

LEGENDARY ABS

From health for Life

Hi! Thank you for ordering Legendary Abs.

The routines in this course are the result of four years' research at Stanford University. A research team spent hundreds of hours observing bodybuilders, gymnasts, martial artists, and wrestlers to learn how dedicated athletes approached abdominal conditioning. The researchers pored over existing physiology studies, and conducted and evaluated new ones. Their findings formed the basis for the most economical and effective program ever developed.

And the results? Quite, simply-amazing! 95% of those using the new program showed improvement in abdominal tone within the first two weeks. Bodybuilders found they could develop and maintain the kind of muscle definition previously thought to require daily 30-minute Roman Chair workouts just using a simple, 6-minute program four times per week!

Now you will discover how well it works. You'll feel it, too. From the very first workout, *Legendary Abs* will make your abs burn just as much as a good bicep workout makes your biceps burn!

Because of your interest in conditioning and exercise, you probably know more about the subject than most people. You may even be doing some of the exercises in this course. Please note: The research behind the program was aimed not only at determining which ab exercises are most effective, but more importantly, at discovering the optimum way to *combine* them. This is Synergism-creating a whole greater than the sum of tile parts. Tile individual exercises described in *Legendary Abs* become many times more effective when used exactly as indicated. It is the specific per-level sequence, timing, and overall progression that make our program such a powerful conditioning tool.

It's interesting how far off the mark traditional training advice falls. Did you know, for example, that tile straight-legged sit-up is not an efficient abdominal exercise? And that it's actually bad for you?

But we're getting ahead of ourselves. To explain this clearly, we must trace the course of our research through some areas of kinesiology and physiology, to the conclusions that shaped this unique program.

IN THE BEGINNING, THERE WAS MUSCLE...

(Later, unfortunately, came fat)

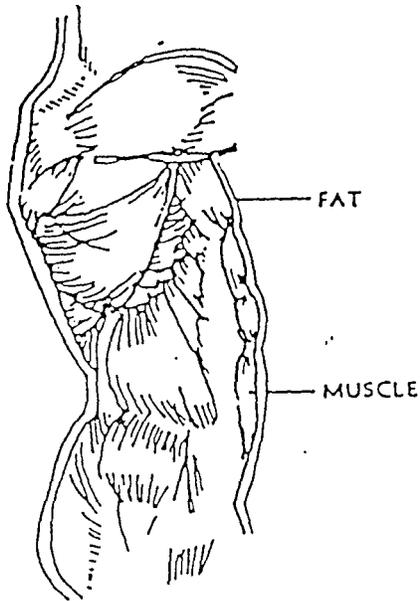
Muscle is the powerhouse of the body. (It has a very special characteristic: it contracts. Given stimulus by the central nervous system, muscle fibers shorten to about two-thirds of their original length. And because of the clever ways in which those fibers are positioned, humans can do amazing things: like run 4-minute miles, climb impossibly high mountains, and make quick recoveries when they trip over their own shadows in public.

Muscles also protect your body from injury. The abdominals in particular, running from the bottom of the rib cage to the top of the pelvis, shield the delicate internal organs.

Finally, the abdominals are essential to good posture. They act in concert with the Spinal Erectors to hold you and your spine upright, much the same way opposing guy-wires support a tent pole.

At least, that's what they were designed to do.

Soft, out of shape abdominals do little supporting or protecting. They don't look great, either-hence the many diet and exercise programs available today. These programs, however, usually fail to distinguish between toning abdominal muscle and getting rid of excess fat.



Muscle and fat lay next to each other in the body, but they are distinct and separate layers.

Fat is the body's way of storing 'extra' food. You eat more than you need to sustain your daily activity; the excess ends up on your thighs, or the backs of your arms, and around your middle in the form of enlarged fat cells.

Getting rid of unwanted fat, if that is your goal, simply requires you to observe the tried and-true formula:

DIET + EXERCISE = WEIGHT LOSS

No secret here. Doing muscular work requires energy. That energy is derived from the food you eat and from your fat stores. If you decrease food intake and/or increase energy output, you will lose fat. Simple.

Some people, though, mistakenly assume they can 'burn' fat from around their middles by doing exercises involving the muscles in that area--side ups, side bends, and the like. Not so. Doing exercises for any single muscle group does not burn enough calories to noticeably reduce fat. Furthermore, when fat does come off, it comes off evenly from all over the body--not just the area being worked. To get rid of fat, you must force your body as a whole to burn lots of calories by involving as many major muscle groups as possible. This means doing exercises like running, swimming, cycling, aerobic dance or jumping rope, and doing them consistently over a period of time. So much for fat. To condition abdominal muscle, it's necessary to do exercises that...

- Involve the abs,
- Overload the abs--forcing them to do more work than they're used to,
- Work the abs from a variety of different angles so that all the muscle fibers get a workout.

With this in mind, let's take a look at the most common abdominal exercises...

THE GOOD WORD ON SIT-UPS

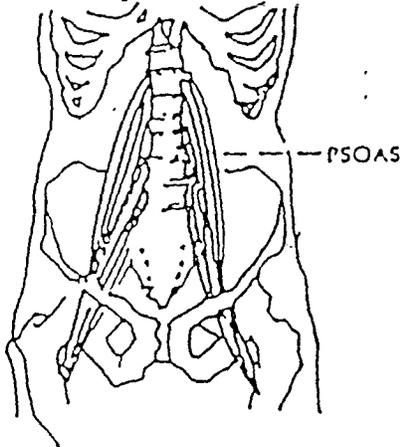
Don't Do Them!

At first thought, straight-legged sit-ups or Roman Chair sit-ups seem reasonable candidates for an abdominal toning program. The stomach muscles appear to be in the middle of the crunch that occurs when you sit up, and they "burn" during the course of the exercises. So they must be doing the work, right? '

Actually, no. It's true the abdominals contract when you do these exercises. But the abs have a much narrower range of motion than these exercises require. If you tie a rat on your back with legs extended, your abs have the capacity to raise your shoulders about 30° off the floor. No further any motion above and beyond that is not the work of the abs. Since the Straight Legged Sit-Up calls for about 90° of trunk flexion, two-thirds of the motion is wasted on other muscles.

As for the Roman Chair Sit-Up, except for getting into position, the movement doesn't call the abs into play at all! The most you get out of rocking back and forth is a bit of thickening of abs muscle tissue at the point where it joins the rib cage. As with Straight-Legged Sit-Ups, other muscles do all the real work.

These "other muscles," the Psoas Magnus and Psoas Parvus, run across the front of the legs up through the pelvis, connecting to the lowest six spinal vertebrae. They *pull* your trunk toward your legs, as do your abs, but unlike the abs, their range of motion is huge: they can pull you forward all the way from a full backbend until your chest touches your knees.



Unfortunately while psoas do their job of raising your torso most efficiently when your legs are extended and/or your feet are held--as in Straight-Legged Sit-Up posture and Roman Chair posture. When you start an exercise in this position, the psoas compete with your abs for the first third of the movement, and then take over entirely for the remaining two-thirds.

This makes a strong case of inefficiency against the two old favorites.

Besides their inefficiency, though, the real problem with these exercises is the stress they put on your lower back. With each straight legged contraction, the psoas tug at the

place where they connect to the spine. That tug doesn't do much damage as long as your abs remain strong enough to prevent your back from arching. But the abs tire fairly quickly even when you're in great shape, and then you do arch. This allows the vertebrae immediately *above and below* the psoas insertion to grind together, and in a decade or so you may be stuck with permanent lower back pain as a result of disk degeneration.

Every kinesiology text we have ever seen warns against any supposed abdominal exercise where both:

1. The psoas come into play,
2. your position allows---or worse, encourages your back to arch during the course of the exercise.

Based on these criteria, we can eliminate these and other similar exercises from our program the Roman Chair Sit-Up, for its inefficiency, and the Straight-Legged Sit-Up for its damaging effect on the spine. Fortunately, there are exercises that fit our needs perfectly; these, will be explained in the program Section of this course. Some may be familiar to you, Just remember-there's much more to this kind of approach than the exercises themselves.

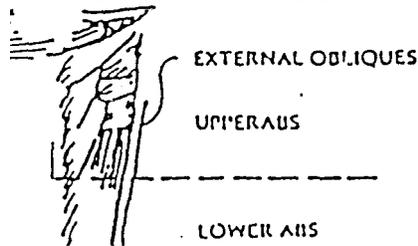
SYNERGISM:

The Critical Element

Research has demonstrated there is one particular sequence of a given series of exercises that affords maximum benefit to all the muscles involved. That sequence makes each of the exercises more effective than those very same exercises performed individually. This is Synergism: combining elements to create a whole greater than a mere sum of the parts.

The ideal order of a series of exercises is partly defined by a principle called "Tile Interdependency Of Muscle Groups". Let us explain it this way:

Imagine the stomach muscles divided into upper abs and lower abs. The line is usually drawn between the top two and bottom two abdominal lumps. This isn't a technical division, and you won't find it listed in Gray's Anatomy, but for the sake of our discussion it exists nonetheless.



The upper abs can in turn be divided into center and outer sections. From now on, we can use the term "upper abs" to refer to the center section; the outers we will call by their actual name: the External Obliques.

First consider just the upper (center) abs the 'lower abs. They are interdependent in this way:

To work the lower abs, you need to use LOWER ABS AND UPPER ABS.

To work the upper abs, you only need use UPPER ABS.

Notice the upper abs play a role in the work you do for both areas. As a result, if you tire the upper abs first, their fatigue *will* limit amount of lower work you can do. The solution, exercise the lower abs first. That way you'll exhaust the lowers completely, and then the uppers to their limit with exercises that concentrate on them.

A side benefit of this approach is that the upper abs, once tired from lower ab exercises don't have to be pushed as hard to get a workout.

Bringing the obliques into the picture, will make a similar argument for twisting (cross knee) versus straight ab exercises. Twin movements involve both the obliques and upper ribs. Straight movements primarily in the upper abs. If you do straight movements first, the upper abs get tired, preventing you from pushing the obliques to their limits. Twisting exercises should precede straight forward exercises.

At this point we have the three rules needed to begin putting together a synergistic abdominal conditioning routine:

RULE 1. Avoid exercises that activate the psoas muscles and require a body position that allows the back to arch.

EFFECT: We eliminate many "standard" ab exercises, straight-legged sit-ups, Roman chair sit-ups, incline board sit-ups, bent-legged, and feet-under-a-couch sit-up

RULE 2. Work lower abs before upper abs.

RULE 3. Do twisting (oblique) upper abs exercises before straight upper abs motions.

EFFECT: We sort the remaining suitable exercises into general categories reflecting the order in which they should be performed. First: exercises mainly involving lower abs; Second: exercises involving twisting movements; . Third: exercises mainly involving upper abs.

EFFECT:

Remember, synergism means finding a way to exercise so each bit of work you do reinforces all -our other work. The most effective specific order within the categories must be determined by experimentation and a bit of physiological detective work. Our researchers have done this for you; their findings shaped the routines described in the Program Section.

The Legendary Abs routines **will** take you as close as you wish to the ancient Greek sculptor's idea of a well defined mid-section. The total amount of time you will spend on any particular day will never exceed six minutes.

The time it will take to reach your goal depends on your present physical condition and the consistency with which you train. It won't be long, though. If you don't have much extra fat, you should see results within a couple of weeks. Mild soreness should occur after the first or second workout (a definite indication that something is happening!).

PROGRAM SECTION

The Exercises

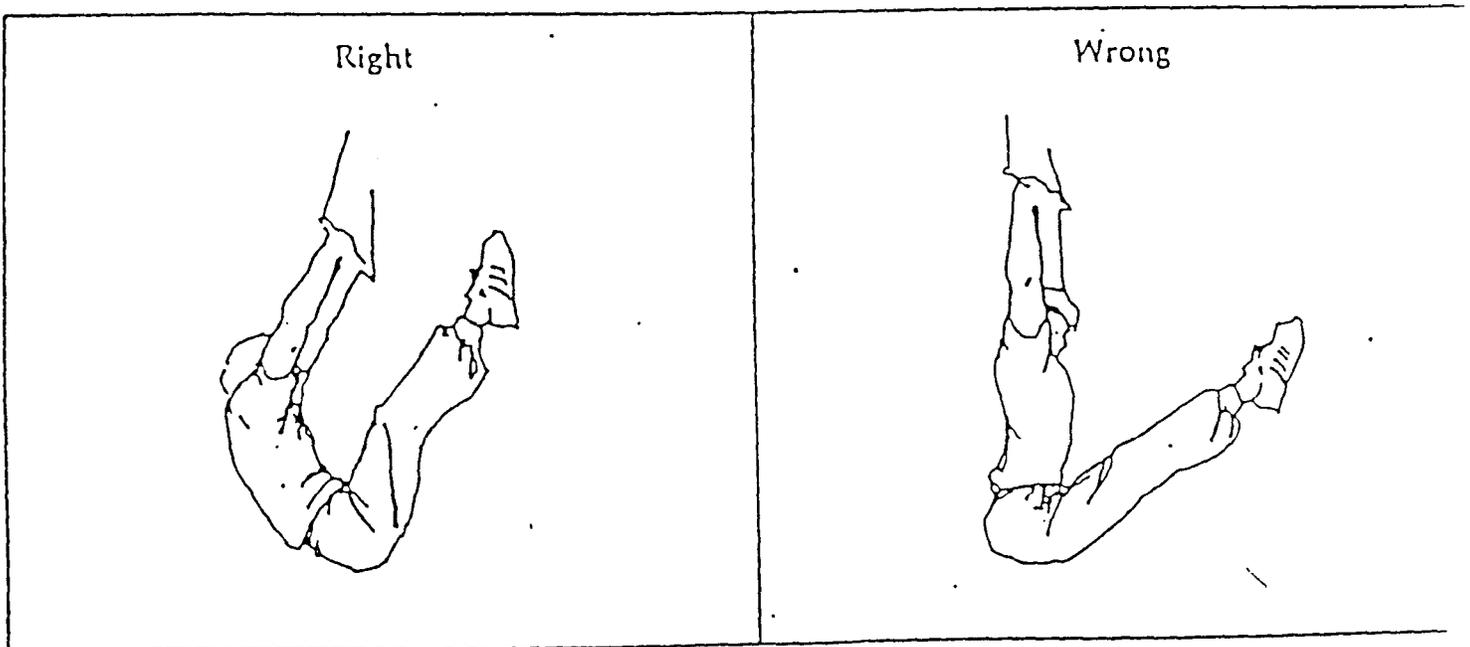
Look over these exercises to become familiar with them. Following the exercise descriptions, we'll present a series of routines ranging from beginning to very advanced. Again, don't be surprised if some of the exercises are similar to exercises you've done in the past. Remember, it's the sequence and timing of the exercises that make all the difference..

Hanging Leg Raises

For this particular exercise, you need a horizontal bar of any sort from which to hang; a doorway-chinning bar will work.

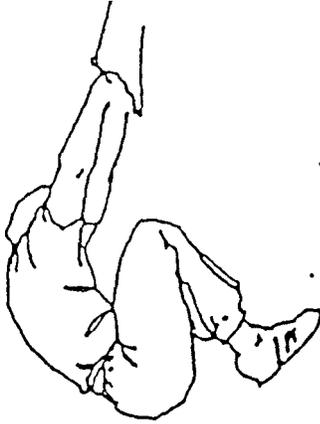
Take a slightly wider than shoulder width grip on the bar and, keeping your upper torso as relaxed as possible, raise your legs until your knees almost touch your chest. Your pelvis should rock forward as you raise your legs (see illustration below)--this guarantees maximum abs involvement. Hold for a second or so, then lower legs back to the starting position. Repeat.

It's important to lower your legs just slowly enough so you don't start swinging; your knees should be slightly bent throughout the exercise.



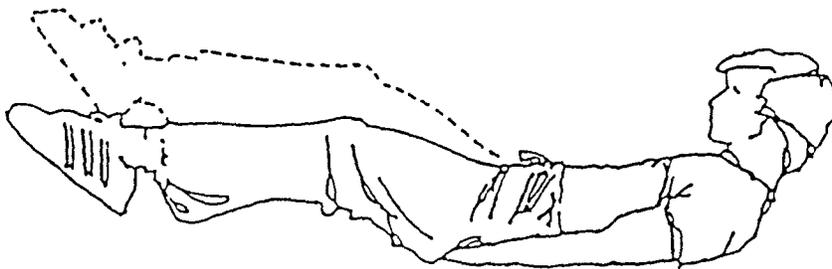
Hanging Knee - Ups

These are similar to the previous exercise except that in this case *you should fully bend your knees as you lift, and actually try to touch them to your chest.*



Lying 6 -Inch Leg Raises

Lie on your back on a soft mat or carpet, and place your hands under your pelvis, palms down, shown below. Raise the legs about 18 inches off the floor, then lower to about 12 inches. Repeat--up 18, down to 12; up to 18, down to 12; etc.



Your hands and arms should function as a cradle to prevent your back from arching; your *l* back should remain flat against the floor throughout the exercise.

It's possible to do this one almost totally with the psoas muscles, so concentrate 'to make sure your abs that do the work. Think less of raising the-legs and more of forcing an "accordion-like" movement out of your stomach muscles-rocking the pelvis forward and back, which, in turn, should move the legs up and down.

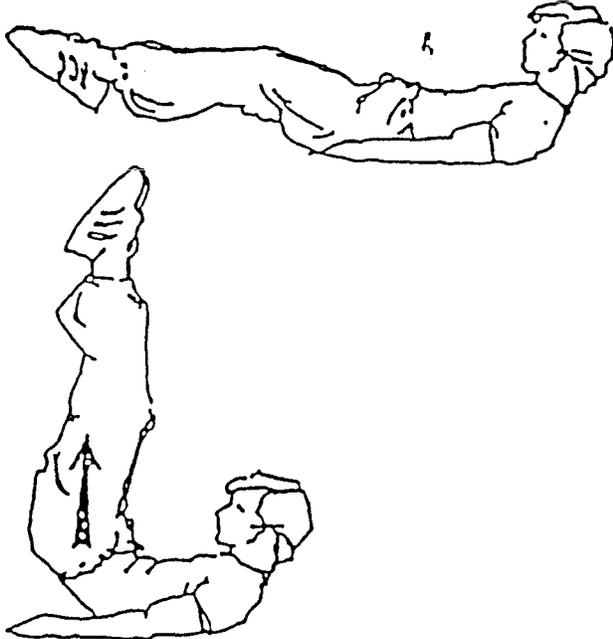
When you get it right, the abdominals will take the brunt of the strain.

Note: Inevitably, you will feel this one at least to some extent in your lower back. Don't worry it's normal. But if the exercise actually hurts, then either (1) you are not doing 'it right (reread the description and try again), or (2) your abs are not yet strong enough to do the exercise correctly. Wait and try again after 2 couple of weeks.

Advanced Lying 6-Inch Leg Raises

Begin Lying Leg Raises as described on previous page. At the top of the motion, when your legs are, as far off the ground as they get, rock your pelvis up off your arms. Hold for a split second, then lower your pelvis and legs and begin your next repetition.

These are more difficult than regular leg raises because the pelvic rock greatly increases the involvement of the abdominals. As soon as you find yourself able to do these, substitute these wherever the routine calls for Lying Leg Raises.

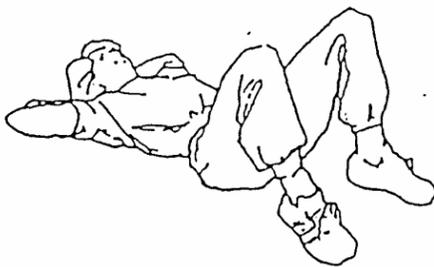


Abdominal Cramps

Lie in standard bent-knee sit-up position (see below) and, while exhaling, very slowly raise your shoulders and upper back about 30° off the ground. Hold for a second or so; then slowly return starting position.

Note: Keep your arms in place (palms against back of your head, elbows out) but as relaxed as possible throughout the exercise--do not pull against the back of your head. Pulling won't make the movement any easier and it will give you one heck of a neckache.

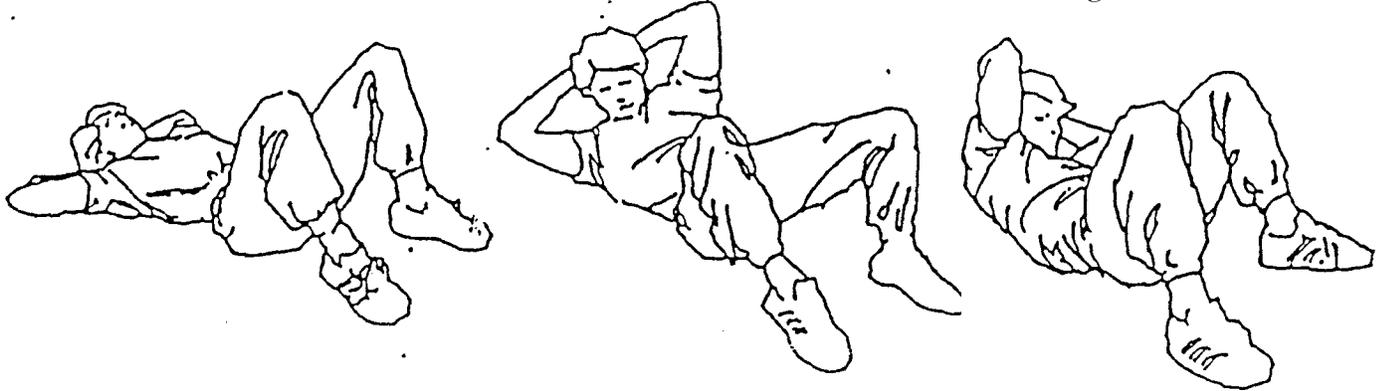
One full rep should take at least 2 seconds.



Cross-Knee Abdominal Cramps

These are a lot harder than the previous exercise, and you should save them until regular abdominal cramps become too easy.

Lie in bent-knee sit-up position, and slowly raise your shoulders, upper back, and right hip up off the ground—your right elbow should *turn* toward (but not touch) your left knee. Hold at peak for at least a second; then slowly return to starting position and repeat with left hip coming off the *ground*, and left elbow turning toward right knee.



1/4 Sit-Ups

Start in bent-knee sit-up position, but with legs up off the floor so both your hips and your *knee* form right angles. Quickly raise upper back and shoulders *off* the floor (as in Abdominal Cramps); then lower and repeat. You should do these as fast as you can.

An important difference between these and Abdominal Cramps: In this case you should think “up” with the torso, rather than “to the knees” (as you do when doing Cramps). This varies the stress on the abs and assures greater definition. Just follow the arrow in the figure below.

Knee Rock-Backs

These are like inverted Abdominal Cramps. Begin in bent-knee sit-up position, feet on the floor, but arms extended straight out a few inches from your sides (palms down), and rock back until your knees hit your chest and your lower back comes off the floor. Lower and repeat.

Note: Pace should be moderate--about 1 rep per second.



Pull-Down Ab Crunches

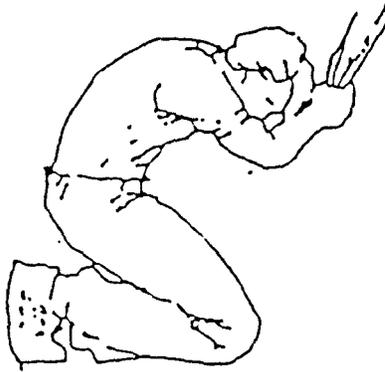
Drape a towel, or something similar (like a shirt or short length of rope), around the cable that connects to a lat pull-down bar so you can grab both ends of the towel and pull the bar down.

The Starting Position: Kneel in front of the machine, holding onto the towel, and bring your hands to the top of your head (this should look a bit like praying). You should be far enough away from the machine so that the cable comes down to you at a slight angle, rather than straight down.

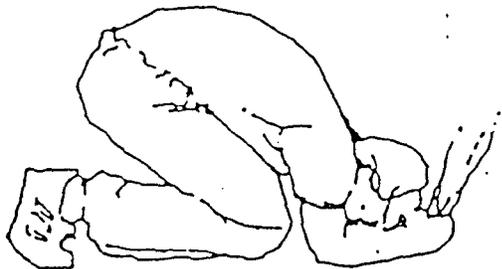
The Exercise: Hunch over until your elbows touch your knees, hold for a second or so, then uncurl back to starting position. Make sure your hands stay against the top of your head. Repeat.

Note: As you do the exercise, think of hunching over a pole running across your chest just below your sternum. This will maximize ab involvement and minimize Psoas contribution. (see "Right" and "Wrong" illustrations below.)

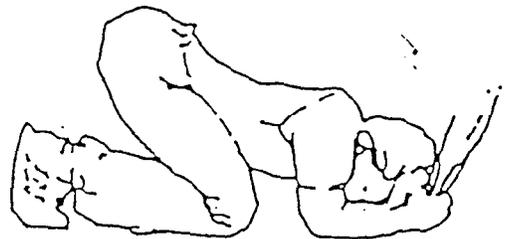
Starting Position



Right



Wrong



SPINAL ERECTORS: The Balancing Antagonists

Earlier in the course we mentioned that the abdominals work in concert with the Spinal Erector muscles to hold your spine upright. Throughout the body, muscle groups work in pairs to maintain a balance of strength around joints.

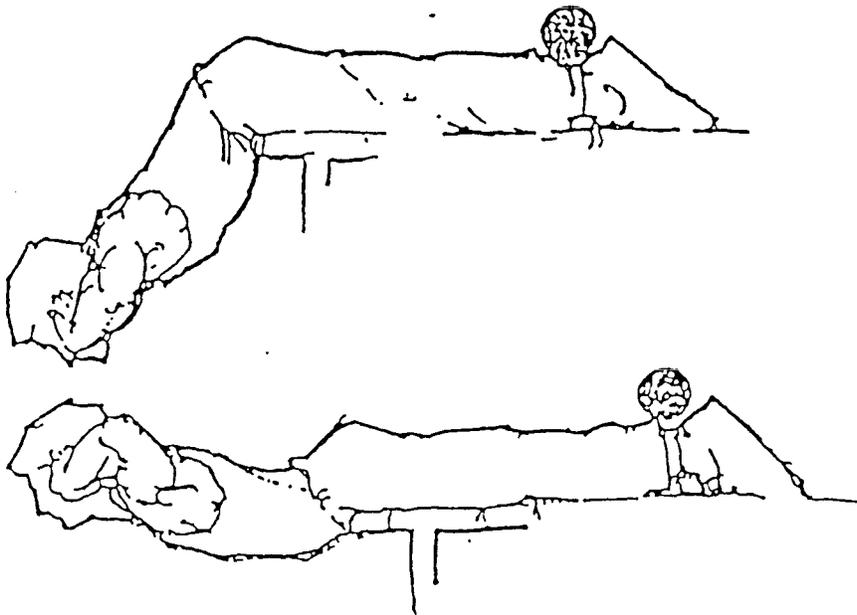
For this reason we're including suggested work for the spinal Erectors. This exercise is not essential for abdominal development—we present it as part of an integrated approach to conditioning for health. A proper balance of strength between these two sets of muscles will insure good posture and a balanced distribution of stress in daily activity.

Hyper-Extensions

These are best done on a bench made for the purpose (you can find one in most gyms), but can also be done on the edge of a resilient surface like a bed, padded table, arm of a sofa, etc., with someone holding your ankles.

Lie face down, bent at the waist; hanging over the edge of the bench. Lightly rest your hands behind your head or neck, and slowly straighten your body to a horizontal position. Don't come up any higher than this.

Throughout the motion, keep your head and shoulders arched backwards, as in a swan dive. Don't try to lace your fingers together behind your neck; if you maintain the proper arch, your fingers may barely touch the sides of your head.



THE ROUTINES

<p>Speed Key</p> <p>(f) = Fast (about 2 reps per second)</p> <p>(m) = Medium (about 1 rep per second)</p> <p>(S) = Slow (about 1 rep per 2 seconds)</p>

Level A

If you're new to conditioning exercise, start at this level.)

Exercise	Goal/Speed
Lying 6-inch Leg Raises	20 reps (m) 0 rest
1/4 Sit-ups	25 reps (s) 0 second rest
Lying 6-inch Leg Raises	15 reps (m) 0 rest
1/4 Sit-ups	20 reps (m) 0 rest

Level 1

Exercise	
Lying 6-inch Leg Raises.....	25 reps (m) 15 seconds rest
Lying 6-inch Leg Raises.....	20 reps (m) no rest
Abdominal Cramps.....	25 reps (s) no rest
1/4 Sit-ups.....	10 reps (f)

Level 2

Exercise	
Hanging Knee-ups	10 reps (m) 15 second-rest
Hanging Knee-ups	8 reps (m) no rest
Abdominal Cramps	25 reps (s) 15 second rest
Abdominal Cramps	10 reps (f)

Level 3

Exercise	Goal/Speed
Hanging Knee-ups	15 reps (m) 15 second rest
Hanging Knee-ups	10 reps (m) no rest
Lying 6-inch Leg Raises.....	15 reps (s) no rest
Abdominal Cramps	20 reps (m) no rest
1/4 Sit-ups.....	10 reps (f)

Level 4

Hanging Knee-ups	20 reps (m) 10 second rest
Hanging Knee-ups	15 reps (m) no rest
Lying 6-inch Let; Raises	20 reps (m) 10 second rest
Lying 6-inch Leg Raises	15 reps (m) no rest
Abdominal Cramps	30 reps (s) no rest
1/4 Sit-ups.....	10 reps (s)

Level 5

Hanging Knee-ups	25 reps (m) 10 second rest
Hanging Knee-ups	20 reps (m) no rest
Lying 6-inch Let; Raises	20 reps (m) 10 second rest
Lying 6-inch Let; Raises	15 reps (m) no rest

Level 6

<u>Exercise</u>	<u>Goal/Speed</u>
Hanging Leg Raises	5 reps (m) 10 second rest
Hanging Leg Raises	5 reps (m) no rest
Hanging Knee-ups	10 reps (m) no rest
Abdominal Cramps	35 reps (s) no rest
1/4 Sit-ups	15 reps (f)

Level 7

(Those in exceptional shape should start at this level)

Hanging Leg Raises	10 reps (m) no rest
Hanging Knee-ups	5 reps (m) 15 seconds rest
Hanging Leg Raises	5 reps (m) no rest
Hanging Knee-ups	5 reps (m) no rest
Lying 6-inch Leg Raises.....	25 reps (m) no rest
Abdominal Cramps	35 reps (s) no rest
1/4 Sit-ups	15 reps (f)

Level 8

<u>Exercise</u>	<u>Goal/Speed</u>
Hanging Leg Raises	10 reps (m) no rest
Hanging Knee-ups	5 reps (m) 10 second rest
Hanging Leg Raises	10 reps (m) no rest
Hanging Knee-ups	5 reps (m) 10 second rest
Lying 6-inch Leg Raises.....	30 reps (m) 10 second rest
Lying 6-inch Leg Raises.....	25 reps (m) no rest
Abdominal Cramps	35 reps (s) no rest
1/4 Sit-ups.....	15 reps (f) no rest

Level 9

Hanging Leg Raises	12 reps (m) no rest
Hanging Knee-ups ...	as many as possible (m) 10 second rest
Hanging Leg Raises	10 reps (m) no rest
Hanging Knee-ups ..	as many as possible (m) no rest
Lying 6-inch Leg Raises	30 reps (m) 10 second rest
Lying 6-inch Leg Raises.....	20 reps (m) no rest
Cross Knee	
Abdominal Cramps....	as many as possible (s) no rest
Abdominal Cramps....	as many as possible (s) no rest
1/4 Sit-ups	15 reps (f) (Good luck!) no rest
Knee Rock-backs	20 reps (m)

THE SCHEDULE - HOW MUCH, *HOW OFTEN*

If you're a beginner, start at Level A and do the program 3 times per week. (for example: Mon/Wed/Fri). When this gets too easy, go to 4 times per week, grouping workout days in pairs Mon-Tues! Thurs-Fri). You should be able to move up to the next level within a month.

Everyone else (except those in excellent shape) should start at Level I and work their way up, trying to get as much out of each level as possible. We can't stress this enough. There's no advantage to jumping up levels before you need to—you just make yourself work harder than necessary. It's a question of balance: You must overload the muscle to get results, but overloading too much too fast just wastes energy and increases the risk of injury. Start with a 3 day-a-week program and work up to 4.

If you plan to add the optional Hyper-Extension Exercise, do 2 to 3 sets of 10 to 12 reps---either after the Legendary Abs routine or after any other work you do for your back muscles,

Those in exceptional shape should start out at Level 7 or 8, training 4 days a week (Mon-Tues/Thurs-Fri). On the first day of each two-day pairing, add 2 sets of Pull-Down Ab Crunches at the end of the normal routine:

Monday
Level 7 or 8 Routine
no rest
Pull-Down Ab Crunches (8-12 reps) 10
second rest
Pull-Down Ab Crunches (8-12 reps)
(Optional Hyper-Extensions)

Tuesday
Level 7 or 8 Routine
(Optional Hyper-Extensions)

Friday
Level 7 or 8 Routine
(Optional Hyper-Extensions)

Thursday
Level 7 or 8 Routine no rest.
Pull-Down Ab Crunches (8-12. reps)
10 second rest
Pull-Down Ab Crunches (8-12 reps)
(Optional Hyper-Extensions)

The Routines

Key

(S) = Slow About 1 rep per 2 seconds
 (M) = Medium About 1 rep per second
 (F) = Fast About 2 reps per second

Level A



Lying 6 - Inch leg Raises

20 Reps (M)
No rest



1/4 Sit-ups

25 Reps (S)
No rest



10 Second Rest



Lying 6 - Inch leg Raises

15 Reps (M)
No rest



1/4 Sit-ups

20 Reps (M)
No rest

Level 1



Lying 6 - Inch leg Raises

25 Reps (M)
15 second rest



15 Second Rest



Lying 6 - Inch leg Raises

20 Reps (M)
No rest



Abdominal Cramps

25 reps (S)
No rest



1/4 Sit-ups

10 reps (F)
No rest

Level 2



Hanging Knee-ups 10

10 reps (M)
15 seconds rest



15 Second Rest



Hanging Knee-ups 10

10 reps (M)
No rest



Abdominal Cramps

25 reps (S)
15 seconds rest



15 Second Rest



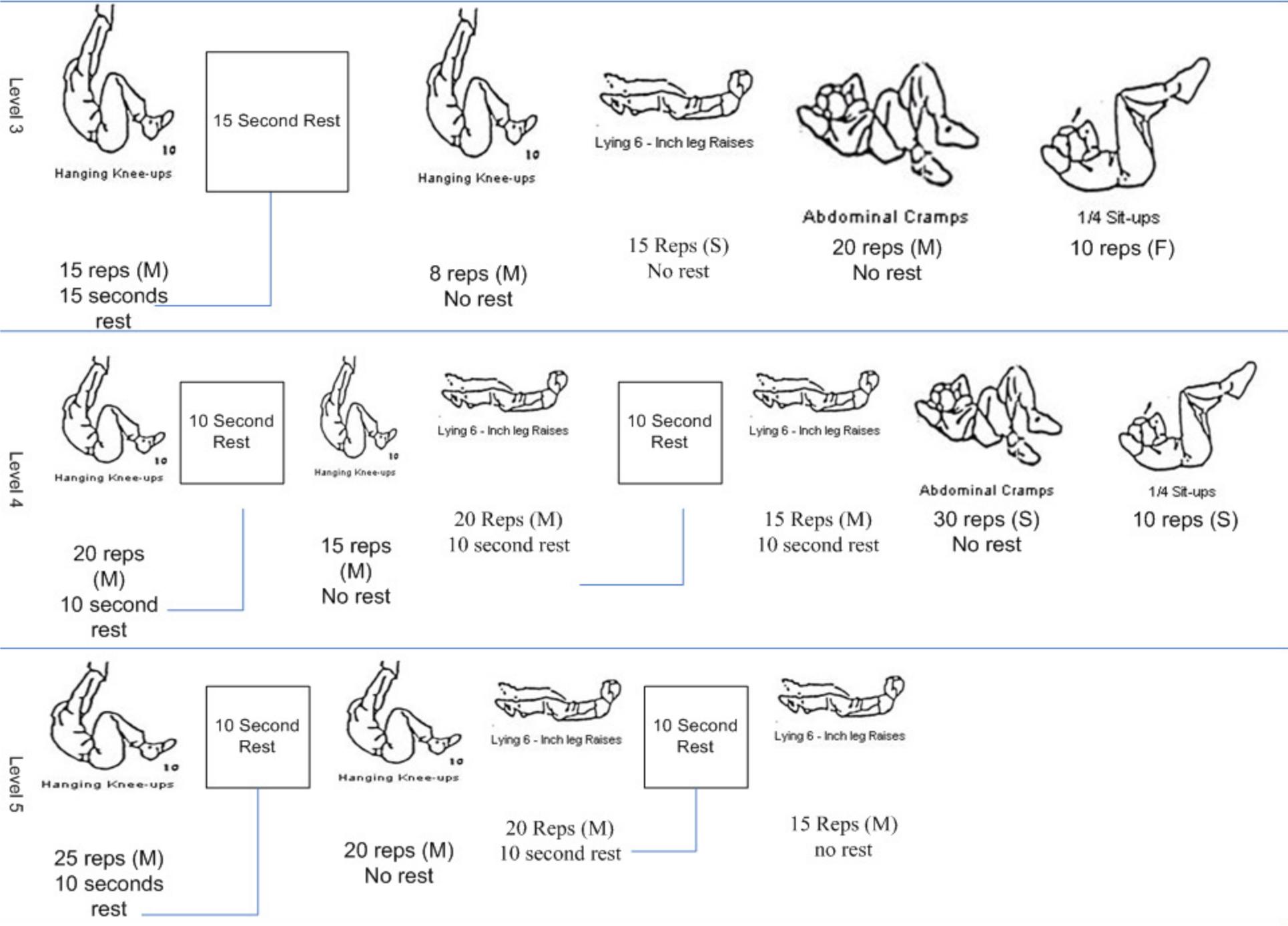
Abdominal Cramps

10 reps (F)
No rest

The Routines

Key

- (S) = Slow About 1 rep per 2 seconds
- (M) = Medium About 1 rep per second
- (F) = Fast About 2 reps per second



LEVEL 5	Hanging Knee-ups 15 reps (m)	10 second rest	Hanging Knee-ups 10 reps (m)	Lying 6-Inch Leg Raises 10 reps (m)	10 second rest	Lying 6-Inch Leg Raises 15 reps (m)	Abdominal Cramps 35 reps (s)	1/4 Sit-ups 15 reps (l)				
LEVEL 6	Hanging 6-Inch Leg Raises 5 reps (m)	10 second rest	Hanging Leg Raises 5 reps (m)	Hanging Knee-ups 10 reps (m)	Abdominal Cramps 35 reps (s)	1/4 Sit-ups 15 reps (l)						
LEVEL 7	Hanging Leg Raises 10 reps (m)	Hanging Knee-ups 5 reps (m)	15 second rest	Hanging Leg Raises 5 reps (m)	Hanging Knee-ups 5 reps	Lying 6-Inch Leg Raises 25 reps (m)	Abdominal Cramps 35 reps (s)	1/4 Sit-ups 15 reps (l)				
LEVEL 8	Hanging Leg Raises 10 reps (m)	Hanging Knee-ups 5 reps (m)	10 second rest	Hanging Leg Raises 10 reps (m)	Hanging Knee-ups 5 reps (m)	Lying 6-Inch Leg Raises 30 reps	10 second rest	Lying 6-Inch Leg Raises 25 reps (m)	Abdominal Cramps 35 reps (s)	1/4 Sit-ups 15 reps (l)	Knee Rock-backs 15 reps (m)	
LEVEL 9	Hanging Leg Raises 15 reps (m)	Hanging Knee-ups as many as possible (m)	10 second rest	Hanging Leg Raises 10 reps (m)	Hanging Knee-ups as many as possible (m)	Lying 6-Inch Leg Raises 30 reps (m)	1 second rest	Lying 6-Inch Leg Raises 10 reps (m)	Cross Knee Abdominal Cramps as many as possible (s)	Abdominal Cramps as many as possible (s)	1/4 Sit-ups 15 reps (l)	Good Luck 10 reps (m)