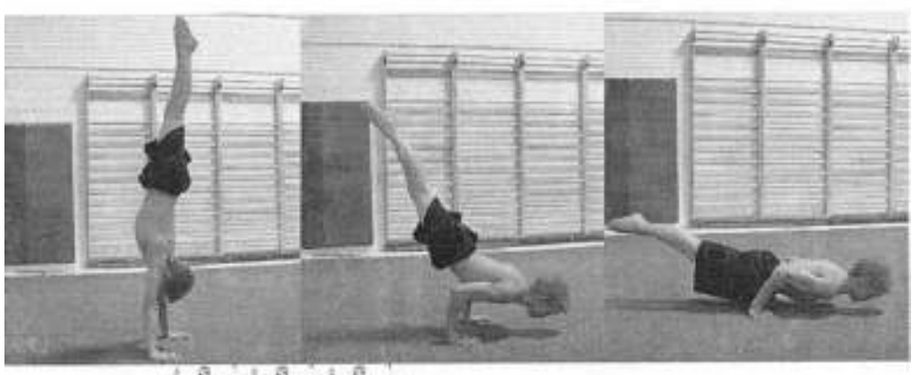
For this variation, now fight to lower as slowly as possible during the descent from the HS back to the arched front support. Be especially vigilant to fight to move slowly during the bottom of the movement when the load is greatest and the most challenging.



Difficulty rating: 

Chest roll - **HeSPU with negative & static**

Once you have achieved the ability to roll to handstand and descend with a slow negative, now attempt to maintain a static hold at the bottom, of the descent. From this point on it is only a small step forward to achieving a true hollow back press.

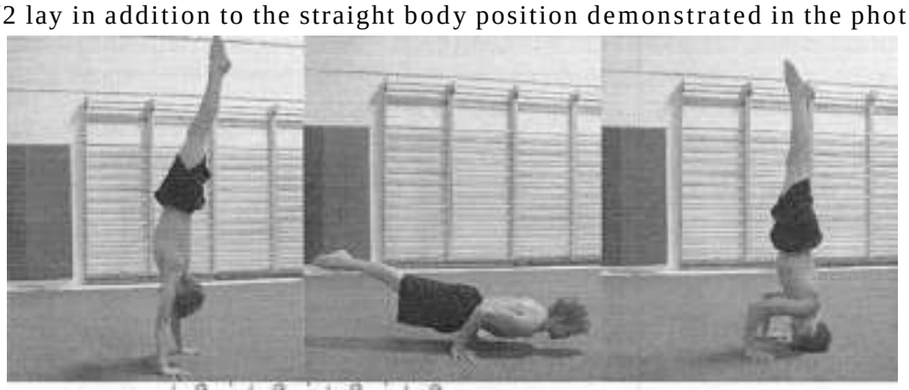


Difficulty rating:

Bowers - half

Begin from a handstand and then lower slowly with control to a bent-arm planche bottom static hold. After the static hold, strongly pull the heels upward with the back and hamstrings while pressing upward with the arms to a headstand.

This movement may also be performed with a tuck, advanced tuck, straddle or 1/2 lay in addition to the straight body position demonstrated in the photos.



Difficulty rating:

Bowers

Bowers are not quite a traditional hollowback press handstand as the lower portion of the movement never goes past horizontal.

Note: If a freestanding handstand is currently beyond your capabilities, you may want to hold off on the development of this skill.

From a handstand, lower the body to a 90° bent-arm planche hold with a tightly arched body and then press back to a handstand. The slight arch will enable you to keep your heels above your head at the bottom of the movement, which in turn somewhat lessens the difficulty of the ascent.

Beginning from a handstand, slowly lower down to just above the floor. During the descent it is critical to gradually press the shoulders well forward of the hands in order to maintain balance. Once at the bottom, the entire shoulder girdle, back and glutes will naturally contract quite strongly while you struggle to hold the static position.

In order to return back to handstand, focus on pulling the shoulders under the hips as you press back up to handstand. Progress will be most rapid if an assistant is present to gently assist you to struggle through sticking points. However a caveat is necessary here; over-spotting or providing too much assistance will drastically curtail your strength gains. It is extremely important that the hand spot provide just barely enough assistance to complete the movement.

These may be performed on either the floor or on parallets while in a tuck, advanced tuck, straddle, 1/2 lay or layout position; although you will find that the tuck and advanced tucks are awkward to perform on the floor.

Very advanced athletes may also perform these on the Xtreme Rings. It should be noted however that the instability inherent in ring work would make any of the Bower variations performed on the Xtreme Rings especially demanding.

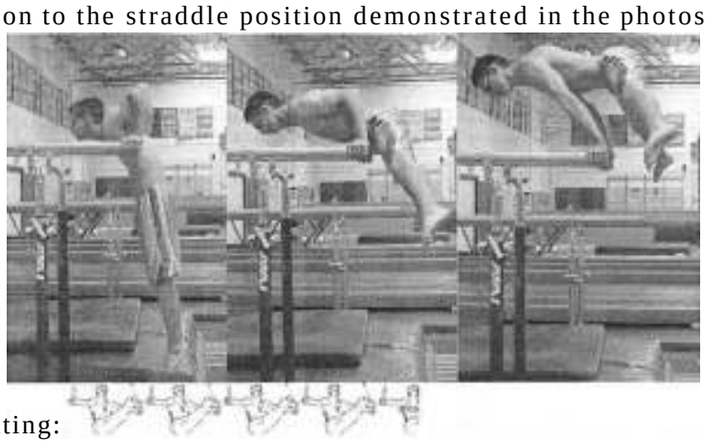
Difficulty rating:

Dips - planche

So simple to describe and yet so incredibly difficult to execute, planche dips begin from the bottom-most portion of a standard dip and then press upward to a planche. Pause in the planche and then return to the bent arm support. Repeat for the desired number of repetitions.

Notice the strong lean forward during the ascent that is necessary to maintain the balance of the planche. This changes the dynamics of the dipping motion drastically and greatly intensifies the challenge of this movement. In addition, it will require a great deal of strength to completely straighten the elbows upon arrival at the planche position.

This movement may also be performed with a tuck, advanced tuck, 1/2 lay or lay in addition to the straddle position demonstrated in the photos.



Difficulty rating:

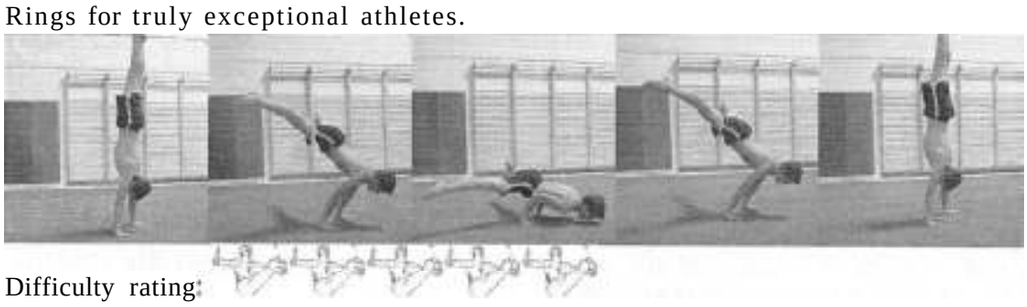
Erbs

Beginning from a handstand, lower to a planche. On reaching the planche position, perform a planche pushup. Be sure to maintain the same body angle during the planche pushup that was present in the static planche. Upon finishing the planche pushup and once again reaching the planche, planche press back to handstand.

Initially there are several modifications that can be made to mitigate the severity of this movement. First, you may choose the position that you will utilize during the movement; choose from adv tuck, straddle, 1/2 lay or lay. Second, it is not necessary to initially lower all the way to horizontal on the planche. That is certainly your ultimate goal, however it may not yet be practical. Lower to whatever degree of planche you are currently comfortable with. Simply be sure to maintain this angle of planche during the descent and ascent of the planche pushup.

Remember that this is not a Bower, the planche pushup should maintain the angle of the preceding planche at all times and should not finish in a handstand, but back in to static planche.

These may be performed on the floor, on parallets or even on the Xtreme Rings for truly exceptional athletes.

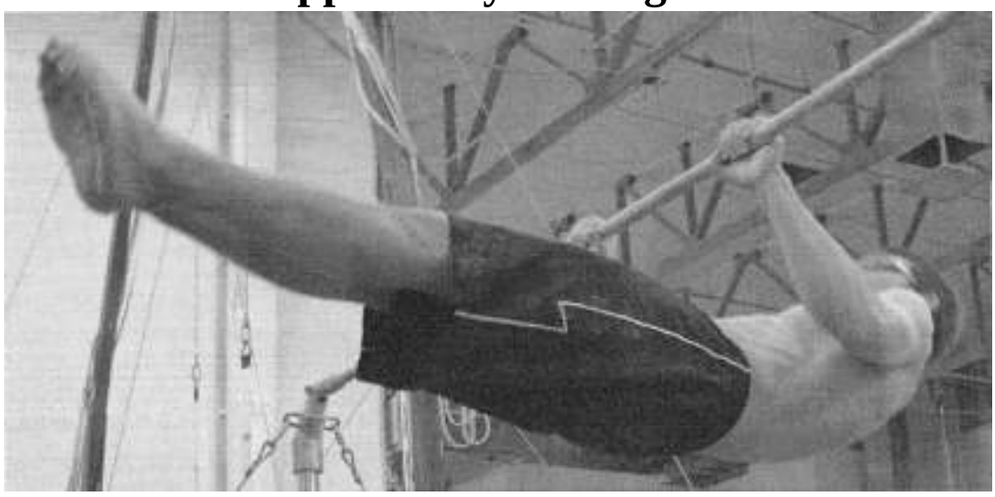


Difficulty rating:

CHAPTER SIX

Upper Body Pulling

Upper Body Pulling



Rphysical preparation of the shoulder girdle. Unfortunately it is also a critical element in maintaining correct strength balance within the shoulder and so neglect of this movement often causes significant shoulder issues after years of higher level training right when a gymnast is becoming exceptional strong (planche and maltese on the still rings etc.).

Row Variations

Rows - XR ground

This exercise is simplicity itself. Adjust the height of the Xtreme Rings so that your glutes and back are just up off of the ground while hanging with the arms fully extended. Pull upward until your hands reach the shoulders. Focus on keeping the back flat as you pull.

If necessary, the intensity of this movement can be reduced by moving your feet closer to the rings.

Difficulty rating:

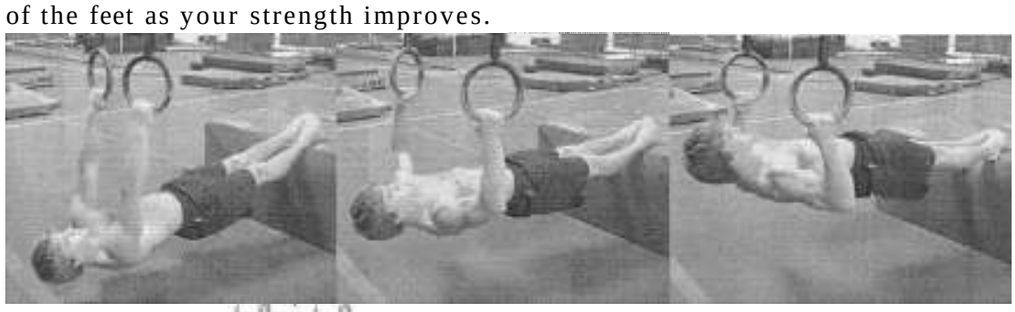
Rows - XR elevated

The intensity this row variation can be increased by elevating the height of your feet. Initially begin with the feet just off of the ground and gradually increase that height over time until the feet are supported at ring height.

Difficulty rating:

Rows - XR Bulgarian
Start from a hang with a regular width grip, as you pull to the top of the movement pull your arms as far apart as is comfortable. As with the other foot supported row variations, remember to keep the back flat at all times.

Begin with the feet placed low on these and then gradually increase the height of the feet as your strength improves.



Difficulty rating:

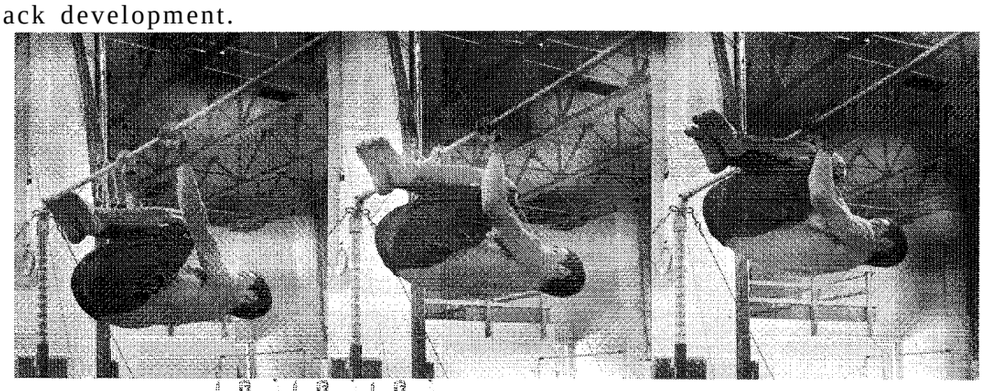
Front Lever Rows - tuck
Begin from a tuck front lever position. While maintaining a horizontal lever position, pull your shins to your hands. Lower back to the tuck front lever without allowing your body to tilt. Repeat for the desired number of repetitions.

Performing these on the Xtreme Rings, rather than a single bar, will allow a greater range of motion but will also incur less stability and make the rowing motion slightly more difficult.

Difficulty rating: 

Front Lever Rows - flat tuck

From a flat tuck front lever you may now attempt to pull yourself up. Basically this is a horizontal pull-up. It is incredibly difficult to hold the hip level with the shoulders during the pull. As you pull up, your hips will want to drop down and as you lower, your hips will want to stay elevated. These changes occur as your body struggles to find an easier way to complete the movement. Maintaining the horizontal position here is the key for exceptional back development.



Difficulty rating: 

Front Lever Rows - straddle

Straddle front lever pull-ups are essentially a full body weight row and will make you incredibly sore from head to toe. Do not attempt this movement until you are proficient at both the static straddle front lever and the flat tuck front lever rows. Doing so anyway will not injure you, you simply will not be strong enough to complete the exercise correctly.

This movement is an especially good overall conditioner for the back, as this one exercise alone will work the back completely from the traps to the lats to the mid back down to and including the lower back. Biceps, forearms and shoulders are obviously also heavily worked. Core strength is once again

extremely taxed as the entire mid section struggles to maintain the stretched (body) position.

From the straddle front lever position, begin to pull your upper stomach to your hands. Be careful to keep the hips level with the shoulders as you rise, as it is very easy to simply let the hips and legs drag and turn this movement into a simple pull-up. Pause at the top and extend back down to the straddle front lever.

Difficulty rating:

Front Lever Rows - half

Bringing the knees together to a half lay position will significantly increase the load on the lower back in this variation. Initially you will almost certainly find that it is necessary to allow a degree of pike in the hips in order to complete even a single repetition of this movement. As your strength progresses, continue extending the hips until you are able to perform half front lever rows with a completely straight and extended body.

Difficulty rating:

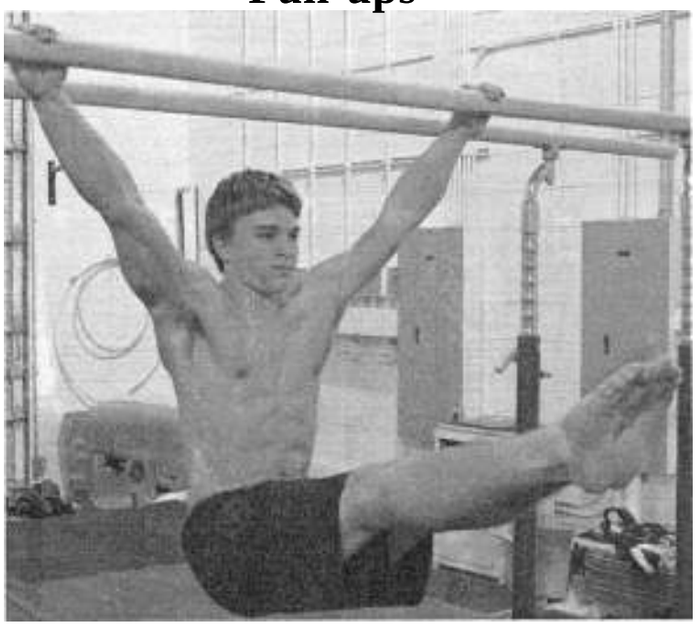
Front Lever Rows

Brutal. These are simply brutal and an incredible demonstration of core strength coupled with exceptional pulling power. This variation will remain out of reach for all but the strongest and most dedicated of athletes.

Focusing on pressing the shoulders strongly backward while you pull upward will help to at least minutely relieve some of the tremendous strain generated by this exceptional movement.

Difficulty rating:

Pull-ups



Pull-ups are a staple in most serious conditioning programs, and gymnastics training, with its supreme emphasis on high levels of relative strength, is certainly no exception. Most gymnastics training exercises and skills on the equipment utilize a pronated or over-hand grip; as such, in this section we will primarily focus primarily on developing pull-up variations. As you will see shortly, I prefer to focus on pull-up variations that emphasize a great deal of core strength.

Besides their effectiveness at building basic strength, I have also found that wide arm pull-up variations are also especially helpful in helping to prepare the shoulder girdle for the advanced ring strength elements that will be forthcoming after an adequate foundation of basic strength has been established.

Pull-up Variations

Pull-ups - negative

Adjust the height of your Xtreme Rings or single bar so that you are able to place your chin over your hands while in a standing position. Remove your feet from the ground and attempt to lower as slowly as possible down to a straight arm hang bending your knees as necessary to avoid contact with the ground. Return back to a stand and repeat for the desired number of repetitions.

I have found that negative pull-ups are most productive when first prefaced with a 5 second static hold at the top of the pull-up.

Difficulty rating:

Pull-ups - jumping

Adjusting the height of the bar or rings being used can easily control the intensity of this element, which in turn regulates the amount of assistance provided by the jump.

Generally jumping pull-ups will begin with the Xtreme Rings or a bar set at less than arm's length overhead. To continue to increase the difficulty of this movement, increase the height of the rings or bar overhead while in the standing position. Once the athlete becomes strong enough to perform **5** repetitions of this movement with the rings or bar set at or slightly above arm's length overhead, for the purposes of Basic Strength, it is time to discontinue this movement and move forward to the next variation.

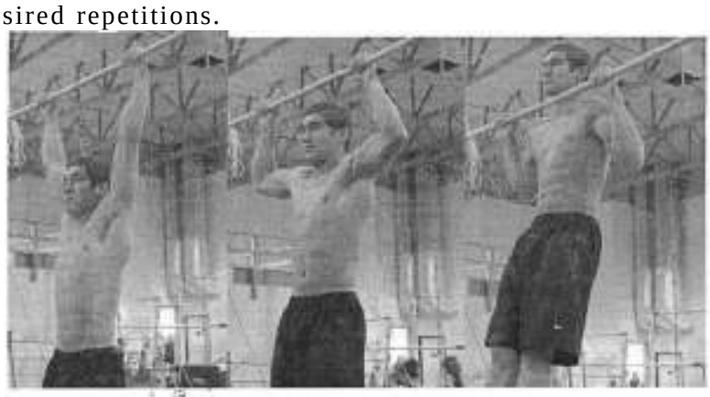
Difficulty rating:

Pull-ups

These may be performed on a single bar or on the Xtreme Rings. The Xtreme Rings are especially comfortable as they allow the grip to rotate naturally during the movement.

Begin from a straight-arm hang position. If using a single bar, adjust your grip so that your hands are approximately shoulder width apart. Smoothly

pull your chin up over the bar or rings and then return to a hang. Repeat for the desired repetitions.



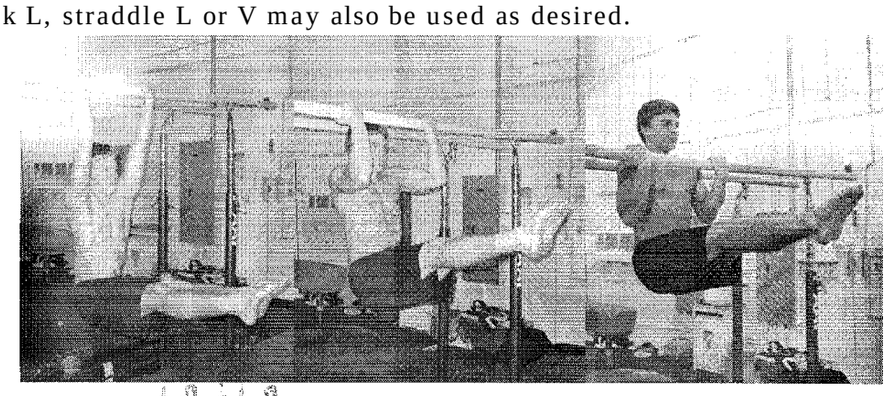
Difficulty rating:

Chin-ups - L

Adding an L sit makes chin-ups significantly harder. In fact, the difference is so staggering for some that they are unable to complete a single repetition, even when they are capable of a reasonable number of repetitions (3-5) on regular chin-ups.

Many people find L chin-ups easier to perform than L pull-ups. The under-grip of the chin-ups allows the shoulders to lean backward relieving some of the strain on the shoulder girdle during the ascent.

A tuck L, straddle L or V may also be used as desired.



Difficulty rating:

Pull-ups - L

Begin from an over-grip hang with the legs raised into a L-sit. Maintaining the L-sit, pull your chin strongly over the bar. Pause and return back to a straight-arm hang. The L-sit should remain horizontal at all times.

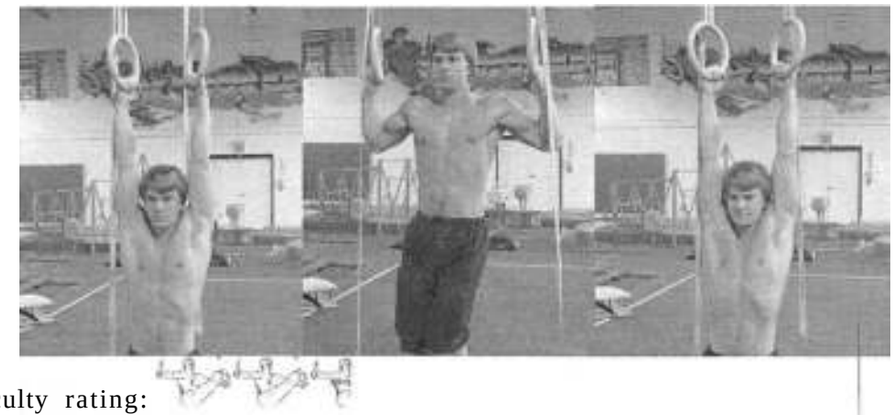
A tuck L, straddle L or V may also be used as desired.

Difficulty rating:

Pull-ups - XR Bulgarian
These are performed on the Xtreme Rings.

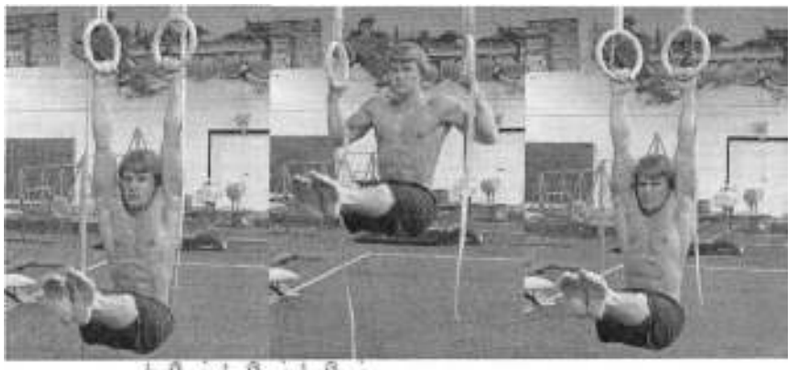
For XR Bulgarian pull-ups, start narrow and then go out very wide (as far as you feel comfortable) at the top of the repetition. Pause at the top and then, as you lower back down, simply allow the rings to come back in to their starting position. Keep the palms of the hands facing each other during the pull-up.

Focusing on simultaneously pulling the shoulder blades down and slightly back during the ascent, will make this is an excellent supplemental movement for iron cross training. At the top of the XR Bulgarian pull-ups, strive to have two 90° angles; one between the upper arm and torso and the other between the upper arm and the forearm. If you find yourself with less than a 90° angle between either the upper arm/forearm or the upper arm/torso; next repetition attempt to pull the rings even further apart at the top of the movement.



Difficulty rating:

Pull-ups - XR Bulgarian L
To execute XR Bulgarian L pull-ups simply add an L-sit to the movement. All other performance guidelines remain the same.

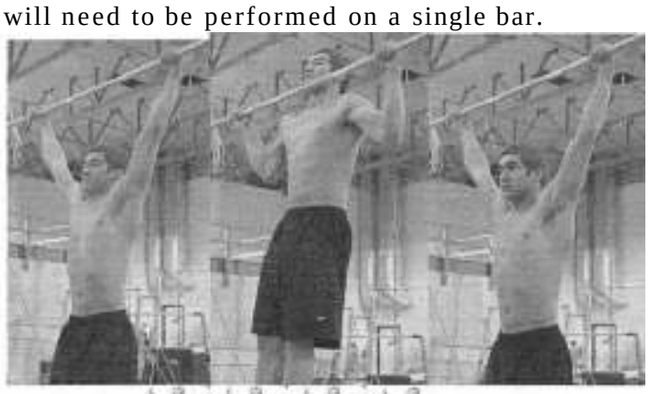


Difficulty rating:

Pull-ups - wide grip

Begin from a wide arm hang. To set your grip, use at least **1**.5 times your shoulder width up to double your shoulder width. Pull your chin strongly over the bar and then lower smoothly back to the wide arm hang. Focus on pulling back strongly with the elbows. Notice in the photos below that the elbows remain in line with the torso at the top of the movement.

These will need to be performed on a single bar.



Difficulty rating:

Pull-ups - wide grip behind

Many people will find that leaning back during wide arm pull-ups helps to relieve some of the tremendous pressure on the shoulder girdle. There is no such escape available with wide grip pull-ups to behind the neck.

Begin as with normal wide grip pull-up, however at the top of the movement attempt to pull the back of your neck to the bar. Attempt to pull so high that the base of your neck touches the bar.

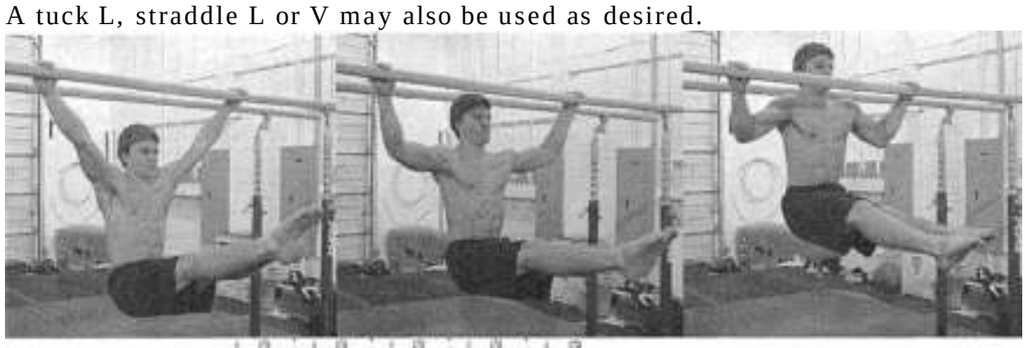
These will need to be performed on a single bar.

Difficulty rating:

Pull-ups - wide grip L

Eduardo Iarov (coach of the great Russian gymnast Valeri Luikin and current head coach of the Canadian Men's National Team program) prefers these for his athletes. He especially likes the training effect of the wide grip on the elbows and shoulder girdle as a preparatory training element for future iron cross work on the rings.

A tuck L, straddle L or V may also be used as desired.



Difficulty rating:

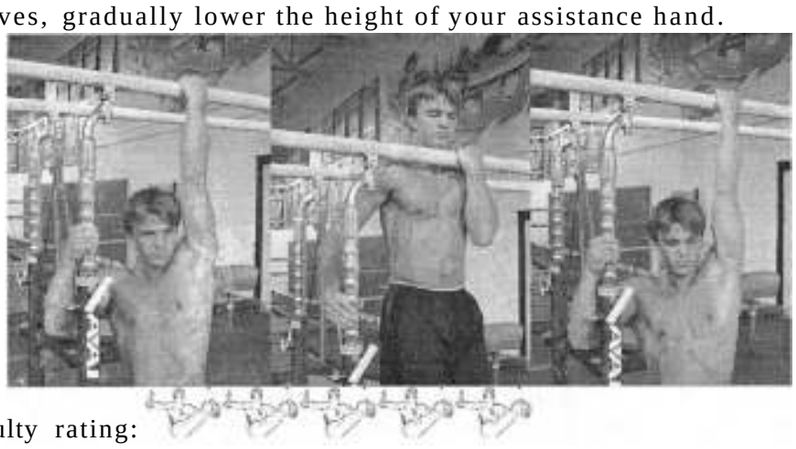
OAC - assisted

My preference for training assisted OACs is to use the side of the parallel bars; placing the chinning hand on the top rail and the assisting hand on the upright post. The upright post is especially helpful in ensuring progress, as it has graduated markings to measure your strength increases by. Depending on the style, a power rack may also be an acceptable training station.

For a right arm assisted OAC position yourself so that an upright post is next to your left shoulder and the rail is directly in front of you. I prefer to begin with the rail at head high and then perform the assisted OACs with my legs in a tuck position. Place the right hand on the top rail in an under-grip while placing the left hand on the upright post. I find a slightly narrower than shoulder width grip most comfortable, but experiment yourself to find your

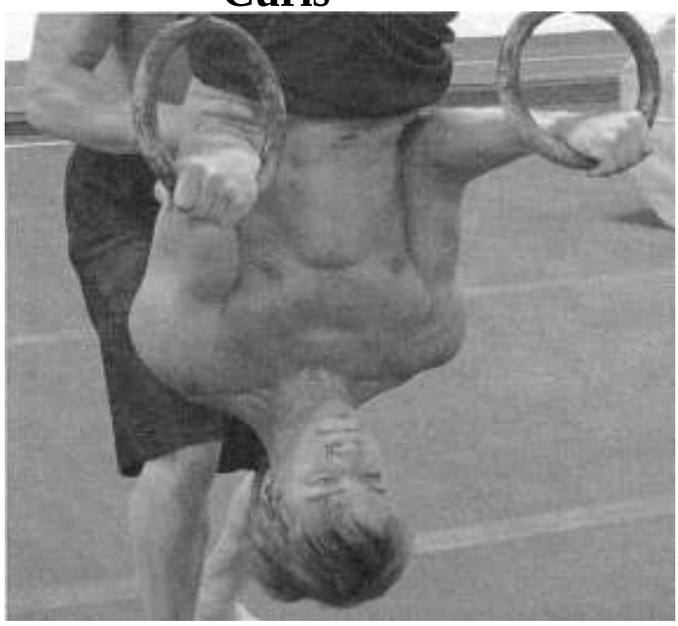
preference.

The height of your hand of the upright post will determine the amount of assistance that that hand is capable of providing. Over time, as your strength improves, gradually lower the height of your assistance hand.



Difficulty rating:

Curls



The Gymnastic Bodies definition of a bodyweight curl is an inverted or semi-inverted pulling movement that initiates with the hands reasonably close to the hips. While some of these movements blur the lines between a pure curling movement and a multi-plane pulling movement, they have been included here as the primary emphasis during these movements is the curling action.

Also note that for many people, most of these variations will require partner assistance to achieve full range of motion (ROM).

Curl Variations

Chin-ups - inverted

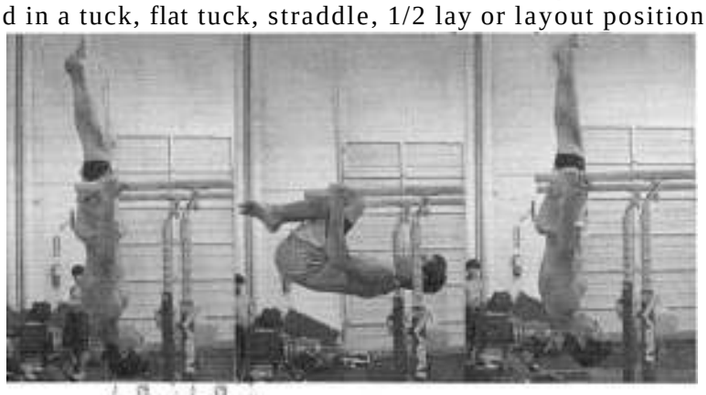
From an inverted hang perform a chin-up. These are quite difficult; even very strong athletes will find it quite challenging to pull up to a 90° bend in the elbows.

These may be performed in a tuck, pike or straight body on the Xtreme Rings, on the parallel bars or even hanging from the bottom of a set of dip bars. Most people will find the tuck and pike positions to be the most stable. The straight body variation is performed most comfortably on the Xtreme Rings as the balance can be quite awkward on a single bar.

Difficulty rating:

Reverse Yewkis
From an inverted hang lower to a front lever while simultaneously curling the arms to the sternum, do not hold this position but simply swing back up to the inverted hang. The slower you perform this movement, the more demanding it will be.

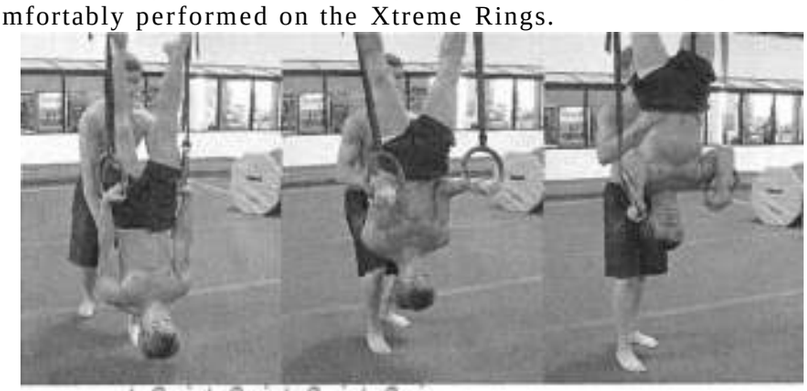
Extending the body position used during the repetitions can staggeringly intensify the difficulty of this movement. As always, this movement may be performed in a tuck, flat tuck, straddle, 1/2 lay or layout position.



Difficulty rating:

Reverse Muscle-up - half
From an inverted hang pull the body up to a shoulder stand and then return to the inverted hang. This constitutes one repetition. Use your feet on the inside of the straps to stabilize yourself. The feet on the straps may also be used to provide assistance during the lift. You will also find that using a false grip will allow you to greatly lessen the intensity of this already demanding exercise.

This movement may be done on a single bar with an under-grip, however it is most comfortably performed on the Xtreme Rings.



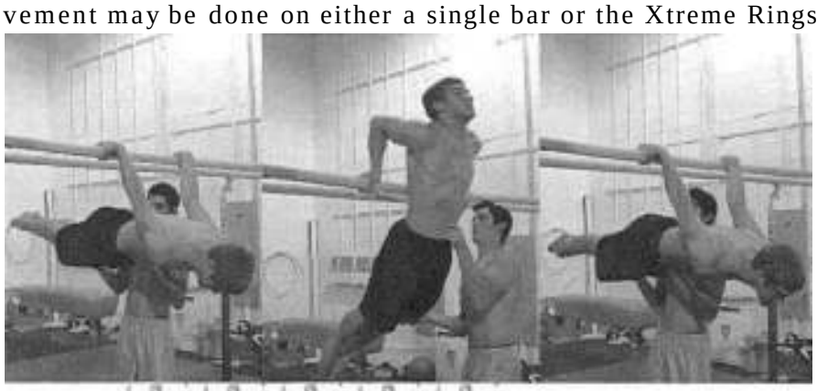
Difficulty rating:

Curls - back lever

From a back lever, curl up to a bent-arm support and then return to the back lever position. In order to maintain balance during the descent, it is necessary to push the shoulders forward strongly while straightening the arms in order to finish the repetition in a balanced back lever position.

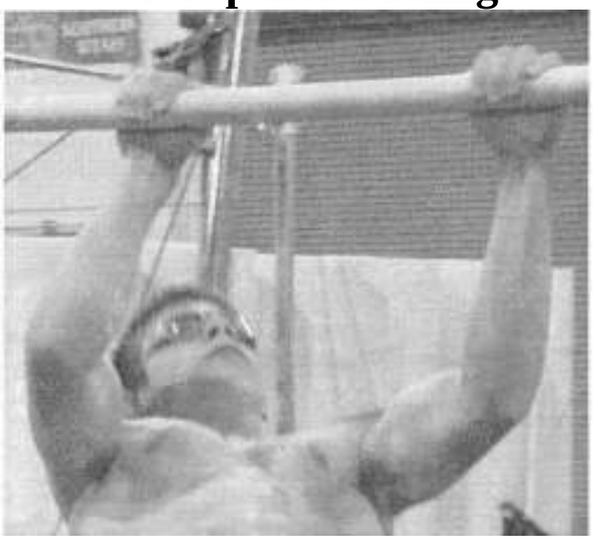
You will find that a maintaining a partial false grip during the back lever makes the curl substantially easier to execute. As you descend once moire to the back lever, be sure to reset your partial false grip for the next repetition.

This movement may be done on either a single bar or the Xtreme Rings.



Difficulty rating:

Multi-plane Pulling



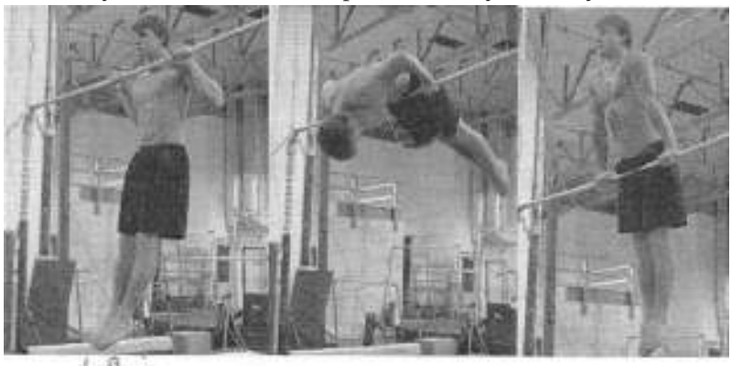
As with the multi-plane pressing movements, the following multi-plane pulling (MPPu) exercises are pulling movements that deviate from the traditional up, down and horizontal pulling classifications; but contain at least two of these directions and sometimes all three.

MPPu Variations

Pullovers

From a hang, pull your nose to the bar. While maintaining your nose to the bar, now tuck your legs and pull your knees up and over the bar. Allow your legs to drop down on the other side of the bar and shift your wrists to push up to a support. To complete the repetition you may either drop straight down or roll forward over the bar, ending back where you began in a hang position with straight arms. Repeat for the desired number of reps.

This movement may also be done in a pike, 1/2 lay and layout.

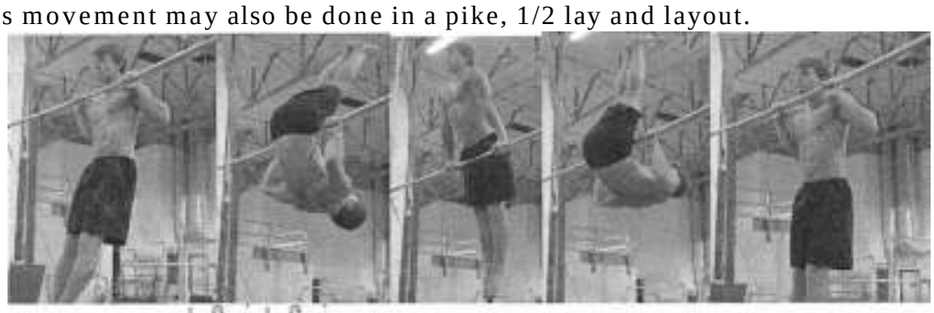


Difficulty rating:

Naners
Basically Naners are a slightly more advanced form of pullovers. Perform a normal pullover to a support position on top of the bar. Now as you roll back forward over the bar, bend your arms and pull strongly keeping your chin over the bar. At no time during the forward roll will your arms straighten. Allow your legs to swing somewhat behind you and then on the forward swing go up and over the bar into another repetition.

As your strength improves, decrease the degree of swing within the movement.

This movement may also be done in a pike, 1/2 lay and layout.



Difficulty rating:

TOPs pulls
Beginning from an inverted hang lower to a full vertical hang while simultaneously pulling the chin over the bar or rings. Reverse the movement and return back to the inverted hang. This constitutes one repetition.

Control the intensity of the movement by adjusting the speed of the movement (faster = easier) or by adding weight at the ankles.

The easiest version of this movement to begin with will entail hanging inverted on either the end of the parallel bars or on a set of rings. The most difficult variation of TOPs pulls utilizes a single bar. The single bar forces the body's center of gravity in front of the bar, making the stabilization of the inverted hang much more challenging.

This movement may be performed in either a tuck, straddle or 1/2 lay or lay position.

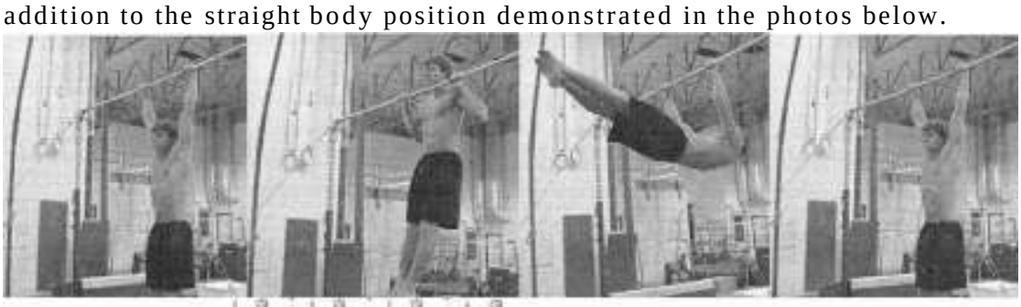
In addition, adding weight to the ankles greatly increases the core strength emphasis of this movement. The best I have seen is 251bs added to the ankles for a solid smooth five repetitions. Most people will find 5-101bs quite challenging.

Difficulty rating:

Front Lever Pulls - half

Begin by performing a standard pull-up until the chin is over the bar. As the arms begin to straighten during the descent, push the shoulders back strongly while pulling the body up to a horizontal front lever position. Attempt to pause in this position. Allow the body to drop out of the front lever down to a normal straight body hang and then repeat for the desired number of reps.

This movement may be done either in a tuck, adv tuck, straddle, 1/2 lay in addition to the straight body position demonstrated in the photos below.



Difficulty rating:

Front Lever Pulls

Start with the chin over the bar. As the arms straighten, pull the body up horizontal to a front lever position. As the front lever begins to fail, let the legs drop back to vertical while simultaneously pulling the chin back over the bar. This is a single repetition.

This movement may also be done either in a tuck, adv tuck, straddle or 1/2 lay position.

Difficulty rating:

Yewkis

Begin from a straight-arm hang and then perform a pull-up while simultaneously pulling your body up to horizontal. This will result in a bent-arm front lever position. Strive to bring the abdomen as close as possible to the bar. Beware; it is quite easy to fall into the habit of abbreviated ROM on this movement.

As always, this movement may also be done in either a tuck, advanced tuck, straddle, or 1/2 lay position.

Difficulty rating:

Front Lever Pulls - circle

For this variation of front lever pull, lift the legs up in a circular motion as the torso leans backward into the front lever. Please note that if lifting the legs to the right, the shoulders will correspondingly lean to the left to maintain balance and vice versa for lifting the legs to the left.

My personal preference is to reverse the circle on each rep, although it is acceptable to reverse the direction of the circle with each set as well.

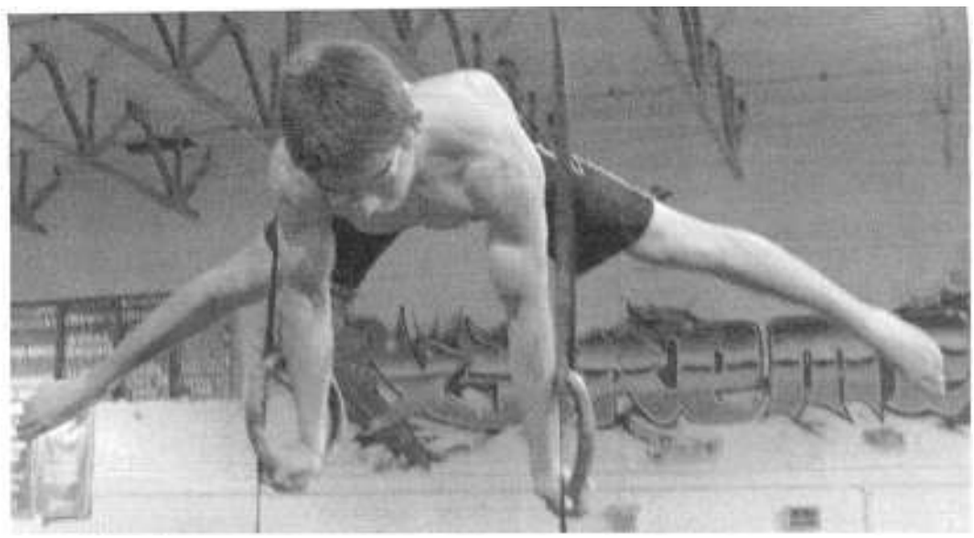
It is also quite beneficial to perform this exercise weighted. The athlete below is capable of performing circle front lever pulls with 251bs on his ankles.

Difficulty rating:

CHAPTER SEVEN

Combined Pull/Press

Combined Pull/Press



These combined pull/press (CPP) variations are movements where a pull and a press are contained within the same exercise. Of particular note with these movements is that a correctly structured workout utilizing CPP s allows the time necessary to complete a workout to be greatly condensed. In addition, by the inherent nature of the movements, their use will result in the balanced development of the shoulder girdle within the same plane of motion.

CPP Variations

Muscle-ups - XR negative

Muscle-ups allow you to train a pull-up and dip at the same time. They also improve basic coordination by requiring the upper body to function athletically as a single unit.

For this first variation, beginning from a straight-arm support on the rings, slowly lower through a dip to a straight-arm hang. Try to go especially slow through the transition from dip to pull-up. Think of the negative transition as that section of the muscle-up where the body changes from a support to a hang. Visually it may be most helpful to notice that during a negative muscle-up transition, the elbows change from pointing up to pointing down.

Difficulty rating:

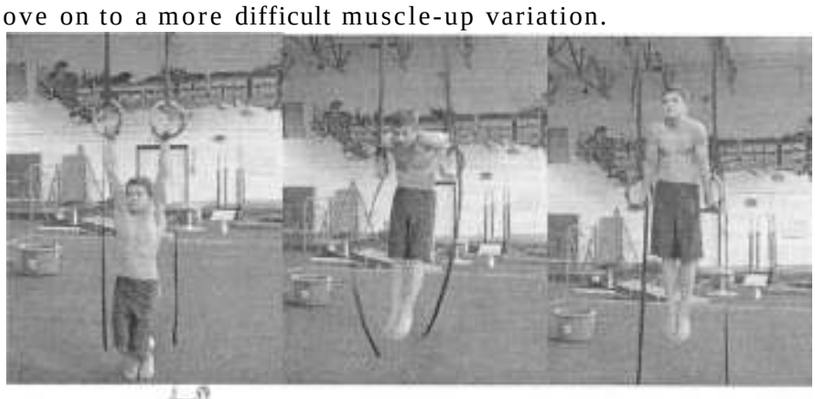
Muscle-ups - XR jumping
I recommend setting your false grip for jumping muscle-ups, as well as all other muscle-up variations, in the following manner: Your grip should be pressing on the ring in a diagonal line from the bottom knuckle on your index finger, across your palm to the heel of your hand as well as somewhat on the outside edge of your wrist (this is where those wonderful blisters on your wrist come from).

In the beginning, you will probably find it necessary to keep your elbows bent in order to maintain this grip. As you reach the transition point from chin-up to dip, roll your hands outward and press down to rotate your grip from a hang to a support.

In the event of getting "rips" or blisters on your wrists from the false grip, a little athletic tape will take care of the problem.

Every effort should be made to complete the transition with the elbows pointing "up" to the ceiling. This positions the body correctly for the dip movement to come.

For the jumping muscle-ups, initially adjust the height of the rings so that they are just above the top of the head. This makes it substantially easier to maintain the false grip as well as greatly improving the leverage. As strength improves either progressively increase the height of the rings above the head or move on to a more difficult muscle-up variation.



Difficulty rating:

Muscle-ups - XR kipping
Essentially this is a muscle-up on the rings where either swing or a kipping action is utilized to make the muscle-up easier to complete. This variation may also be performed on a straight bar, where it is slightly easier.

It is important to note that when utilized as a movement addressing basic strength, these dynamic variations, while helpful in facilitating the learning

curve, are not however the ultimate goal in this instance and every effort should be made to progress onward to the non-dynamic muscle-up variations.

Difficulty rating:

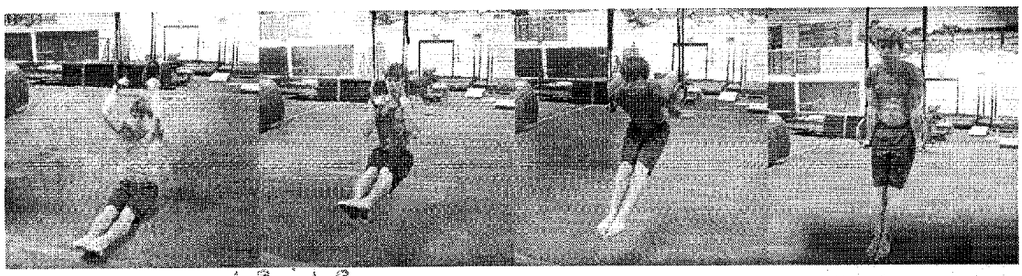
Muscle-ups - XR seated

As mentioned in the previous variation, there are instances where the correct execution of a strict muscle-up may not yet be possible and the use of incorrect or sub-optimal technique may be a necessary evil - but these variations should be viewed as temporary technical compromises and should be left behind as soon as physically possible. A muscle-up is by definition a "muscle" up, not a "kip" or "swing" up. Seated muscle-ups begin the transition from a swinging orientation to a strength orientation.

The height of the rings will begin somewhat above the top of the head and then progress upward to the current limits of the athlete's strength.

Many trainees make the common error of looking at the transition phase of a muscle-up as an unnecessary hindrance, one that retards their muscle-up performance. Nothing could be further from the truth. In fact, the transition is one of the primary reasons for training the muscle-up; it helps to prepare the shoulder girdle, chest, lats and arms for the rigors of the more advanced ring strength elements that will be addressed later in All Muscle, No Iron. My recommendation is if you are going to train muscle-ups - train them correctly. If you prefer to simply train the pull up or dip portion of the movement, I have provided you with a multitude of pull-up and dip specific movements to choose from.

Unnecessarily speeding or kipping though the transition of a muscle-up is the same as bouncing the bar off the chest during a heavy bench press. It gives the illusion of greater strength, but in reality this is a grave misconception. Yes, there are a great many exercises where speed is not only helpful but an essential component; in the long term, however, muscle-ups are not one of them.



Difficulty rating:

Muscle-ups - XR narrow

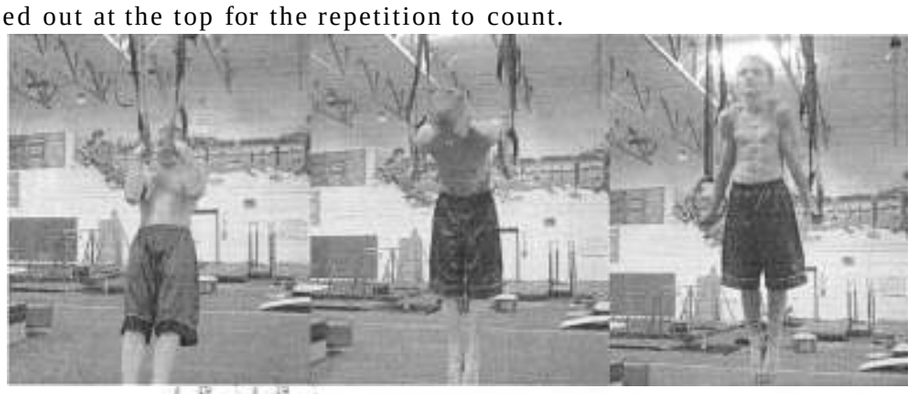
The easiest of the hanging non-kipping variations is to perform the narrow muscle-up with the hands pulled in toward the center of the chest. This variation is so named due to the hands being

At this stage, be sure to use a false grip.

Also, in order to build the most strength with this movement, strive to perform this and the other subsequent "strict" muscle-up variations without piking the hips or leaning the chest forward while the arms "transition" from a hang to a support grip. Ideally, the only movement should be a pulling and straightening of the arms.

Once on top in the completed support position, be sure that the elbows completely lock out straight with the hands turned out to 45 degrees. Until you have achieved a relatively smooth transition and the correct support position, I would recommend staying with this variation.

By the way, just for fun one day I allowed my younger athletes to have a muscle-up contest for reps. Their record for strict muscle-ups ended up being 13 (the top contestants actually did 15-17, but only perfect repetitions were counted), with no swinging, no piking of the hips at anytime and no leaning forward of the chest allowed, and finishing with elbows locked and rings turned out at the top for the repetition to count.



Difficulty rating:

Muscle-ups - XR wide
This hardest version of the bodyweight muscle-ups to perform is done with the hands out wide of the shoulders and without using a false grip. This one is brutal and begins to mimic the stress and strain of performing an iron cross.

Difficulty rating:

Muscle-ups - straight bar
Rings for muscle-ups, while preferable for comfort, are not necessary. It is also possible to perform muscle-ups on a straight bar. For this you will need to use an exaggerated false grip.

At first, you will probably not be able to completely straighten your arms at the bottom of the movement and retain your false grip. This is fine, simply continue with the movement and, as your strength and forearm flexibility improves, so will your bottom hang position.

If you are not allowing yourself to kip, the transition from the pull-up to the dip during a straight bar muscle-up is also much harder as you are not able to lean forward. For future training purposes however, this is actually preferable as a perfect muscle-up on the Xtreme Rings doesn't lean forward, but transitions with the arms remaining out to the sides rather than moving forward and backward.

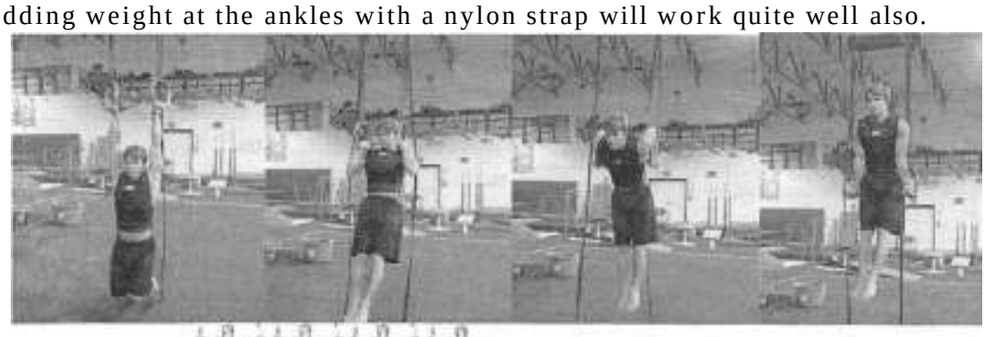
Difficulty rating: 

Muscle-ups - XR weighted

Many people on completing their first muscle-up are excited and immediately want to proceed on to weighted muscle-ups. Assuredly weighted muscle-ups are an excellent exercise and are, in fact, a staple in the conditioning program of my advanced athletes. However, for the beginning and intermediate trainee, until all three of the main bodyweight muscle-up versions (narrow, medium and wide grips) have been mastered with a correct transition and perfect support position, the athlete should forego working weighted muscle-ups. Only then has a strong enough foundation been built to that will allow them to maximize the benefits of the weighted muscle-up.

Weighted muscle-ups may also be done on a straight bar. The best weighted single bar muscle-up that I have seen is with an additional half bodyweight attached.

Generally I prefer to use a weight vest, if it has an athletic cut, although adding weight at the ankles with a nylon strap will work quite well also.



Difficulty rating: 

Ians

Beginning from a rear support on a single bar, perform an under-grip Korean dip descent. From this position, push the shoulders forward while simultaneously extending the arms and lowering the body to a back lever. A common mistake is failing to extend the shoulders far enough forward to achieve a true back lever position during this portion of the movement.

From the back lever curl the body up to the bottom position of the Korean dip and then press back up to support. Do not attempt to keep the body horizontal during the curl, but allow the torso and legs to drop naturally. Keeping somewhat of a false grip during the lower to back lever, will greatly facilitate the bodyweight curl out of the lever.

This is an unbelievably brutal exercise and, unassisted, can only be performed by the very strongest of athletes. Most other athletes will have difficulty even

attempting this movement, and this often despite substantial assistance from a hand spotter. The tension on the biceps is quite significant, however so are the potential strength gains. This movement contains a legitimate bodyweight curl with, no possibility whatsoever of cheating. Add in the required active flexibility, static strength and pressing strength and you have a superior movement effective across a wide range of training components.

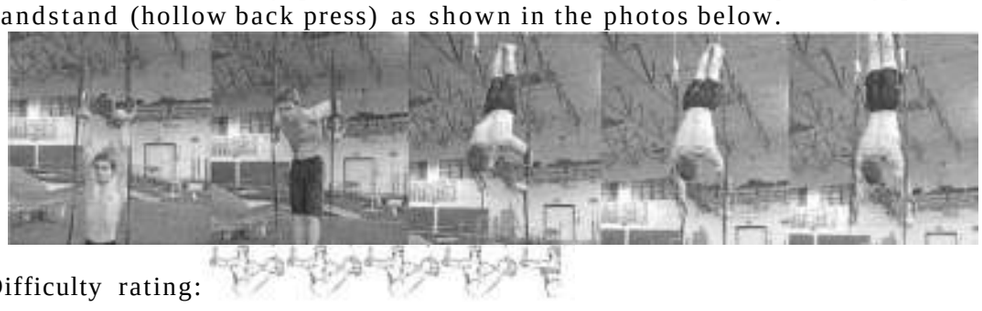
Great care should be taken to gradually increase the intensity of this exercise. Steady state training is by far the most effective and safest cyclical method to use with this movement.

Difficulty rating:

Roeslers

From a hang on the rings, perform a muscle-up that continues into a bent arm press to handstand. Initially it is acceptable to perform the press portion of this movement to a shoulder stand, however this should be discontinued in favor of a press to handstand as soon as possible. If you are not yet proficient at ring handstands, feel free to straddle the legs at the top of the bent arm press handstand and use the ring straps to stabilize the handstand.

These may be done with a bent arm tuck press to handstand, a bent arm straddle press to handstand, a bent arm pike press to handstand or very advanced athletes may perform them with a bent arm straight body press to handstand (hollow back press) as shown in the photos below.



Difficulty rating:

Galimores

From a front lever with a strong false grip, allow the hips to drop while simultaneously pulling the body up above the rings and pressing into a planche. After achieving the planche, reverse the movement and descend

back to the front lever. During the descent be sure to reset your false grip as you pass through the transition.

Rings are required for the execution of this element. These may be done in tuck, advanced tuck, 1/2 lay or layout positions in addition to the straddle position shown below.

Difficulty rating:

CHAPTER EIGHT

Core

Core

It has become fashionable of late within fitness circles to discuss the importance of "mid-line stability", however most seek to achieve this by promoting only full body weight-lifting movements and avoiding all direct core training. While this approach may be adequate for other forms of athletics, it will fall far short of the tremendous midsection strength that is required to perform even rudimentary gymnastics elements.

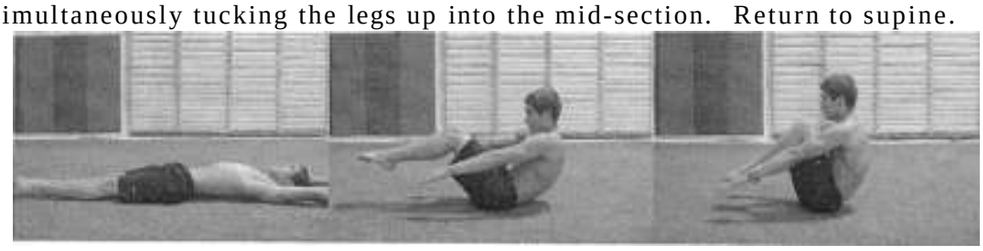
Some extremely challenging core exercises, many never before seen by the general public, are an essential staple in the Gymnastic Bodies conditioning program. While these movements may not have had a great deal of public exposure, they do have one thing in common; they are brutally effective and upon completion, or even attempted completion, will leave no doubt in your mind whatsoever of just where your "core" is located and exactly what it is for.

This chapter on core strength will proceed from V-up, to HLL to lower back to oblique to straight body variations.

V-up variations

V-ups - tuck

From a supine position (spine on the floor), sit the torso up while simultaneously tucking the legs up into the mid-section. Return to supine.



Difficulty rating: 

V-ups - straddle

From supine, sit the torso up while lifting straddled legs as high as possible. Keep the knees straight and attempt to maintain a flat back during this movement.

Difficulty rating: 

V-ups

From supine, sit the torso up but now maintain the legs together and straight rather than straddled. Attempt to pull the legs and torso up to at least 45°. Do not allow the back to curl during this movement, but strive to sit up with the chin and chest held high.

Difficulty rating: 

L-sit lift

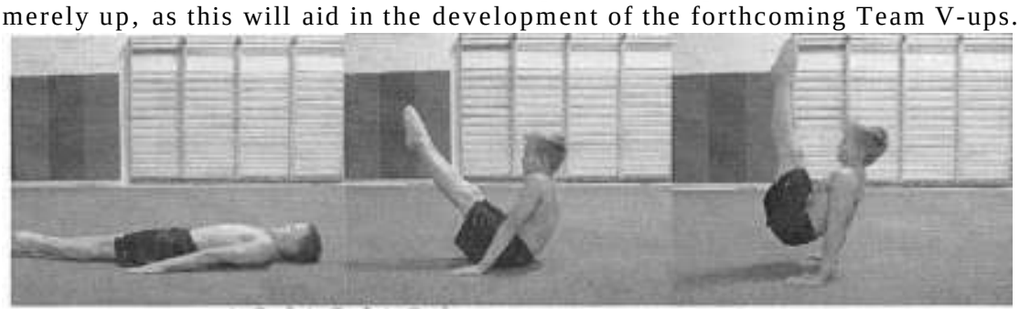
Beginning from an L-sit position, lift the legs as close to a V-sit as you are currently capable. Lower back to the L-sit. Repeat for the desired number of repetitions.

This movement may also be done in a tuck or straddled position.

Difficulty rating:

V-ups - lift
These are simply v-ups where at the peak of the ascent, you try to press the glutes up off of the ground. They may range from lifting the tiniest fraction of an inch off of the ground or you may succeed in pressing all the way up to a V-sit.

The primary focus here is to strive to press the hips forward and up, not merely up, as this will aid in the development of the forthcoming Team V-ups.



Difficulty rating:

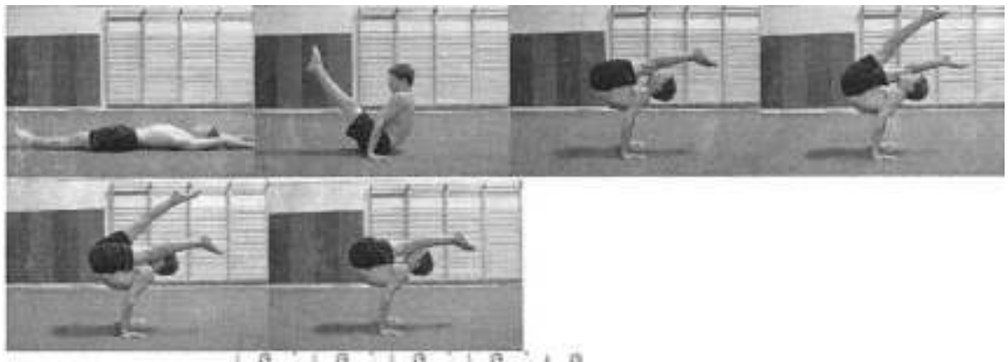
V-ups - **team**
Perform a regular V-up with lift; however at the top of the movement rather than descending, now attempt to continue pressing on upward to a full manna. Hold the manna and then descend with control back to the ground.

As with the static manna it is important to remember to press the hips strongly forward in order to maintain your balance. If you attempt to lift by higher by leaning backward, you will surely fall.

Difficulty rating: 

V-ups - team with single

At the top of the team v-up, now attempt to perform a single leg lift while maintaining your torso in a manna position. To maintain balance during the single leg lifts, it is important to press the hips up as well as the leg.

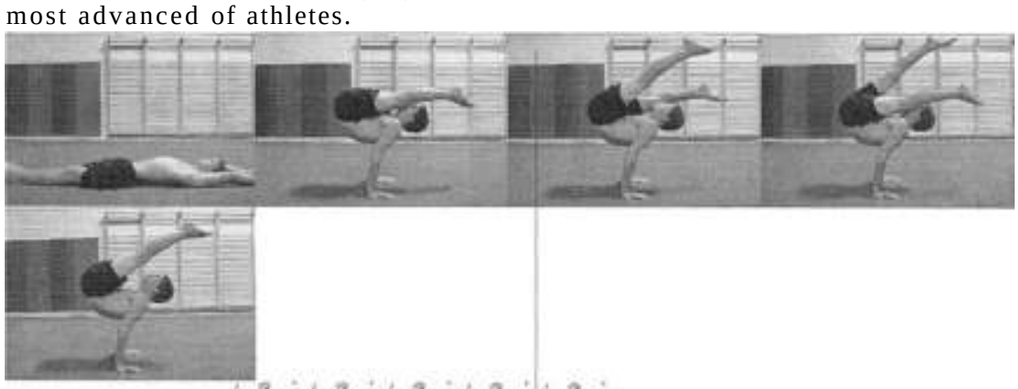


Difficulty rating: 

V-ups - team with single & double

Now add a double leg lift, to the team v-up following the two single leg lifts. As this is an exceptionally demanding movement, the height of the lifts may vary from initially being barely recognizable to quite substantial for stronger trainees.

This tremendously challenging movement is obviously reserved for only the most advanced of athletes.



Difficulty rating: 

Hanging Leg Lifts

Hanging leg lifts (HLLs) are a mandatory component in my upper athletes' training program. However, executed correctly, this exercise will be beyond the reach of most beginning or even some intermediate trainees and will need to be developed progressively.

The movements in the following progression can be done either on a single bar or a stall bar. A stall bar is a specially designed piece of gymnastics apparatus that is of enormous benefit in a multitude of stretching and conditioning exercises. It is demonstrated in the photos to follow. My preference when working HLLs is to use the stall bar as it ensures that the athlete's shoulders will be unable to lean back during the movement. This drastically cuts down on the amount of help that the lats can provide during the leg lift.

If you do not have access to a stall bar, these exercises can also be done on any overhead single bar with or without a partner. Simply having someone push forward slightly on your shoulders from behind is a very effective substitution for the stall bar. A great deal of pressure is not required, nor is it necessary to push the shoulders out in front of the hands. Simply provide a gentle firm pressure that prevents the athlete from pulling the shoulders back behind the hands.

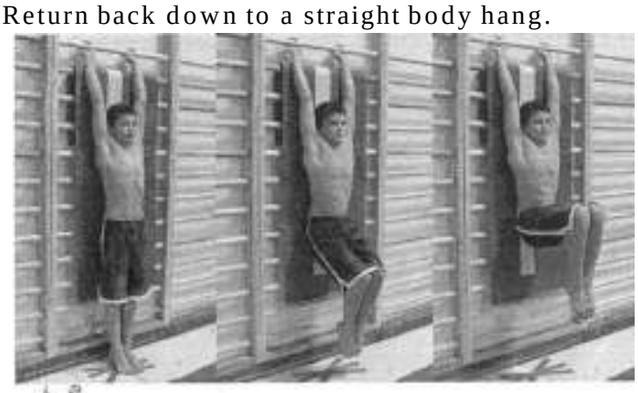
If training without a partner, in order to get the maximum benefits from these movements, you will need to monitor yourself assiduously to make sure that you are maintaining correct form.

HLL variations

HLL - tuck half

From a hanging position, bend the knees and lift them up to a horizontal bent

knee L hang. Return back down to a straight body hang.

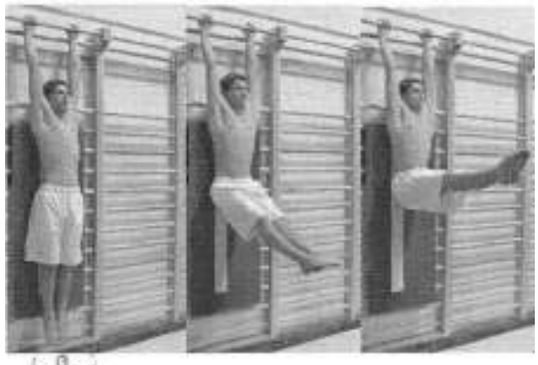


Difficulty rating:

HLL - half

From a hang, with straight legs, pull up as close to a horizontal L as you can. Lower and repeat. Do not rest at the bottom in between reps; there is a great difference between one rep done three times and one set of three reps.

Keeping the knees locked will greatly increase the active flexibility component of this exercise.



Difficulty rating:

HLL - V to L

From a hanging V, lower as close as you can to the L and then pull back up to the V. Combine this exercise with the leg lift to L to develop both sides of the hanging leg lift.

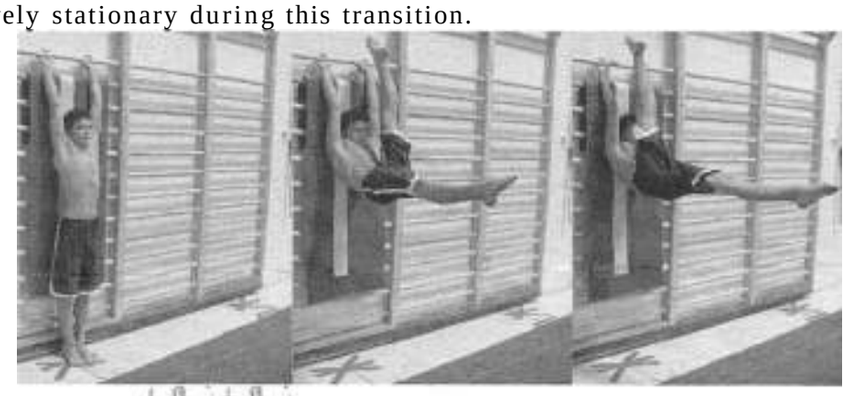
At first, you may only be capable of a very small range of motion. That's fine. The key here is patience, consistency and persistence. Progress is not made in giant leaps, but rather in very small, almost immeasurable improvements. I tend to think of each day of training as a page in a novel. Taken individually, each page is so thin as to be almost not worth considering. Yet if one page were added to the total over the course of a year, in the end we would have a

substantial novel of 365 pages. In my opinion, it is the same with physical preparation. In fact I have used this exact method to develop all of my champions both in terms of physical preparation and technical refinement.

Difficulty rating:

HLL - single leg
Beginning from a straight-arm hang, attempt to lift only one leg to the bar. Of especial import here is that while one leg is lifting, the other non-lifting leg should be attempting to pull as far away from the other as possible. Do not allow the knees of either leg to bend. Return back to the hang and switch legs. Repeat for the desired number of repetitions.

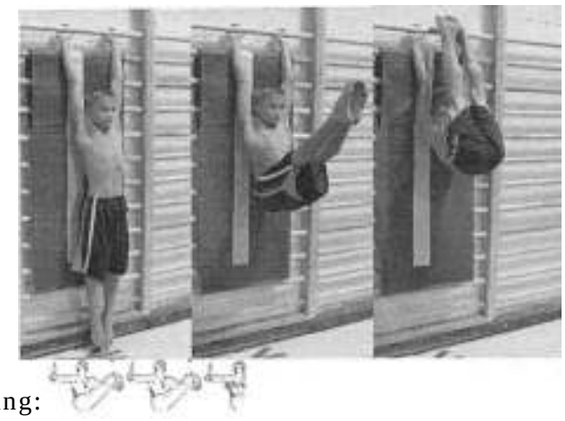
Advanced athletes may choose to simply switch the legs without returning to a straight-arm hang in between repetitions. To exercise this option, at the top of the repetition begin to lower one leg while now lifting the other to the bar. If the movement has been coordinated correctly, the two legs should reach their new positions simultaneously. The torso should remain stable and relatively stationary during this transition.



Difficulty rating:

HLL

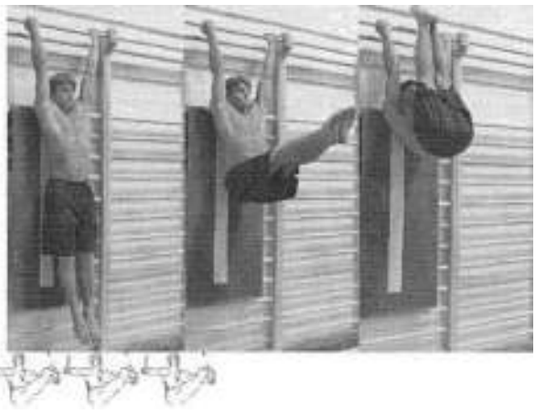
From a hang, pull the toes up to the bar. With this particular variation it is fine to allow the feet to go above the bar. Just strive to keep your feet as low as you are able. Also be careful to ensure that the elbows and knees remain straight.



Difficulty rating:

HLL - under-grip

This variation is not tremendously more difficult that a standard **HLL;** unless you have developed the habit of leaning back and pulling strongly with your lats during your hanging leg lifts. If this is the case, now utilizing an under-grip will greatly reduce the amount of assistance that the lats can provide during this movement.



Difficulty rating:

HLL - weighted at ankles

Finally we arrive at the weighted hanging leg raise. All of the regular guidelines for a correct leg lift continue to apply; now simply hang weight on the ankles to increase the intensity of the movement. With the movement now being done under load, the temptation will be especially great to bend the knees - avoid this as it will severely undercut your progress.

Another common mistake here is to attempt to swing the weight up rather than lifting it under control. On some conditioning elements momentum is an

essential component; however, when utilized to build basic strength, weighted HLLs are not one of them.

The sky would seem to be the limit here, however do not plan on being able to pull enormous amounts of weight in this movement; the leverage is simply too disadvantaged. The most weight I have seen used is 151bs. for reps and this was by a young lady who weighed approximately 1301bs. Generally my top athletes add anywhere from 10-15lbs on the ankles for this movement, which works out to an incredible 15% to 20% of their bodyweight.

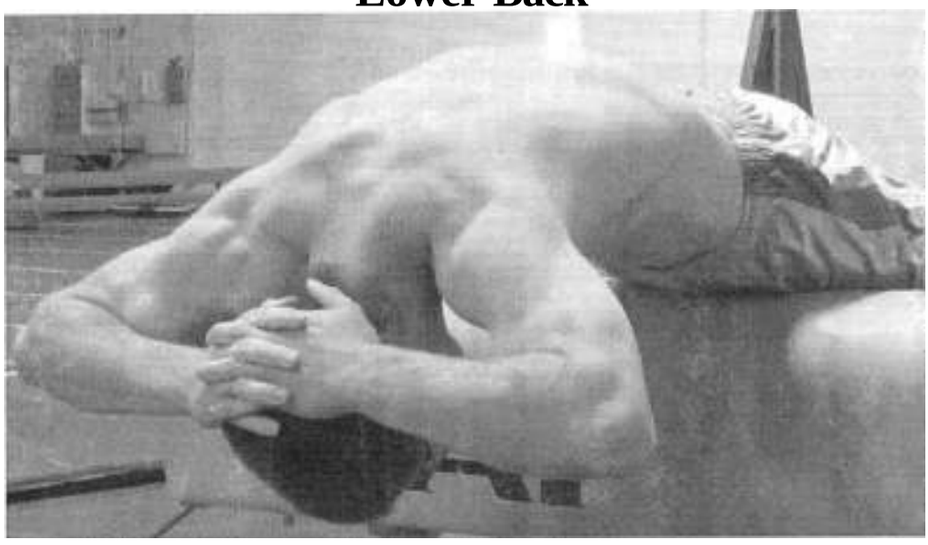
Difficulty rating:

HLL - weighted at ankles and waist

Any type of weighted belt will work for this variation. If you are unable to fully lift your legs to the bar, then you have chosen a load too great for your current capabilities. Reduce the weight you are using accordingly.

Difficulty rating:

Lower Back



Many athletes tend to train the abs and the hip flexors in isolation to the exclusion of the lower back and spinal erectors. In the long run, this causes several problems including muscle imbalance injuries and the inability to function efficiently under load; remember a chain is only as strong as the weakest link.

In gymnastics, most of our enormous lower back strength is the result of our exposure to the many dynamic, plyometric and ballistic elements in our training. These elements have been analyzed and distilled into their various components and will be addressed in the upcoming volume; The Dynamic Physique. There are, however, a variety of basic strength exercises that I have found very useful.

All lower back reverse leg lift variations may be done with legs either straddled or together. The straddle variations will prepare the hips for the rigors of pressing open during straddle planches, the legs together variations will allow substantially more resistance to be used.

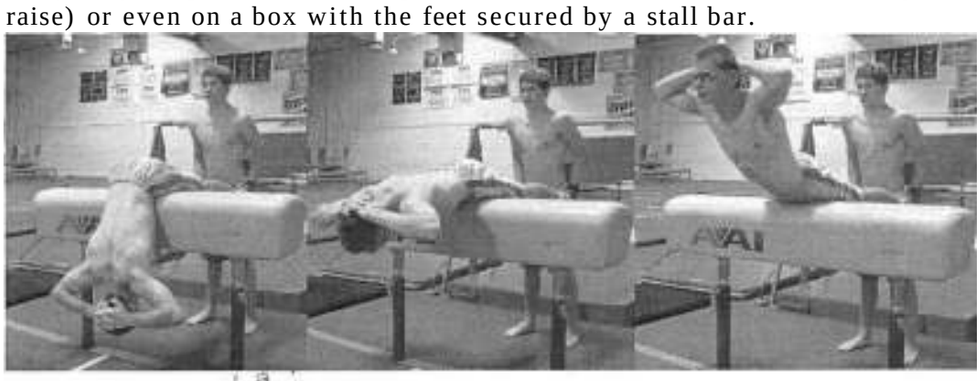
Lower back variations

Archups

These are an excellent movement and are essentially a bodyweight good morning. They are my favorite movement and have a strong active flexibility component as well as a strength component.

I am not sure if it is the decompression inherent in this movement, or increasing the blood flow and mobility through an often an area where the focus in most traditional weight training exercises is on maintaining a rigidly arched position; but personally my back always feels substantially "younger" and more athletic after a good session of archups.

They may be performed on a pommel horse as shown, on a GHR (glute-ham raise) or even on a box with the feet secured by a stall bar.



Difficulty rating:

Curl-ups

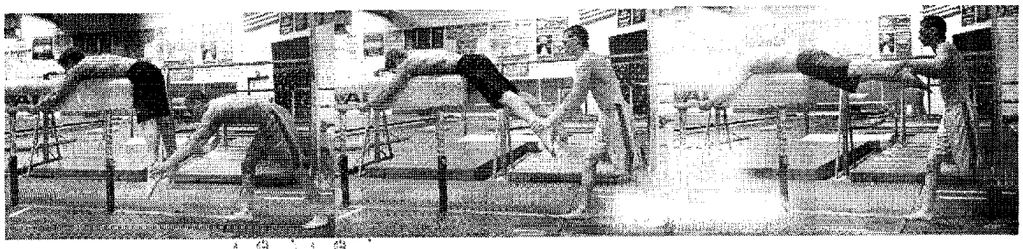
Curl the spine up one vertebra at a time, like rolling up a string of pearls. From the bottom of the movement the chin will be the first to curl down and at the top of the movement the chin will be the last to uncurl.

Increase the intensity by adding weight; smaller plates will work better as they will not interfere with the essential curling motion of the back.

Difficulty rating:

RLL - in straddle

Reverse leg lifts (RLL) are especially helpful for developing the strength necessary to open the hips during a straddle planche. As it is awkward to add weight to these, I usually have my athletes perform these with a partner supplying downward pressure on the ankles.



Difficulty rating:

RLL

In the training of my own athletes, I prefer to use reverse leg lifts (RLL) rather than a reverse hyper machine. It is time consuming to correctly adjust the lever arm of the reverse hyper machine for each athlete. In addition, the reverse hyper provides far too much of a leverage advantage during this movement. None of these disadvantages apply to RLL.

Lay prone across a pommel horse, vaulting table or even a simple weight lifting bench that has been elevated. Ensure that the surface you are working upon is high enough to allow the legs to hang down clear of the floor. Beginning from this position, slowly and deliberately lift the legs up to, or just above, a horizontal position. Pause and then return back to the hang.

My athletes usually perform this variation weighted. In comparison to a reverse hyper machine, the leverage of this variation is far less with most of my older athletes find using 35-551bs quite challenging rather than the 75-lOOlbs that they would normally use on a reverse hyper; especially when done with a slow deliberate tempo.

Difficulty rating:

RLL - stall bar

Bend forward and, with the head down, grasp the stall bar with an over-hand grip. Lift the feet from the ground and press the hips firmly into the bars. Keeping the hips in contact with the bar, lower the feet to the limits of your current flexibility, pause and then pull the legs up to vertical. Descend back to the bottom of the movement while making sure to keep the hips and back pressed into the bars. This constitutes one repetition.

This change in orientation of the body greatly reduces the leverage that can be brought to bear by the lower back to this **RLL** variation. Athletes that can perform regular **RLL** with 35-451bs will often find themselves reduced to 10-251bs when performing **RLL** on the stall bar.

Difficulty rating:

RLL - headstand
From a freestanding headstand, lower the feet to the ground and then pull them back up to a headstand. The feet should only lightly touch the ground, before ascending once more.

These may be performed both with and without weight added on an ankle strap.

Difficulty rating:

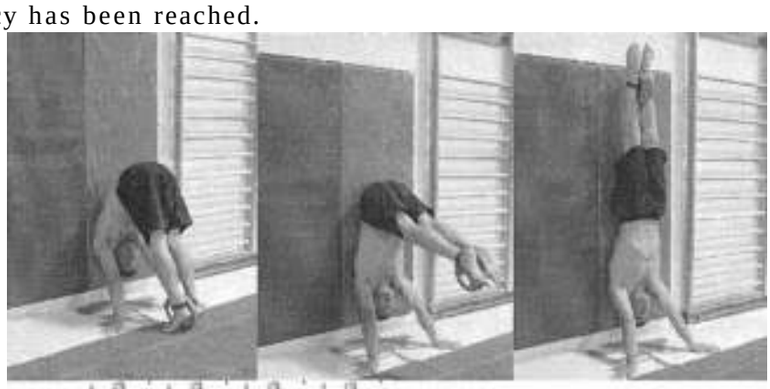
RLL - wall HS
In actuality, this is a press handstand preparatory element. However it also has a very strong lower back strength component.

Face a wall and set yourself so that your hands are approximately 12 to 18 inches from the wall. Duck your head and lean forward against the wall with the back of shoulders. With straight or nearly straight legs, move your feet closer into the wall until your hips are nearly over your shoulders. If your

flexibility prevents you from achieving the correct hips over the shoulders position at 12-18 inches from the wall, then move your hands out farther from the wall, allowing the additional angle of lean to compensate for your flexibility. The increased angle will increase the stress on your wrists, but this can be greatly alleviated by turning your fingers out to the side.

Once in position, with your weight firmly supported by your shoulders leaning against the wall, lift your legs overhead

Add weight to the ankles once a reasonable level of bodyweight only proficiency has been reached.



Difficulty rating:

Youngs

Begin in a straddle L, then keeping the hips stationary and maintaining the approximately 45° angle of the back to the ground, press the legs rearward and open the hips without allowing either the hips or the back to rise.

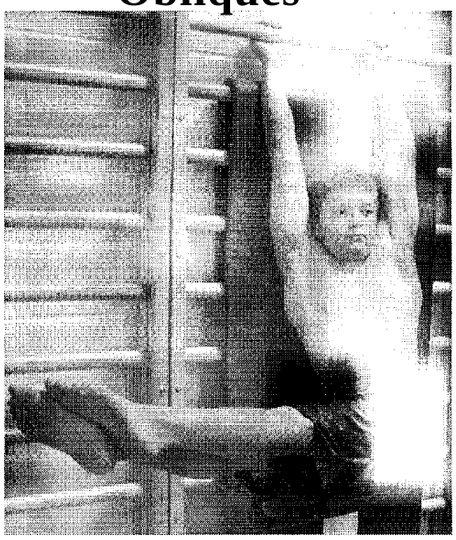
Initially the emphasis is on opening the hips, not on leaning the shoulders further forward or pressing the hips upward. Focus on maintaining the vertical location of the hips established during the straddle L for the entire movement. The angle of the hips will open and the legs will partially extend backward, however there should be no additional vertical elevation of the hips during this movement. On reaching full extension of the hips, return back to the straddle L.

This is a very easy movement to unintentionally cheat on. Extra vigilance should be maintained care should be taken to correctly execute and maintain its efficacy.

This movement is extremely helpful in improving the hip extension during a straddle planche, an area where most people are usually extremely weak when beginning planche training. As your strength improves, you may allow yourself to press higher into an actual planche, however, the primary focus should remain on completely extending the hips and then returning back to the straddle L.

Difficulty rating:

Obliques



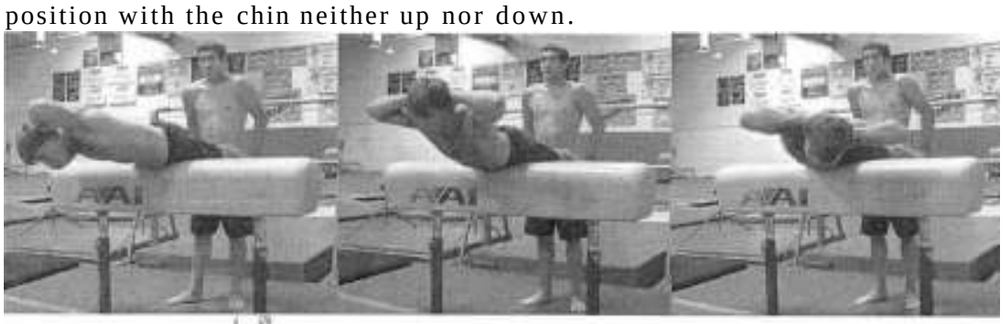
Without constant attention, it is quite easy to overlook oblique training. Oblique strength is especially important for tumbling, vaulting and all pommel horse skills. In can however, be quite challenging to find and utilize movements that are effective in strengthening this often-neglected area. That issue has however now been resolved for you.

In addition to movements that directly impact upon the obliques, also included in this chapter are lower back movements that contain an oblique strength element.

Oblique Variations

Archups - side to side

Pull up to horizontal with the legs firmly stabilized behind you. Now maintaining the horizontal plane, move the body from side to side. In addition to the side-to-side motion of the shoulders, also attempt to curl the ribs sideways as strongly as possible. The head should remain in a neutral position with the chin neither up nor down.



Difficulty rating:

Windshield wipers - supine
To begin supine windshield wipers, lie upon the ground with the arms out to the side and pressing firmly into the ground. Now lift your legs until your feet are pointing to the ceiling; it is important for the feet to be directly above the hips. Lower the feet to the side, attempting to keep the hips on the ground. Pull back to vertical and repeat on the other side.

If desired weight may also be added to the ankles for this movement.

Difficulty rating:

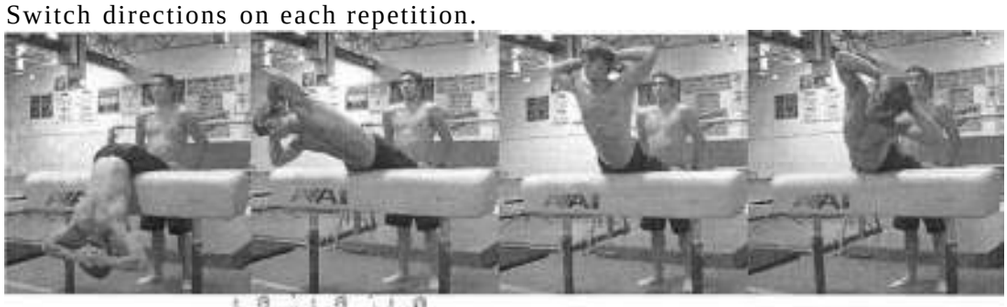
Archups - twisting
A traditional arch-up will lift directly upward. For this twisting variation with its heavy emphasis on oblique strength, attempt to lift upward as high as possible at a 45° angle. Return to the bottom of the movement and repeat on the other side. The head should remain neutral with the elbows pulled back at all times.

Difficulty rating:

Windshield wipers - half
These are done in a hanging L-sit moving the legs from side to side. The intensity of this movement can be greatly magnified by adding very small amounts of weight to the ankles.

Difficulty rating:

Archups - circular
Perform as large a circle as possible during the ascent and descent of the lift. Switch directions on each repetition.



Difficulty rating:

HLL - circular
Beginning from a hang, perform a **HLL** in which the lift the legs ascend and descend in as large an arc sideways as possible. Attempt to keep the legs near the bars at all times.

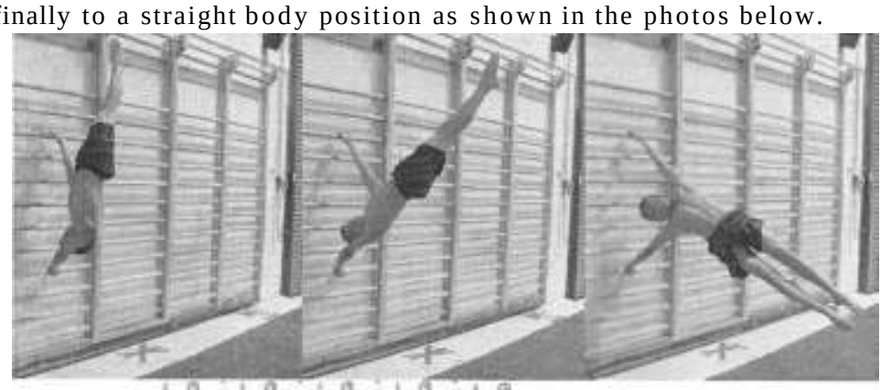
Difficulty rating:

Windshield wipers

and arm will PULL strongly on the bar. It is this interaction between the two arms individually pulling and pressing that allows the body to remain moderately stable in the sideways position.

To perform a negative side lever pull, first establish a solid grip and then attempt to jump to a completely inverted position. You will need to maintain a very firm pressure with the bottom arm to achieve this. Please note that at the inverted position, the body will no longer be completely sideways. This is not something to be overly concerned about, but is something that will occur naturally as a consequence of the physiology of the shoulders.

If however you are not yet confident of the security of your grip it is fine to initially only jump to horizontal position and attempt to slowly lower back to a stand. In the early stages of your training, you will find it much easier to perform negative side levers in a tuck, then proceed to a straddle, then 1/2 lay and finally to a straight body position as shown in the photos below.



Difficulty rating:

Side Lever Pulls

After performing a full negative, you may now attempt to add a pull back to the inverted support. At first it will be most efficient to utilize a different position for the negative (i.e. straight body) and then a different position for the pull itself (i.e. tuck).

Experiment with the different body positions to discover the best starting point for you. Proceed as always from tuck to advanced tuck to straddle to 1/2 lay to straight body.

difficulty rating:

Straight Body

In terms of a gymnast's physique, the glamour muscles of the arms and shoulders usually get most of the attention; but in terms of functionality it is often the ability of a gymnast to manipulate his body in a laid out, or straight body position, that makes many of those amazing skills and strength positions possible. Straight arm/straight body strength is a critical and often overlooked component of gymnastics strength training. Unfortunately, other than haphazardly training static planches and levers, few understand how to approach this fundamental aspect of gymnastics physical preparation.

Straight body elements and their variations are particularly challenging because there is literally nowhere to hide. If you have weak abdominals; it will show. If you have a weak lower back; you will collapse. The only way to survive training these elements is to move forward and improve.

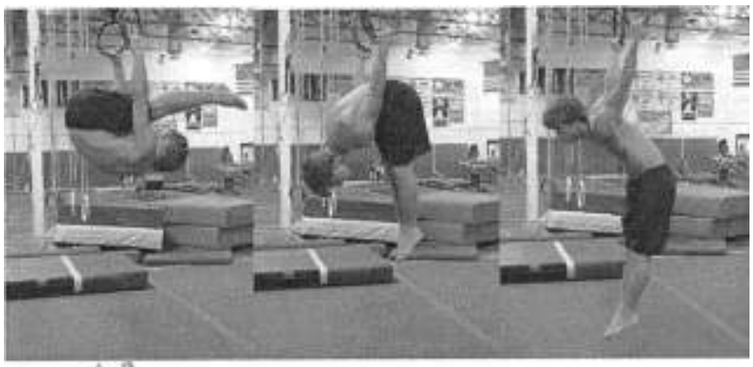
On all straight bodywork, once you have progressed past working your preferred variation in a tuck position, never again should you allow yourself to curl your upper back during your repetitions. It is far more beneficial to perform your straight bodywork with a flat tuck than in a layout with a curled back.

Also do not allow the arms to press into the sides or lay the arms on the lats at anytime; except for perhaps the rawest beginners who are unable to support themselves in any other way and even then it should be discontinued as soon as possible.

Back pull variations

German Hang Pull

From an inverted pike, lower to a German hang and then pull back up to the inverted pike. During the German hang the knees may be bent but the hips should be flat and open.



Difficulty rating:

Back Pull - negative

From an inverted hang, lower as slowly as possible through a back lever to a German hang. From the German hang, first pull back up to the inverted pike and then continue on up to an inverted hang. Initially it will be easiest to perform this element in a tuck, then advanced tuck, then as proficiency improves proceeding on to a straddle, to a 1/2 lay and finally to the layout position.

Difficulty rating:

Reverse Crank - half

From an inverted pike, extend outward to a back lever, lower down to a German hang and then pull back to the inverted pike.

This movement may also be done in a tuck, advanced tuck, straddle or 1/2 lay position.

Difficulty rating:

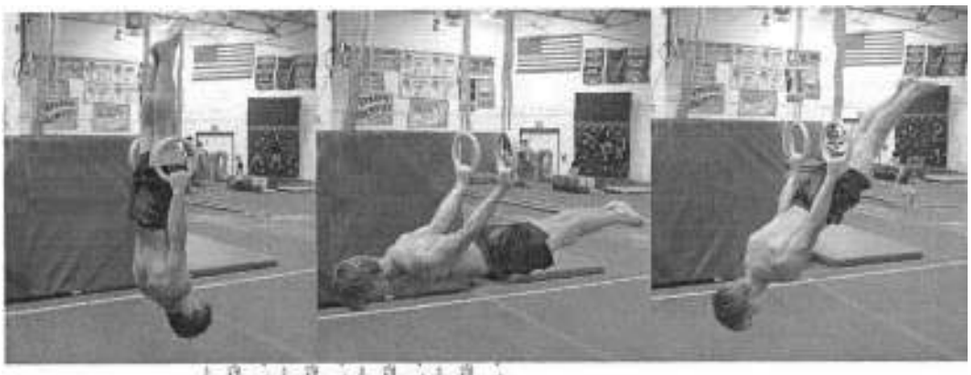
Reverse Crank
From an inverted pike, extend out to a back lever and then pull up to an inverted hang. Focus on keeping the back flat and extended during the pull back upward to inverted.

This movement may be done progressing from tuck, to advanced tuck, to straddle, to 1/2 lay, to straight body. Advanced trainees may also add weight to the ankles using a nylon strap.

Difficulty rating:

Back Pull - half
This is my preferred back pulling movement. From an inverted hang, lower to a back lever and then pull back up to an inverted hang.

This movement may also be done in a tuck, advanced tuck, straddle or 1/2 lay position in addition to the straight body demonstrated in the photos below.



Difficulty rating:

Back Pull

From a German hang pull out to an inverted hang with a straight body. If you find yourself unable to begin the movement, a slight swinging motion may be used to initiate the lift. This should however be discontinued as soon as possible.

As always, this movement may be performed in a tuck, advanced tuck, straddle or 1/2 lay position. It should be noted that the positions that contain a flat-back element will build the greatest degrees of strength when employed with this exercise.

Difficulty rating:

Front pull variations

Body Lever

Anchor your hands firmly behind you and then lift your body upward until you are solely support on the back of your shoulders. Maintaining a tightly extended body lower to horizontal, pause and then pull back to the vertical position.

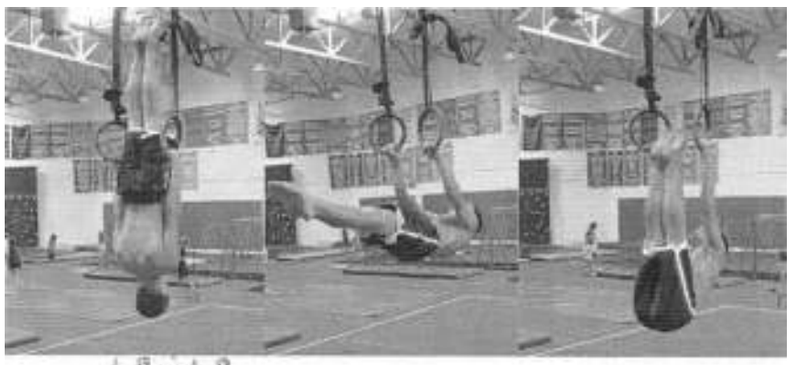
Do not allow the body to arch or pike during the ascent. Do not descend deeper into this movement than you can continue to maintain a straight body during the ascent.

Difficulty rating:

Front Pull - negative

From an inverted hang, lower as slowly as possible through a front lever to a simple hang. From the hang, pull up in a tuck or pike back to the inverted hang. If necessary allow the arms to bend at first, and then straighten the arms later once your strength has improved.

These may also be done in a tuck, advanced tuck, straddle or 1/2 lay during the descent.

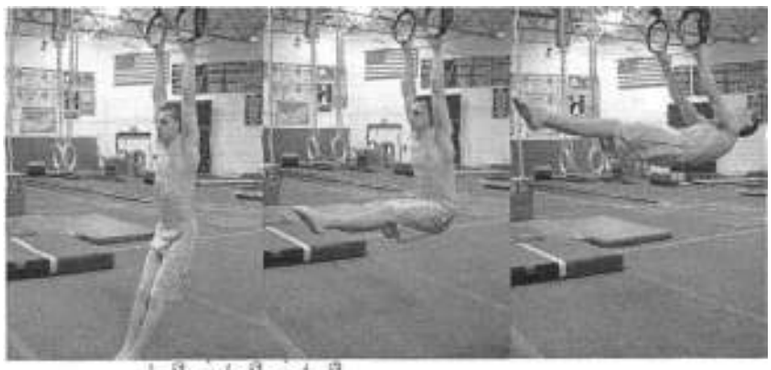


Difficulty rating:

Crank - half

From a hang, lift the legs to an L-sit, then extend outward to a front lever and finally lower back to the hang.

You may of course change the position of the front lever you extend out into as necessary. You also have the option of utilizing additional L-sit positions as well.



Difficulty rating:

Crank
From an L sit, extend out to a front lever and then, maintaining your front lever shape, pull up to an inverted hang. Lower back down to the front lever and then return back to the L sit. This is one repetition.

As always, the front lever in this movement may be done by progressing from tuck, to advanced tuck, to straddle, to 1/2 lay, to straight body as shown in the photos below.

Additionally, the intensity may be likewise be increased by decreasing the speed of movement or adding additional weight at the ankles.

Difficulty rating:

Front Pull - half
From an inverted hang, descend to a front lever and then pull back to an inverted hang. Pushing the shoulders backward strongly as you descend will help you to strengthen your entry into the front lever.

This exercise may be performed in a tuck, advanced tuck, straddle, 1/2 lay or straight body position.

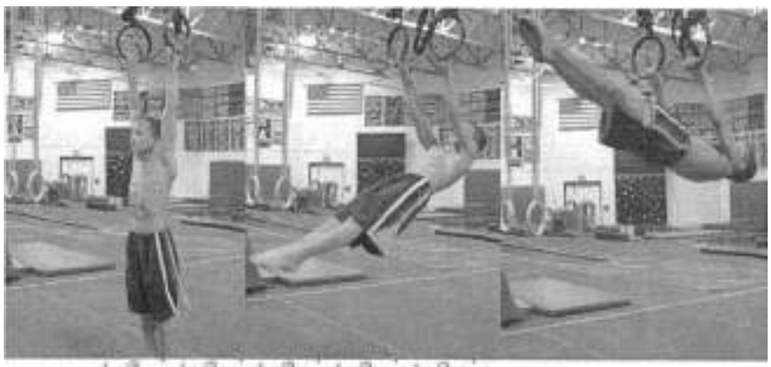
Difficulty rating:

Front Pull
From a hang, pull up through a front lever to an inverted hang, pause and then descend through the front lever back to the hang. Focus on keeping the elbows straight. If you find yourself struggling to keep the arms straight, allow them to bend with the understanding that this is only a short-term concession to necessity.

These may also be done in a tuck, advanced tuck, straddle or 1/2 lay position. Once you have mastered the basic tuck, strive to keep the hips flat at all times while also allowing no arch in the lower back.

As a miscellaneous aside, many gymnasts who are having difficulty performing a straight-arm kip to support on bars are unable to perform this exercise without assistance. A short-term focus on this movement will usually solve the problem quite handily.

As always, advanced trainees may also add weight to the ankles using a nylon strap.



Difficulty rating:

Whole body variations
Tick Tocks

Beginning in an inverted hang, lower to a front lever, pull back to an inverted hang, lower to a back lever, pull back to an inverted hang. This constitutes one repetition.

This movement may also be performed in a tuck, straddle or 1/2 lay position.

Difficulty rating:

360 Pulls

Beginning from a straight-arm hang, pull the body to an inverted hang position. Lower through a back lever to a German hang. Pull out of the German hang back to the inverted hang. Lower through a front lever returning once more to a straight arm hang.

As with Tick Tocks, 360 Pulls may also be done in either tuck, or a straddle position. In addition, you may also choose to use different positions for the descent and ascent portions of the movement. For example, you might lower to the German hang with a straight body, but pull back out with a pike or 1/2 lay.

Difficulty rating:

CHAPTER NINE

Legs

Legs

Leg conditioning for gymnastics is probably the area where my thinking has changed the most over the course of my career. It is also, in my opinion, the area where gymnastics conditioning traditionally has been the weakest. This is unfortunate, as well as unnecessary, as correct leg conditioning for the attainment of basic strength is a relatively straightforward affair.

The parameters of gymnastics leg strength training are quite different than that of many other sports. In gymnastics a high degree of leg strength is crucial for success, however excessive leg size and weight for a gymnast is simply unproductive ballast and will actually have a significant negative effect on gymnastics performance. As such we need legs that are enormously strong and capable of jumping as high as possible, able to absorb the most violent of landings and yet carry only the minimum amount of mass necessary to help preserve that ever-important strength to weight ratio.

In my opinion, it is the combination of basic leg strength with plyometric ability that gives that greatest athletic return. This is of course true for the rest of the body as well, however this combination is most easily developed with the legs. For this reason, this chapter alone in this volume will contain some dynamic leg strength variations.

For a variety of reasons I prefer single leg squat progressions when building basic leg strength; there are a large variety of movements available, they are easy to implement in group-training sessions, different athletes can simultaneously use whatever variation is appropriate for them, no racks are required and only minimal equipment is necessary.

Moving to a more difficult variation, or holding dumbbells or weight plates or weight vests or even a sandbag can easily increase resistance. I am only just

beginning to experiment with sandbags and immediately there are several noticeable benefits - they are also easily implemented into a group training scenario, when placed on the shoulder the center of gravity is maintained, no racks are required, no potential injuries from dropped weights and no expensive bumper plates are required in order to safely dump a weight.

I generally find it easiest for trainees to first build some proficiency in double leg deck squat variations before proceeding into the single leg squat work. Also if, for whatever reason, you are unable to correctly perform single leg squats, you can continue to make adequate progress with the deck squats by continuing to increase the resistance.

As a general performance note, if your current level of active flexibility is causing you to excessively struggle while lifting the non-working leg in front of you during the bottom of a single leg squat, performing your single leg squat work on an elevated surface can help to alleviate this.

Deck Squat Variations

Deck Squats

Deck squats are essentially a rolling squat variation. From a standing position simply squat down while simultaneously rolling backward onto your back. Reverse direction and return to a stand. The momentum of the rolling action makes this a nice introductory movement for those unused to the ROM of a full squat.

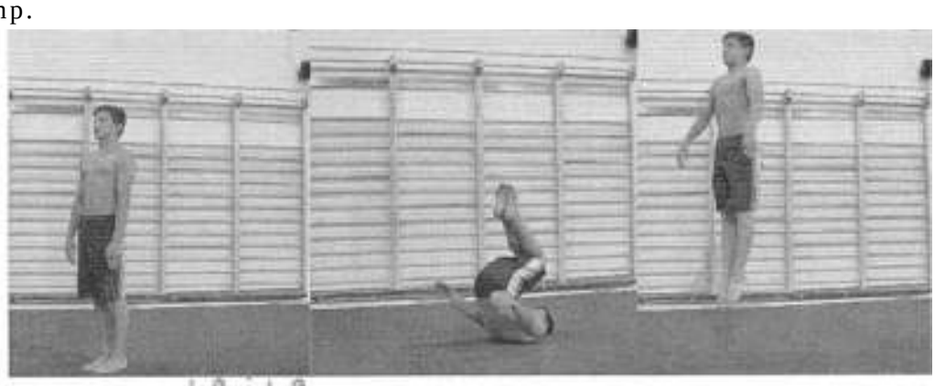
Difficulty rating:

Deck Squats - jumping

In this variation, add a jump upward as you roll back to your feet. To measure performance, I prefer for jumping deck squats to be done up onto a box. Simply position yourself so you begin and finish the roll just in front of the box you are planning to jump up onto.

Of special note here is that there is a great difference between a hop and a jump. Be sure to execute this movement using a jump. A jump begins early in the ascent and continues to accelerate throughout the completion of the movement, culminating when you leave the ground forcefully. A hop occurs from near the top of the movement when the standing motion is almost completed. It is much less rigorous and will develop far less strength than the

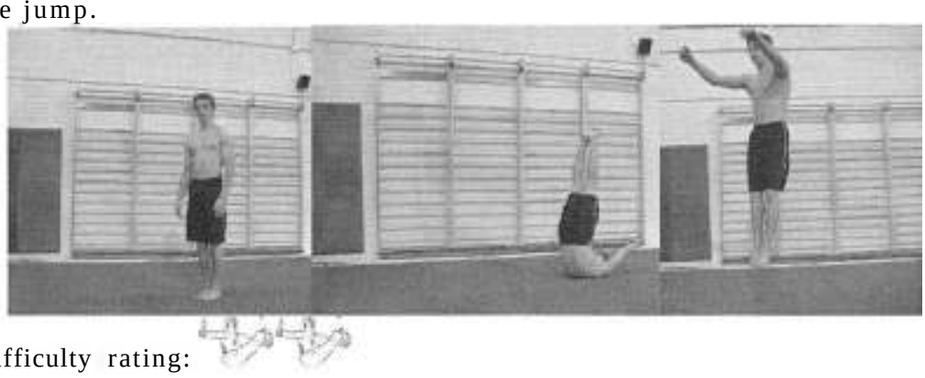
jump.



Difficulty rating:

Deck Squats - jumping for distance

The emphasis here is on jumping for distance rather than height as in the previous variation. I encourage the arms to swing strongly upward during the jump.



Difficulty rating:

Deck Squats - jumping for distance & height

Use the same box arrangement as for the jumping deck squat for height; the use of the box will add an element of measurement to the height of your jump and help to keep your level of effort honest and consistent. In addition, you will now adjust your distance from the box so that there is a distance element as well as a height element.

In my opinion, it is important to prepare the surface of your box carefully when you are combining distance and height into a single jump. If you are short on either your height or distance, there is a distinct possibility of dragging your shins down the edge of the box. If the box is a soft gymnastics type, this is not an issue; however if the box is wooden or metal a missed jump could be quite painful. If a plyometric training type box is all you have access to, be sure to appropriately pad the edges in some manner.

Difficulty rating:

Deck Squats - weighted

Options for holding the weights include holding extended out in front of you with straight arms, held with bent arms, held into the chest or my personal favorite of using a weighted vest.

Difficulty rating:

Deck Squats - weighted jumping

Be careful about adding weight too quickly during this movement. Remember that the primary goal here is to be explosive, not to perform a "grinding" type movement.

Difficulty rating:

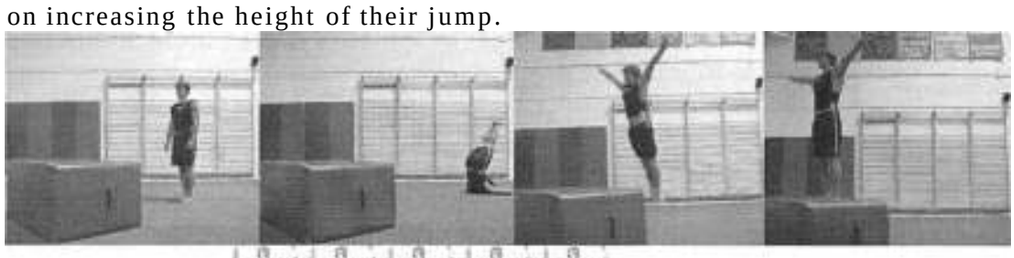
Deck Squats - weighted jumping for distance

For safety reasons, I prefer utilizing weight vest for this variation.

Difficulty rating:

Deck Squats - weighted jumping for distance & height

Generally my athletes seldom jump from farther than 6-8 feet on this variation. Once that distance is achieved, my preference is for them to focus on increasing the height of their jump.



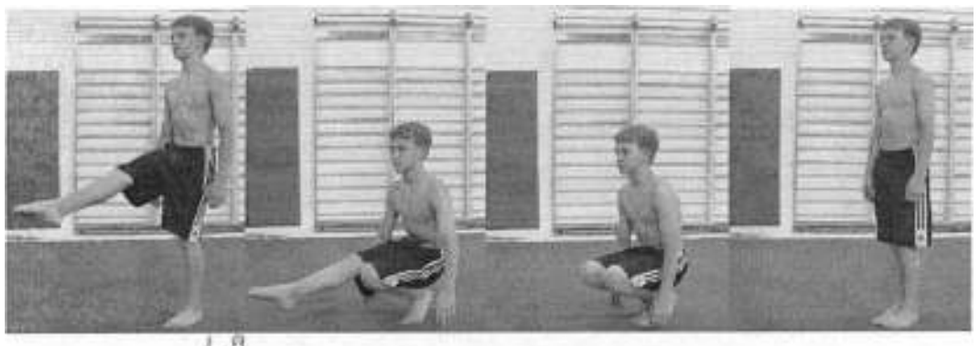
Difficulty rating:

Single Leg Squat Variations

SLS - negative

From a standing position, simply attempt to lower, under control, to the bottom of a single leg squat (SLS). Upon reaching the bottom of the squat, return to a stand using both feet. As your strength and proficiency continue to improve over time, attempt to slow the rate of descent.

If you find it impossible to lower without a degree of control or confidence, you may find it helpful to hold onto to something else during the descent. Stall bars, power racks, parallel bars and even doorknobs work well quite well for this.



Difficulty rating:

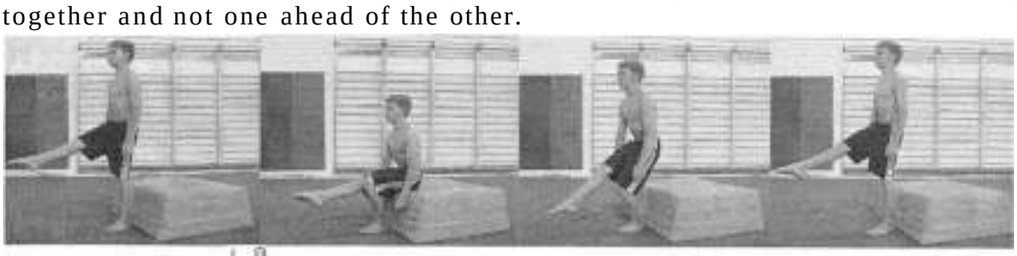
SLS - Graduated

We have now prepared a sufficient strength base to begin working on single leg squats. Depending on the degree of innate active flexibility that you are bringing to your gymnastics strength training, you will either find the single leg squat variations to be easy and natural progressions or a seemingly endless and frustrating exercise in futility. In my experience, these problems are usually simply due to a lack of adequate flexibility while in the "hole" or lowest portion of the single leg squat.

Graduated single leg squats allow you to progressively extend your ROM by gradually deepening the squat. You may utilize any type of surface that may be height adjusted; panel mates, aerobic class steps or even stairs. As long as the surface in question, can be methodically adjusted in height over time it should work fine

Begin by standing facing away from your chosen raised surface. Do not attempt to squat straight down, but rather extend your glutes behind you as though you were going to sit down on a chair. Initially this will result in your torso leaning forward, which is fine. Lower down to the top of your object and then return to a stand.

A common mistake here is to allow the torso to fall forward during the ascent, straightening the legs first and then straightening the back up to an upright position. Make sure that the leg and back straighten in concert, finishing together and not one ahead of the other.



Difficulty rating:

SLS - **deck**
At the bottom of the squat simply roll back a little onto your rear and then use momentum to roll forward up onto your foot and out of the bottom of the squat.

Difficulty rating:

SLS
For my athletes, I require a well done single leg squat (SLS) to have the non-supporting leg extended as closely as possible into a single-leg L position; both at the top and bottom positions.

Success at achieving this position will of course vary a great deal depending upon your degree of flexibility as well as hip flexor strength.

Difficulty rating:

SLS - **jumping**
As with the jumping deck squat, when performing jumping SLS be sure to jump during the ascent, rather than allowing yourself to hop once you have nearly returned to a stand. Focusing on initiating the jump early will have tremendous long-term benefits.

Difficulty rating:

SLS - jumping for distance
When utilizing this variation, be diligent in completely extending the leg during the jump.

Often I will string these together in a series of 3-5 jumps. The athlete who covers the most distance in the set number of jumps is the winner. I do use one catch however. All athletes must land with control; if upon any of the 3-5 landings they take a small shuffle or hop, they are disqualified for that turn and must start over. Outside of making the game more interesting, this landing requirement has the added benefit of greatly increasing ankle strength and stability.

Difficulty rating:

SLS - **jumping for distance & height**
To use a box with this variation of SLS jumps, initially position yourself so that while facing the box your straight leg is extended out next to the side of a box approximately 18-24" high. This will help to minimize your distance requirement in the beginning. As your strength improves, gradually increase your distance from the box until you are able to jump with your leg completely extended directly in front of the box as the athlete demonstrates below.

Difficulty rating:

SLS - **weighted**

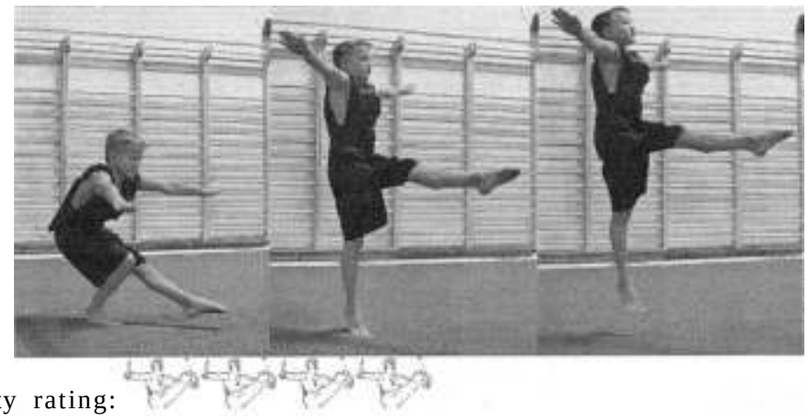
Remember to press the hips back strongly as you descend into the weighted SLS. Be conscientious in remaining upright as you ascend. Do not allow the chest to drop forward or the hips to rise first during the ascent; rather both must rise simultaneously.

Another option to the weight vest is to hold a weight plate during your SLS work. In fact, some people will find it is easier to use a weight plate during weighted single leg squat work as the extension of the plate to the front acts as a counterbalance for the glutes sticking out to the rear.

Difficulty rating:

SLS - weighted jumping

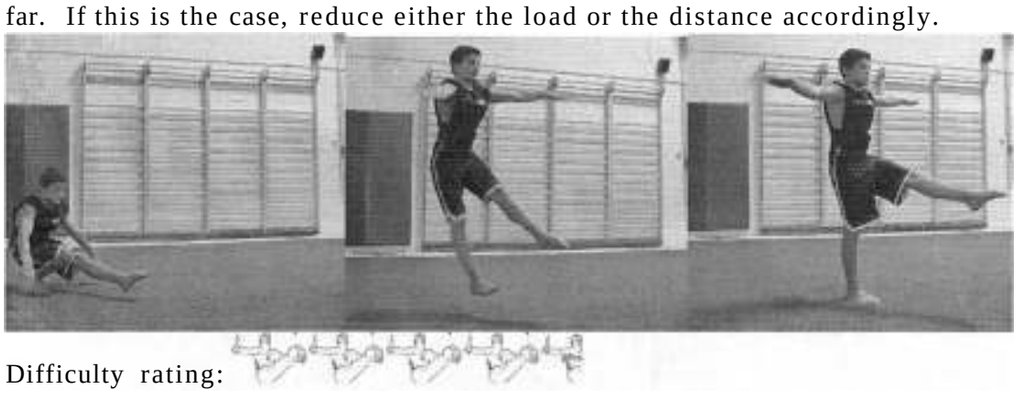
Be conservative in choosing a load for this variation. If you find yourself unable to initiate the jumping action early in the ascent, the load you have chosen is too great for your current capabilities. Reduce the load and focus on being explosive.



Difficulty rating:

SLS - **weighted jumping for distance**

Remember that a controlled landing is essential here. If you are unable to land with stability, either your load is too great or you are attempting to jump too far. If this is the case, reduce either the load or the distance accordingly.



Difficulty rating:

SLS - **weighted jumping for distance & height**

As a variation, the athlete below is demonstrating the weighted SLS for distance and height holding a weighted plate rather than wearing a weighted vest. If utilizing the weight plate, extending the plate forward as your descend into the SLS will aid greatly in maintaining your balance. As you begin to explode upward, pull the plate somewhat closer into your chest. Be sure to completely extend the jumping leg while in the air and then re-bending it prior to landing on the box.

Difficulty rating:

Hamstring Variations

Natural Leg Curls

Begin from a kneeling position. Your feet should be secured either by a partner or placing them under a mat or stall bar. Keeping the hips flat, lower the torso to the floor as slowly as possible. Use the tips of your fingers to control the speed of your descent if you are not yet able to perform these by yourself. Pull yourself back to a kneeling position by strongly pulling with the hamstrings. Do not allow the hips to pike during the ascent. This constitutes one repetition.

As an interesting aside, a friend of mine, Roumen Gabrovska - the former Bulgarian Women's National Team Coach from the 1970s and 1980s, once saw a girl do 12 by herself, full range of motion with no assistance from her hands whatsoever. If that is not humbling enough, the Bulgarian men's record for repetitions performed with no assistance is 25.

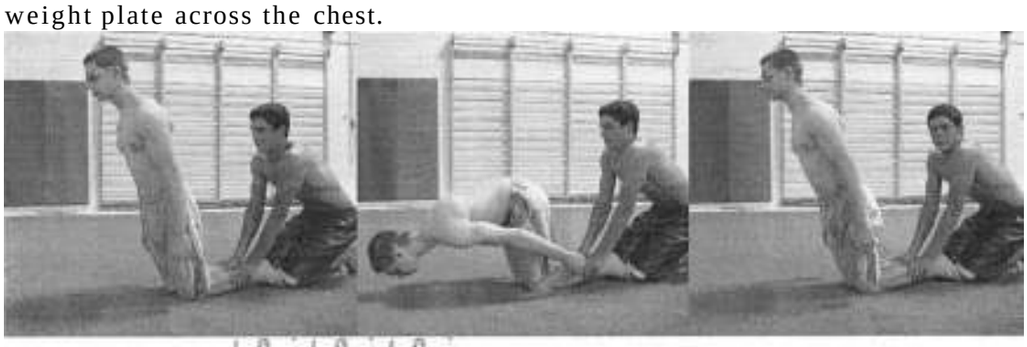
Difficulty rating:

GHR - half

Half GHR (glute ham raises) begin as a leg curl with the partner securing the ankles, tilting the hips forward as far as can be maintained with a straight body, then; while MAINTAINING the hip position and keeping the back completely flat (no curling!), lower the forehead to the ground and return back to the straight body tilted position. The partner can assist in the correct execution of this movement by placing a shoulder or an arm behind the glutes to prevent the athlete from pressing the hips backward during either the descent to the ground or during the ascent back to tilted position. This

constitutes one repetition. Do not return to a completely upright position until you have completed all of the desired repetitions.

It is easy to increase the intensity of this movement by simply holding a weight plate across the chest.



Difficulty rating:

Archups - single leg

Utilizing only one leg dramatically changes the main stress on this movement from a lower back focus to a hamstring focus. Perform your desired repetitions and then immediately switch legs and repeat on the other side.

Add weight as necessary to this movement by holding a plate either across the chest or behind the neck.

Difficulty rating:

GHR

From a prone position, secure your feet firmly behind you and then arrange yourself so that your hips are on the edge of whatever support you have chosen. This may be a GHR unit, a box, a bench or even a vaulting table as shown below. It would be most helpful, especially in the beginning, if the support you have chosen will allow you to grip it somewhere nearby your waist. This will enable you to self-spot this movement until your strength improves to the point where you can perform GHRs unassisted.

Drop your chest forward until you are hanging vertically upside down and then, utilizing the lower-back, lift the torso up to horizontal. Upon reaching

Horizontal begin to raise yourself to vertical by strongly contracting the hamstrings. Continue curling with the hamstrings until you are sitting completely upright. Pause and then descend back to the bottom to begin another repetition.

Alongside with your arms, the speed of your movement can also be a highly effective method of assistance. Adding a little speed or momentum will make the GHRs much easier initially. Simply be conscientious in reducing the amount of momentum used as your strength increases.

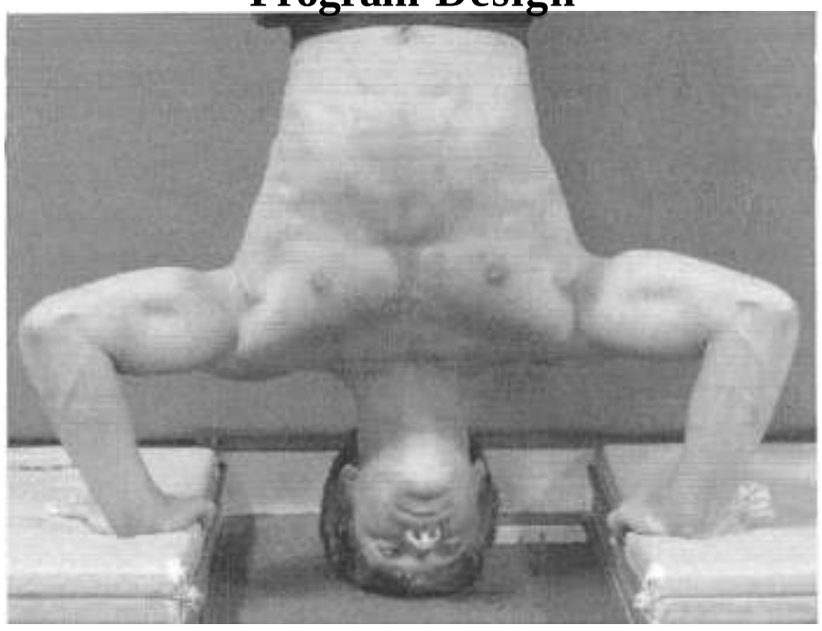
In addition, the more you pike the hips and bend forward during the ascent, the easier the leg curl will be. Over time strive to develop the ability to perform the leg curl portion of the GHR with a perfectly straight body.

Difficulty rating:

CHAPTER TEN

Program Design Options

Program Design



Throughout this volume many unique and never before seen gymnastics strength training exercises have been documented and taught. Progressions and performance caveats have been painstakingly discussed and evaluated. Training these movements in and of themselves can, and will, provide excellent gains in overall strength. However, when the two components of FSP (fundamental static positions) and FBE (fundamental bodyweight exercises) are combined correctly, the results can be substantially greater than the results of training either one separately.

This final chapter of Building the Gymnastic Body will first examine how to structure static and basic strength training separately and then detail how to integrate them together for the greatest possible gains.

Static Strength Training

Static Holds - simple

Pick a static strength position. Work your way through the progressions of that position. Quick and efficient, this approach requires almost no equipment whatsoever, no partner and very little time. Yet despite this extremely minimalist approach, some trainees have reported surprisingly good strength results from such an extremely abbreviated strength program that consisted solely of front lever and planche static work (please see Appendix B).

This method of training has proven to be particularly popular with those who are new to gymnastics bodyweight conditioning and would like to insert it into their existing conditioning program with the least amount of disruption to their former training protocol.

Below is a sample static hold program based on your having a maximum tuck planche hold of eleven seconds and utilizing a Steady State training cycle (For

additional information on Steady State training cycles see the section on Managing Training Intensity). The program could be placed either before or after their regular training.

1) An eleven second maximum hold divided by two equals a tuck planche "rep" of approximately six seconds.

2) Sixty seconds total work time divided by six seconds equals ten sets.

3) You will perform ten sets of six seconds. This is important; at no time during the training cycle increase past a six second tuck planche hold. Maintain it even towards the end of the cycle, when you are feeling particularly strong and stable at 6 seconds.

4) Try to keep recovery periods between the sets reasonably short; forty five to ninety seconds max.

5) My preference is to perform simple static hold training on a Mon, Tue, Thu, Fri schedule. Although, if you are feeling particularly strong one week, adding in an additional day on Wednesday is fine. Also if you are feeling fatigued or somewhat over-trained for any reason, do not hesitate to insert an extra rest day when needed.

6) Your cycle will last anywhere from eight to twelve weeks depending on your perceived level of exertion. If you are still "working" fairly hard to complete all ten sets at six seconds at the eight-week mark, continue on with the training cycle for at least another two weeks. If still in doubt at the ten-week mark, continue for two more weeks.

7) At the end of the current cycle, test to establish your new maximum tuck planche hold and recalculate your planche program for the next training cycle. For example, if your new maximum hold is now fifteen seconds, you will be training with eight sets of eight seconds in the new cycle.

When you are capable of performing a static hold for longer than 15 seconds, you should proceed onward to the next harder variation; provided you can hold that new variation for at least three to five seconds. If you are unable to hold the next variation for three to five seconds, you should continue training with your current variation while experimenting with the new to begin to establish a foundation of familiarity from which to work the new variation from.

Static Holds - embedded

The embedded static protocol was originally formalized from a correspondence with Julian Aldag of Australia. Essentially an embedded static strength training template is where a progressively more challenging entry and exit into the primary static hold is used each week of a six to eight-week training cycle - all the while continuing to maintain the same static hold

time for the length of the training cycle. On completion of the training cycle, either establish a new maximum static hold with that same variation or move on to the next variation in the progression for that static strength position.

A sample cycle of embedded L-sits

week **1:** jump to an L, hold
week 2: lower to an L, hold
week 3: lift to an L, hold
week 4: leg lift, lower to an L, hold
week 5: lift to an L, hold, finish the leg lift
week 6: leg lift, lower to an L, hold, leg lift back to top from the L
week 7: pull to inverted hang, lower to an L, hold
week 8: pull to inverted hang, lower to an L, hold, Crank

A sample cycle of embedded Straddle Ls

week 1: jump to a straddle L, hold
week 2: lower to a straddle L, hold
week 3: lift to a straddle L, hold
week 4: forward roll to a straddle L, hold
week 5: backward roll to a straddle L, hold
week 6: headstand lower to a straddle L, hold
week 7: handstand lower to a straddle L, hold
week 8: forward roll to straddle L, hold, press to HS

A sample cycle of embedded Back Levers

week **1:** jump into a tuck back lever, hold
week 2: lower from an inverted hang into a tuck back lever, hold
week 3: from inverted pike hang press out to tuck back lever, hold
week 4: lower from an inverted hang to tuck back lever, hold, pull back up to the inverted hang
week 5: from an inverted pike press out to tuck back lever, hold, pullout to inverted hang
week 6: pull from a tucked German hang to a tuck back lever, hold
week 7: pull from tucked German hang to tuck back lever, hold, pullout to inverted hang

A sample cycle of embedded front levers

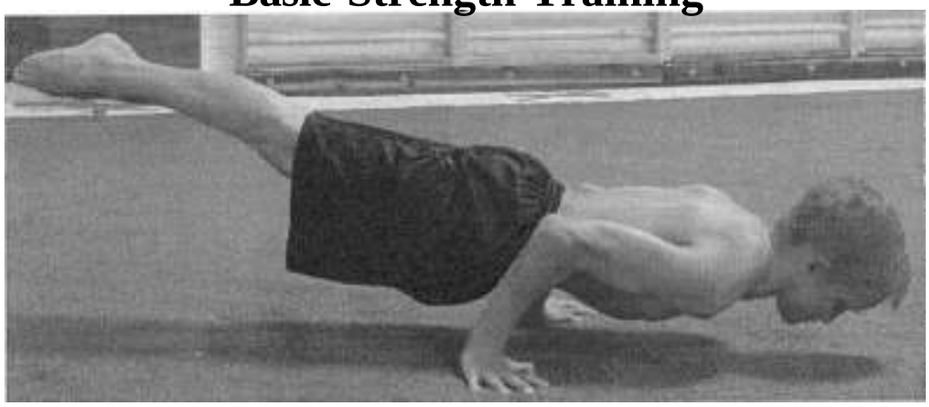
My adjustment to his protocol: (use various front lever pulls)
week 1: jump into the tuck lever
week 2: lower from inverted hang to tuck lever
week 3: pull from dead hang to tuck lever
week 4: lower from inverted hang to tuck lever, hold, pull back up to inverted hang
week 5: pull to inverted hang, lower to tuck lever, hold
week 6: pull from dead hang to tuck lever, hold, pull up to inverted hang
week 7: pull chin over the bar, front lever row to tuck lever, hold,

pull chin back over bar
week 8: Perform a tuck Yewki to a bent-arm tuck lever hold, lower to tuck lever, hold

A sample cycle of embedded Planches

week 1: jump into a tuck planche, hold
week 2: lower from a HeS into the tuck planche, hold
week 3: press up from the floor into a tuck planche, hold
week 4: lower from a headstand into a tuck planche, hold, press back up to a headstand
week 5: press up from the floor into a tuck planche, hold, press up to a headstand
week 6: lower from a handstand to a tuck planche, hold
week 7: press up from a headstand to a handstand, lower to a tuck planche, hold, press back up to a headstand
week 8: press up from a headstand to a handstand, lower to a tuck planche, hold, press back to handstand, lower to headstand

Basic Strength Training



When building basic strength, it is best to employ a low repetition, low volume scheme for any given exercise. This general template coupled with various set construction options will be suitable for the vast majority of athletes.

Most trainees should plan on working in sets of either 3x3 or 3x5; with all of these being work sets. There are two exceptions however to this general rule. Typically it is best for pre-pubescent athletes to use a very simple template of 1x3-5 reps. While it is true that these younger athletes are capable of incredible gains in strength, the total volume (tonnage) of weight moved in higher volume work simply cuts too deeply into their limited recovery ability.

There are also other athletes, an admittedly very small minority, who absolutely stagnate when forced to follow low repetition low volume training. They require an absolute minimum of 5 sets of 5 reps during their basic strength training in order to receive the correct neurological stimulation for their particular physiology. Unfortunately, there is no way to accurately predict who will need the additional volume other than practical experience.

If, after all of the above, additional hypertrophy is still required for an exceptionally slim athlete to be able to perform adequately, a template of 10x3 work sets done every two minutes or a pyramid structure of 12,10,8,6 reps with increasing training loads as the repetitions decrease will usually resolve the issue.

Weekly Scheduling

As far as a weekly basic strength training schedule, you may choose the training schedule of your choice; ranging from M/T/TH/F, to M/W/F to M/TH or T/F. When deciding on your schedule, remain mindful that you will be engaging in a whole body workout on each of the training days.

Each day of the training week focus on a different a press, pull, core and leg exercise. Set up a rotation that takes you through the primary planes of

movement and then begins again. For example; training day 1 could be a curl variation, training day 2 could be a row variation, training day 3 could be a pull-up variation, training day 4 could be a MPPu variation and training day 5 would begin the rotation again back at curl variations. This keeps the mind fresh and engaged while helping to prevent overuse injuries. For basic strength, it is best to pair exercises and then rotate between them rather than stand around while waiting to recover for your next set.

For upper-body work, focus on CPPs, or pair a curl with a dip, a HSPU with a pull-up and a pushup with a row or a MPPu with a MPPr; although any variation of pull/press would be acceptable. Leg work should be alternated with a core exercise.

Set Structure Variations

In addition to the traditional methods of simply increasing repetitions or adding external weight to the body, there are also a variety of methods for combining different bodyweight exercises to utilize progressive loads and progressive unloading during the course of a workout.

Traditional

Traditional methods of controlling intensity can easily be employed with bodyweight exercises; simply maintain the same exercise and the same number of repetitions for each of the sets performed. Care should be used to choose a bodyweight movement of the correct intensity.

For this set variation, the same exercise and number of repetitions will be used for all sets.

Ladders

Ladders may proceed 1,2,3,1,2,3 etc. or 1,2,3,2,1. The first variation allows for more recovery within the ladder set and a greater focus on strength acquisition, while the second places a greater premium on muscular endurance. The lower reps in the beginning sets afford a gradual effective warm-up.

For this set variation, you will use the same exercise for all of the sets within the ladder. Only the repetitions will change from set to set. Be sure to choose an exercise that you find at least moderately challenging when performed for three to five repetitions.

Gymnastic Bodies Pyramids

GB Pyramids are a method of combining bodyweight exercises to increase the intensity of the work done within a workout from set to set. In this instance the exercises will change, progressing from easiest to hardest, while the repetitions per set also change. The exercises will generally increase in difficulty within the same plane of movement.

Here is an example utilizing HSPU variations
HeSPU => PB HSPU => XR HSPU

Another pyramiding set example utilizing CPP exercises
narrow muscle-ups => wide muscle-ups => straight bar muscle-ups

Generally when using this format use a repetition scheme of 5,4,3,2,1 or 5,3,1 reps progressing from the easiest to the most difficult. Within this template, consider these repetition numbers as "slots" where the appropriate exercise will be placed.

For this set variation, both the exercises and the number of repetitions performed will change from set to set within the pyramid.

Gymnastic Bodies Reverse Pyramids
Arrange the exercises from hardest to easiest. Reverse the usual pyramid repetition scheme as well to 1,3,5 or perhaps 1,2,3,4,5.

Below is an example of a reverse pyramid workout utilizing CPP variations
Galimores => Roeslers => Ians => weighted muscle-ups

For this set variation, the intensity of the exercise will decrease and the number of repetitions will increase from set to set.

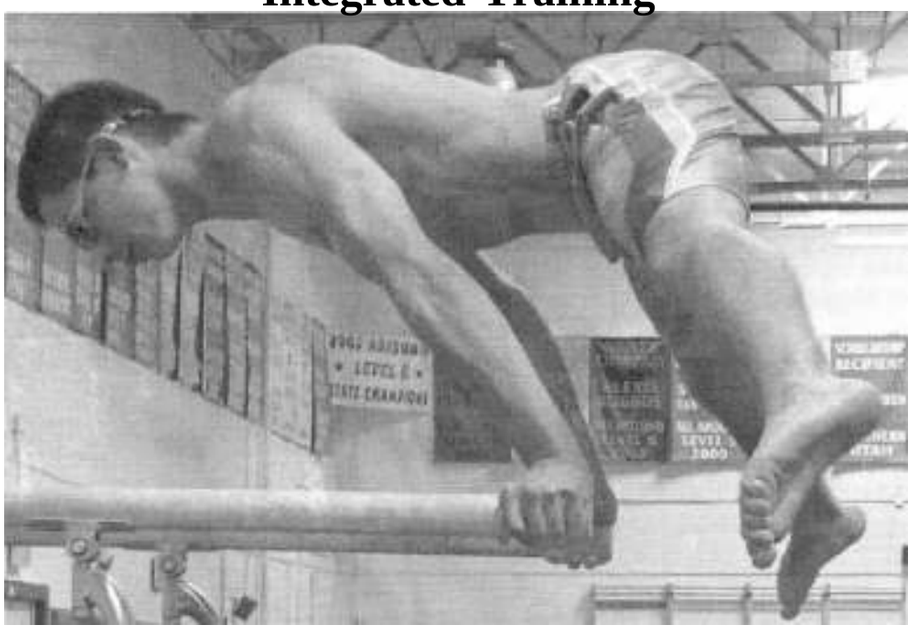
Blended Sets
Blended sets are a combination of various exercises that seamlessly "blend" into one set. The object is to strive to cover several planes of movement within the context of one set. For the purposes of basic strength, we will restrict the selection of exercises within a single set to either pulling, pressing, core or legs. Generally in blended sets, the progression is from most difficult to easiest during the course of the set with the exercises changing from repetition to repetition.

The following is an example of a pulling blended set
1 Front lever row then 1 reverse Yewki then 1 front lever pull then 1 L pull-up

The following is an example of a pressing blended set
1 XR HSPU then 1 XR tuck planche pushup then 1 XR Bulgarian Dip

For this set variation, the exercises will change from repetition to repetition within a given set; but the overall structure of each set will remain the same throughout the workout.

Integrated Training



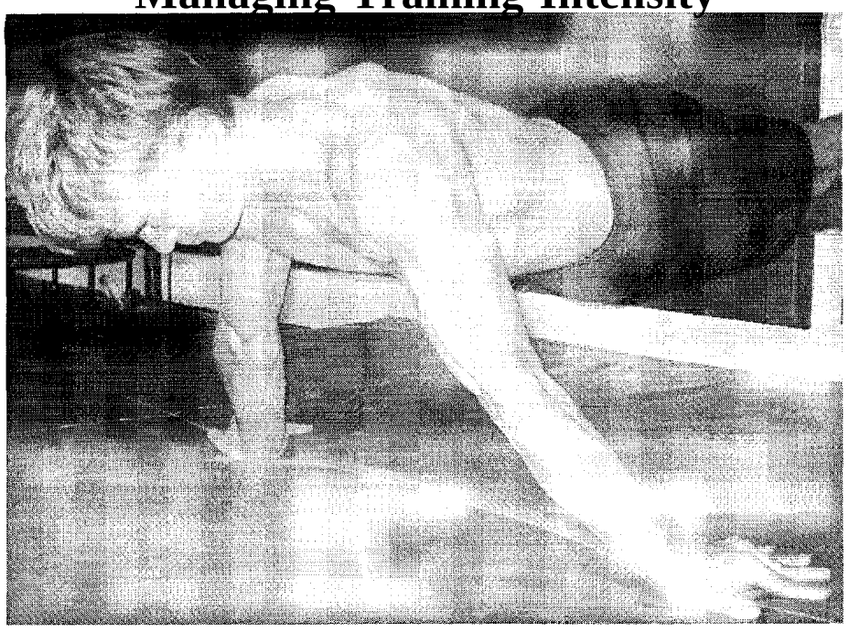
This is by far the most effective of all of the strength training protocols discussed to date. Static strength positions are best developed through a combination of static hold training and the appropriate pull/press supplemental movement. In addition, pull/press movements increase in strength much faster when paired with the appropriate static hold positions.

To perform integrated training, take your basic strength workout that you have designed and pair it with either your simple hold static work or the appropriate embedded static work. The static strength work will be done immediately preceding the basic strength work. A short rest of 30-60 seconds between the static work and the basic strength work is fine.

For example
Embedded back lever work will be paired with each day's pulling variations.
Embedded planche work will be paired with the pressing variations.
Front lever work will be paired with the leg variations.
L-sit/Straddle L/or Manna work will be paired with the core variations.

In integrated training, the steady state cycle established for your static strength work will be set aside in favor of either the PTTP or the steady state cycle that you will be following for your basic strength work.

Managing Training Intensity



The purpose of training is to prepare the body to be capable of exerting greater physical effort. Often however in our zeal to be successful, we over exert ourselves, often to the point of physical injury, and ultimately end up falling far short of our physical potential. More often than not, this failure to fulfill our potential is not due to a lack of effort or a willingness to work hard, but through a lack of patience coupled with a "take no prisoners" attitude. The following two training cycles will help you to more appropriately manage your training intensity and avoid unnecessary down time.

I recommend that you work hard, sometimes quite hard, but reasonably. After an initial period of adaptation, you should be able to finish conditioning feeling relatively fresh. In fact, my senior athletes begin their technical training immediately after their physical preparation has ended. At the beginning of a new cycle, this can be rather challenging to say the least, however the period of perceived stressful adaptation is seldom more than two weeks.

Modified PTTP

PTTP, originally created by Pavel Tsatsouline (his many fine publications and training articles may be found at www.dragondoor.com), is an excellent method for controlling and measuring the intensity of weighted workouts while simultaneously allowing for full athlete recovery. Ample time is given for recovery and, correctly implemented; training injuries will be practically non-existent. The major complaint that most have when implementing a PTTP training cycle is the relative ease with which strength is developed. As most

of the cycle is spent with sub-maximal resistances, the degree of perceived effort is medium.

The PTTP cycle is designed for use with weighted exercises, however a simple, yet effective, modification allows the PTTP approach to be used with bodyweight movements. Rather than adjusting the weight to be used from week to week, simply move on to a harder variation of a movement each week. For example jumping dips to negative dips to PB dips to upper arm dips to Bulgarian dips to single bar dips to Korean dips to XR dips. The key here is to not perform maximum efforts with each variation, but to gradually increase the level of perceived effort as the weeks progress. Upon reaching a week where the level of perceived effort is too great and you fail, stop and take a break from training for the rest of that week. The following week begin the cycle again, only this time chose an exercise that is at least slightly harder than that of your last starting point.

Steady State

Steady State is by far the best training cycle that I have ever developed for use with my athletes. It is the end result of many years of studying as well as thousands of hours of practical trial and error.

In essence the Steady State training cycle is simplicity itself; only add weight, or add repetitions, or increase the duration of a static hold or progress onward to a new more difficult exercise variation approximately every 8-12 weeks and then only after the athlete has progressed through an adaptive training cycle of perceived over-load (hard effort), load (medium effort) and under-load (easy effort or recovery). This means that the training load; i.e. number of sets, number of exercise repetitions or the duration of static hold repetitions, will all remain constant throughout the entire training cycle. At no time during this Steady State cycle will the level of work be increased.

In my opinion, the most common and yet serious flaw in the thinking of most coaches, trainers and athletes is that they neglect to allow enough time in the under-load, or recovery stage, where the level of effort is physically perceived as being relatively easy. This is actually a crucial part of any training cycle, allowing the current gains to be solidified and the musculature/joints/connective tissue/central nervous system (CNS) and the psyche to completely heal and recover in preparation for the next steady state cycle of perceived over-load, load and under-load.

Beginners often mistake the rapid improvements that they make in load/rep increases as increases in strength when in reality their untrained physique is simply becoming more neurologically efficient through practice. In reality it takes a minimum of 6 weeks to see actual physical improvements in basic strength.

By constantly attempting to improve from workout to workout; more weight, more reps, more volume, more speed etc. over an extended period of time, the athlete will eventually, usually within an eight week timeframe, come up against their current physical limitations. Continued attempts to try to force the body to blast thru these very real physical limitations are fruitless as the body's schedule of regeneration and adaptation is set and cannot be exceeded.

Tissue Type	**Regeneration Schedule**
Platelets	Every 10 days
Blood Cells	Every 3 months
Muscle Cells	Every 4 months
Bone Cells	Every 2-3 years

Excerpt from Younger Next Year by Lodge and Crowley

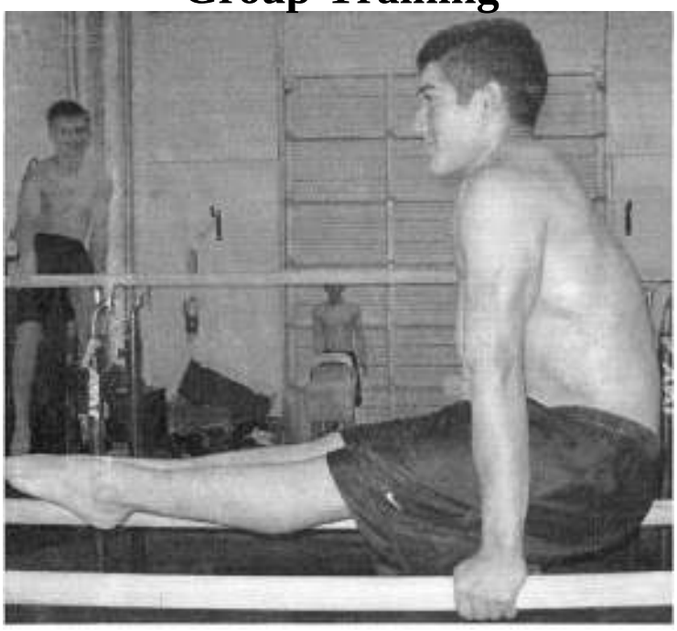
All that will be accomplished by continually struggling to exceed these biological limitations are a plethora of over-training issues, among these being: joint pain, muscle strains, lack of energy, decrease in coordination, lack of explosiveness, connective tissue issues and mental fatigue. In addition, continuing to push in the face of these over-training issues will often result in a short term injury, which could easily have been resolved through reduced training or rest, becoming a chronic or permanent physical impairment.

By utilizing a correctly established steady state training cycle, physical injuries will be practically non-existent as will be mental burnout from psychological stress.

Establishing a Steady State training cycle for basic strength is extremely easy. Simply choose a challenging exercise for a particular plane of movement and then stay with it, performing the same number of repetitions and sets for the entire training cycle.

Remember, "Make haste, slowly." The body improves on its own biological schedule. If you listen to your body carefully and respect its limitations while challenging it appropriately, you will be able to enjoy an almost completely pain-free and injury-free training experience; and while continuing to make excellent consistent gains in strength. Remember that Coach Sakamoto built his incredible record of 163 freestanding HSPU over the course of years with consistent patient effort, and not while engaging in a mad dash to the finish.

Group Training



The Gymnastic Bodies program is endlessly adaptable and is capable of providing the appropriate training stimulus simultaneously to a group of trainees with widely ranging athletic abilities.

In light of this, it is important to note that the starting position of the preceding exercises has a great influence on the intensity of any given movement. For example, L pull-ups could be in either the tuck, straddle or pike position; with each of the proceeding positions being progressively more difficult.

In addition, where in the ROM the exercise begins will also greatly affect the difficulty of the movement. For example, an L-pull-up that begins each rep from the chin over the bar rather than the standard hang position is substantially more difficult., as will a handstand pushup that begins from the bottom of the ROM. Beginning the repetition count from the middle of the ROM is especially useful in a group-training environment.

For example when training a group of beginning athletes there is usually quite a bit of variability between their different levels of strength. As such, out of four athletes all doing 5 pull-ups following my repetition count, two may be doing standard pull-ups, one doing tuck L pull-ups from a hang and the fourth doing L pull-ups beginning each rep from chin over the bar. In this instance the stronger athlete has a significantly more difficult conditioning challenge, which is further exacerbated by his having to wait with chin over the bar while the weaker athletes complete their repetition.

The above protocol applies to any of the fundamental bodyweight exercises. One individual could be doing tuck leg lifts, another regular leg lifts, two could be doing leg lifts beginning each repetition from the top static position and the final could be doing single leg-single leg-double leg lifts beginning from the top static position as well.

Appendix A

Tips for Increasing Pull-ups

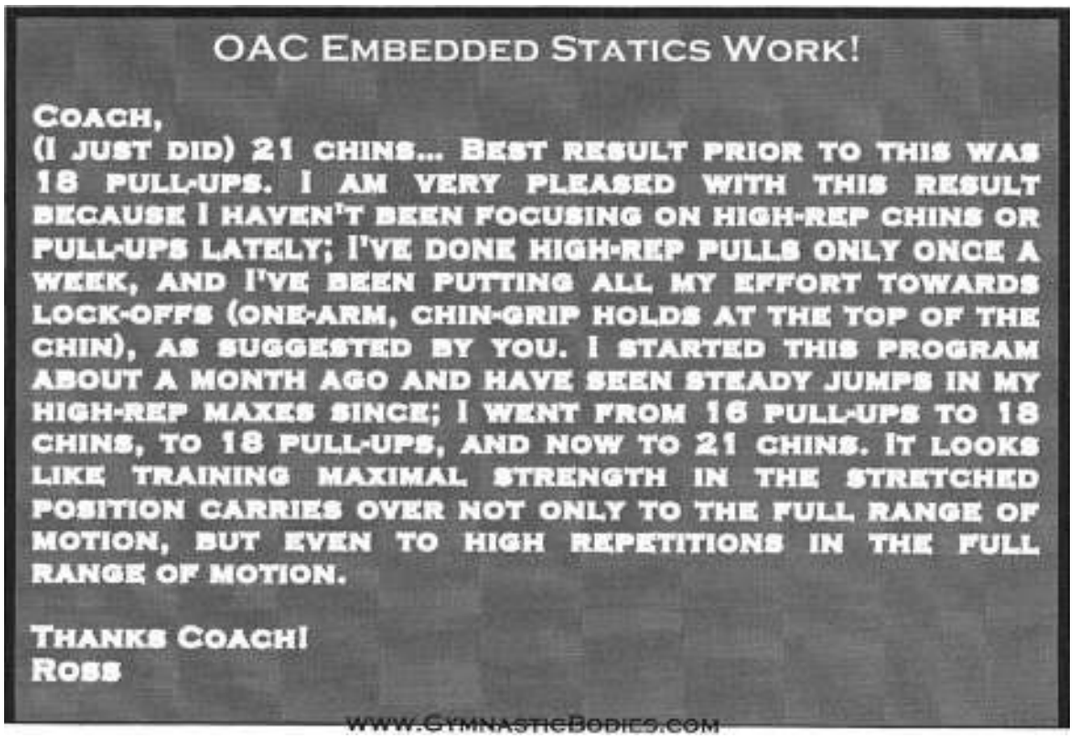
Many people believe that an easy way to increase your repetitions in the pull-up is the focus on performing a bottom static hold (the "hang" portion of the pull-up). I agree. In addition, I would submit that it is equally important to train the top position as a static hold as well.

A few years ago, I obtained a personal best in weighted chins (bodyweight plus 751bs for 1 rep at 1301bs bodyweight) after being stuck at bodyweight plus 551bs for a number of years. The improvement came after a couple months of training assisted OACs (see the section on pull-ups) and performing them in 2-3 sets of 1-3 reps with a top static hold of 3-5 seconds on each repetition.

During this period, I did no weighted chins or high rep pull-ups - just the program outlined above three to four days a week. In addition to the weighted chin PR, during the same time frame, I also performed an easy set of 19 pull-ups as a spur of the moment demo for some of my students.

I feel that these results were the result of focusing on the top static hold under an increased training load (i.e. the one arm hold). I did no training to increase my strength in the bottom hang position, although I wonder if working both together might have been even more beneficial.

Yours in Fitness,
Coach Sommer



Appendix B

Static Strength Only Training Results

While I generally that recommend static training be regarded as one element of a comprehensive training program, static positions can actually constitute an entire work out in and of themselves in a minimum of time and with maximum results. The following are one man's tremendous results from just three months of static only training.

"I'm an adventure racer who's trying to find simple ways of increasing his strength without having to go to the gym or gaining too much weight (which over a 24-36hr race, can really slow one down). By the way, I think the atmosphere on this board is great, and that you guys are truly lucky to have world-class coaches that share their knowledge and experience freely.

I started with Coach Sommer's bodyweight article alone just over 3 months ago, and can now hold a front lever with one leg bent (Brad J's variation) for about 40 seconds, and a tuck planche for about 30 seconds before my hips drop lower than my shoulders.

I have to say that I've already noticed my arms and shoulders getting more muscular, and my abs and wrists feel much stronger (I do the tuck planche on parallets-like bars).

In terms of carryover benefits, I haven't done any chin-up training in about a year, and could only do 7 four months ago. I tried my max last week, and hit 15. This is without having done *any* chin-up training or even any front lever pull-ups in that time. Of note is that my max while training weighted chin-ups regularly a couple of years ago was 18.

My dips also increased from 8 to 16, without training them specifically or losing any weight.

My L-sit went from 7 seconds to 30 seconds with no specific training, which I believe comes from the front lever, but also from the tuck planche, as it requires one to forcefully contract his abs to tuck the legs up.

This is also the first time I started the Kayak season without having my shoulders burn half-way into my first training session from holding the paddle up (likely due to the planche training).

I'm truly amazed with the results. Although non-adventure-racer friends of mine are getting faster results (i.e. getting bigger) by hitting the weights, none of them spent as little time as me strength training (2 minutes per day total!!!), and I doubt they're hitting their stabilizers like I am.

Thanks, Dave

Appendix C

120 Muscle-ups in 15 minutes

The following incident simply confirmed what I had previously suspected; that focusing on metabolic conditioning or strength endurance training is far more efficient if a solid foundation of basic strength has first been established. In my experience, strength always comes before strength endurance and indeed is the necessary foundation from which ALL impressive displays of strength endurance occur.

A Gymnastics Based WOD

On Friday May 21 2004, my athletes did an unusual workout for the GPP (general physical preparation) portion of their conditioning which some of you may be interested in. In the past we have not done any high rep circuit type training and I was curious to see how they would respond to the challenge.

After a four hour workout and completing their ring strength training, the GPP assignment was to complete, in 15 minutes, as many rounds as possible of the following: 10 muscle-ups followed by 20 pause-jump squats. The winner would be the one who completed the most rounds within the fifteen minutes.

To avoid traffic congestion problems, the muscle-ups were done on a single rail of our parallel bars rather than on the rings. Although kipping was allowed, full extension at the top and bottom was required in order to count the rep. The sets could be broken up as needed.

The pause-jump squats were simply a jumping squat with a 2-3 second pause at the bottom with hips parallel or slightly below the knees. I placed these here primarily to provide a break for their upper body before the next set of muscle-ups. (As a side note, towards the end of the workout, one of my athletes became bored with the pause-jump squats and began adding a back flip on the jump portion.)

The results were as follows: Chris and Greg chased each other throughout the entire fifteen minutes, completing 12 rounds each and were beginning a thirteenth round when the clock ran out. Chris was crowned champion as he finished his 12th round of muscle-ups one rep ahead of Greg. Greg was, needless to say, quite annoyed to have been defeated by one rep.

For these two young men that means that in fifteen minutes they completed 120 single bar muscle-ups and 240 pause-jump squats. They were not

extremely fatigued and would have been fine had I extended the time of the MetCon/GPP conditioning period to twenty minutes.

Davey was second with eleven rounds completed for a score of 110 single bar muscle-ups and 220 pause-jump squats. Davey is the one who got bored and began adding the back flips to his pause-jump squats.

Allan and Zach were tied for third with 10 rounds apiece for 100 single bar muscle-ups and 200 pause-jump squats. As an interesting aside, Allan turned in that outstanding performance despite only recently having turned 9 years old that previous March.

We finished off our workout with 50 flairs on the pommel horse. I anticipated some problems here due to support fatigue. The athletes however were in high spirits from their GPP conditioning contest and managed to turn their pommel horse conditioning (50 flairs) into another contest to see who could do the most flairs in one turn. Allan and Greg had a great battle with Allan eventually coming out on top with 25. They were having so much fun with their contest that they forgot to stop at fifty.

All in all, it was a very productive conditioning period that evening. A lot of specific, as well as general conditioning, was accomplished and the athletes especially enjoyed the challenge of something new and different.

It was also an excellent example of exceptional strength always providing the foundation for exceptional strength endurance. It is instructive to note here that during our regular conditioning sessions, Greg was capable of performing one strict non-kipping muscle-up on a single bar with nearly half of his bodyweight attached to him.

Yours in Fitness,
Coach Sommer

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A Special Thanks

A special thanks is due to the talented young men of the Xtreme Gymnastics Optional Team who over the years have brought my conditioning ideas and philosophy to life. Without their generous contributions of both time and effort, the many illustrations throughout this book would not have been possible. Thank you gentlemen and well done.

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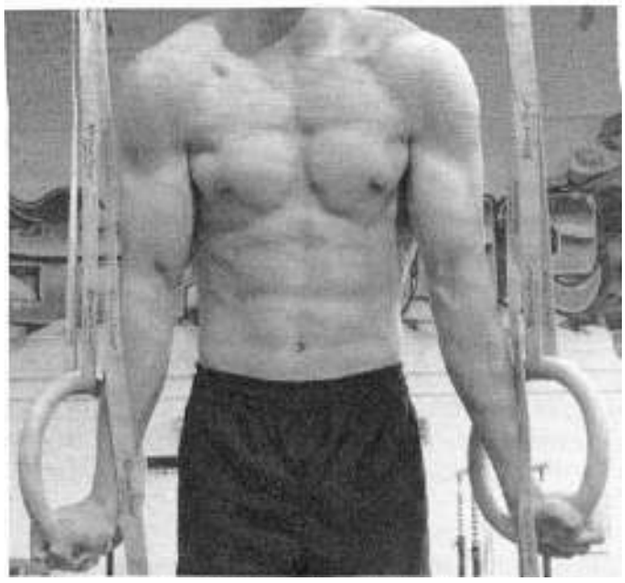

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