

# Owner's Manual & Fitness Guide

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**Special Edition Includes:**

Dr. Ellington Darden's  
*Six Week Fast Fat Loss — Body Leanness Program*

**BOWFLEX<sup>®</sup>**  
**FITNESS**

**BOWFLEX<sup>®</sup>**  
**ULTIMATE**

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# Getting To Know Your Machine

CONGRATULATIONS on your commitment to fitness! By choosing Bowflex to be your partner, you've chosen a machine that can deliver on its promises!

The resistance and aerobic training that can be performed on the Bowflex is unmatched by any other single piece of home fitness equipment available. You have definitely made the right decision!

In this owner's manual you'll find detailed information on a wide variety of exercises, workout programs and a very specialized program titled, "Fast Fat Loss Now" by Dr. Ellington Darden.

Please take your time to read through the entire manual before attempting to use your Bowflex. It's important you understand HOW to properly perform each exercise before you attempt to perform the exercise with Power Rod® Resistance.

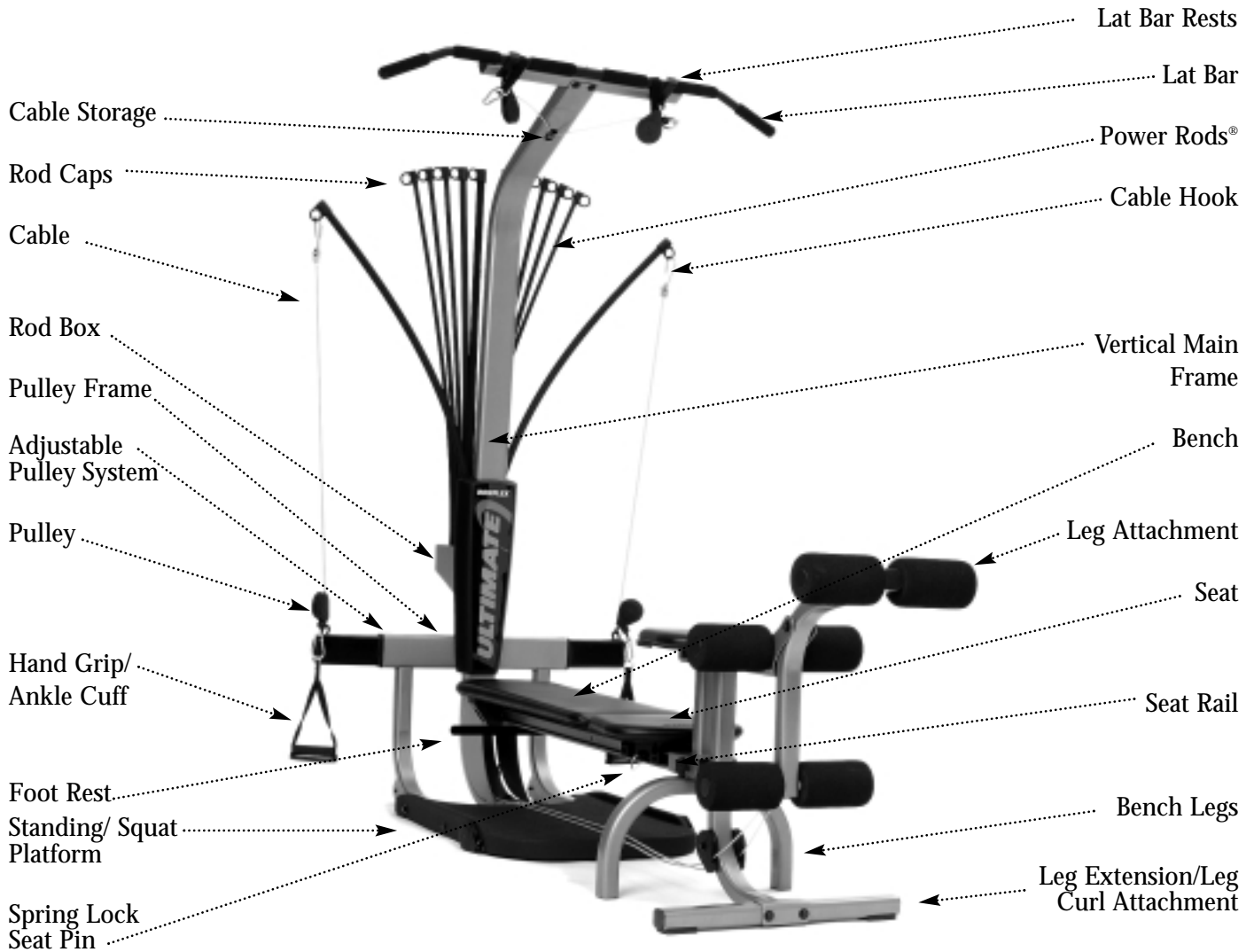
With all of the fitness choices available today, we understand that choosing a piece of equipment can be very confusing. Everyone at Bowflex, Inc. would like to thank you for your trust and your confidence in our product. Bowflex is as good as we say it is, and you're just about to prove it to yourself.

Again, thank you for choosing Bowflex.

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## THE BOWFLEX ULTIMATE

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# Using Your Machine

## Power Rod® Resistance

Power Rods are made from a special composite material. Your rods are sheathed with a protective black rubber coating. Each rod is marked with its weight rating on the rod cap.

### Adjusting And Understanding The Resistance

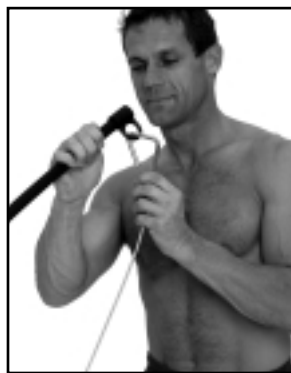
The Bowflex Ultimate comes with 310 pounds of resistance (one pair of 5-pound rods, two pairs of 10-pound rods, one pair of 30-pound rods, and two pairs of 50-pound rods). If you upgraded to a 410 pound capacity, you will have an additional pair of 50-pound Power Rods.



### Hooking The Power Rods® To The Cables:

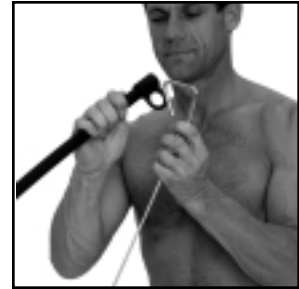
You may use one rod or several rods in combination, to create the desired resistance level. To hook multiple rods up to one cable, simply bend the closest rod toward the cable and place the cable hook through the rod cap. Then, hook up the next closest rod.

Hooking up the most forward rod prevents rods from crossing over the top of one another.



### When You Are Not Using Your Bowflex

Disconnect the cables from the Power Rods when you are not using your Bowflex.



Use the rod binding strap included with your machine to bind all the rods together near the top. This keeps them neat in appearance and makes your Bowflex as compact as possible. Place your cables and grips through the strap to keep them out of the way.



**To upgrade to 410 pounds of Power Rod® Resistance please call 1-800-269-3539**

# Using Your Machine

## The Workout Bench

Your Bowflex has four different bench positions. To adjust the bench, simply locate the spring lock pin on the side of the seat. Pull out pin to release seat, then slide it to the desired position. Pull out pin, give it half a turn, and release to place it in a “free sliding” position for exercises such as rowing.



**Quick Release Bench:** The long portion of your bench attaches to and releases from the seat portion very easily. To attach it, simply insert the half hinge on the end of the bench into the half hinge on the seat. For *standing* exercises, simply remove the bench by lifting up on the long portion and pulling away from the seat.

**Flat Position 1 & 2:** Along the side of the seat rail there are three holes for the spring lock seat pin. Pull out on the pin and slide the entire bench forward until the spring lock seat pin locks into a hole. With the bench in the flat position there are two possible holes for the spring lock pin to lock into, one forward and one back.



**Incline Position:** Start with the bench flat in the the furthest position away from the Power Rods®. Pull out on the spring lock seat pin and lift the long bench pad up. Slide forward until the pin locks into the farthest forward hole. Rest the bench's incline support bracket on the base of the Power Rods®.



**“Free Sliding” Position:** Remove the long bench pad. Pull out on the spring lock seat pin, give it a half turn, and release to place it in a “free sliding” position for exercises such as rowing.



## How to Mount the Bowflex Incline Bench

Sit on the bench and reach back, one arm at a time, grasping hand grips. KEEPING HANDS DOWN AND PALMS UP.



Begin by reaching back for hand grips.

Curl your hands up toward the front of your shoulders AND turn your wrists so that your palms now face away from you. The cables will now be over your elbows.



Curl up toward your shoulders.



Turn your wrists forward.

# Using Your Machine

## Using the Bowflex Hand Grips

The Bowflex hand grips can be used as regular grips, hand cuffs or ankle cuffs.



**Regular Grip:** Grasp the handle and cuff together to form a grip without inserting your hand through the cuff portion. Most of the exercises you perform utilize this grip.



**Hand Cuff Grip:** Slip your hand through the cuff portion of the grip so that the foam pad rests on the back of your hand. Then grasp the remainder of the grip that is sitting in your palm. This method of gripping is great for exercises like front shoulder raises or any exercise where your palm is facing down.



**Ankle Cuff Grip:** The cuff opening can be made larger to accommodate the ankle. Simply insert your hand in the cuff and slide it away from the handle. Insert your foot or ankle and tighten the grip by sliding the handle back toward the cuff.



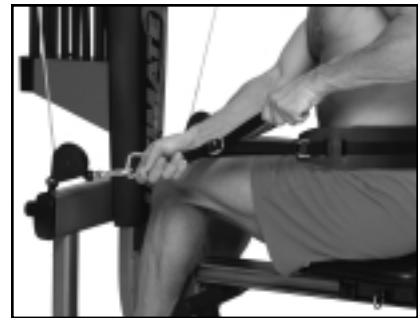
## Using the Bowflex Leg Press Belt

The Leg Press Belt is used exclusively for the *Leg Press* and the *Seated Hamstring Curl* exercises.

- With the Bowflex seat adjusted to the “free sliding” position (spring lock seat pin unlocked), the hand grips removed, and the desired amount of resistance hooked up, sit on the seat and position the leg press belt around your hips.



- Slide forward to the pulleys and place your feet through the right and left openings under the pulleys.



- Attach the belt to the cables and cinch the adjustment strap on the belt by pulling the strap until the belt is taut.

- Place hands on vertical main frame and push yourself back while placing feet, one at a time, onto non-skid pads on pulley frame.

- Grasp belt near where it's attached to the cables and begin to press back.



# Using Your Machine

## Using the Bowflex Adjustable Pulley System

Using the Bowflex adjustable pulley system is as easy as pulling a pin and expanding the pulley out.

Pulley knobs are spring-loaded and are located on the back of the adjustable pulley system. To extend the pulley, simply twist the knob a couple of turns to the left, then pull out. Next, pull the adjustable sleeve out away from the machine until it clicks into the extended position. Then, tighten the knob to lock the adjustable pulley into position.

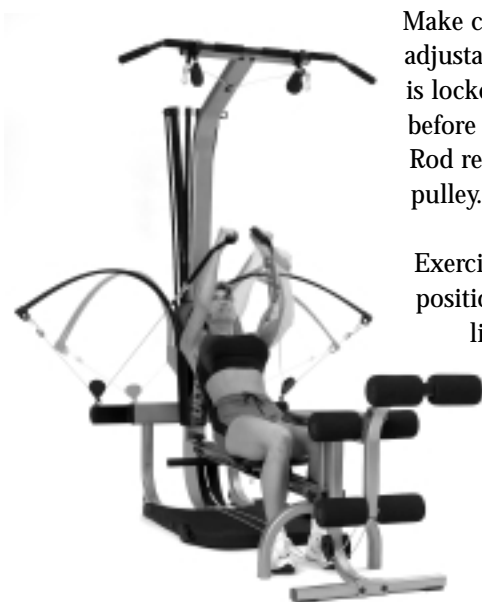


Pulleys adjust position with the simple turn and pull of a knob.

The adjustable pulley system was designed to change the angle of resistance to increase the effectiveness of many upper body exercises.

Use the pulley system in either the wide or narrow pulley position. We've included a guide in each exercise so you can use the pulley at the correct position.

To avoid injury, do not attempt to use the pulley in the wide position when the manual indicates to perform the exercise in the narrow pulley position.



Make certain the adjustable pulley system is locked and secure before adding any Power Rod resistance to the pulley.

Exercises in the wide position may require a lighter weight than those in the narrow position.

The Bowflex Ultimate adjustable pulley system allows you to work the same muscles from different angles, depending on the width of the pulley angle.

## Using the Bowflex Low Pulley/Squat Station

Connect the low pulley/squat station with the squat cables.

Without any resistance attached, thread the squat cables through the low pulley. The black plastic ball on the cable should rest directly against the pulley and should be on the far side of the pulley, away from the machine.

The squat cable has a loop at the end. Fasten the loop with a snap hook to the rod cables.

Next, fasten the squat cables to the squat harness, using a snap hook.

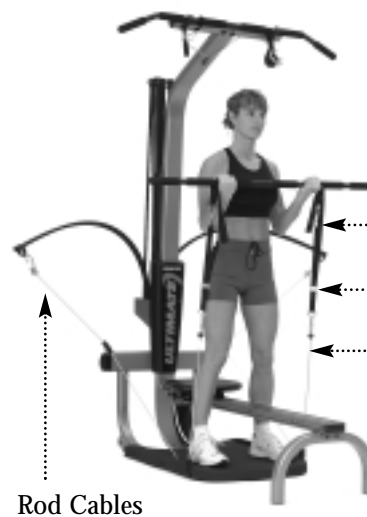


The squat cable feeds through the low pulley. The black plastic ball is on the side farthest away from the Power Rods.



And finally, attach the squat harness to the squat bar using a snap hook.

Now you can add Power Rod Resistance.



Rod Cables

Squat Harness

Adjustment Buckle

Squat Cables

Hooking up the low pulley/squat station is easy. Once it's together, you can use it for a wide variety of exercises — including squats, flat bench presses and bent over rows!

# Using Your Machine

## Using the Bowflex Leg Extension/Leg Curl Attachment

The Bowflex leg extension/leg curl attachment is a gym-quality attachment that helps you develop strong, muscular legs.

Attaching the leg extension/leg curl attachment is as easy as screwing in two knobs.

With all Power Rod resistance off and with the bench in the incline position, move the attachment to the end of the sliding seat rail.

Remove the knobs from the attachment and place the attachment over the end of the seat rail. Line up the holes and screw the knobs in. Make certain the attachment is secure before sitting on it and before adding weight to the cables.

Using a snap hook, attach the loops at the end of the leg attachment cables to the rod cables. Once this is accomplished, you are ready to add Power Rod resistance to the attachment.

To set up for leg curls, simply remove the quick release bench and place it onto the hinge of the leg extension/leg curl seat.



The leg extension/leg curl attachment uses two knobs to attach to the Bowflex, at the end of the sliding seat rail.



When not in use, leg extension/leg curl cables can be stored in clips located directly under the Power Rods, along the path of the sliding seat rail.

## Using The Bowflex Lat Tower

Build back and shoulder muscles quickly with this integrated lat tower. It is easy to set up and can get you on track in no time at all.

To attach the tower, remove all Power Rod resistance. Be certain the lat bar is secured to the lat bar rests. Remove the lat tower cables from their storage holes, and let them dangle from the lat bar.

Using a snap hook, attach the loop from the lat tower cables to the rod cables. Again, check that lat bar is secured on the lat bar rests. Now you can add Power Rod resistance.

If you choose to use hand grips rather than the lat bar for exercises, remove all Power Rod resistance from the lat tower prior to exchanging the bar for hand grips.



When not in use, lat tower cables store easily in storage hole in the lat tower. Simply push the cables into the hole, so they're out of sight and out of the way.



# Using Your Machine

## Folding & Moving Your Bowflex

Folding and moving your Bowflex is easy. Follow the simple steps below to fold your Bowflex. Once it's folded, simply tilt the machine back on its transport wheels and roll it to any location

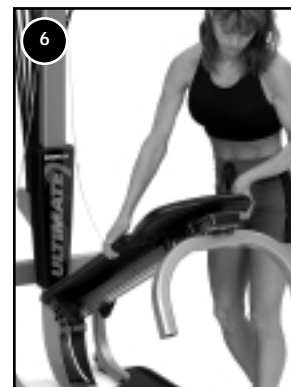
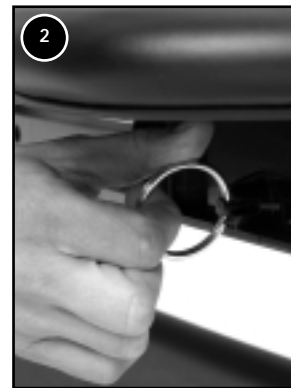
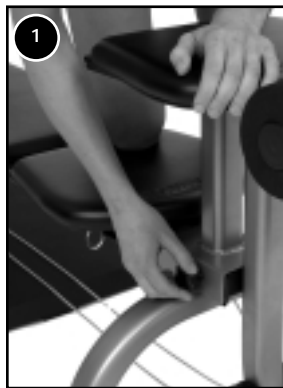
1. Remove the leg attachment from the Bowflex, if attached.
2. Lock the seat and bench into place using the spring lock seat pin.
3. Hook cables into cable storage loops.
4. Bind the Power Rods® with the rod binding strap.
5. Remove the threaded knob on the platform.
6. Tilt the bench up to the Power Rods®.
7. Screw the threaded knob into the end of the sliding seat rail.

### Maintenance & Care Of Your Bowflex:

Your Bowflex requires very little maintenance. To keep your Bowflex in top condition check all fasteners and rod caps before each workout and tighten as needed.

Clean the bench with a non abrasive cleaner after each use. This will keep it looking new. Any non abrasive household cleaner or soap works well. Many automotive interior cleaners make surfaces too "slick" and should not be used.

If you have any questions regarding maintenance please call our customer service department at 1-800-269-3539.



# About Your Bowflex Attachments

## The Bowflex Leg Extension / Leg Curl Attachment

This attachment is designed to add more effectiveness to all exercise routines where “leg work” is required.

### Safety

- Before using the attachment, make sure all fasteners are in place and tightened.
- Make sure the attachment's cables are securely fastened to the regular Bowflex cables.
- Always use the supplied threaded knobs to secure the attachment to your Bowflex.



## The Bowflex Lat Pulldown

The lat pulldown tower enhances several exercises that work the back and triceps muscles.

### Safety

- Before using the lat tower, make sure all fasteners are in place and tightened.
- Make sure the cables are securely fastened to the regular Bowflex cables.
- Always use the “Bar Holders” to support the lat pulldown bar or remove the bar when not in use.
- Do not hang from the lat tower and do not attempt to do chin ups from the bar.
- Never pull on the bar or handle unless there is resistance attached to it.



## The Adjustable Pulley System

This attachment is specifically designed to enhance the bench press and shoulder press exercises by changing the angle of resistance. The attachment is mounted on the rear of the machine and serves to widen the angle of resistance to create a more effective exercise. To use the adjustable pulley system, first remove any Power Rod resistance. Then unscrew the pin on the back and pull it out slightly until you can slide the pulley away from the machine. Slide the pulley only until it clicks into place and then push the pin forward to lock it into place. Make certain the pins are completely locked in place before you use the adjustable pulley system.

### Safety

- Before using the attachment make sure all fasteners are in place and tightened.
- Always check fasteners, hooks, cables and each workout to ensure functioning.



## The Low Pulley/ Squat Station

Use this station to do squats, bent over rows and more. Exercises performed here work your legs and most of your other lower body muscles. Plus you can use it for serious upper body workouts, too!

### Safety

- Always wear shoes with non-skid soles when using the low pulley/squat attachment.
- Always adjust cable travel and tension of the squat harness in such a manner that it will not cause a hazard.
- Always check fasteners, snap hooks, cables and pulleys before each workout to ensure proper functioning.



# WARNING!

**Before beginning any exercise program consult your physician or health care professional. Only he or she can determine the exercise program that is appropriate for your particular age and condition. If you experience any lightheadedness, dizziness, or shortness of breath while exercising, stop the exercise and consult your physician.**

## For Your Safety Please Follow These Instructions

- Keep your body weight centered on the machine, bench, or standing platform while exercising.
- When using the Bowflex for standing leg exercises, always grasp the Power Rods® for stability.
- Keep out of the path of the Power Rods® when exercising and make certain that observers also stand clear of the Bowflex when the Power Rods® are in use.
- Never move or adjust the bench while sitting or lying on the Bench. Never stand on the bench.
- Before exercising, make sure the spring lock seat pin is securely fastened and the bench is firmly in place.
- Inspect your machine before each workout. Periodically check all fasteners to make sure none have loosened with use. Tighten if necessary.
- When hooking up Power Rods® do not stand directly looking over the top of the rods. Stand off to the side while attaching rods.
- Never attempt to exercise with more resistance than you are physically able to handle.
- Keep cables and Power Rods® bound with the rod binding strap when the Bowflex is not in use.
- Make sure adjustable pulley system's adjustment pins are securely tightened before use.

# Defining Your Goals

Your body will do what you train it to do. That's why it's important to define your goals and focus on those goals. Here are some fitness components that will help you define your goals and choose your fitness program.

**MUSCLE STRENGTH** is the *maximum force* you can exert against resistance at one time. Your muscle strength comes into play when you pick up a heavy bag of groceries or lift a small child. It is developed when a localized muscle is worked both positively (concentric) and negatively (eccentric) at a resistance great enough to perform only five to eight repetitions of the exercise before the muscle fails. Each set of repetitions is followed by a rest interval that typically runs three times longer than the set. Later, between exercise sessions, the muscle overcompensates for the stress and usually increases in both strength and size.

**MUSCLE ENDURANCE** is the ability to perform repeated contractions. It comes into play when you cross-country ski or work on your feet all day. Endurance training addresses the slow twitch, endurance muscle fibers, which depend on oxygen for energy. To develop muscle endurance, use low resistance and high repetitions — about 15-20 repetitions in each set, three sets to each exercise, working the muscle only to fatigue.

**MUSCLE POWER** is the combination of strength and speed of the muscular contraction. This is often misinterpreted as:

- a) Being directly associated with certain skill or sport and/or
- b) Meaning that you must *move* fast.

Load is actually a more important factor than speed when attempting to improve power. When training to achieve muscular power, pick a resistance that fatigues you in the 3-5 repetition range. When performing these reps, it is more important to think of *contracting the muscles faster* rather than attempting to move faster. Performing *sport simulation* exercises usually results in a deterioration of the motor pattern or skill. The biomechanically sound method of improving power in your sport is to train for power using the correct joint movements, as described in this manual. Then practice the skill associated with your sport, learning to apply this newly achieved power.

**BODY COMPOSITION** is the ratio of fat weight (fat) to lean weight (muscles, bones and tissue). As you age, the ratio shifts. The fat weight increases and the lean weight decreases. Training for muscle strength will generally increase muscle size and aerobic conditioning will help burn extra calories. Performing these two forms of exercise, either at different times or together, will create the greatest changes in body fat weight.

**BALANCED STRENGTH** and alignment is the result of equal strength developed in all parts of the body. It comes into play in your standing and sitting posture, and in your ability to perform just about any activity safely and effectively. An over-development of the back will round the shoulders; weak or stretched abdominals can cause lower back pain. You want a balance of muscle strength in front and back. In addition, you need a balance of strength between your middle, lower, and upper body.

**FLEXIBILITY** is the ability of a muscle or group of muscles to move the joint through a full range of motion. Flexibility comes into play when you execute an overhand serve or stretch for the top shelf in the kitchen. It is a cooperative movement of opposite muscle groups. When a muscle contracts, its opposite muscle group must relax for the action to occur. Increased flexibility means an increased range of motion, made possible by this simultaneous contracting and relaxing. Good flexibility is important in protecting the body from injury and can be achieved through the balanced strength training programs included in this manual.

**CARDIOVASCULAR ENDURANCE** is the ability of the heart and lungs to supply oxygen and nutrients to exercising muscles over an extended period of time. It comes into play when you jog a mile or ride a bike. It is a critical component of overall fitness and health. Any exercise program must be supplemented with cardiovascular training, such as rowing on the Bowflex.

# Defining Your Goals

## Reaching Your Goals

To reach your goals you must follow a consistent, well designed program that provides balanced development to all parts of the body and includes both aerobic and strength exercise. Only then will you meet your goals safely and efficiently.

The workout routines found in this manual are professionally designed and written to target specific fitness goals. Should you not find one specific program to your liking, you can design your own, based on sound information and the principles found in this manual.

### Designing Your Own Program

You may want to design your own personal program specifically geared to your goals and lifestyle. Designing a program is easy, as long as you follow these guidelines.

**Understand fitness and its components:** Improperly designed programs can be dangerous. Take some time to review this manual as well as other fitness guides.

**Know your current fitness level:** Before you start any fitness program you should consult a physician who will help you determine your current abilities.

**Identify your goals:** Goals are critical to choosing and designing an exercise program that fits and enhances your lifestyle, but so is strategy. It's important not to rush the process and try to accomplish too much too soon. That will lead to setbacks and discouragement. Instead, set a series of smaller achievable goals.

**Select complementary exercises:** Be sure to pair exercises that address compound joint movements and single joint movements. In addition, select exercises that address complementary muscle groups.

**Put first things first:** During each session, first work those muscle groups that need the most training.

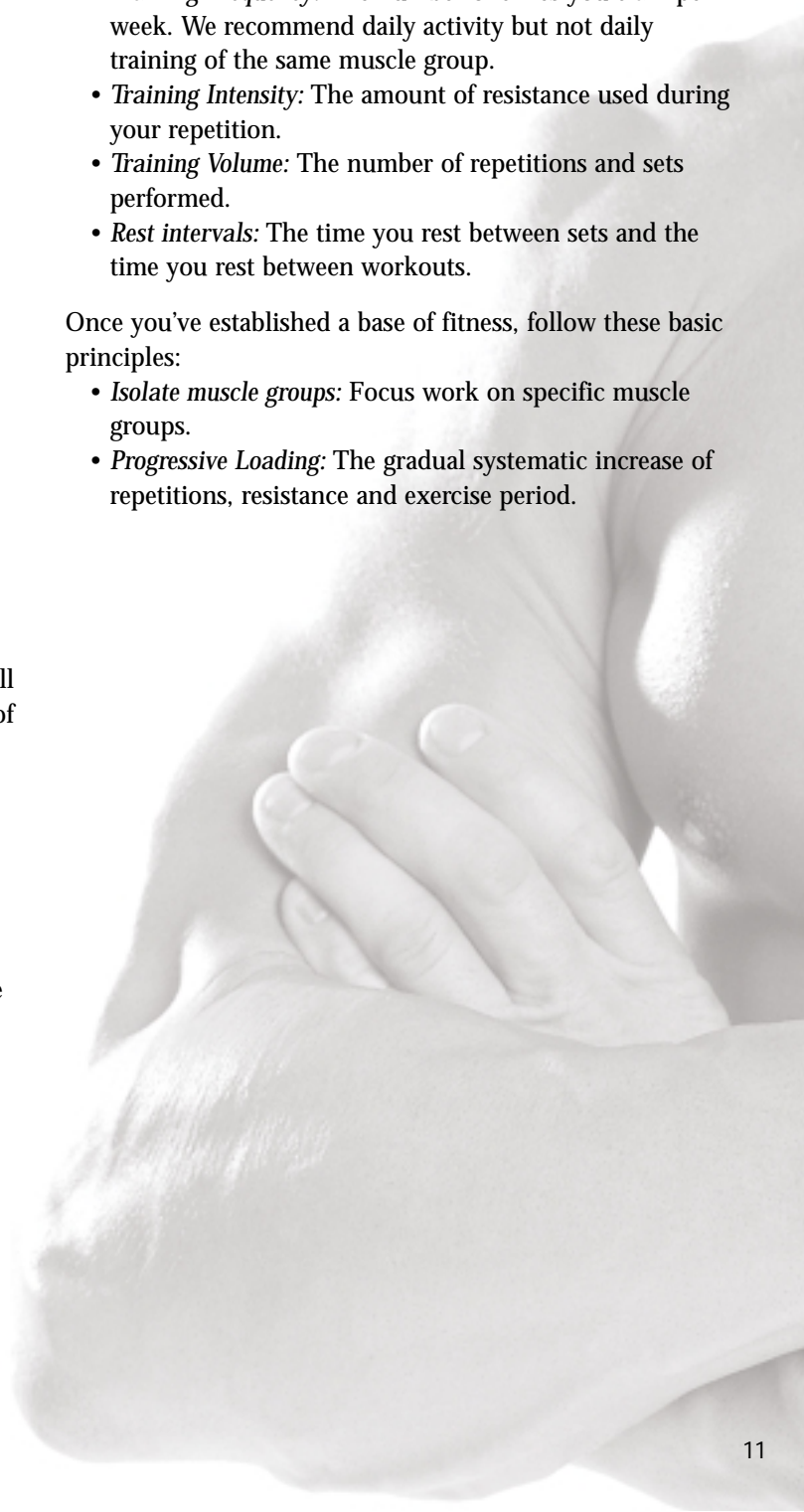
**Remember your cardiovascular component:** Any fitness program must contain a cardiovascular fitness component to be complete. So complement your resistance training with aerobic exercise such as walking, running, bicycling or rowing on the Bowflex.

**Training variables:** When designing your own program there are several variables that, when mixed properly, will equal the right fitness formula for you. In order to find the best formula, you must experiment with several combinations of variables. The variables are as follows:

- *Training Frequency:* The number of times you train per week. We recommend daily activity but not daily training of the same muscle group.
- *Training Intensity:* The amount of resistance used during your repetition.
- *Training Volume:* The number of repetitions and sets performed.
- *Rest intervals:* The time you rest between sets and the time you rest between workouts.

Once you've established a base of fitness, follow these basic principles:

- *Isolate muscle groups:* Focus work on specific muscle groups.
- *Progressive Loading:* The gradual systematic increase of repetitions, resistance and exercise period.



# Exercising Properly

## Working Out

A workout begins in your mind's eye. With concentration and visualization you can approach your workout with a positive, constructive attitude. A good pre-workout mental routine is to sit and relax, so you can focus on what you are about to do and think about achieving your end goal.

### Warming Up

We recommend that you warm up by rowing on the Bowflex.

### Aerobic Rowing Position:

- Remove bench, unlock the seat.
- Sit on the seat facing the Power Rods®.
- Grab the handles and keep the arms straight to the front.
- Position the arches of your feet on the footrest of the machine, knees bent comfortably.
- Sit up straight with your spine in good alignment.



START



FINISH

### Motion:

- Initiate the movement by extending the knees while simultaneously bending the arms and pinching the shoulder blades together.
- With the arms passing by the sides of your trunk, the handles should be near your torso as the knees near extension.

### Key Points:

- Do not lose spinal alignment — keep your chest lifted.
- If you bend forward during the return toward the Power Rods, bend at the hips, not the waist.

## Breathing

The most important part of breathing during exercise is, quite simply, that you do it. Breathing in or out during the actual performance is not dependent upon the direction of air flow relative to exertion. It is, in fact, a mechanical process that changes the position of your spine as your rib cage moves. Here are some tips for breathing:

- 1) Be cautious when you are concentrating or exerting effort. This is when you will probably hold your breath. **DO NOT** hold your breath. Do not exaggerate breathing. Depth of inhalation and exhalation should be natural for the situation.
- 2) Allow breathing to occur naturally. Don't force it.

### Performing Your Routine

The workout portion of your fitness routine is the series of exercises devoted to your particular goals. Remember, make sure to have fun!

### Cool Down

An essential part of the exercise routine is the cool down. Gradually reduce the level of exercise intensity so that blood does not accumulate in one muscle group, but continues to circulate at a decreasing rate. We recommend the rowing exercise for the cool down. Remember to gradually move yourself into a relaxed state.

# The Workouts

## 20 MINUTE BETTER BODY WORKOUT

**FREQUENCY: 3 DAYS PER WEEK (M-W-F)      TIME: ABOUT 20 MINUTES**

Start by performing one set of each exercise. Warm up with a light resistance exercise that you can perform easily for 5 -10 reps without fatiguing. Focus on practicing and learning your technique before increasing the resistance. Then move to a more challenging resistance you can perform for no less than 10 reps and no more than 15 reps without your form deteriorating. As you become stronger, you can advance to two sets for each exercise. Complete all sets of each exercise before moving on to the next. Rest 30 to 45 seconds between sets. Move slowly on each rep. Use a pace that will allow you to stop the movement instantly at any point in the rep. Count three seconds up and three seconds down and work to fatigue during each set.

Body Part	Exercise	Sets	Reps
Chest	Bench Press	1-2	10-15
Back	Seated Lat Rows	1-2	10-15
Shoulders	Standing Lateral Shoulder Raise	1-2	10-15
Arms	Standing Biceps Curl	1-2	10-15
	Lying Triceps Extension	1-2	10-15
Legs	Leg Extension	1-2	10-15
	Leg Curl	1-2	10-15
	Seated (Straight Leg) Calf Raise	1-2	10-15
Trunk	Low Back Extension	1-2	10-15
	Resisted Abdominal Crunch	1-2	10-15

## ADVANCED GENERAL CONDITIONING

**FREQUENCY: 4 DAYS PER WEEK (M-T-Th-F)      TIME: ABOUT 35-45 MINUTES**

When you are proficient in performing the exercise techniques of the above routine and are no longer realizing results, or if you become bored, it is time to change your program. You can increase your training with this "split system" routine that works opposing muscle groups on different days. To do this, you'll increase your resistance when you can perform 12 reps perfectly, and you'll increase your volume by performing more sets and more exercises. Move slowly on each rep. Use a pace that will allow you to stop the movement instantly at any point in the rep. Count three seconds up and three seconds down and work to fatigue during each set.

Day 1 & 3

Body Part	Exercise	Sets	Reps
Chest	Bench Press (Wide Pulley)	1-3	10-12
Shoulders	Seated Shoulder Press	1-3	10-12
Arms	Seated Triceps Extension	1-3	10-12
	French Press	1-3	10-12
Legs	Leg Press	1-3	10-12
	Leg Curl	1-3	10-12
	Seated (Straight Leg) Calve Raise	1-3	10-12

Day 2 & 4

Body Part	Exercise	Sets	Reps
Back	Seated Lat Rows	1-3	10-12
	Narrow Pulldowns	1-3	10-12
Shoulders	Rear Deltoid Rows	1-3	10-12
Arms	Standing Biceps Curl	1-3	10-12
	Reverse Grip Barbell Curls	1-3	10-12
Trunk	Low Back Extension	1-3	10-12
	Seated Resisted Abdominal Crunch	1-3	10-12
	Reverse Crunch	1-3	10-12

# The Workouts

## 20 MINUTE UPPER/LOWER BODY

FREQUENCY: 4 DAYS PER WEEK (M-T-Th-F)

TIME: ABOUT 20 MINUTES

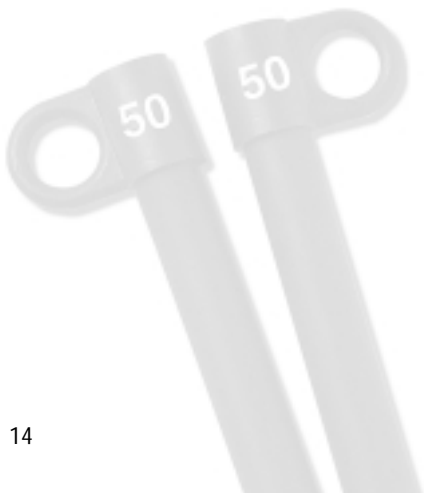
This program provides you with a quick and effective workout that combines muscle conditioning with some cardiovascular benefits. Do this routine when you are limited in time or just want a variation to your normal routine. Perform this program training 2 days, resting 1 to 2. Perform all exercises to near failure, stopping at the point that your technique starts to deteriorate. Rest only 20-30 seconds between sets. As you get stronger, increase the number of sets you perform. Move slowly on each rep. Use a pace that will allow you to stop the movement instantly at any point in the rep. Count three seconds up and three seconds down and work to fatigue during each set.

### DAY 1 & 3

Body Part	Exercise	Sets	Reps
Chest	Bench Press	1-3	12-15
Back	Wide Pulldowns	1-3	12-15
Shoulders	Standing Lateral Shoulder Raise	1-3	12-15
Arms	Standing Biceps Curl	1-3	12-15
	French Press	1-3	12-15

### DAY 2 & 4

Body Part	Exercise	Sets	Reps
Legs	Leg Extension	1-3	12-15
	Seated Leg Curl	1-3	12-15
	Standing Hip Extension	1-3	12-15
	Seated (Straight Leg) Calf Raise	1-3	12-15
Trunk	Low Back Extension	1-3	10-12
	Seated Resisted Abdominal Crunch	1-3	10-12





# The Workouts

## BODY BUILDING

FREQUENCY: 3 DAYS ON, 1 DAY OFF      TIME: ABOUT 45-60 MINUTES

Body building requires focused concentration and dedication to training, as well as proper eating habits. Train each muscle group to failure before moving on to the next exercise. Do not neglect any muscle group. If needed, include an aerobic activity to increase your caloric expenditure and help to reduce your body fat levels to achieve a defined muscular look. Rest 30-60 seconds between each set and exercise. Focus on proper form. **Tighten** the muscle before you move, **squeeze** the muscle as you move, **cramp** the muscle at the point of full contraction, and **resist** the movement as you lower the weight. Move slowly on each rep. Use a pace that will allow you to stop the movement instantly at any point in the rep. Count three seconds up and three seconds down and work to fatigue during each set.

### DAY 1

Body Part	Exercise	Sets	Reps
Chest	Bench Press (Wide Pulley)	2-4	8-12
	Chest Fly	2-4	8-12
Shoulders	Seated Shoulder Press	2-4	8-12
	Rear Deltoid Rows	2-4	8-12
	Standing Lateral Shoulder Raise	2-4	8-12
	Shoulder Shrug	2-4	8-12

### DAY 2

Body Part	Exercise	Sets	Reps
Back	Seated Lat Rows	2-4	8-12
	Narrow Pulldowns	2-4	8-12
Arms	Standing Biceps Curl	2-4	8-12
	Reverse Grip Barbell Curls	2-4	8-12
	Lying Triceps Extension	2-4	8-12
	French Press	2-4	8-12

### DAY 3

Body Part	Exercise	Sets	Reps
Legs	Leg Press	2-4	8-12
	Leg Extension	2-4	8-12
	Standing Hip Extension	2-4	8-12
	Leg Curl	1-3	8-12
Trunk	Seated (Straight Leg) Calf Raise	2-4	12-15
	Low Back Extensions	2-4	8-12
	Seated Resisted Abdominal Crunch	2-4	8-12
	Seated Resisted Oblique Crunch	2-4	8-12
	Aerobic Rowing		Progress up to 15-25 minutes

# The Workouts

## CIRCUIT TRAINING - ANAEROBIC/CARDIOVASCULAR

FREQUENCY: 2-3 TIMES PER WEEK      TIME: ABOUT 20-45 MINUTES

Circuit training is a great way to achieve the benefits of strength training *and* cardiovascular training in one quick, challenging routine. The idea is to move quickly from exercise to exercise, taking only as much rest between sets as it takes to set up the next exercise (less than 20 seconds). One circuit equals one set of each exercise. Initially, start with completing one round of Circuit 1. Then add an additional round of the same circuit. Once you reach three rounds of Circuit 1, add one round of Circuit 2. Add additional rounds of Circuit 2 as your fitness level increases. Repeat process with Circuit 3. Do not let your heart rate exceed 220 minus your age. Perform each rep of each exercise slowly and with perfect technique. Count three seconds up and three seconds down. Warm-up with 5-15 minutes of rowing or some other aerobic exercise before starting your circuits.

### Circuit 1

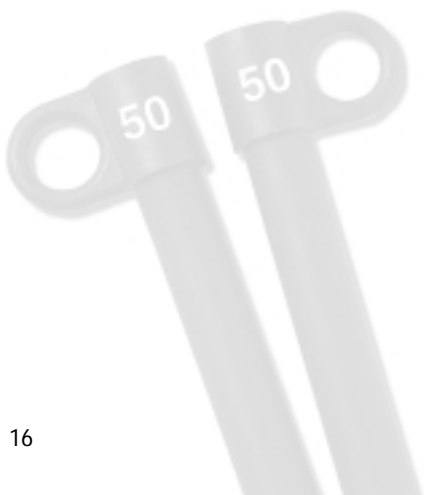
Body Part	Exercise	Reps
Chest	Bench Press	8-12
Legs	Leg Press	8-12
Back	Seated Lat Row	8-12
Legs	Seated Leg Curl	8-12
Trunk	Seated Resisted Abdominal Crunch	8-12

### Circuit 2

Body Part	Exercise	Reps
Shoulders	Seated Shoulder Press	8-12
Legs	Lying Leg Extension	8-12
Back	Lying Lat Pulldowns	8-12
Trunk	Low Back Extensions	8-12
Arms	Standing Biceps Curl	8-12

### Circuit 3

Body Part	Exercise	Reps
Shoulders	Rear Deltoid Rows	8-12
Arms	Lying Triceps Extensions	8-12
Legs	Leg Curls	8-12
Trunk	Seated Resisted Oblique Crunch	8-12
Legs	Seated (Straight Leg) Calf Raise	8-12



# The Workouts

## TRUE AEROBIC CIRCUIT TRAINING

FREQUENCY: 2-3 TIMES PER WEEK      TIME: ABOUT 20-60 MINUTES

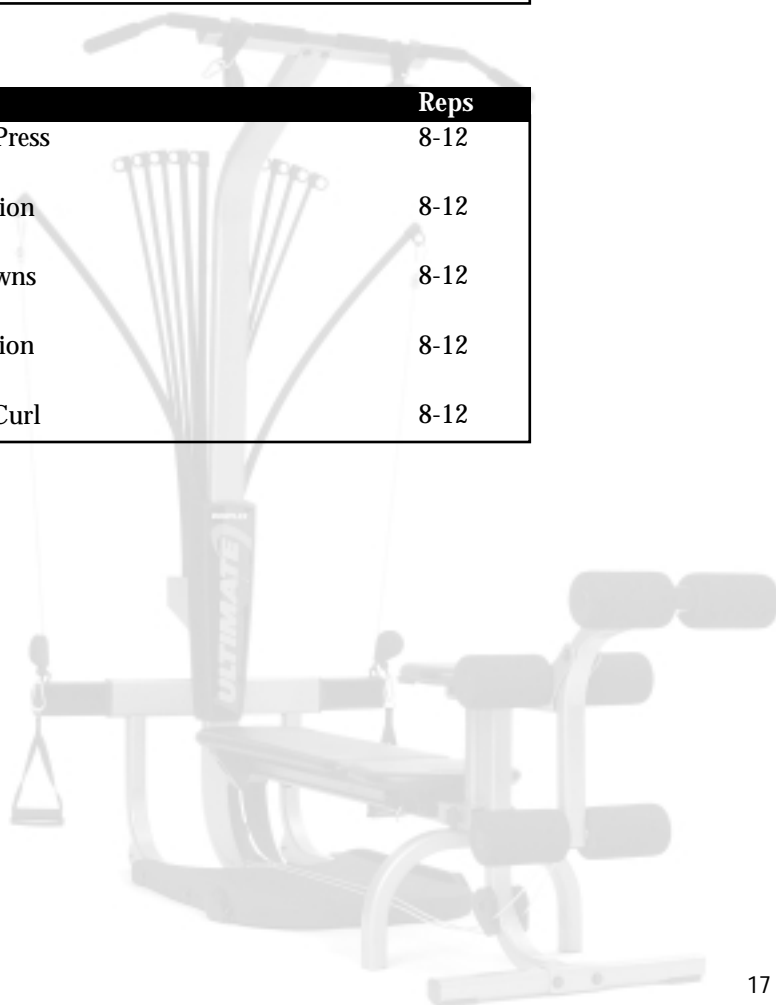
Circuit training is a great way to achieve the benefits of strength training *and* cardiovascular training in one quick, challenging routine. By returning to the aerobic rowing exercise between each set you are increasing your aerobic capacity, endurance and burning fat as energy. The idea is to move quickly from exercise to exercise, taking only as much rest between sets as it takes to set up the next exercise (less than 20 seconds). One circuit equals one set of each exercise. Initially, start with completing one round of Circuit 1. Then add an additional round of the same circuit. Once you reach three rounds of Circuit 1, add one round of Circuit 2. Add additional rounds of Circuit 2 as your fitness level increases. Repeat process with Circuit 3. Do not let your heart rate exceed 220 minus your age. Perform each rep of each exercise slowly and with perfect technique. Count three seconds up and three seconds down. Warm-up with 5-15 minutes of rowing or some other aerobic exercise before starting your circuits.

### Circuit 1

Body Part	Exercise	Reps
Chest	Bench Press	8-12
Aerobic Rowing	30 - 60 Seconds	
Legs	Leg Press	8-12
Aerobic Rowing	30 - 60 Seconds	
Back	Seated Lat Rows	8-12
Aerobic Rowing	30 - 60 Seconds	
Legs	Seated Leg Curl	8-12
Aerobic Rowing	30 - 60 Seconds	
Trunk	Seated Resisted Abdominal Crunch	8-12
Aerobic Rowing	30 - 60 Seconds	

### Circuit 2

Body Part	Exercise	Reps
Shoulders	Seated Shoulder Press	8-12
Aerobic Rowing	30 - 60 Seconds	
Legs	Lying Leg Extension	8-12
Aerobic Rowing	30 - 60 Seconds	
Back	Lying Lat Pulldowns	8-12
Aerobic Rowing	30 - 60 Seconds	
Trunk	Low Back Extension	8-12
Aerobic Rowing	30 - 60 Seconds	
Arms	Standing Biceps Curl	8-12



# The Workouts

## STRENGTH TRAINING

FREQUENCY: 3 DAYS PER WEEK (M-W-F) TIME: ABOUT 45-60 MINUTES

This program is designed to emphasize overall strength development. This is an advanced routine to be used only after you have progressed from the advanced general conditioning routine and only after you have perfected your exercise techniques. Work each set to near exhaustion. If you can perform more than 5 to 8 reps, you should increase your resistance 5 lbs. and decrease your reps to 5. Rest 60 - 120 seconds between each set and exercise. Focus on proper form. **Tighten** the muscle before you move, **squeeze** the muscle as you move, **cramp** the muscle at the point of full contraction, and **resist** the movement as you lower the weight. Move slowly on each rep. Use a pace that will allow you to stop the movement instantly at any point in the rep. Count two seconds up and four seconds down and work to fatigue during each set.

Day 1

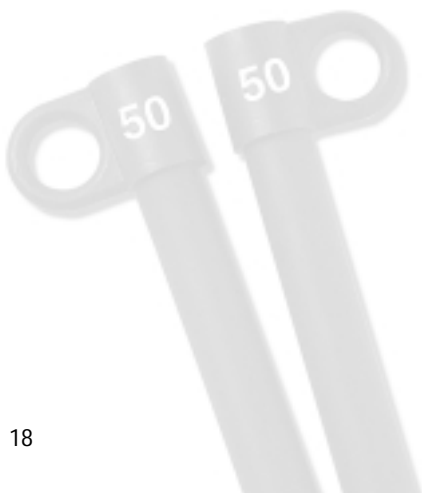
Body Part	Exercise	Sets	Reps
Chest	Bench Press (wide pulley)	2-4	5-8
	Chest Fly (wide pulley)	2-4	5-8
Shoulders	Seated Shoulder Press	2-4	5-8
	Standing Lateral Shoulder Raise	2-4	5-8
	Rear Deltoid Rows	2-4	5-8
	Shoulder Shrug	2-4	5-8

Day 2

Body Part	Exercise	Sets	Reps
Back	Barbell Bent Over Row	2-4	5-8
	Wide Pulldowns	2-4	5-8
Arms	Standing Biceps Curl	2-4	5-8
	Reverse Grip Barbell Curls	2-4	5-8
	Seated Triceps Extension	2-4	5-8
	Standing Triceps Pushdown	2-4	5-8

Day 3

Body Part	Exercise	Sets	Reps
Legs	The Squat	2-4	5-8
	Lying Prone Leg Curl	2-4	5-8
	Seated Leg Curl	2-4	5-8
	Seated (Straight Leg) Calf Raise	2-4	5-8
Trunk	Low Back Extension	2-4	8-12
	Seated Resisted Abdominal Crunch	2-4	5-8



# Chest Exercises

## **BENCH PRESS** — Shoulder Horizontal Adduction (and elbow extension)

**Muscles worked:** This exercise emphasizes the chest muscles (pectoralis major). It also involves the front shoulder muscles (anterior deltoid, a portion of the middle deltoid) and the triceps, which are located on the back of the upper arm.

**Pulley position:** Wide or narrow (Wide offers a greater challenge throughout the entire range on specific movements, especially at the top of these movements. This can make these exercises even more effective. However, when both pulley positions are listed as options, do not attempt to use the same weight for each position).

### **Starting Position:**

- Seated in the 45 degree position, reach straight behind your body, grasp the handles, and bend your elbows until your hands are near your chest. Rotate your upper arms away from your torso so your elbows are pointing outward and your palms are facing forward.
- Keeping knees bent and feet flat on the floor, lay your head back against the bench and straighten your arms to the front.
- Be sure your arms are directly "in line" with the cables (cables lying along the backs of your arms and center of the shoulders), palms facing forward and wrists straight.
- Raise your chest and slightly "pinch" your shoulder blades together. Maintain a very slight, comfortable arch in your lower back.

### **Motion:**

- Slowly move your elbows outward while simultaneously bending your arms so your forearms remain parallel to each other and

the hands remain over the elbows throughout the movement. From the side view it would appear as if the forearms are in-line with the cables at all times.

- Stop when your upper arms are approximately straight out to the side (your elbows will be level with your shoulders or slightly below).
- Then, slowly press forward, moving hands toward the center. Return to starting position with arms straight to the front at shoulder width and in-line with the cables. Keep chest muscles tight during the entire motion.

### **Optional motions:**

- Bilateral movement - both arms pressing forward at the same time.
- Unilateral movement - performing all reps with one arm before moving to the next.
- Alternating - performing one rep on one side and then the next rep on the other side.
- Simultaneously alternating - both arms moving, although in opposite directions (one pressing while the other is returning)

### **Key points:**

- The upper arms will be 60-90 degrees from the sides of your torso at the bottom of the movement and approximately 90 degrees from the front of your torso at the top.
- Control the range of motion so your elbows travel only slightly behind your shoulders.
- Your shoulder blades may "float" forward and backward naturally with the arm movement. For increased pec involvement, keep the shoulder blades "pinched" together throughout both the upward and downward movements.



START



FINISH

## **CHEST FLY** — Shoulder Horizontal Adduction (elbow stabilized in slight flexion)

**Muscles worked:** This exercise emphasizes the chest muscles (pectoralis major). It also involves the front shoulder muscles (anterior deltoid).

**Pulley position:** Wide or narrow (Wide offers a greater challenge throughout the entire range on specific movements, especially at the top of these movements. This can make these exercises even more effective. However, when both pulley positions are listed as options, do not attempt to use the same weight for each position).

### **Starting position:**

- Seated in the 45 degree position, reach straight behind your body, grasp the handles, and bend your elbows until your hands are near your chest. Rotate your upper arms away from your torso so that your elbows are pointing outward at each side and your palms are facing forward.
- Keeping knees bent and feet flat on the floor, lay your head back against the bench and straighten your arms to the front.
- Be sure that your arms are directly "in line" with the cables, palms facing forward and wrists straight.
- Raise your chest and slightly "pinch" your shoulder blades together. Maintain a very slight, comfortable arch in your lower back.

### **Motion:**

- Slowly move your arms outward, maintaining the elbow in a slightly bent position throughout the movement.
- Stop when your upper arms are approximately straight out to the sides (your elbows will be level with your shoulders or very slightly below).
- Slowly return to starting position keeping your chest muscles tightened during the entire motion.

### **Key points:**

- Maintain a 60-90 degree angle between the upper arms and the torso throughout the exercise.
- Limit and control the range of motion so that your elbows travel only slightly behind your shoulders if at all.
- For normal pressing/pushing patterns of movement, your shoulder blades may "float" forward and backward naturally with the arm movement. For increased pec involvement, keep the shoulder blades "pinched" together throughout both the upward and downward movements.



START



FINISH

# Chest Exercises

## **INCLINE BENCH PRESS** — Shoulder Horizontal Adduction (with elbow extension)

**Muscles worked:** This exercise emphasizes the chest muscles (pectoralis major), especially the upper portion. It also involves the front shoulder muscles (anterior deltoid, a portion of the middle deltoid) and the triceps, which are located on the back of the upper arm.

**Pulley position:** Wide or narrow (Wide offers a greater challenge throughout the entire range on specific movements, especially at the top of these movements. This can make these exercises even more effective. However, when both pulley positions are listed as options, do not attempt to use the same weight for each position).

### **Starting position:**

- Seated in the 45 degree position, reach straight behind your body, grasp the handles, and bend your elbows until your hands are near your chest. Rotate your upper arms away from your torso so that your elbows are pointing outward to each side and your palms are facing forward.
- Keeping knees bent and feet flat on the floor, lay your head back against the bench and straighten your arms to the front.
- You may also utilize the alternate incline bench press position by placing your feet on the forward leg of the Bowflex and using your legs to slide the torso upward on the bench so that your head is near the lat tower. This will allow a greater incline of the arms without losing alignment of the cables.
- From this position, raise your arms 10-15 degrees (cables touching the tops of your arms/shoulders) above the regular bench press position (cables lying along the backs of your arms and center of the shoulders).
- Be sure that your arms are directly "in line" with the cables, palms facing forward and wrists straight. If the cables are "above" the arms, too much elevation was introduced.
- Raise your chest and slightly "pinch" your shoulder blades together. Maintain a very slight, comfortable arch in your lower back.

### **Motion:**

- Slowly move your elbows outward, simultaneously bending your arms so that your forearms remain parallel to each other and the hands remain over the elbows throughout the movement. From the side view it should appear as if the forearms are in line with the cables at all times.
- Stop when your upper arms are approximately straight out to the sides (your elbows will be level with your shoulders or very slightly below).
- Then, slowly press forward/upward, moving hands toward the center. Then return to starting position with arms straight to the front at shoulder width and in-line with the cables. Keep your chest muscles tightened during the entire motion.

### **Optional motions:**

- Bilateral movement - both arms pressing forward at the same time.
- Unilateral movement - performing all reps with one arm before moving to the next.
- Alternating - performing one rep on one side and then the next rep on the other side.
- Simultaneously alternating - both arms moving, although in opposite directions (one pressing while the other is returning).

### **Key points:**

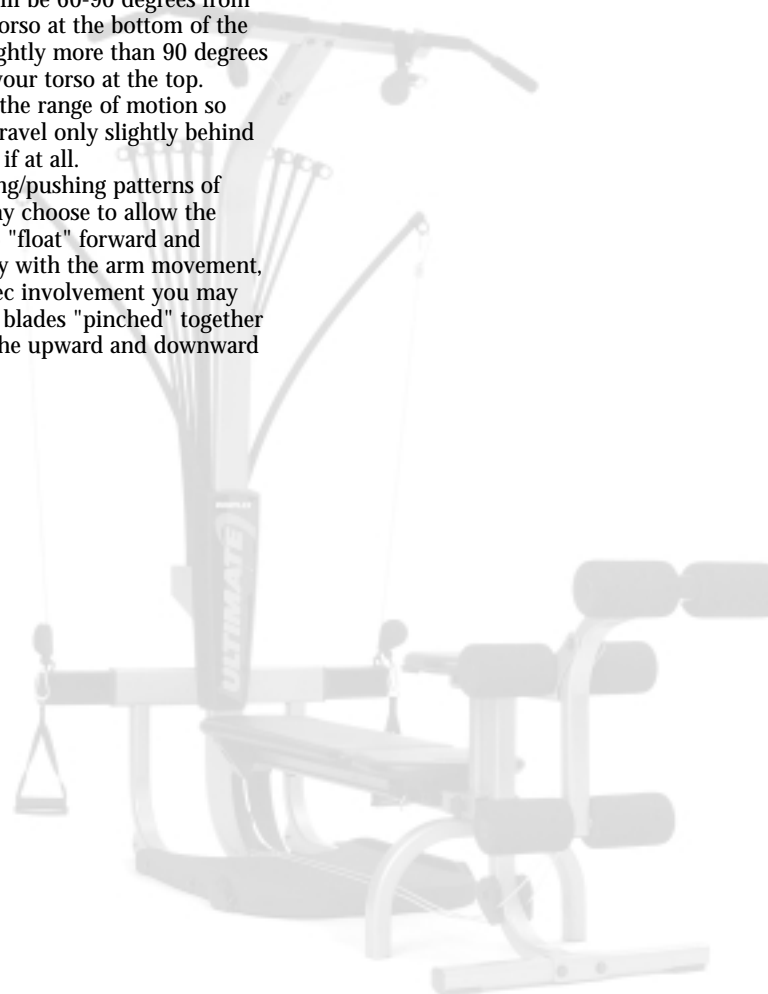
- The upper arms will be 60-90 degrees from the sides of your torso at the bottom of the movement and slightly more than 90 degrees from the front of your torso at the top.
- Limit and control the range of motion so that your elbows travel only slightly behind your shoulders — if at all.
- For normal pressing/pushing patterns of movement you may choose to allow the shoulder blades to "float" forward and backward naturally with the arm movement, or for increased pec involvement you may keep the shoulder blades "pinched" together throughout both the upward and downward movements.



START



FINISH



# Chest Exercises

## **DECLINE BENCH PRESS** - Shoulder Horizontal Adduction (with elbow extension)

**Muscles worked:** The entire chest muscle (pectoralis major) is emphasized. It also involves the front shoulder muscles (anterior deltoid, a portion of the middle deltoid) and the triceps, which are located on the back of the upper arms.

**Pulley position:** Wide or narrow (Wide offers a greater challenge throughout the entire range on specific movements, especially at the top of these movements. This can make these exercises even more effective. However, when both pulley positions are listed as options, do not attempt to use the same weight for each position).

### **Starting position:**

- Seated in the incline position, reach straight behind your body, grasp the handles with an overhand grip and bend your elbows until your hands are near your chest. Rotate upper arms away from your torso so your elbows point outward and your palms face forward.
- Make sure cables travel underneath your arms, not over your arms.
- Keeping knees bent and feet flat on the floor, lay your head back against the bench and straighten your arms to the front.
- From this position, lower your arms 10-15 degrees (cables touching the bottom of your arms/shoulders) below the regular bench press position (cables lying along the back of your arm and center of the shoulders).
- Be sure your arms are directly in-line with the cables, palms facing forward and wrists straight. If the cables are "below" the arms, the arms are too low.
- Raise your chest and slightly "pinch" your shoulder blades together. Maintain a very slight, comfortable arch in your lower back.

### **Motion:**

- Slowly move your elbows outward, simultaneously bending your arms so that your forearms remain parallel to each other and the hands remain over the elbows throughout the movement. From the side view it should appear as if the forearms are in line with the cables at all times.
- Stop when your upper arms are approximately straight out to the sides (your elbows will be level with your shoulders or slightly below).
- Then, slowly press forward, moving the hands toward the center, and return to the starting position with arms straight to the front at shoulder width and in line with the cables. Keep your chest muscles tightened during the entire motion.

### **Optional motions:**

- Bilateral movement - both arms pressing forward at the same time.
- Unilateral movement - performing all reps with one arm before moving to the next.
- Alternating - performing one rep on one side and then the next rep on the other side.
- Simultaneously alternating - both arms moving, although in opposite directions (one pressing while the other is returning).

### **Key points:**

- The upper arms will be 60-90 degrees from the sides of your torso at the bottom of the movement and slightly less than 90 degrees from the front of your torso at the top.
- Limit the range of motion so your elbows travel only slightly behind your shoulders — if at all.



START



FINISH

## **RESISTED PUNCH** — Shoulder Flexion, Elbow Extension and Scapular Protraction

**Muscles worked:** This exercise involves the entire chest muscle, the front shoulder muscles (anterior deltoid, a portion of the middle deltoid) and the triceps, located on the back of the upper arms. The goal however, is not any specific muscle group. It is to be used with very light resistance for an endurance activity.

**Pulley position:** Narrow only.

### **Starting position:**

- With the bench flat and locked in the back position against the lat tower, sit facing away from the Power Rods®.
- Reach straight behind your body, grasp the handles with an overhand grip so that the cable will lay between your arm and your torso.
- Bend your elbows until your hands are level with your waistline and your palms are facing your torso.
- Maintain erect posture.

### **Motion:**

- Using a moderate speed and light weight, rotate your trunk and press one arm forward to full extension, allowing the shoulder blade to move forward at the end of the punch.

- Return that arm to the starting position — under control — and repeat with the other arm.
- As an alternative to punching straight forward you may also punch upward at an angle in line with the cable.

### **Optional motions:**

- Bilateral movement - both arms pressing forward at the same time.
- Unilateral movement - performing all reps with one arm before moving to the next.
- Alternating - performing one rep on one side and then the next rep on the other side.
- Simultaneously alternating - both arms moving, although in opposite directions (one pressing while the other is returning).

### **Key points:**

- Maintain an upright, erect posture as your trunk twists/rotates with the punch.
- It is important to note that "sport specific" movements will not necessarily improve the skill associated with a sport.



START



FINISH

# Chest Exercises

## **LYING CABLE CROSSOVER** — Shoulder extension/adduction (elbow stabilized near extension)

**Muscles worked:** This exercise emphasizes the chest (the pectoralis major muscles). The triceps muscles, located on the back of the upper arms, are also involved in maintaining the elbow position and also help with shoulder motion.

**Pulley position:** Wide only.

### **Starting position:**

- With the bench flat, lie on your back with your head toward the Power Rods. Position yourself far enough down the bench to allow the arms to extend overhead without hitting the Power Rods. Keep the knees bent and feet flat on the floor.
- Extend the arms overhead and grasp the handles with your palms facing the ceiling.
- Tighten your abdominals to stabilize your spine while maintaining a very slight arch in the lower back.

### **Motion:**

- Move your hands in an arc upward angling toward midline and then downward toward the opposite leg.
- Control the return to the starting position by slowly moving the arms back up, uncrossing, and moving overhead.

### **Key points:**

- Keep your chest lifted, even as your arms near your legs.



START



FINISH

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## **FLAT BARBELL BENCH PRESS**

**Muscles worked:** This exercise emphasizes the chest muscles (pectoralis major). It also involves the front shoulder muscles (anterior deltoid, a portion of the middle deltoid) and the triceps, which are located on the back of the upper arm.

**Pulley position:** Low pulleys only.

### **Starting Position:**

- Begin by adjusting the bar harness so that you are under tension when you initiate the pressing motion. NOTE: Not everyone is built to perform the bench press with the bar touching the chest! The harness adjustment should limit the range of motion so that your elbows travel only slightly behind your shoulders if at all.
- Lie flat on the bench with your legs toward the power rod. Slide your head and shoulders up under the bar to get into position. The cable/bar harness should lie against the underside of your arms.
- **Warning:** Never adjust the bar so tightly that you have to "squeeze under it" to get into position. Always adjust the bar with the harness so you can move freely into and out of the position.
- Place your feet either on the floor or up on the frame of the machine.

- Position your upper arms away from your torso so that your elbows are pointing out at each side.
- Raise your chest and slightly "pinch" your shoulder blades together. Maintain a very slight, comfortable arch in your lower back.

### **Motion:**

- Slowly press the bar upward until your upper arms are straight, but do not lock the elbows.
- Slowly lower the bar, returning to the starting position.
- Keep your chest muscles tightened during the entire motion.

### **Key points:**

- Do not lift your hips off the bench.
- Keep your hands over your shoulders at all times.
- For normal pressing/pushing patterns of movement you may choose to allow the shoulder blades to "float" forward and backward naturally with the arm movement, or for increased pec involvement you may keep the shoulder blades "pinched" together throughout both the upward and downward movements.



START



FINISH



# Shoulder Exercises

## **SEATED SHOULDER PRESS** — Shoulder Abduction (with elbow extension)

**Muscles worked:** This exercise emphasizes the front portion of the shoulder muscles (front deltoids as well as the front part of the middle deltoids), the rotator cuff muscles, the upper back muscles (trapezius), and the triceps muscles located on the back of the upper arms.

**Pulley position:** Wide or narrow (Wide offers a greater challenge throughout the entire range on specific movements, especially at the top of these movements. This can make these exercises even more effective. However, when both pulley positions are listed as options, do not attempt to use the same weight for each position).

### **Starting position:**

- Sit on the bench facing away from the Power Rods, knees bent and feet flat on the floor.
- You may sit back against the lat tower, or you may choose to sit forward away from the tower and remaining free from back support, thereby increasing the challenge of spinal stabilization as part of the exercise.
- Keep your chest up, abdominals tight and maintain a very slight arch in your lower back.
- Grasp the handles with palms facing away from the machine.
- Raise handles to just above shoulder level, keeping palms facing forward.

### **Motion:**

- Straighten the arms upward, focusing on a final point either directly overhead or slightly forward over the forehead as comfort/shoulder range dictates.
- Slowly return to starting position keeping tension in the front shoulder muscles.

### **Optional motions:**

- Bilateral movement - both arms pressing at the same time.
- Unilateral movement - performing all reps with one arm before moving to the next.
- Alternating - performing one rep on one side and then the next rep on the other side.
- Simultaneously alternating - both arms moving, although in opposite directions (one pressing while the other is returning).

### **Key points:**

- Keep the chest up and abdominals tight throughout the entire motion to maintain good spinal alignment.
- Do not let the arch increase in the lower back while pressing up.



START



FINISH

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## **FRONT SHOULDER PRESS** — Shoulder Flexion (elbow stabilized near extension)

**Muscles worked:** This exercise emphasizes the front portion of the shoulder muscles (front deltoids as well as the front part of the middle deltoids).

**Pulley position:** Narrow only.

### **Starting position:**

- Sit on the bench facing away from the Power Rods, knees bent and feet flat on the floor.
- You may sit back against the lat tower, or you may choose to sit forward away from the tower and remaining free from support, thereby increasing the challenge of spinal stabilization as part of the exercise.
- Keep your chest up, abdominals tight and maintain a slight arch in your lower back.
- Grasp handles with your palms facing backward and arms straight at your sides.

### **Motion:**

- Keeping your arms straight and your palms down, move your arms forward and then upward to shoulder height.
- Slowly return the arms beside the torso and repeat.

### **Optional motions:**

- Bilateral movement - both arms raising at the same time.
- Unilateral movement - performing all reps with one arm before moving to the next.
- Alternating - performing one rep on one side and then the next rep on the other side.
- Simultaneously alternating - both arms moving, although in opposite directions (one raising while the other is returning).

### **Key points:**

- Keep the chest lifted and the abdominals tightened throughout the entire motion and maintain good spinal alignment.
- Do not increase the arch in your lower back while lifting your arms.



START



FINISH

# Shoulder Exercises

## REAR DELTOID ROWS — Shoulder Horizontal Abduction (with elbow flexion)

**Muscles worked:** This exercise emphasizes the back portion of the shoulder muscles (the rear deltoids, as well as the rear portion of the middle deltoids, the posterior rotator cuff, upper lat and teres major) as well as the trapezius and rhomboids.

**Pulley position:** Wide or narrow.

### Starting Position:

- Sit on the bench facing the Power Rods, knees bent and your feet on the platform.
- Cross the handles and grasp with your palms facing down and arms straight (right hand on left handle and vice versa).
- Sit up straight and then bend over slightly from the hips (not the spine) until arms/cables are in front of body at a 90 degree angle to your torso.
- Lift your chest and slightly pinch your shoulder blades together.

### Motion:

- Allowing your arms to bend as you go, move your elbows outward and backward keeping a 70-90 degree angle between your upper arms and the sides of your torso.
- Your forearms should always point in the direction of the cables.
- Move until your elbows are slightly behind your shoulders, then slowly reverse the motion keeping the rear shoulder muscles tightened during the entire motion.

### Optional motions:

- Bilateral movement - both arms rowing at the same time.
- Unilateral movement - performing all reps with one arm before moving to the next.
- Alternating - performing one rep on one side and then the next rep on the other side.
- Simultaneously alternating - both arms moving, although in opposite directions (one rowing while the other is returning).

### Key points:

- Maintain a 90 degree angle between your upper arms and the sides of your torso during the exercise.
- For normal pulling/rowing patterns of movement you may choose to allow the shoulder blades to "float" forward and backward naturally with the arm movement, or for increased rear deltoid involvement you may keep the shoulder blades "pinched" together throughout both the forward and backward movements.



START



FINISH

## STANDING LATERAL RAISE — Shoulder Abduction (elbow stabilized)

**Muscles worked:** This exercise emphasizes the side shoulder muscles (middle deltoids), the top muscle of the rotator cuff (supraspinatus) and the trapezius muscles.

**Pulley position:** Narrow.

### Starting position:

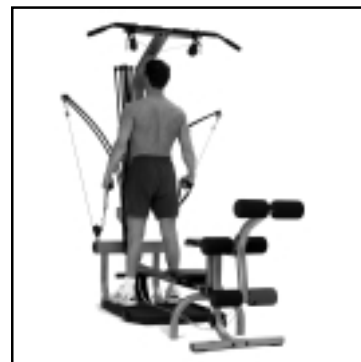
- Remove the bench and stand on the platform straddling the rail and facing the Power Rods.
- Grasp the handles with palms facing toward each other.
- Attain erect spinal posture.
- Let your arms hang directly in line with the cables.

### Motion:

- Raise your arms directly out to the sides to almost shoulder level.
- Lift your elbow and hand at the same speed and do not let one get ahead of the other.
- Do not turn/rotate your arms while raising them. Keep the side of your arm/elbow facing out/up throughout the movement.
- Slowly bring your arms into the starting position without relaxing.

### Key points:

- DO NOT swing the arms upward or move the trunk during the motion.



START



FINISH

# Shoulder Exercises

## SEATED LATERAL SHOULDER RAISE — Shoulder Abduction (elbow stabilized)

**Muscles worked:** This exercise emphasizes the side shoulder muscles (middle deltoids), the top muscle of the rotator cuff (supraspinatus) and the trapezius muscles.

**Key points:**

- DO NOT swing the arms upward or move the trunk during the motion.

**Pulley position:** Narrow.

**Starting position:**

- Sit on the bench facing the Power Rods, knees bent and your feet on the platform.
- Spread the cuff from the handle and slide it over the opposite forearm near the elbow (left handle over right forearm and vice versa).
- Sit up straight and maintain erect posture.

**Motion:**

- Raise your arms directly out to the sides to almost shoulder level.
- At the top of the movement you may need to rotate your hands slightly above the level of your elbows to prevent the cuffs from sliding to your wrists.
- Slowly bring your arms into the starting position near your sides without relaxing.



START



FINISH

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## SCAPULAR PROTRACTION (elbow stabilized)

**Muscles worked:** This exercise emphasizes the serratus anterior muscles, the muscles that can be seen on the side of the upper rib cage, and are involved in pushing and overhead movements.

**Motion:**

- Keeping your arms straight and pointing the same direction of the cables, slowly move your shoulder blades forward off of the bench, as if shoving your arms straight ahead.
- Slowly return to the starting position without bending your arms.

**Pulley position:** Wide or narrow

**Starting position:**

- Seated in the 45 degree position, reach straight behind your body, grasp the handles with an overhand grip, and bend your elbows until your hands are near your chest. Rotate your upper arms away from your torso so that your elbows are pointing outward to each side and your palms are facing forward.
- Keeping knees bent and feet flat on the floor, lay your head back against the bench and straighten your arms to the front.
- Be sure that your arms are directly "in line" with the cables, palms facing down and wrists straight.
- Raise your chest and "pinch" your shoulder blades together. Maintain a very slight, comfortable arch in your lower back.

**Key points:**

- Maintain a 90 degree angle between upper arms and your torso throughout the exercise.
- Keep your elbows straight.
- Do not slouch forward in the upper spine to further the motion. Maintain a very slight arch in your lower back at all times.



START



FINISH

# Shoulder Exercises

## SCAPULAR DEPRESSION

**Muscles worked:** This exercise involves your lower trapezius muscles, and latissimus dorsi muscles. Both act as stabilizers and movers of your shoulder blades. This motion of scapula depression is very important in posture as well as when using the arms to raise from a chair. It is also involved in overhead pulling exercises.

**Pulley position:** Wide or narrow.

**Starting position:**

- With the bench flat, lie on your back with your head toward the Power Rods, knees bent, and feet flat on the floor.
- Grasp the handles and straighten your arms down along side your trunk.
- Tighten your trunk muscles to stabilize your spine while maintaining a very slight arch in the lower back.

**Motion:**

- Keeping the chest up and arms straight, slide your shoulder blades toward your hips (hands sliding along outer thighs).
- When shoulder blades are fully depressed, slowly return to the starting position.

**Key points:**

- Do not lose spinal alignment, keep your chest lifted.



START



FINISH

---

## SHOULDER ROTATOR CUFF — Internal Rotation

**Muscles worked:** This exercise emphasizes the front rotator cuff muscle (subscapularis).

**Pulley position:** Wide or narrow.

**Starting position:**

- Sit on the bench with one side toward the Power Rods. Maintain good spinal alignment.
- Grasp the handle nearest you and draw the upper arm into your side, keeping your elbow bent.
- Distance yourself on the bench to eliminate slack in the cable.
- Use a light resistance. This is not a powerful movement.

**Motion:**

- Rotate your forearm toward your abdomen, keeping your elbow by your side during the entire motion.
- Slowly return to the starting position.

**Key points:**

- Control the motion during the entire exercise.
- Do not rotate the spine to get additional range of motion. Try for “pure” rotation of the shoulder joint. More is not better!
- Use light resistance only. Pick a resistance that you can perform 12-15 perfect reps.



START



FINISH

# Shoulder Exercises

## SHOULDER ROTATOR CUFF — External Rotation

**Muscles worked:** This exercise emphasizes the rear portion of the rotator cuff (infraspinatus and teres minor muscles). This area generally gets very weak as we age and needs to be addressed by almost everyone.

**Pulley position:** Wide or narrow.

### Starting position:

- Sit on the bench with one side toward the Power Rods. Maintain good spinal alignment.
- Using the arm farthest from the rods, reach across your body, grasp the handle nearest you and draw that arm back into your side, keeping your elbow bent.
- Allow your forearm to rest against your abdomen and your elbow against your side, taking out some of the slack or tension in the cables.

### Motion:

- Rotate your forearm away from your abdomen and out to the side, keeping your elbow/upper arm by your side during the entire motion.
- Slowly return to the starting position.

### Key points:

- Control the motion during the entire exercise.
- Do not rotate the spine to get additional range of motion. Try for "pure" external rotation of the shoulder joint. More is not better!
- Use light resistance only. Pick a resistance that allows you to perform 12 — 15 reps.



START



FINISH

---

## SHOULDER EXTENSION — Elbows Stabilized

**Muscles worked:** This exercise emphasizes your upper back (the latissimus dorsi, teres major and rear deltoid muscles), as well as the muscles between your shoulder blades (middle trapezius and rhomboid muscles). The triceps muscles, located on the back of the upper arms, are worked throughout the entire motion as they try to prevent the elbows from bending.

**Pulley position:** Narrow only.

### Starting position:

- With the bench flat, sit facing the Power Rods, knees bent, and feet flat on the floor.
- Grasp the handles with your palms facing down and back.
- Slide back to create tension at the start of the motion.
- Tighten your trunk muscles to stabilize your spine while maintaining a very slight arch in the lower back.

### Motion:

- Simultaneously "pinch" your shoulder blades together and moving your hands in an arc downward and backward below your hips.
- Slowly return to the starting position allowing your shoulder blades to move forward with your arms.

### Optional motions:

- Bilateral movement — both arms extending at the same time.
- Unilateral movement — performing all reps with one arm before moving to the next.
- Alternating — performing one rep on one side and then the next rep on the other side.
- Simultaneously alternating — both arms moving, although in opposite directions (one extending while the other is returning).

### Key points:

- Do not slouch — keep chest lifted and spine erect.
- Keep the lats tightened throughout the entire motion.



START



FINISH

# Shoulder Exercises

## SHOULDER SHRUG — Scapular Elevation

**Muscles worked:** The primary muscles emphasized are the upper trapezius and associated smaller muscles of the region.

**Pulley position:** Narrow or wide.

**Starting position:**

- Stand on the platform facing the Power Rods. Reach down and grasp the handles with the palms facing each other or facing backward, as comfort dictates.
- Let your arms hang extending in the direction of the pulleys.

**Motion:**

- Raise your shoulders toward the back of your head, making sure your neck/head position does not move.
- Slowly allow the shoulders to return downward without slouching or rounding the upper spine.

**Key points:**

- Do not bend the neck backward or forward while raising the shoulders.
- Do not slouch upon lowering the shoulders
- Keep the spine in erect alignment throughout the entire motion.
- Make sure both shoulders raise evenly.



START



FINISH

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## BARBELL SHOULDER SHRUG — Scapular Elevation

**Muscles worked:** The primary muscles emphasized are the upper trapezius and associated smaller muscles of the region.

**Pulley position:** Low pulleys only.

**Starting position:**

- Stand on the platform facing the Power Rods. Reach down and grasp the bar with a grip width slightly wider than shoulders, palms facing toward the back.

**Motion:**

- Raise your shoulders toward the back of your head, making sure your neck/head position does not move.
- Slowly allow the shoulders to return downward without slouching and rounding the upper spine.

**Key points:**

- Do not bend the neck backward or forward while raising the shoulders.
- Do not slouch upon lowering the shoulders
- Keep the spine in erect alignment throughout the entire motion.
- Make sure both shoulders raise evenly.



START



FINISH

# Shoulder Exercises

## **LYING FRONT SHOULDER RAISE** — Shoulder Flexion (elbow stabilized)

**Muscles worked:** This exercise emphasizes the front portion of the shoulder muscles (front deltoids as well as the front part of the middle deltoids).

**Pulley position:** Narrow only.

### **Starting position:**

- Sit on the bench facing the Power Rods, knees bent and feet flat on the platform.
- Grasp the handles, with your arms straight and your palms facing down. Lie back completely so that your head is supported by the bench.
- Keep your chest up, abdominals tight and maintain a slight arch in your lower back.

### **Motion:**

- Keeping your arms straight, move them in an arc upward and then directly over your shoulders.
- Slowly return to the starting position, arms by your sides.

### **Optional motions:**

- Bilateral movement – both arms raising at the same time.
- Unilateral movement – performing all reps with one arm before moving to the next.
- Alternating – performing one rep on one side and then the next rep on the other side.
- Simultaneously alternating – both arms moving, although in opposite directions (one raising while the other is returning).

### **Key points:**

- Keep the chest lifted and the abdominals tightened throughout the entire motion.
- Maintain good spinal alignment.
- Do not increase the arch in your lower back while lifting your arms.



START



FINISH

---

## **REVERSE FLY** — Shoulder Horizontal Abduction (elbows stabilized in slight flexion)

**Muscles worked:** This exercise emphasizes the back portion of the shoulder muscles (the rear deltoids and the rear portion of the middle deltoids) as well as the trapezius and rhomboids.

**Pulley position:** Narrow only.

### **Starting position:**

- With the bench flat, sit facing the Power Rods, knees bent, and feet flat on the floor.
- Grasp the handles with your palms facing toward the floor and arms nearly straight.
- Sit up straight and then bend slightly forward from the hips (not the spine) until arms/cables are in front of body at a 90 degree angle to your torso.
- Lift chest and pinch shoulder blades together.

### **Motion:**

- Maintaining the same slight bend in your arms, move your arms outward and backward, keeping a 90 degree angle between your upper arms and the sides of your torso.
- Move until your elbows are slightly behind your shoulders, then slowly reverse the motion keeping the rear shoulder muscles tightened during the entire motion.

### **Key points:**

- Maintain a 90 degree angle between your upper arms and the sides of your torso during the exercise.
- For normal pulling /rowing patterns of movement you may choose to allow the shoulder blades to "float" forward and backward naturally with the arm movement, or for increased rear deltoid involvement you may keep the shoulder blades "pinched" together throughout both the forward and backward movements.



START



FINISH

# Shoulder Exercises

## MILITARY PRESS

**Muscles worked:** This exercise emphasizes the front portion of the shoulder muscles (front deltoids and the front part of the middle deltoids), the rotator cuff muscles, the upper back muscles (trapezius), and the triceps muscles located on the back of the upper arms.

**Pulley position:** Low pulleys only.

### Starting position:

- Sit on the bench facing away from the Power Rods, directly over the low pulleys, knees bent and feet flat on the floor.
- Adjust the bar harness to provide tension at the bottom of the movement while still completing the top of the movement.
- Bring the bar up to shoulder level.
- Keep your chest up, abdominals tight and maintain a very slight arch in your lower back.

### Motion:

- Straighten arms overhead.
- Slowly return to starting position keeping tension in the front shoulder muscles.
- Do not press from behind the neck as this places undue stress on the joint capsule.

### Key points:

- Keep the abdominals tight throughout the entire motion.
- Maintain good spinal alignment.
- Do not let the arch increase in the lower back while pressing up.



START



FINISH





# Back Exercises

## LYING SHOULDER PULLOVER — Shoulder Extension (elbow stabilized)

**Muscles worked:** This exercise emphasizes the upper back (the latissimus dorsi, teres major, and rear deltoid muscles). It also involves the chest (the pectoralis major muscles). The triceps muscles, located on the back of the upper arms, are involved in maintaining the elbow position and also help with shoulder motion.

**Pulley position:** Narrow.

### Starting position:

- With the bench flat, lie on your back with your head toward the Power Rods. Position yourself far enough down the bench to allow the arms to extend overhead without hitting the Power Rods. Keep the knees bent and feet flat on the floor.
- Extend the arms overhead and grasp the handles with your palms facing the ceiling.
- Tighten your abdominals to stabilize your spine while maintaining a very slight arch in the lower back.

### Motion:

- Move your hands in an arc upward and then down toward your legs.
- Keep your shoulder blades on the bench, pinch them together and slide them downward toward your hips as your arms move.

- End the motion with your arms by your sides, pressing your shoulder blades down, completely tightening your lats.
- Control the return to the starting position by slowly moving the arms back overhead and releasing the shoulder blades.

### Optional motions:

- Bilateral movement – both arms pulling at the same time.
- Unilateral movement – performing all reps with one arm before moving to the next.
- Alternating – performing one rep on one side and then the next rep on the other side.
- Simultaneously alternating – both arms moving, although in opposite directions (one pulling while the other is returning).

### Key points:

- Do not lose spinal alignment. Relax your neck, keep your chest lifted, abs tight and maintain a very slight arch in your lower back.
- Keep the lats tightened throughout the entire motion.
- Release your shoulder blades at the end of each rep and initiate each new rep by depressing your shoulder blades.



START



FINISH

## WIDE PULLDOWNS — Shoulder Adduction (with elbow flexion)

**Muscles worked:** This exercise emphasizes the latissimus dorsi, teres major and rear deltoid which make up the large pulling muscles of your upper back. It also involves the muscles on the front of your upper arms (the biceps group) which are responsible for bending your elbows.

**Pulley position:** Lat tower.

### Starting position:

- To determine the appropriate grip width for you, hold your upper arms straight out to the sides at shoulder height. Bend your elbows approximately 90 degrees. Your hands should be no wider than your elbows. (For many individuals slightly less than elbow width is more comfortable.)
- Facing the Power Rods, grasp the bar at a width determined above, then sit on the bench.
- Position your knees directly under the pulleys and sit upright with your arms extending upward. *NOTE: You may position your hips directly under the pulleys but then you must lean back slightly from hips (not the waist).*
- Maintain good spinal alignment, chest lifted, abs tight and maintain a very slight arch in your lower back.

### Motion:

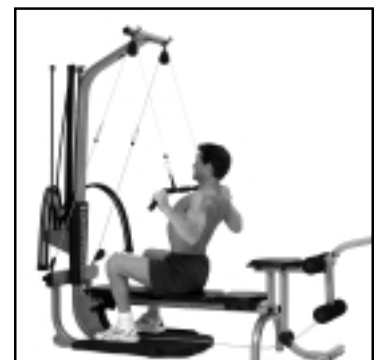
- Initiate the movement by pulling your shoulder blades down and together while simultaneously drawing your elbows downward to the sides, and then inward, toward your trunk.
- The bar does not have to touch your chest but, at the end of the motion, your arms should be drawn near your sides, your shoulder blades should be fully depressed toward your hips and your forearms must be in line with the direction of the cables (not rotated forward).
- Slowly return to the starting position allowing your arms and shoulder blades to move fully upward, without relaxing the muscles.

### Key points:

- From the side view the forearms should appear to remain in line with the cables.
- Do not lose spinal alignment.
- Do not lean backward as you pull.
- Keep the chest up, especially at the bottom of the movement.
- Keep your lats tightened throughout the entire motion.
- Do not move your elbows posteriorly on the way down.



START



FINISH

# Back Exercises

## **NARROW PULLDOWNS** — Shoulder Extension (with elbow flexion)

**Muscles worked:** This exercise emphasizes the latissimus dorsi, teres major and rear deltoid which make up the large pulling muscles of your upper back. It also involves the muscles on the front of your upper arms (the biceps group) which are responsible for bending your elbows.

**Pulley position:** Lat tower.

### **Starting position:**

- Attach a single handle to each cable.
- Facing the Power Rods, grasp the handles with the corresponding hand, palms facing each other, and sit on the bench.
- Position your knees directly under the pulleys and sit upright with your arms extending upward. **NOTE:** You may position your hips directly under the pulleys but then you must lean back slightly from hips (not the waist).
- Maintain good spinal alignment, chest lifted, abs tight and maintain a very slight arch in your lower back.

### **Motion:**

- Keeping your hands shoulder width, initiate the movement by pulling your shoulder blades down and together while simultaneously drawing your elbows downward to the front, and then back toward the sides of your body.

- At the end of the motion, your arms should be drawn near your sides, your shoulder blades should be fully depressed toward your hips and your forearms must be upward in line with the direction of the cables (not rotated forward).
- Slowly return to the starting position allowing your arms and shoulder blades to move upward fully, without relaxing the muscles.

### **Optional motions:**

- Bilateral movement – both arms pulling at the same time.
- Unilateral movement – performing all reps with one arm before moving to the next.
- Alternating – performing one rep on one side and then the next rep on the other side.
- Simultaneously alternating – both arms moving, although in opposite directions (one pulling while the other is returning).

### **Key points:**

- Do not lose spinal alignment.
- Keep the lats tightened throughout the entire motion.
- Do not lean backward as you pull.
- Keep the chest up, especially at the bottom of the movement.



START



FINISH

## **LYING LAT PULLDOWNS**

**Muscles worked:** This exercise emphasizes the latissimus dorsi, teres major and rear deltoid which make up the large pulling muscles of your upper back, and eliminates the biceps from the movement.

**Pulley position:** Wide.

### **Starting position:**

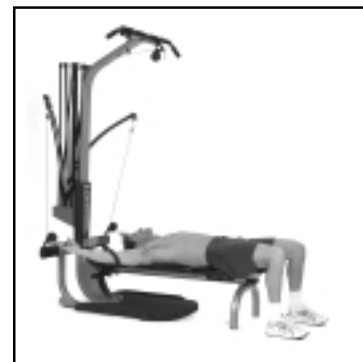
- Lie on your back on the bench, head toward the Power Rods. Your buttocks will eventually be off the end of the bench.
- Slip your arms through the handles and slide the cuffs just past your elbows and tighten cuffs.
- Grasp the cable with your palms facing inward and slide your body down along the bench far enough that your arms are fully extended, knees bent and feet flat on the floor.
- Although they will be overhead, position your upper arms wide, out to the sides.
- Tighten your abdominals to stabilize your spine while maintaining a very slight arch in the lower back.

### **Motion:**

- Initiate the movement by pulling your shoulder blades down toward your bottom while simultaneously pulling your elbows out to the sides, then down and inward toward the sides of the torso.
- Slowly return to the starting position, allowing your arms and shoulder blades to move back up toward the Power Rods without relaxing.

### **Key points:**

- Do not lose spinal alignment.
- Keep the lats tightened throughout the entire motion.
- Release your shoulder blades at the end of each rep and initiate each new rep by depressing your shoulder blades.
- This exercise may also be performed by grasping the handles, although you will have to slide farther down the bench to create starting position tension.



START



FINISH

# Back Exercises

## LYING NARROW LAT PULLDOWNS — Shoulder Extension (with elbow flexion)

**Muscles worked:** This exercise emphasizes the latissimus dorsi, teres major and rear deltoid which make up the large pulling muscles of your upper back and eliminates the biceps from the movement.

**Pulley position:** Narrow only.

### Starting position:

- Lie on your back on the bench, head toward the Power Rods. Your buttocks will eventually be off the end of the bench.
- Slip your arms through the handles and slide the cuff just past your elbows and tighten cuffs.
- Grasp the cable with your palms facing inward and slide your body down along the bench far enough that your arms are fully extended, knees bent and feet flat on the floor.
- Although they will be overhead, position your upper arms shoulder width or slightly wider.
- Tighten your abdominals to stabilize your spine while maintaining a very slight arch in the lower back.

### Motion:

- Initiate the movement by pulling your shoulder blades down toward your bottom while simultaneously pulling your elbows forward to the front, then down and back toward the sides of the torso.
- Slowly return to the starting position, allowing your arms and shoulder blades to move back up toward the Power Rods without relaxing.

### Key points:

- Do not lose spinal alignment.
- Keep the lats tightened throughout the entire motion.
- Release your shoulder blades at the end of each rep and initiate each new rep by depressing your shoulder blades.
- This exercise may also be performed by grasping the handles, although you will have to slide farther down the bench to create starting position tension.



START



FINISH

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## LOW BACK EXTENSIONS — Seated (with hip extension)

**Muscles worked:** This exercise emphasizes the muscles in your low back (erector spinae and deep spinal muscles) that are necessary for providing stabilization and protection for the spine. The lower back muscles are challenged isometrically just like they should be used when lifting and carrying in daily life. The gluteus maximus and the hamstrings are also strengthened at the hip.

**Pulley position:** Narrow only.

### Starting position:

- Sit on the bench facing the Power Rods.
- Spread the cuffs from the handles and slide them over the forearms up to the elbows.
- Place heels on the end of the platform, bend the knees comfortably, cross your arms in front of your chest and pull handles tightly to your chest.
- Sit up straight, lift your chest, tighten your trunk muscles and maintain a slight arch in your lower back.
- Pinch your shoulder blades together slightly.
- Lean forward from the hips slightly letting out some of the tension in the cables.

### Motion:

- Keeping your chest lifted, move your entire torso backward — as a unit — by pivoting at the hips.
- Slowly return to the starting position without slouching or changing spinal alignment.

### Key points:

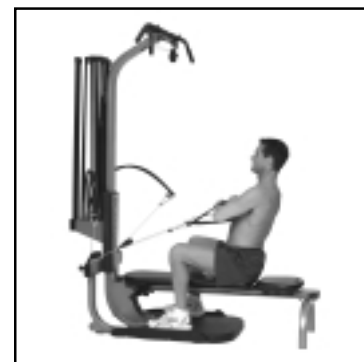
- Keep your chest lifted and a very slight arch in your lower back at all times.
- Move from the hips only, not your waist. Do not increase or decrease the arch in your lower back during the movement.

### Alternate motion:

- From the same starting position, sit erect and slowly allow your spine to flex forward maintaining control of the weight.
- Slowly straighten and extend your spine/trunk to a comfortable arch.
- Repeat with control.
- This version will require less weight than the exercise above.



START



FINISH

# Back Exercises

## SEATED LAT ROWS — Shoulder Extension (with elbow flexion)

**Muscles worked:** This exercise emphasizes the latissimus dorsi, teres major and rear deltoid muscles which make up the large pulling muscles of your upper back as well as the trapezius and rhomboids. The biceps muscles on the front of the upper arms are also involved in this movement.

**Pulley position:** Narrow only.

### Starting position:

- Sit on the bench facing the Power Rods.
- Grab handles with palms facing each other.
- Place heels on the end of the platform, bend the knees comfortably.
- Sit up straight with your spine in good alignment.

### Motion:

- Initiate the movement by pinching the shoulder blades back and together while simultaneously drawing your elbows down and backward toward the sides of your body.
- Continue moving the arms past the sides of the body while keeping the forearms pointing in the direction of the cable.
- Slowly return to the starting position, straightening the arm and letting the shoulder blades slide forward without slouching.

### Optional motions:

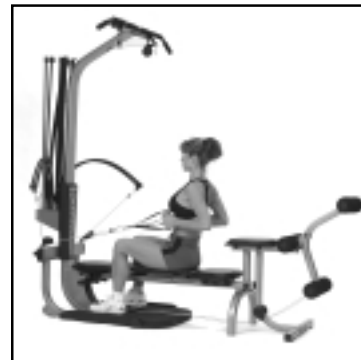
- Bilateral movement – both arms pulling at the same time.
- Unilateral movement – performing all reps with one arm before moving to the next.
- Alternating – performing one rep on one side and then the next rep on the other side.
- Simultaneously alternating – both arms moving, although in opposite directions (one pulling while the other is returning).

### Key points:

- Do not bend your torso forward at any point.
- Do not lose spinal alignment — keep chest lifted.



START



FINISH

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## LYING LAT FLY — Shoulder Adduction (elbow stabilized near extension)

**Muscles worked:** This exercise emphasizes the latissimus dorsi, teres major and rear deltoid which make up the large pulling muscles of your upper back, as well as involving your biceps which are located on the front of your upper arms.

**Pulley position:** Wide.

### Starting position:

- Lie on your back, head toward the Power Rods.
- Grasp the handles and straighten the arms out to the sides with your palms facing away from the pulleys, knees bent, and feet flat on the floor.
- Tighten your abdominals to stabilize your spine while maintaining a very slight arch in the lower back.

### Motion:

- Initiate the movement by pulling your shoulder blades down toward your bottom while simultaneously pulling your arms out to the sides, then down and inward toward the sides of the torso.
- Slowly return to the starting position, allowing your arms and shoulder blades to move back up/out toward the Power Rods without relaxing.

### Key points:

- Do not lose spinal alignment.
- Keep the lats tightened throughout the entire motion.
- Release your shoulder blades at the end of each rep and initiate each new rep by depressing your shoulder blades.



START



FINISH

# Back Exercises

## REVERSE GRIP PULLDOWNS — Shoulder Extension (with elbow flexion)

**Muscles worked:** This exercise emphasizes the latissimus dorsi, teres major and rear deltoid which make up the large pulling muscles of your upper back. It also involves the muscles on the front of your upper arms (the biceps group) which are responsible for bending your elbows.

**Pulley position:** Lat tower.

### Starting position:

- Facing the Power Rods, grasp the bar with an underhand grip, approximately shoulder width. Then sit on the bench.
- Position your knees directly under the pulleys and sit upright with your arms extending upward. *NOTE: You may position your hips directly under the pulleys but then you must lean back slightly from hips (not the waist).*
- Maintain good spinal alignment, chest lifted, abs tight and maintain a very slight arch in your lower back.

### Motion:

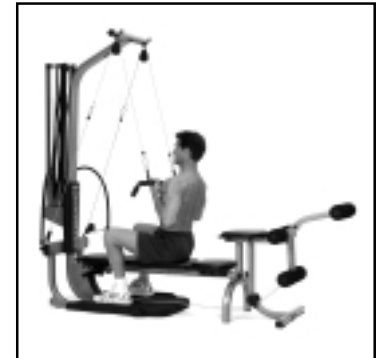
- Initiate the movement by pulling your shoulder blades down and together while simultaneously drawing your elbows downward to the front, and then back toward the sides of your body.
- At the end of the motion, your arms should be drawn near your sides (although may not be touching your sides), your shoulder blades should be fully depressed toward your hips and your forearms must be upward in line with the direction of the cables (not forward).
- Slowly return to the starting position allowing your arms and shoulder blades to move fully upward, without relaxing the muscles.

### Key points:

- Do not lose spinal alignment.
- Keep the lats tightened throughout the entire motion.
- Do not lean backward as you pull.
- Keep the chest up, especially at the bottom of the movement.



START



FINISH

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## SCAPULAR RETRACTION

**Muscles worked:** This exercise develops the muscles between your shoulder blades (middle trapezius and rhomboids), that pull your shoulder blades together and are essential to good posture.

**Pulley position:** Narrow only.

### Starting position:

- Sit on the bench facing the Power Rods.
- Grab handles with palms facing each other.
- Place heels on the end of the platform, bend hips and knees comfortably, arms straight.
- Lift your chest, sit up straight with your spine in good alignment and tighten your trunk muscles.

### Motion:

- Keeping your arms straight, slowly pinch your shoulder blades together.
- When your shoulder blades are fully retracted, slowly return to the starting position.

### Key points:

- Do not bend your torso forward.
- Do not lose spinal alignment – keep chest lifted.
- Do not bend and pull with your arm muscles.



START



FINISH

# Back Exercises

## **STIFF-ARM PULLDOWN** — Shoulder Extension (elbow stabilized near extension)

**Muscles worked:** This exercise emphasizes your upper back (the latissimus dorsi, teres major and rear deltoid muscles), as well as the muscles between the lower part of your shoulder blades (lower trapezius muscles). The triceps muscles, located on the back of the upper arms, will also be involved.

**Pulley position:** Lat tower.

### **Starting position:**

- Remove the bench, straddle the rail and stand on the platform facing the Power Rods.
- Grasp the lat bar at shoulder width or slightly wider with your palms down.
- Step back slightly. This may have to be adjusted on the first rep to insure that there is enough movement in the cable to complete the range of motion.
- Lift your chest and tighten your abdominals to stabilize your spine while maintaining a very slight arch in the lower back.

### **Motion:**

- Keeping your arms straight, initiate the movement by pulling your shoulder blades down and together while simultaneously drawing your arms downward to the front, and then in toward your legs.
- Allowing your shoulder blades to move with your arms, slowly return to the starting position.

### **Key points:**

- Do not lose spinal alignment — keep chest lifted.
- Keep the lats tightened throughout the entire motion.
- Keep your elbows nearly straight (not locked) throughout the entire exercise.



START



FINISH

---

## **BARBELL BENT OVER ROW**

**Muscles worked:** This exercise emphasizes the latissimus dorsi, teres major and rear deltoid muscles which make up the large pulling muscles of your upper back as well as the trapezius and rhomboids. The biceps muscles on the front of the upper arms are also involved in this movement. Strength in the spinal erectors and control over posture will be critical in this position.

**Pulley position:** Low pulley.

### **Starting position:**

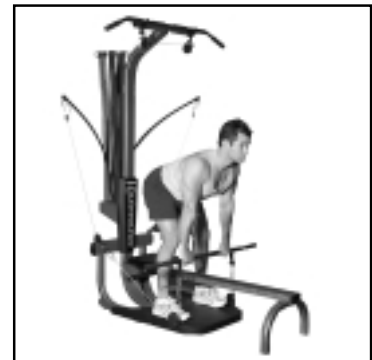
- Remove the bench, straddle the rail and stand facing away from the Power Rods.
- Grasp the bar with an overhand grip.
- The bar harness may have to be adjusted to insure that there is enough movement in the cable to complete the range of motion. In some cases the harness may have to be removed and the cable snap hook connected directly to the D-ring of the bar.
- Position your trunk almost parallel to the platform by bending from your hips (not the waist) and by bending your knees and sticking your hips out while lifting your chest. Tighten your abdominals to stabilize your spine while maintaining a flat lower back.

### **Motion:**

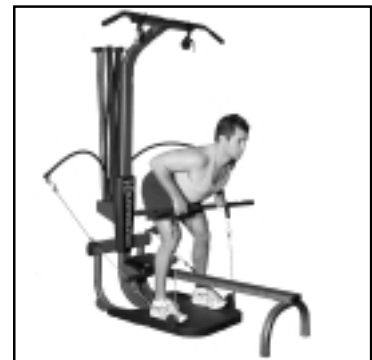
- Initiate the movement by pinching the shoulder blades back and together while simultaneously drawing your elbows back and upward toward the sides of your body.
- Keep the forearms pointing in the direction of the cable.
- Slowly return to the starting position, straightening the arm and letting the shoulder blades slide forward without slouching and bending the spine.

### **Key points:**

- Do not lose spinal alignment — keep chest lifted.
- Keep the lats tightened throughout the entire motion.
- Release your shoulder blades at the end of each rep and initiate each new rep by retracting (pinching) your shoulder blades.



START



FINISH

# Arm Exercises

## **FRENCH PRESS** — Elbow Extension Overhead

**Muscles worked:** This exercise emphasizes the triceps muscles located on the back of the upper arms.

**Pulley position:** Narrow only.

**Starting position:**

- Sit on the bench facing away from the Power Rods. Bend the knees and place your feet flat on the floor.
- Reach behind and grasp the handles, palms facing each other (or angled upward).
- Draw your arms up until your elbows are comfortably overhead (different for everyone) and your hands are pointed to the ceiling.
- Tighten your trunk muscles and maintain a very slight arch in your lower back.

**Motion:**

- Keeping your upper arm stationary, bend your elbows allowing your hands to move downward in an arcing motion.
- Stop your motion at approximately 90 degrees (or as comfort allows) and then slowly reverse your arcing motion upward and forward until your elbows are straight.

**Key points:**

- Keep your upper arm motionless.
- Keep wrists straight.
- Tighten the triceps throughout the exercise and control the motion on the way down.
- Keep your chest lifted, abs tight and maintain a very slight arch in your lower back.



START



FINISH

---

## **LYING TRICEPS EXTENSION** — Elbow Extension

**Muscles worked:** This exercise emphasizes the triceps muscles located on the back of the upper arms.

**Pulley position:** Narrow only.

**Starting position:**

- Lie on your back with your head toward the Power Rods. Knees bent and your feet flat on the floor.
- Reach overhead and grasp the handles, palms facing toward the ceiling.
- Keeping your elbows bent, bring your upper arms to your sides and maintain.
- Raise your chest and "pinch" your shoulder blades together. Maintain a very slight arch in your lower back.

**Motion:**

- Keeping your upper arms stationary and by your side, straighten your arms in an arcing motion downward and then inward toward your legs.
- Fully straighten your arms.
- Controlling the motion, allow your elbows to bend, returning to the starting position without moving your upper arms.

**Optional motions:**

- Bilateral movement — both arms extending at the same time.
- Unilateral movement – performing all reps with one arm before moving to the next.
- Alternating – performing one rep on one side and then the next rep on the other side.
- Simultaneously alternating – both arms moving, although in opposite directions (one extending while the other is returning)

**Key points:**

- Keep your upper arms motionless.
- Keep wrists straight.
- Tighten the triceps throughout the exercise and control the motion on the way down.



START



FINISH

# Arm Exercises

## LYING 45 DEGREE TRICEPS EXTENSION — Elbow Extension

**Muscles worked:** This exercise emphasizes the triceps muscles located on the back of the upper arms.

**Pulley position:** Narrow only.

**Starting position:**

- Lie on your back with your head toward the Power Rods, knees bent and your feet flat on the floor.
- Reach overhead and grasp the handles, palms facing toward the ceiling.
- Keeping your elbows bent, bring your upper arms to the front, angled approximately 45 degrees from the front of your torso and maintain.
- Raise your chest and "pinch" your shoulder blades together. Maintain a very slight arch in your lower back.

**Motion:**

- Keeping your upper arms stationary and by your side, straighten your arms in an arcing motion down and then inward toward your legs.
- Fully straighten your arms.
- Controlling the motion, allow your elbows to bend, returning to the starting position without moving your upper arms.

**Optional motions:**

- Bilateral movement — both arms extending at the same time.
- Unilateral movement – performing all reps with one arm before moving to the next.
- Alternating – performing one rep on one side and then the next rep on the other side.
- Simultaneously alternating – both arms moving, although in opposite directions (one extending while the other is returning).

**Key points:**

- Keep your upper arms motionless.
- Keep wrists straight.
- Tighten the triceps throughout the exercise and control the motion on the way down.



START



FINISH

---

## TRICEPS PUSHDOWN — Elbow Extension

**Muscles worked:** This exercise emphasizes the triceps muscles located on the back of the upper arms. These muscles are responsible for straightening your arms and assist in any upper body pushing or pressing motion.

**Pulley position:** Lat tower.

**Starting position:**

- Remove the bench, straddle the rail and stand on the platform facing the Power Rods.
- Grasp the lat bar at shoulder width, with your palms down.
- Adjust your distance from the pulleys (one to two feet in front of you). This may need to be altered after attempting the first rep.
- Keeping your arms bent, bring your upper arms to your side and maintain.
- Lift your chest and tighten your abdominals to stabilize your spine while maintaining a very slight arch in the lower back.

**Motion:**

- Keeping your upper arms stationary and your elbows next to the sides of your torso, slowly straighten your arms by arcing downward and then inward toward your legs.
- Straighten your arms fully.
- Controlling the motion, allow your elbows to bend, returning to the starting position without moving your upper arms.

**Optional motions:**

- Bilateral movement — both arms extending at the same time.
- Unilateral movement – performing all reps with one arm before moving to the next.
- Alternating – performing one rep on one side and then the next rep on the other side.
- Simultaneously alternating – both arms moving, although in opposite directions (one extending while the other is returning).

**Key points:**

- Keep your upper arms motionless.
- Keep wrists straight.
- Tighten the triceps throughout the exercise and control the motion on the way up.
- Maintain good posture by keeping your chest lifted, abs tight and maintain a very slight arch in your lower back.



START



FINISH



# Arm Exercises

## “ROPE” PUSHDOWNS — Elbow Extension

**Muscles worked:** This exercise emphasizes the triceps muscles located on the back of the upper arms. These muscles are responsible for straightening your arms and assist in any upper body pushing or pressing motion.

**Pulley position:** Lat tower.

### Starting position:

- Remove the bench, straddle the rail and stand on the platform facing the Power Rods.
- Using the single handles, grasp the webbing of the opposite handle (right hand to left handles and vice versa).
- Cross the cables with the palms facing each other as if grasping a rope handle.
- Keeping your elbows bent, bring your upper arms to your sides allowing your forearms to remain angled toward the midline in line with the cable.

### Motion:

- Keeping your upper arms stationary and your elbows next to the sides of your torso, slowly straighten your arms arcing down and then outward toward your sides, ending with your hands and elbows directly below the shoulders, arms fully straightened.
- Slowly allow the elbows to bend, angling forward and toward midline, returning to the start position.

### Key points:

- Keep your upper arms motionless.
- Keep wrists straight.
- Tighten the triceps throughout the exercise and control the motion on the way up.
- Maintain good posture by keeping your chest lifted, abs tight and maintain a very slight arch in your lower back.



START



FINISH

---

## SINGLE-ARM PUSHDOWN — Elbow Extension

**Muscles worked:** This exercise emphasizes the triceps muscles located on the back of the upper arms. These muscles are responsible for straightening your arms and assist in any upper body pushing or pressing motion.

**Pulley position:** Lat tower.

### Starting position:

- Remove the bench, straddle the rail and stand on the platform facing the Power Rods.
- Using the single handle, grasp the handle with your palms up.
- Adjust your distance from the pulleys (one to two feet in front of you). This may need to be altered after attempting the first rep.
- Keeping your arm bent, bring your upper arm to your side and maintain.
- Lift your chest and tighten your abdominals to stabilize your spine while maintaining a very slight arch in the lower back.

### Motion:

- Keeping your upper arm stationary and your elbow next to the side of your torso, slowly straighten your arm by arcing downward and then inward toward your leg, ending with your hand and elbow directly below the shoulder, arm fully straightened.
- Straighten your arm fully.
- Controlling the motion, allow your elbow to bend, returning to the starting position without moving your upper arm.

*NOTE: This exercise can also be performed utilizing the following options:*

- Palm up grip (supinated)
- Palm down grip (pronated)
- "Hammer" grip (neutral)

### Key points:

- Keep your upper arm motionless.
- Keep wrist straight.
- Tighten the triceps throughout the exercise and control the motion on the way up.
- Maintain good posture by keeping your chest lifted, abs tight and maintain a very slight arch in your lower back.



START



FINISH

# Arm Exercises

## CROSS TRICEPS EXTENSION

**Muscles worked:** This exercise develops the triceps muscle located on the back of the upper arms.

**Pulley position:** Wide only.

**Starting position:**

- Seated in the 45 degree position, reach across and straight behind your body, grasp a handle, and bend your elbow until your hand is near your chest.
- Keeping knees bent and feet flat on the floor, lay your head back against the bench and straighten your arm to the front.
- Then, reaching across mid-line, grasp the handle, palm down, with the opposite arm.
- Pointing your elbow upward, hold your upper arm at an angle consistent with the angle of the cable.
- With your free hand lightly grasp the back of your arm near your elbow, to give yourself a reference point and/or to help stabilize the working arm.
- Raise your chest and slightly "pinch" your shoulder blades together. Maintain a very slight arch in your lower back.

**Motion:**

- Keeping your upper arm stationary, straighten your arm, moving your hand in an arcing motion across your chest and over your shoulder.
- Fully straighten your arm.
- Controlling the motion, allow your elbow to bend, returning to the starting position without moving your upper arm.

**Key points:**

- Keep your upper arm motionless.
- Keep wrist straight.
- Tighten your triceps throughout the exercise and control the motion on the way down.



START



FINISH

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## TRICEPS KICKBACK

**Muscles worked:** This exercise emphasizes the triceps muscles located on the back of the upper arms.

**Pulley position:** Narrow.

**Starting position:**

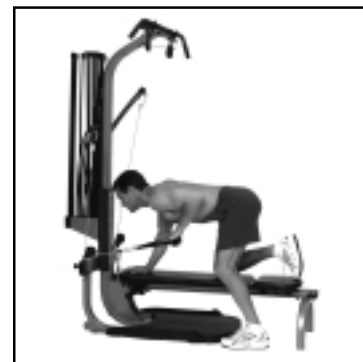
- Face the Power Rods, standing along side the bench. Kneel with one leg on the bench, bend forward at the hips (not the waist) and place the hands on the bench. Bend the other knee slightly and flatten the back by sticking the hips out and lifting the chest.
- Support yourself with one arm on the bench and grasp a handle with your free hand.
- Keeping your elbow bent, bring your upper arm to your side, parallel to the ground, and maintain.

**Motion:**

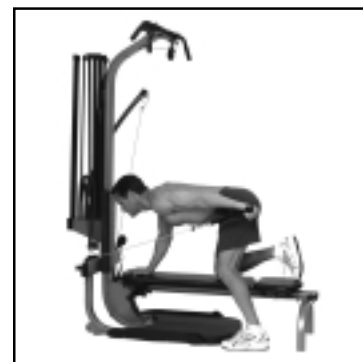
- Straighten elbow while keeping your upper arm completely still.
- When arm is completely straight, slowly return to the starting position.

**Key points:**

- Maintain spinal alignment.
- Keep your arm at your side and your wrist straight throughout entire motion.
- Tighten the triceps throughout the exercise and control the motion.



START



FINISH

# Arm Exercises

## SEATED TRICEPS EXTENSION — Elbow Extension

**Muscles worked:** This exercise emphasizes the triceps muscles located on the back of the upper arms.

**Pulley position:** Narrow only.

**Starting position:**

- Seated in the 45 degree position, reach straight behind your body, grasp the handles, and bend your elbows until your hands are near your chest and your palms are facing toward the floor.
- Keeping knees bent and feet flat on the floor, lay your head back against the bench and straighten your arms to the front.
- Be sure that your arms are directly "in line" with the cables, palms facing down and wrists straight.
- Raise your chest and "pinch" your shoulder blades together. Maintain a very slight, comfortable, arch in your lower back.

**Motion:**

- Keeping your upper arms stationary, slowly bend your elbows allowing your hands to move in an arcing motion toward your head.
- Stop when the elbows are approximately 90 degrees or as comfort dictates.
- Slowly reverse your arcing motion and straighten your elbows are fully.

**Key points:**

- Keep your upper arms motionless.
- Keep wrists straight.
- Tighten the triceps throughout the exercise and control the motion on the way down.



START



FINISH

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## STANDING BICEPS CURL — Elbow Flexion (in supination)

**Muscles worked:** This exercise emphasizes and develops the biceps muscles, which are located on the front of your upper arms and are primarily responsible for bending your elbows, as well as the brachialis and brachioradialis.

**Pulley position:** Wide or narrow (wide will work ideally for most people due to the angle created in the arm (carrying angle) in the palm forward (supinated position)).

**Starting position:**

- Remove the bench and stand on the platform, straddle the rail, facing the Power Rods.
- Bend down and grasp the handles with your palms facing forward.
- Stand with your upper arms by your sides (although not "smashed" against them). Lift your chest, tighten your abdominals and maintain a very slight arch in your lower back.

**Motion:**

- Curl handles forward, then upward, and then in toward shoulders while keeping your elbows at your sides and your upper arms completely still.
- Slowly lower to the starting position by performing the same arcing motion.

**Key points:**

- Keep elbows at your sides.
- Keep wrists straight.
- Keep your trunk muscles tight and maintain a very slight arch in your lower back.



START



FINISH

# Arm Exercises

## SEATED BICEPS CURL — Elbow Flexion (in supination)

**Muscles worked:** This exercise emphasizes and develops the biceps muscles, which are located on the front of your upper arms and are primarily responsible for bending your elbows, as well as the brachialis and brachioradialis.

**Pulley position:** Narrow.

### Seated position:

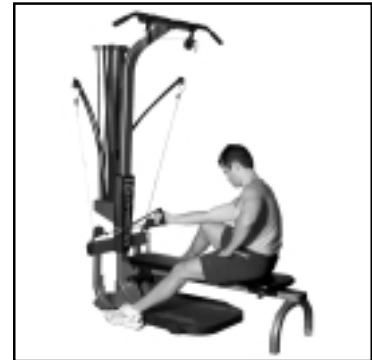
- Sit facing the Power Rods, knees bent with one foot resting on the bench and one on the floor. Angle the elevated leg toward the opposite pulley (right leg toward left pulley).
- Grasp the opposite handle (right hand to left pulley) and rest the back of your upper arm near your elbow, on the elevated knee.
- Maintain erect spinal alignment.

### Motion:

- Curl the forearm toward the upper arm, keeping your upper arm and shoulder blade completely still.
- Slowly return to the starting position without relaxing the biceps.

### Key points:

- Do not rock the upper body while bending your elbow.
- Keep wrist straight.
- Keep your chest lifted, trunk muscles tight and maintain a very slight arch in your lower back.



START



FINISH

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## SEATED WRIST EXTENSION

**Muscles worked:** This exercise develops the back and top parts of your forearms and is critical in helping to prevent injuries like tennis elbow.

**Pulley position:** Narrow only.

### Starting position:

- Sit facing the Power Rods with your knees bent and feet flat on the bench.
- Grasp the handles with your palms facing down and rest your mid-forearms on your upper legs with the elbows flared out to the sides wider than the shoulders.
- Be sure to sit far enough back on the bench to maintain tension throughout the exercise.
- Raise your chest, tighten your trunk muscles and maintain a very slight arch in your lower back.

### Motion:

- Slowly curl the back of your fists toward the forearms.
- Slowly return to the starting position.

### Key points:

- Move slowly and keep tension in the back of the forearms at all times.
- You can perform this exercise one arm at a time to make it easier to focus and isolate the back of your forearms, or you can perform it with both arms simultaneously to save time.



START



FINISH

# Arm Exercises

## STANDING WRIST EXTENSION

**Muscles worked:** This exercise emphasizes the back and top parts of your forearms. It also isometrically challenges your elbow flexors, located on the front part of your upper arms.

**Pulley position:** Narrow.

**Starting position:**

- Remove the bench and stand on the platform facing the Power Rods.
- Bend down and grasp the handles with your palms facing down.
- Stand with your upper arms by your sides.
- Lift your chest, tighten your trunk muscles and maintain a very slight arch in your lower back.
- Bend your elbows 90 degrees hold that elbow position throughout the entire exercise.

**Motion:**

- Slowly curl your knuckles upward.
- Keeping your forearms still, slowly return to the starting position.

**Key points:**

- Move slowly and never relax the wrist.
- Do not move your forearm or alter the bend in your elbow. Perform the entire motion at your wrist.
- Do not rock your body. Keep your chest lifted, abs tight and maintain a slight arch in your lower back.



START



FINISH

---

## SEATED WRIST CURL

**Muscles worked:** This exercise develops the front part of your forearms as well as increasing the grip strength.

**Pulley position:** Narrow.

**Starting position:**

- Sit facing the Power Rods with your knees bent and feet flat on the bench.
- Grasp the handles with your palms facing up and rest your entire forearms on your thighs, allowing the wrists to bend above the knees.
- Raise your chest, tighten your trunk muscles and maintain a very slight arch in your lower back.

**Motion:**

- Slowly curl your fists toward the front of your forearms.
- Slowly return to the starting position without relaxing the wrists.

**Key points:**

- Move slowly and keep tension in the front of the forearms at all times.
- You can perform this exercise one arm at a time to make it easier to focus and isolate the front of your forearms, or you can perform it with both arms simultaneously to save time.



START



FINISH

# Arm Exercises

## STANDING WRIST CURL

**Muscles worked:** This exercise emphasizes the front part of your forearms as well as increases the strength of your grip. It also isometrically challenges your elbow flexors, located on the front part of your upper arms.

**Pulley position:** Narrow.

**Starting position:**

- Remove the bench and stand on the platform facing the Power Rods.
- Bend down and grasp the handles with your palms facing forward.
- Stand with your upper arms and elbows by your sides.
- Lift your chest, tighten your trunk muscles and maintain a very slight arch in your lower back.
- Bend your arms 90 degrees, palms up, and hold that position throughout the entire exercise.

**Motion:**

- Slowly curl your fists upward.
- Keeping your forearms still, slowly let your fists return to the starting position.

**Key points:**

- Move slowly and keep tension in the front of the forearm at all times.
- Do not move your forearm or alter the bend in your elbow. Perform the entire motion at your wrist.
- Do not rock your body. Keep your chest lifted, abs tight and maintain a slight arch in your lower back.



START



FINISH

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## REVERSE CURL — Elbow Flexion (in pronation)

**Muscles worked:** This exercise emphasizes the deep arm muscle (brachialis) while involving the front forearm muscle (brachioradialis) and the biceps as well.

**Pulley position:** Narrow.

**Starting position:**

- Remove the bench and stand on the platform facing the Power Rods.
- Bend down and grasp the handles with your palms facing down/backward.
- Stand with your arms by your sides.
- Lift your chest, tighten your abdominals and maintain a very slight arch in your lower back.

**Motion:**

- Keeping the palms facing down, slowly curl the handles forward, then upward, then in toward your shoulders while keeping your elbows at your sides and your upper arms completely still.
- Slowly lower to the starting position.

**Key points:**

- Keep elbows from moving forward and backward.
- Keep wrists straight.
- Keep your trunk muscles tight and maintain a very slight arch in your lower back.



START



FINISH

# Arm Exercises

## **LYING BICEPS CURL** — Elbow Flexion (in supination)

**Muscles worked:** This exercise emphasizes and develops the biceps muscles, which are located on the front of your upper arms and are primarily responsible for bending your elbows, as well as the brachialis and brachioradialis.

**Pulley position:** Wide or narrow (wide will work ideally for most people due to the angle created in the arm (carrying angle) in the palm forward (supinated position)).

**Position:**

- Sit on the bench facing the Power Rods, knees bent and feet flat on the platform.
- Grasp the handles, with your arms straight and your palms facing upward. Lie back completely so that your head is supported by the bench.
- Keep your chest up, abdominals tight and maintain a slight arch in your lower back.

**Motion:**

- Curl handles forward, then upward and then in toward the shoulders while keeping your elbows at your sides and your upper arms completely still.
- Slowly lower to the starting position by performing the same arcing motion.

**Key points:**

- Keep elbows from moving forward and backward.
- Keep wrists straight.
- Keep your trunk muscles tight and maintain a very slight arch in your lower back.



START



FINISH

---

## **REVERSE GRIP BARBELL CURLS** — Elbow Flexion (in pronation)

**Muscles worked:** This exercise emphasizes the deep arm muscle (brachialis) while involving the front forearm muscle (brachioradialis) and the biceps as well.

**Pulley position:** Low pulley.

**Starting position:**

- Remove the bench and stand on the platform facing away from the Power Rods.
- Grasp the bar with an overhand grip.
- The bar harness may have to be adjusted to insure that there is enough movement in the cable to complete the range of motion.
- Stand with your arms down by your sides.
- Lift your chest, tighten your abdominals and maintain a very slight arch in your lower back.

**Motion:**

- Keeping the palms facing down, slowly curl the bar forward, then upward, then in toward your shoulders while keeping your elbows at your sides and your upper arms completely still.
- Slowly lower to the starting position.

**Key points:**

- Keep elbows from moving forward and backward.
- Keep knees slightly bent.



START



FINISH

# Arm Exercises

## **BARBELL CURLS** — Elbow Flexion (in supination)

**Muscles worked:** This exercise emphasizes and develops the biceps muscles, which are located on the front of your upper arms and are primarily responsible for bending your elbows. The brachialis and brachioradialis are also involved.

**Pulley position:** Low pulley.

### **Starting position:**

- Remove the bench and stand on the platform facing away from the Power Rods.
- Grasp the bar with an underhand grip. Place your hands slightly wider than shoulder width. This creates a natural angle in the arm (carrying angle) created by the palm forward (supinated) position.
- The bar harness may have to be adjusted to insure that there is enough movement in the cable to complete the range of motion.
- Stand with your arms down by your sides.
- Lift your chest, tighten your abdominals and maintain a very slight arch in your lower back.

### **Motion:**

- Keeping the palms facing up, slowly curl the handles forward, then upward, then in toward your shoulders while keeping your elbows at your sides and your upper arms completely still.
- Slowly lower to the starting position.

### **Key points:**

- Keep elbows from moving forward and backward.
- Keep knees slightly bent.



START



FINISH



# Abdominal Exercises

## SEATED (RESISTED) ABDOMINAL CRUNCH — Spinal Flexion

**Muscles worked:** This exercise emphasizes the abdominal area including the upper and lower front abs (rectus abdominus) and the side abs (obliques).

**Pulley position:** Wide or narrow.

### Starting position:

- While seated in the 45 degree position, spread the cuffs from the handles and put the arms through, positioning each cuff around the front of the respective shoulder.
- Your lower back can start out flat or in a normal arch, knees and hips are bent and your feet are flat on the floor.

### Motion:

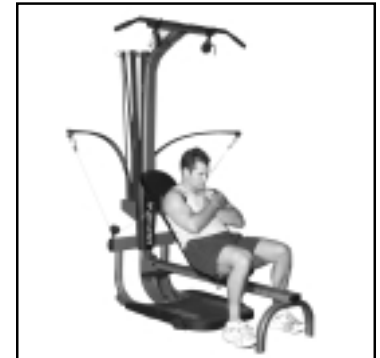
- Tighten your abs and curl only your torso, slowly moving your ribs toward your hips. Move as far as you can without moving the hips or neck. **THE LOWER BACK SHOULD NOT LOSE CONTACT WITH THE BENCH** when fully crunched.
- Slowly reverse the motion returning to the starting position, without relaxing.

### Key points:

- Allow exhalation up and inhalation down, don't exaggerate it.
- Do not lift your head/chin. Your head should follow the rib motion, not lead, allowing you to maintain normal neck posture.
- Tighten your abdominals throughout the entire exercise range of motion. Do not let your abs relax until the set is over.
- **MOVING SLOWLY** to eliminate momentum is critical.
- This exercise will **NOT** spot-reduce fat!



START



FINISH

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## SEATED (RESISTED) OBLIQUE CRUNCH — Spinal Flexion with Rotation (Diagonals)

**Muscles worked:** This exercise emphasizes the side abs (obliques) as well as the upper and lower front abs (rectus abdominus)

**Pulley position:** Wide or narrow

### Starting position:

- While seated in the 45 degree position, bring the left handle to the left shoulder, and then reaching across the chest, grasp and hold with the right hand as pictured.
- **Alternative Handle Position:** Spread the left cuff from the handle and put the left arm through, positioning the cuff around the front of the shoulder (a one-sided version of the handle position described in the Seated Resisted Abdominal Crunch).
- Your lower back can start out flat or in a normal arch, knees and hips are bent and your feet are flat on the floor.

### Motion:

- Tighten your abs and move in a diagonal direction, slowly moving your right ribs toward your left hip. Move as far as you can without moving the hips or neck. **THE LOWER BACK SHOULD NOT LOSE CONTACT WITH THE BENCH** when fully crunched.
- Slowly reverse the motion returning to the starting position, without relaxing.
- After you've completed sufficient reps of this exercise, repeat it on the other side of your body.

### Key points:

- Allow exhalation up and inhalation down, don't exaggerate it.
- Do not lift your head/chin. Your head should follow the rib motion, not lead, allowing you to maintain normal neck posture.
- Tighten your abdominals throughout the entire exercise range of motion. Do not let your abs relax until the set is over.
- **MOVING SLOWLY** to eliminate momentum is critical.
- This exercise will **NOT** spot-reduce fat!



START



FINISH

# Abdominal Exercises

## REVERSE CRUNCH — Spinal Flexion

**Muscles worked:** This exercise works your entire abdominal area including your upper and lower front abs (rectus abdominus) and your side abs (obliques).

**Pulley position:** None.

### Starting position:

- With the bench in the flat position, lie on your back with your head toward the Power Rods.
- Bend your knees fully.
- The amount of bend at the hips based on desired difficulty. Beginners should be fully bent, bringing the legs near the abs. As strength improves the legs can be positioned farther away. DETERMINE THESE POSITIONS AND MAINTAIN THROUGHOUT THE EXERCISE.
- Reach overhead grasp either the bench, or the metal frame, with each hand.
- Relax your neck.

### Motion:

- Tighten your abs and slowly curl your hips toward your rib cage. Move as far as you can without using your legs to get momentum and do not curl up onto your shoulder blades.
- Slowly reverse the motion returning to the starting position without relaxing.

### Key points:

- Tighten your abs before you move.
- Keep knees and hips stationary.
- Allow exhalation up and inhalation down without exaggerating breathing.
- Contract as far into the movement as possible. Lower under control. Keep abs tight during the entire motion.
- This exercise will NOT spot-reduce fat!



START



FINISH

## RESISTED REVERSE CRUNCH — Spinal Flexion

**Muscles worked:** This exercise works your entire abdominal area including your upper and lower front abs (rectus abdominus) and your side abs (obliques).

**Pulley position:** Narrow.

### Starting position:

- With the bench in the flat position, sit facing the Power Rods and attach both ankle cuffs over the respective ankle.
- Lie flat on your back on the bench with your head facing away from the Power Rods.
- Bend your hips and knees so that your thighs are resting on your abdominals.
- Reach overhead and grasp the bench.
- Relax your neck.

### Motion:

- Tighten your abs and slowly curl your hips toward your rib cage. Move as far as you can without using your legs to get momentum and do not curl up onto your shoulder blades.
- Slowly reverse the motion returning to the starting position without relaxing.

### Key points:

- Do not throw your legs to initiate the motion.
- Tighten your abs before you move.
- Keep knees and hips stationary.
- Allow exhalation up and inhalation down without exaggerating breathing.
- Contract as far into the movement as possible. Lower under control. Keep abs tight during the entire motion.



START



FINISH

# Abdominal Exercises

## TRUNK ROTATION

**Muscles worked:** This exercise involves most of the trunk and deep spinal muscles. It does not “spot reduce” or eliminate “love handles.” It should be noted that rotation is more limited in the spine than most people realize and should be performed with minimal resistance, and always in proper erect alignment.

**Pulley position:** Narrow.

### Starting position:

- Sitting sideways on the bench with one side facing the Power Rods, grasp the handle closest to you with both hands.
- Raise both arms up to chest level, centered in front of the sternum (breast bone).
- Keep both elbows slightly straight.
- Lift your chest, pinch your shoulder blades together, tighten your abs and maintain a very slight arch in your lower back.

### Motion:

- Tighten your entire abdominal area and slowly rotate your rib cage/arms away from the cables (30-40 degrees), as if you were rotating with a rod through the middle of your spine.
- Rotate past midline as far as can be performed slowly and comfortably.
- Slowly return to the starting position.

### Key points:

- This is an important exercise, yet it can become high risk if done incorrectly. Keep your chest lifted and always maintain your spine in good alignment with a very slight arch in your lower back.
- Keep your hands centered in front of the middle of your chest (sternum) and your shoulder blades “pinched” together. Insure that all of your motion occurs in the torso.
- Remember, more range of motion is not necessarily better, especially in this exercise. Move only as far as your muscles will take you. Try to eliminate uncontrolled momentum.
- Caution — Do not use heavy resistance for this exercise. Pick a weight that allows you to perform at least 12-15 reps.
- This exercise will NOT spot-reduce fat!



START



FINISH

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## ABDOMINAL CRUNCH — Spinal Flexion

**Muscles worked:** This exercise emphasizes the abdominal area including the upper and lower front abs (rectus abdominus) and the side abs (obliques).

**Pulley position:** None.

### Starting position:

- Lie face up on the bench with feet near the Power Rods.
- Your lower back can start out flat or in a normal arch, knees and hips are bent with your feet either on the bench, resting on the lat tower, or held in space.
- Fold your arms across your chest.

### Motion:

- Tighten your abs and curl only your torso, slowly moving your ribs toward your hips. Move as far as you can without moving the hips or neck.
- Slowly reverse the motion returning to the starting position, without relaxing.

### Key points:

- Allow exhalation up and inhalation down, don't exaggerate it.
- Do not lift your head/chin. Your head should follow the rib motion not lead, allowing you to maintain normal neck posture.
- Tighten your abdominals throughout the entire exercise range of motion. Do not let your abs relax until the set is over.
- MOVING SLOWLY to eliminate momentum is critical.
- This exercise will NOT spot-reduce fat!



START



FINISH

# Leg Exercises

## LEG EXTENSION

**Muscles worked:** This exercise emphasizes the muscles on the front of the upper thigh (quadriceps muscle group) which are responsible for straightening your leg against resistance. This powerful muscle group helps provide stability for the knee joint and is essential for producing power in running, jumping and lifting activities.

**Pulley position:** Leg extension/ Leg curl attachment.

### Starting position:

- Sit on the seat facing away from the Power Rods with your knees near the pivot point and the lower roller pads on the front of your shins/ankle (see picture).
- Position your thighs at hip width pointing your knee caps straight to the front.
- Grasp the sides of the seat.
- Sit up straight with your chest lifted, abs tight and maintain a very slight arch in your lower back.

### Motion:

- Tighten your quads and straighten your legs by moving your feet forward and then upward until your legs are completely straight and your kneecaps are pointing up toward the ceiling (not turned outward).
- Then slowly return to the starting position keeping tension in your quads during the entire movement.

### Key points:

- Use slow controlled motion. Do not “kick” into extension.
- Do not let your knees rotate outward during the exercise. Keep your kneecaps pointing up and straight forward.



START



FINISH

---

## LEG CURL

**Muscles worked:** This exercise emphasizes the hamstring muscle group (biceps femoris, semimembranosus, semitenonosus) on the back of the thigh as well as the calf muscle (gastrocnemius).

**Pulley position:** Leg extension/Leg curl attachment.

### Starting position:

- With the back support of the bench attached to the seat of the leg unit, lie face down with your lower thigh on the pad, the knees near the pivot point and ankles under the upper roller pads .
- Point your knees and feet straight down and tighten your inner thigh muscles (as if squeezing your knees together) to stabilize.
- Place your hands on the floor or grasp the rail or bench for stability.
- Place your forehead on the bench or look to the side, but do not look up, hyper-extending your neck.
- Tighten your abs to prevent spinal motion and very slightly lift your knees (approximately 1 inch), placing the pressure on your thighs.

### Motion:

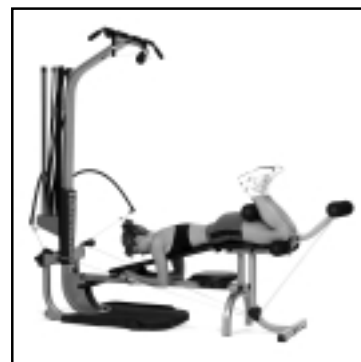
- Slowly bend your knees, upward and then toward your hips without moving your spine and without your hips lifting from the bench.
- Keeping the hamstrings tight, slowly allow your legs to straighten and return near the starting position. Do not fully extend your legs.

### Key points:

- Make sure you straighten your legs under control, do not allow your knees to hyper-extend.
- Keep your chest lifted, abs tight and maintain a very slight arch in your lower back.
- Try to relax your calf and foot muscles.



START



FINISH

# Leg Exercises

## THE SQUAT — Knee Extension, Hip Extension, Ankle Plantarflexion

**Muscles worked:** Although the squat is often considered a total body exercise, the glutes, adductors, hamstrings and quads are primary movers and the spinal erectors are key to stabilization.

**Pulley position:** Low pulley.

### Starting position:

- Remove the back support and place the seat in free sliding position.
- Use the bar harness to adjust strap length allowing tension at the appropriate depth. This will require experimentation. Increase depth slowly according to your ability, knee conditions, etc. Most orthopedists recommend that healthy knees not go any lower than a 90 degree angle (between the thigh and calf) when using extra resistance. Many people go lower for their goals, but this dramatically increases the risk to the knee cartilage and increases the probability of degenerative/arthritis changes.
- Sit on the seat facing the Power Rods and position the bar on the traps (across the shoulders, not on the neck). Maintain a grip on each side of the bar.
- Flatten your back, keep your chest up and position your feet in line with the cable/pulley.
- Place your feet wider than hip width and point your toes outward slightly. Direct the thighs to the same outward angle as the feet.

### Motion:

- While keeping your back straight, tighten your abdominals and move to a standing position.
- Keep the pressure through the middle of the arches/feet, not through the toes or heels.
- Using control, slowly squat down by sticking the hips out as the knees start to bend. Keep the chest up and back flat as the hips continue to move backward.
- Lower to approximately 90 degrees at the knees (unless otherwise determined).
- Do not return to the seat until the end of the last repetition.

### Key points:

- Keep knees pointed the same direction as the toes.
- Keep the head/neck in line with the trunk.
- Pay close attention to all alignment and stabilization issues on every part of each and every repetition!



START



FINISH

## LEG PRESS – Hip Extension and Knee Extension

**Muscles worked:** This exercise develops overall lower body pushing strength, primarily emphasizing your knee extensors on the front of your thighs (quadriceps), your hip extensors muscles on your rear (gluteus maximus), as well as on your inner thighs (adductor muscle groups).

**Pulley position:** Narrow.

### Starting position:

- Remove the bench and unlock the rowing seat.
- Sit on the seat facing the Power Rods with the leg press belt attached and adjusted. Support your feet on the upright pulley frame or foot rests as shown. The belt should be placed around the pelvis, NOT the low back/spine.
- Lift your chest, tighten your abs and maintain a very slight arch in your lower back.
- Slowly straighten your legs, but do not lock your knees.
- You may rest your hands around the sides of the belt, on the sides of the seat, or you may fold your arms across your chest, whichever is more comfortable.

### Motion:

- Bend your knees and hips slowly allowing yourself to slide toward the Power Rods.
- Limit your slide to a position that allows you to still maintain good spinal posture, with your chest lifted, abs tight and a slight arch in your lower back.
- Slowly return to the starting position.

### Key points:

- Generate the force for the leg press by mentally *directing your pushing/pressing effort through the lower leg and squarely into the frame of the machine*. In other words, push in the direction the calf bone is pointing throughout the motion, rather than just pushing your body backward. This will decrease the shearing forces at the knee.
- Keep your knees pointed in the same direction as your feet. DO NOT let the knees travel inward/closer during the motion.
- Keep your spine in good posture.
- Straighten but do not “lock out” your knees. Keep your quads tightened throughout the entire motion.
- Do not use momentum. MOVE SLOWLY! Do not “launch” yourself when you straighten your knees.



START



FINISH

# Leg Exercises

## LYING (PRONE) LEG CURL — Knee flexion

**Muscles worked:** This exercise emphasizes the hamstring muscle group (biceps femoris, semimembranosus, semitendinosus) on the back of the thigh as well as the back of the calf (gastrocnemius).

**Pulley position:** Narrow.

### Starting position:

- Seated on the flat bench, attach the cuffs to the respective ankles.
- Turn and lie on your stomach with your head facing away from the Power Rods. The cables will cross. Keep your feet together and your hands flat on the floor helping to provide stability.
- Move forward to provide tension in the cables.
- Look toward the floor to keep your neck in good alignment and tighten your abdominals.
- Lift your knees very slightly (1/4 inch) off of the bench by pressing your hips into the bench and hold them completely still.

### Motion:

- Slowly bend your knees, moving your feet in an arc upward and then inward toward your buttocks.
- Then slowly allow your legs to straighten through the arc described, returning to the starting position without relaxing.

### Key points:

- Keep your upper leg motionless during the entire exercise.
- Keep your abs tight and do not lift your hips or excessively arch your back.



START



FINISH

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## STANDING HIP EXTENSION — Knee stabilized in flexion

**Muscles worked:** This exercise strengthens and develops the muscles of your buttocks area (gluteus maximus). Remember, there is no such thing as *spot reduction*. This exercise will not remove fat from this area, but it will strengthen and build these muscles.

**Pulley position:** Narrow.

### Starting position:

- Remove the bench.
- Facing the Power Rods, stand on the platform to one side of the rail.
- Secure the cuff around the ankle (or foot) farthest from the rail. Keep this leg bent at approximately 90 degrees.
- You may stand erect or you may bend over 30 - 45 degrees from your hips (not your waist) and very slightly bend the knee of your support leg.
- Keep your spine in good posture, with your chest lifted, abs tight and maintain a very slight arch in your lower back.

### Motion:

- Initiate the movement by tightening your glutes. Extend your hip by moving your entire leg backward.
- Slowly move your leg as far as you can, without allowing ANY movement to occur at your waist or your knee.
- Then slowly return to the starting position.

### Key points:

- Make sure all of your motion occurs at your hip, NOT your waist or lower back.
- Keep your abs tight throughout the entire exercise.
- Maintain exactly the same bend in the knee of your moving leg throughout the entire exercise.



START



FINISH

# Leg Exercises

## STANDING HIP FLEXION — With knee flexion

**Muscles worked:** This exercise primarily develops and strengthens the muscles on the front of your hips (iliopsoas and rectus femoris) that are primarily responsible for bending or flexing your hips.

**Pulley position:** Narrow.

**Starting position:**

- Remove the bench.
- Stand on the base platform, facing away from the Power Rods, on one side of the bench.
- Secure the cuff around the leg farthest from the rail, just above or just below the knee.
- Straighten, but do not lock, the knee of your support leg.
- Keep your spine in good posture with your chest lifted, abs tight and maintain a very slight arch in your lower back.

**Motion:**

- Initiate the movement by lifting your knee up and in toward your torso.
- Allowing the knee to bend as you move, bring your knee upward as far as you can, without allowing ANY movement to occur at your waist or lower back.
- Slowly return to the starting position without resting your leg muscles.

**Key points:**

- Make sure all of your motion occurs at your hip, NOT your waist or lower back.
- Keep your chest lifted and trunk muscles tight throughout the entire exercise.
- Allow your lower leg to hang in the direction of the cable at all times.



START



FINISH

---

## SEATED LEG CURL — Knee Flexion with Hip Flexion

**Muscles worked:** This exercise emphasizes the hamstring muscle group (biceps femoris, semimembranosus, semitendinosus) on the back of the thigh.

**Pulley position:** Narrow.

**Starting position:**

- Remove the bench, unlock the seat.
- Attach one end of the belt to a pulley, sit on the seat facing away from the Power Rods, position the belt around your midsection and then attach the free end of the belt to the other pulley.
- Move forward and secure your heels over the rail support at the end of the unit.
- Lift your chest, tighten your abdominals and maintain a very slight arch in your lower back.

**Motion:**

- Slowly bend your knees, pulling yourself forward toward your feet.
- Slowly allow your legs to straighten and return to the starting position.

**Key points:**

- Make sure that you straighten your legs under control, do not allow your knees to hyper-extend.
- Keep your chest lifted, abs tight and maintain a very slight arch in your lower back.



START



FINISH

# Leg Exercises

## **LYING LEG EXTENSION** — Knee Flexion with Hip Flexion

**Muscles worked:** This exercise allows you to strengthen and develop the front part of your upper thighs (quadriceps muscle groups), helping to increase your muscular stability at the knee joints.

**Pulley position:** Narrow.

### **Starting position:**

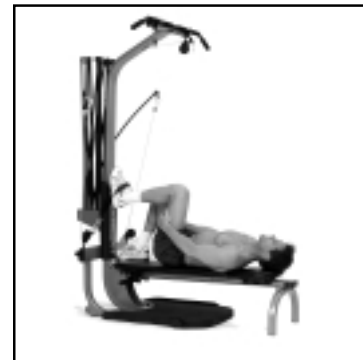
- Sit on the bench facing the Power Rods and place one cuff over the respective foot with the handle under the foot.
- Lie back on the bench so that your head is supported by the bench.
- Bend your working leg at the knee and bend your hip until your knee is pointing up.
- You may grasp your working thigh with both hands around the back of the knee or increase the difficulty by attempting to hold the thigh stable without your hands.
- Place the uninvolved foot on the floor or bench, relax your neck, straighten your spine, lift your chest, and tighten your abs.

### **Motion:**

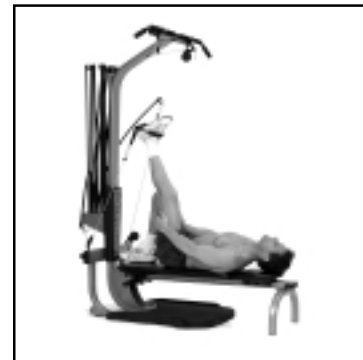
- Slowly straighten your leg, moving only your knee/lower leg.
- Slowly return to the starting position without relaxing the quad.

### **Key points:**

- Keep your upper thigh motionless throughout the exercise.
- Keep your spine in good posture with your chest lifted, abs tight and a very slight arch in your lower back.



START



FINISH

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## **SEATED (STRAIGHT LEG) CALF RAISE** —

Ankle Plantarflexion (knee stabilized in slight flexion)

**Muscles worked:** This exercise is great for emphasizing the muscles of your lower leg or calf (gastrocnemius and soleus), which are responsible for raising and lowering your heels at the ankle joint. Strength and power in these muscles are essential for all sports and daily activities.

**Pulley position:** Narrow.

### **Starting position:**

- Remove the bench and unlock the rowing seat.
- Sit on the seat facing the Power Rods with the leg press belt attached and adjusted.
- Place the balls of your feet on the upright pulley frame as shown.
- Lift your chest, tighten your abs and maintain a very slight arch in your lower back.
- Push back and straighten your legs (but do not lock your knees) and maintain this position.
- You may rest your hands around the sides of the belt, on the sides of the seat, or you may fold your arms across your chest, whichever is more comfortable.

### **Motion:**

- Slowly press the balls of your feet into the frame and pull your heels toward your knees.
- Slowly return to the starting position without relaxing.

### **Key points:**

- Do not lose contact between the balls of your feet and the frame as you push.
- Do not change your hip or knee position, ONLY ankle motion should be allowed.



START



FINISH



# Leg Exercises

## STANDING LEG KICKBACK — Hip extension and knee extension

**Muscles worked:** This exercise strengthens and develops the muscles of your buttocks area (gluteus maximus). Remember, there is no such thing as “spot reduction.” Do not do this exercise because you believe it will remove fat from this area — do it to strengthen and build these muscles.

**Pulley position:** Narrow.

**Starting position:**

- Remove the bench.
- Facing the Power Rods, stand on the platform to one side of the rail.
- Secure the cuff around the foot farthest from the rail. Bend this leg to approximately 90 degrees.
- Bend over 30-45 degrees from your hips (not your waist) and very slightly bend the knee of your support leg.
- Keep your spine in good posture, with your chest lifted, abs tight and maintain a very slight arch in your lower back.

**Motion:**

- Extend your entire leg backward, straightening the knee.
- Slowly move your leg backward as far as you can, without allowing ANY movement to occur at your waist.
- Then slowly return to the starting position.

**Key points:**

- Do not allow your waist, lower back or supportive hip to move.
- Keep your abs tight throughout the entire exercise.



START



FINISH

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## KNEELING LEG KICKBACK — Hip extension and knee extension

**Muscles worked:** This exercise strengthens and develops the muscles of your buttocks area (gluteus maximus). Remember, there is no such thing as “spot reduction.” Do not do this exercise because you believe it will remove fat from this area — do it to strengthen and build these muscles.

**Pulley position:** Narrow.

**Starting position:**

- Face the Power Rods, standing along side the bench.
- Secure the cuff around the foot farthest from the bench.
- Kneel with closest leg on the bench, bend forward at the hips (not the waist) and place the hands on the bench.
- Bend the hip and knee while maintaining tension from the cable.

**Motion:**

- Extend your entire leg backward, straightening the knee.
- Slowly move your leg backward as far as you can, without allowing ANY movement to occur at your waist.
- Then slowly return to the starting position.

**Key points:**

- Do not allow your waist, lower back or supportive hip to move.
- Keep your abs tight throughout the entire exercise.



START



FINISH



The Kneeling Leg Kickback utilizes a unique cuff placement. Simply separate the cuff from the handle, sliding the handle half way between the cable D-ring and the cuff. Place the toes/ball of your foot between the handle and cable D-ring, positioning the handle under the arch of the foot. Then slip the cuff over the heel of the shoe.

# Leg Exercises

## STANDING HIP ABDUCTION

**Muscles worked:** This exercise will not burn off fat from your hips or outer thigh! There is no exercise that will burn fat from a specific area. This exercise will, however, strengthen the muscles on the sides of your hips (gluteus medius), especially on the standing/support side. Use light resistance and controlled range of motion on this exercise. You may also think of this exercise as a tool for challenging your ability to stabilize your hip on the supportive leg.

**Pulley position:** Narrow.

### Starting position:

- Remove the bench, stand with one side near the Power Rods, and attach a handle /strap to the ankle farthest from the machine (outside leg).
- Stand up straight, lift your chest, tighten your abs and maintain a very slight arch in your lower back.
- Adjust your position so that there is some resistance in the cables.
- In the beginning, you may hold on to the Power Rods for added stability.

### Motion:

- Slowly move the attached leg outward to the side away from the pulley (30-45 degrees), keeping your hips and spine perfectly still.
- Slowly return to the starting position without relaxing.

### Key points:

- Do not use this exercise for losing fat from your hips. It will not make your hips smaller. Use it to develop hip strength and stability.
- Use a very small range of motion. More is not better.
- Keep your spine straight and your hips level. Try not to raise your hips when raising your leg to the side.



START



FINISH

## SEATED HIP ADDUCTION

**Muscles worked:** This exercise will not burn off fat from your inner thighs or make them smaller! There is no exercise that will burn fat from a specific area. This exercise will, however, strengthen the muscles on the insides of your thighs (adductor muscle groups). It also works the muscles on the outside of your hip (gluteus medius) on the side that you are standing on. Use very light resistance and small range of motion on this exercise. Think of this exercise as a tool for challenging your ability to stabilize your hip and stand on one leg.

**Pulley position:** Wide.

### Starting position:

- Sit one side near the Power Rods, and attach a handle/strap just above the calf (below the knee) on the leg nearest the pulley.
- Adjust your position away from the machine so that tension is created.
- Bend the leg farthest from the machine and place the foot flat on the platform. Straighten your exercising leg and hold it just off the ground.
- Sit straight, lift your chest, tighten your abs and maintain a very slight arch in your lower back.

### Motion:

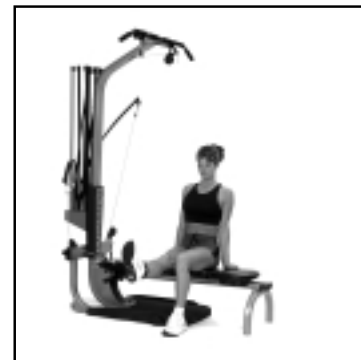
- Keeping your hips and spine perfectly still, slowly move your attached leg toward the center/midline, away from the pulley.
- Slowly control the leg back toward the pulley, returning to the starting position.

### Key points:

- Do not use this exercise for losing fat from your thighs. It will not make your thighs smaller. Use it to develop hip strength and stability.
- Keep your hips and spine perfectly still.



START



FINISH

# Leg Exercises

## SEATED HIP ABDUCTION

**Muscles worked:** This exercise will not burn off fat from your outer thighs or make them smaller! There is no exercise that will burn fat from a specific area. This exercise will, however, strengthen the muscles on the sides of your hips, which in the seated (hip flexed) position includes the piriformis and gluteus maximus.

**Pulley position:** Wide.

### Starting position:

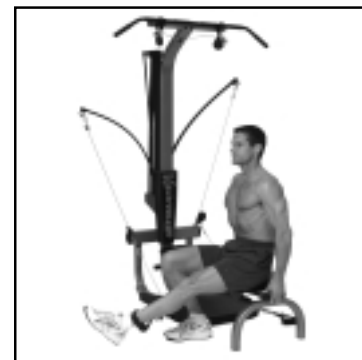
- Sit with one side near the Power Rods, and attach a handle/strap to the ankle farthest from the machine.
- Adjust your position away from the machine so that tension is created.
- Sit straight, lift your chest, tighten your abs and maintain a very slight arch in your lower back.

### Motion:

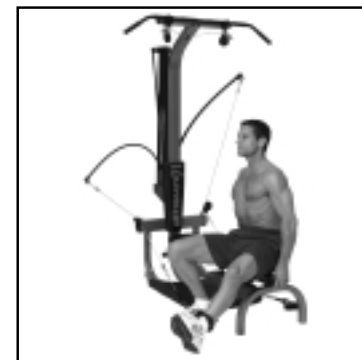
- Slowly move the attached leg outward away from the pulley, keeping your hips and spine perfectly still.
- Slowly control the leg back toward the pulley, returning to the starting position.

### Key points:

- Do not use this exercise for losing fat from your thighs. It will not make your thighs smaller. Use it to develop hip strength and stability.
- Keep your spine straight and your hips level.



START



FINISH

## ANKLE INVERSION

**Muscles worked:** This exercise strengthens and develops the muscles on the inside of your lower legs (tibialis anterior and posterior). These muscles are essential for standing balance, support/alignment of the knee, and lateral agility of the ankle.

**Pulley position:** Narrow.

### Starting position:

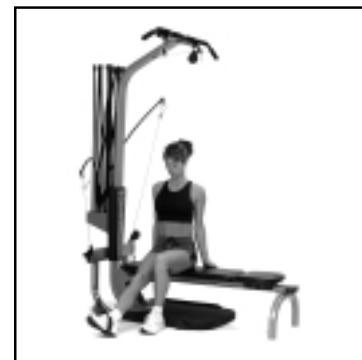
- Sit on the bench with one side of your body facing the Power Rods.
- Attach the handle around the ball of the foot closest to the pulley.
- Straighten the attached leg and sit up straight.
- Allow the foot to rotate toward the Power Rods, keeping tension in the cables.

### Motion:

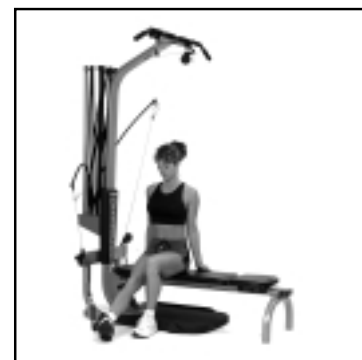
- Keeping your leg stationary, slowly rotate your foot away from the Power Rods.
- Slowly return to the starting position without relaxing.

### Key points:

- Movement should occur only at the ankle, keep the rest of your body motionless.
- You should feel tension in the inside of your calf throughout the entire motion.



START



FINISH



Both the Ankle Inversion and Ankle Eversion exercises will be easier if you utilize this unique cuff placement. Simply separate the cuff from the handle, sliding the handle half way between the cable D-ring and the cuff. Fold the cuff in half and place the foot through with the cuff and D-ring on the inside of the foot for eversion and outside of the foot for inversion.

# Leg Exercises

## ANKLE EVERSION

**Muscles worked:** This exercise strengthens and develops the muscles on the outside of your lower legs (peroneals). These muscles are essential for standing balance and lateral agility of the ankle.

**Pulley position:** Narrow.

### Starting position:

- Sit on the bench with one side of your body facing toward the Power Rods.
- Attach the handle around the ball of the foot farthest from the pulley.
- Straighten the attached leg and sit up straight.
- Allow the foot to rotate inward toward the Power Rods.

### Motion:

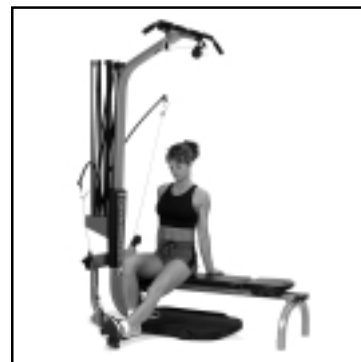
- Keeping your leg stationary, slowly rotate your foot outward, away from the Power Rods.
- Slowly return to the starting position without relaxing.

### Key points:

- The only movement that occurs is at the ankle, keep the rest of your body/leg motionless.
- You should feel tension in the outside of your calf throughout the entire motion.



START



FINISH

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## DEADLIFT

**Muscles worked:** This exercise is very similar to the squat and is also considered a total body exercise. It involves the glutes, adductors, hamstrings and quads – which are primary movers – and the spinal erectors and trapezius, – which are key to stabilization.

**Pulley position:** Low pulley

### Starting position:

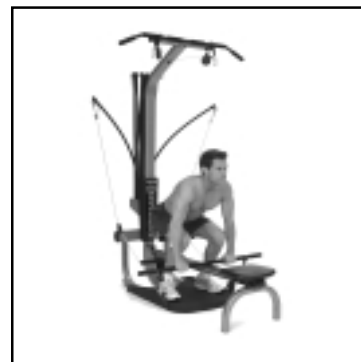
- Remove the back support and straddle the rail.
- Use the bar harness to adjust strap length allowing tension at the appropriate depth. This will require experimentation. Increase depth slowly according to your ability, knee conditions, etc. Most orthopedists recommend that healthy knees not go any lower than a 90 degree angle (between the thigh and calf) when using extra resistance. Many people go lower for their goals, but this dramatically increases the risk to the knee cartilage and increases the probability of degenerative/arthritis changes. To go lower than the harness allows, connect the cable snap hook directly to the D-ring of the bar.
- Position your feet in line with the cable/pulley.
- Place your feet shoulder width or wider and point your toes outward slightly. Direct the thighs to the same outward angle as the feet.

### Motion:

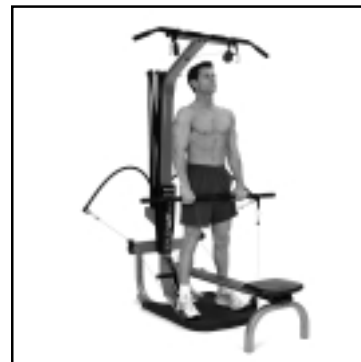
- Using control, slowly squat down by sticking the hips out as the knees start to bend. Keep the chest up and back flat as the hips continue to move backward.
- Lower to approximately 90 degrees at the knees (unless otherwise determined).
- Grasp the bar with an overhand grip and slowly stand erect maintaining the alignment as indicated.
- Keep the pressure through the middle of the arches/feet, not through the toes or heels.
- Slowly lower to the predetermined range, maintaining tension from the cable.

### Key points:

- Keep knees pointed the same direction as the toes.
- Keep the head/neck in line with the trunk.
- Pay close attention to all alignment and stabilization issues on every part of each and every repetition!



START



FINISH

# Leg Exercises

## **STIFF-LEG DEADLIFT** – Hip extension

**Muscles worked:** This exercise emphasizes and develops the hamstrings and glutes, while requiring the spinal erectors to stabilize.

**Pulley position:** Low pulley

### **Starting position:**

- Remove the bench and stand on the platform facing the Power Rods.
- Grasp the bar with an overhand grip approximately shoulder width.
- The bar harness may have to be adjusted to insure that there is enough movement in the cable to complete the range of motion.
- Do not lock your knees. Position them either nearly straight or very slightly bent.
- Lift your chest, tighten your abdominals and maintain a very slight arch in your lower back.

### **Motion:**

- Maintaining your knee position, slowly bend forward at the hips by moving your butt backwards. It is critical that you keep the “chest out/up” and do not allow it to “cave in,” an indicator that your back is rounding.
- Stop as your hamstrings begin to get taut and before your back begins to round.
- Concentrate on tensing the hamstrings to pull you back up to the starting position.

### **Key points:**

- Your torso should move from vertical angling forward — toward horizontal — without rounding, slouching or otherwise losing “flat” postural alignment.
- Keep knees slightly bent.
- Move only as far as you can go correctly!



START



FINISH

**Fast Fat Loss  
Now!**

# **The Bowflex Body Leanness Program**

**By Ellington Darden, Ph.D.**

*The following program was created by Dr. Ellington Darden. It contains a rigorous fitness and dietary program. Please consult your physician before beginning any fitness or dietary program.*

*Some of the names of the exercises listed in this program have been changed in order to match the names of the exercises in this manual. The exercises themselves have NOT been changed, in order to preserve the integrity of Dr. Darden's Study.*

# Introduction

## The Bowflex Body Leanness Program

This program is scientifically designed for maximal fat loss over six weeks. It is important that you practice every aspect of the plan to achieve optimum results.

The program separates into three two-week stages. During each stage you will exercise, control the number and quality of calories you consume, and drink plenty of ice-cold water.

Before starting the exercise routine you must be familiar with your Bowflex. You should experiment with finding the proper amount of resistance to use on each exercise. You should be able to perform 8 repetitions, but not more than 12 repetitions, for each exercise. It is essential that you learn how to perform each movement before trying a complete circuit, because part of the effectiveness of the training depends on minimal rest between each exercise.

## **Warning!**

Before beginning this program consult your physician or healthcare professional. Show this plan and your Bowflex Owner's Manual to your physician or healthcare professional. Only he or she can determine if this course is appropriate for your particular age and condition. If you experience any lightheadedness, dizziness, or shortness of breath while exercising, stop the movement and consult a physician.

**Make sure you read your Bowflex Owner's Manual before attempting a workout.**

There are a few people who should not try this program: Children and teenagers; pregnant women; women who are breast feeding; diabetics; individuals with certain types of heart, liver, or kidney disease; and those suffering from certain types of arthritis. This should not be taken as an all inclusive list. Some people should follow the course only with their physician's specific guidance. Play it safe and consult a healthcare professional.

# A Personal Guarantee From Dr. Ellington Darden

Dear Bowflex Enthusiast,

I'm excited, really excited! I'm elated because I've developed an exercising and eating program that produces fat loss faster than any plan I've ever tested.

The men involved in my research, for example, had an average fat loss of 27.95 pounds per man. Women on the same program averaged a reduction of 16.96 pounds. Best of all, these dramatic results were achieved — not in six months — but in only six weeks!

That's right. Similar results can be accomplished by you in six short weeks, which include just 18 workouts (3 per week) on the Bowflex machine.

Bowflex was a significant part of the results. The exercises performed on it allowed the participants to build muscle, which accelerated their metabolisms, and produced faster and greater fat losses.

The plan worked so well that it became known as *The Bowflex Body Leanness Program*.

Leanness means to strip away the fat from under the skin as well as at deeper levels. Leanness also implies a pleasing shape and tone to the skeletal muscles.

You might say leanness is the opposite of fatness because the people involved in my research certainly got rid of their excessive fatness in record time.

All the guidelines that were applied have been organized in the booklet you are now holding in your hands. It's the next best thing to actually going through one of my research projects. In fact, it's probably better since nothing is experimental. All of the fine points have been tried, tested and proven effective.

If you are overfat, and if you are interested in doing this program, there are several things that you need to understand about my experience. Since 1965, I've trained more than 10,000 overfat individuals. After many years of pushing, coaxing, and listening to these trainees, certain traits became evident to me:

- People are not lazy by choice. They are forced into it by the confusion that surrounds the abundance of fitness information that is available. If these individuals are given simple decisive instructions, they will train very intensely.
- People, if they are provided with specific menus, will drastically alter their eating habits.
- Most of these people, however, will do neither of these challenging things for more than a week — unless they quickly see and feel changes in their body.

The Bowflex Body Leanness Program emerged from these findings. For you to get the best-possible results, you must be willing to exercise very intensely on the Bowflex machine and adhere to a strict eating plan.

In return, you'll get simple exercise instructions, specific menus to use, and my guarantee that if you follow the program exactly as directed, you'll observe the pounds and inches disappear on almost a weekly basis.

Now it's your turn to get excited, and get started!

Sincerely,



Dr. Ellington Darden



# Measurements

If you would like to measure your personal before-and-after results, there are several steps you need to take. It is important that you accurately perform each task, then at the end of the six-week program, repeat the process in the same manner.

## Body Weight:

Remove clothing and shoes and record your weight to the nearest quarter pound. Be sure to use the same scale when weighing yourself at the end of the six-week program. For the most accurate recordings, weigh yourself nude in the morning.

Since the program is divided into three two-week segments, you may want to weigh yourself at the end of each two-week period. Understand, however that weight loss is not the best way to determine your success. Fat loss is the key component. To determine the amount of fat you've lost, you'll need to follow the instructions in the next section.

Enter your starting weight on your RESULTS SUMMARY SHEET, which is found on page 64.

## Circumference of Body Parts:

For an even better idea of the changes that will occur to your body in the next six weeks, it is necessary to measure the circumference of certain body parts. This will tell you where the fat is shrinking and what areas are toning up.

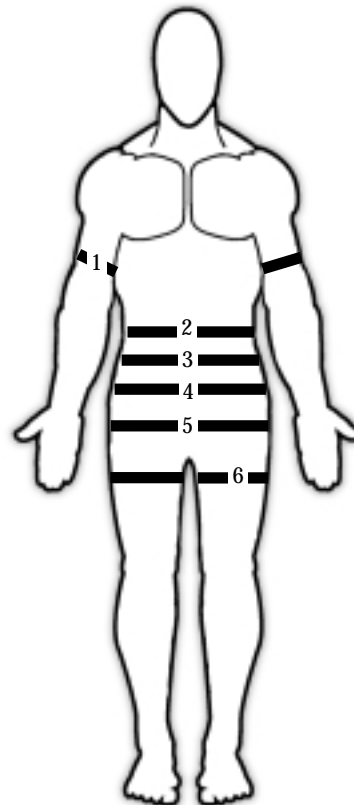
### Use a plastic tape to measure the following:

- 1) **Upper arms** — hanging and relaxed, midway between the shoulder and elbow.
- 2) **Two inches above navel** — belly relaxed.
- 3) **At navel** — belly relaxed.
- 4) **Two inches below navel** — belly relaxed.
- 5) **Hips** — feet together at maximum protrusion of buttocks.
- 6) **Thighs** — high, just below the buttocks crease with legs apart and weight distributed equally on both feet.

**Record each measurement on your Results Summary Sheet.**

**Women Measure:** suprailium, triceps, and thigh.

**Men Measure:** Chest, abdomen, and thigh.



# Measurements

## Skinfold Measurements

To accurately track your progress through this six-week program, it is necessary to take skinfold measurements. By measuring yourself in this way, you will be able to determine your lean-body mass and your body-fat percentage. The goal of this program is to increase your lean-body mass and decrease your body-fat percentage.

Please read this section carefully. Proper measuring techniques are essential to track your success. It is best to have someone measure you. Measuring yourself can lead to inaccurate results.

**Women Measure:** suprailium, triceps, and thigh.



### Suprailium

Stand relaxed. Pick up a diagonal skinfold just above the crest of the hip bone on the right side of the waist.



### Triceps

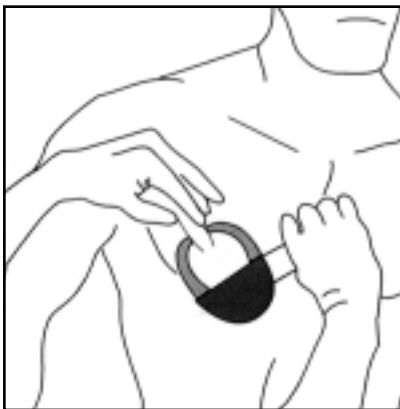
Stand with right elbow flexed 90 degrees and locate the center of the back of the upper arm midway between the shoulder and the elbow. Relax arm at your side. Pick up skinfold as pictured.



### Thigh

Stand relaxed with most of the weight on your left leg. Pick up a skinfold in the vertical plane on the front side of the right thigh, midway between the hip and knee joints.

**Men Measure:** Chest, abdomen, and thigh.



### Chest

Stand relaxed. Pick up a diagonal skinfold over the right pectoralis muscle, midway between the armpit and the nipple.



### Abdomen

Stand relaxed. Pick up a vertical skinfold on the right side of the navel.

# Measurements

## Using Calipers When Measuring Skinfolts

The procedure for measuring skinfold thickness is to grasp firmly with the thumb and forefinger a fold of skin and surface fat and pull it away from the underlying muscle. Take the caliper in your other hand and open the jaws. Clamp the jaws over the pinched skin and fat. The jaws exert constant tension at the point of contact with the skin. The thickness of the double layer of skin and fat can then be read directly from the caliper, which is marked in millimeters.

### Women

Suprailium \_\_\_\_\_

Triceps \_\_\_\_\_

Thigh \_\_\_\_\_

Total \_\_\_\_\_

### Men

Chest \_\_\_\_\_

Abdomen \_\_\_\_\_

Thigh \_\_\_\_\_

Total \_\_\_\_\_

Use these figures on the following chart to determine your body-fat percentage and enter the number on the line below.

**Starting body-fat percentage** \_\_\_\_\_

## Optional Picture Taking

Pictures can be the most exciting evaluation you can do. The numbers and the tape measurements are great, but actually seeing differences from comparison photographs of yourself is quite satisfying.

Taking full-length photographs is not difficult, but to see the maximum difference between before and after, you should follow these guidelines.

- 1) Keep everything the same. Wear the same outfit, a snug solid color is best, and have the person taking the picture stand in the same place, with the same setting behind you.
- 2) Make sure you stand against an uncluttered, light background.

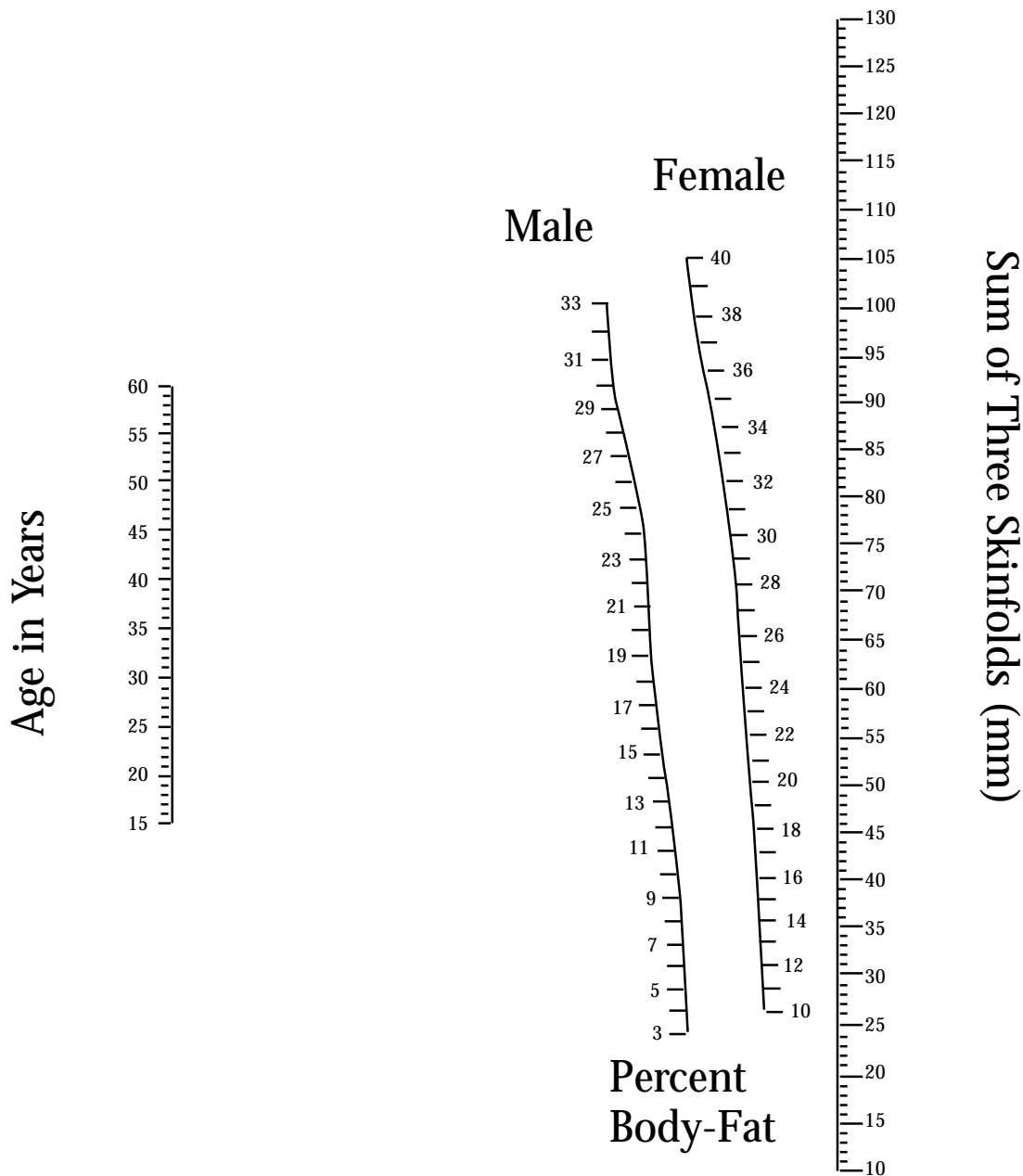
- 3) Have the person taking the photograph move away from you until he can see your entire body in the viewfinder.
- 4) Stand relaxed for three pictures, front, right side, and back. Do not try to suck in your stomach.
- 5) Interlace your fingers and place them on top of your head, so the contours of your torso will be plainly visible. Keep your feet 8 inches apart in all three pictures.
- 6) When you get the film developed tell the processors to make your after photos the same size as your previous ones. This way, your height in both sets of photos is equal and more valid comparisons can be made.

# Determining Your Body Fat

## To Use The Nomogram:

- 1) Locate the sum of your three skinfolds in the right column and mark it.
- 2) Locate your age in years on the far left column and mark it.
- 3) Connect the two marks with a straightedge. Where the straightedge intersects the line in the middle column appropriate to you, you will find your body-fat percentage.

Baun, W.D, Baun, M.R., and Raven, P.B. A nomogram for the estimate of percent body fat from generalized equations. *Research Quarterly for Exercise and Sport*, 52:380-384, 1981.



# Calculating Lean Body Mass

Now that you know your body-fat percentage, you can calculate your lean-body percentage. This will eventually show you how many pounds of muscle were added to your body, after completing the program.

## For Example:

Before the program, Joe weighs 200 pounds and measures 30% fat, which amounts to 60 pounds. Thus, his lean-body mass is 70% or 140 pounds.

After the program, Joe weighs 180 pounds and is 20% fat, which equals 36 pounds. His lean body mass is 80%, or 144 pounds.

Simple calculations allow us to find the amount of fat Joe lost, and the amount of muscle Joe gained. Before fat pounds (60), minus after fat pounds (36) equals 24 pounds of fat lost. After lean-mass pounds (144) minus before lean-mass pounds (140) equals 4 pounds of muscle gained.

## Enter Your Information Here:

### Before

$$\frac{\text{Body Weight}}{\text{Fat Percentage}} \times \text{Fat Percentage} = \text{Lean-Body Weight}$$

$$\frac{\text{Body Weight}}{\text{Fat Pounds}} - \text{Fat Pounds} = \text{Lean-Body Weight}$$

*Use the Same Factors to Calculate After Six Weeks.*

### After

$$\frac{\text{Body Weight}}{\text{Fat Percentage}} \times \text{Fat Percentage} = \text{Pounds of Fat}$$

$$\frac{\text{Body Weight}}{\text{Fat Pounds}} - \text{Fat Pounds} = \text{Lean-Body Weight}$$

## Final Results

$$\frac{\text{Before Fat Pounds}}{\text{After Fat Pounds}} - \text{After Fat Pounds} = \text{Total Fat Lost}$$

$$\frac{\text{After Lean-Mass Pounds}}{\text{Before Lean-Mass Pounds}} - \text{Before Lean-Mass Pounds} = \text{Total Lean-Mass Gained}$$

# Your Results

## Your Results Summary Sheet

Name \_\_\_\_\_

Age \_\_\_\_\_

Height \_\_\_\_\_

Weight Loss \_\_\_\_\_

Weight Before \_\_\_\_\_

Muscle Gain \_\_\_\_\_

Weight After \_\_\_\_\_

Fat Loss \_\_\_\_\_

Please follow the instructions on page 57 for measuring the circumferences.

<b>Measurements</b>	<b>Before</b>	<b>After</b>	<b>Difference</b>
Right Arm	_____	_____	_____
Left Arm	_____	_____	_____
2" Above Navel	_____	_____	_____
Navel	_____	_____	_____
2" Below Navel	_____	_____	_____
Hips	_____	_____	_____
Right Thigh	_____	_____	_____
Left Thigh	_____	_____	_____
		Total	_____
Percent Body Fat	_____	_____	_____

If you wish to send in your results to Bowflex, please send to: Bowflex Results, 1400 N.E. 136th Ave., Vancouver, WA. 98684. Or you may fax this sheet to Bowflex Results at 1-360-694-7755. Please include your name, address, and phone number. Submissions may be selected for use in promotional marketing materials.

# The Workouts

## GUIDELINES Week 1&2

All exercises should be practiced with one set of 8 to 12 repetitions. The style of performance is very important. The movement for each repetition should be 4 seconds in the positive phase and 4 seconds in the negative. Keep the motion slow and smooth. When 12 repetitions are accomplished, increase the resistance by approximately 5 percent. Keep the time between exercises to a minimum, no longer than **60** seconds. No workout should take more than 30 minutes to complete. Perform each workout three days a week.

Exercise	Sets	Reps
Leg Curl	1	8-12
Leg Extension	1	8-12
Bench Press	1	8-12
Lying Biceps Curl	1	8-12
Seated Shoulder Press	1	8-12
Seated Abdominal Crunch	1	8-12

## GUIDELINES Week 3&4

All exercises should be practiced with one set of 8 to 12 repetitions. The style of performance is very important. The movement for each repetition should be 4 seconds in the positive phase and 4 seconds in the negative. Keep the motion slow and smooth. When 12 repetitions are accomplished, increase the resistance by approximately 5 percent. Keep the time between exercises to a minimum, no longer than **45** seconds. No workout should take more than 30 minutes to complete. Perform each workout three days a week.

Exercise	Sets	Reps
Leg Curl	1	8-12
Leg Extension	1	8-12
Bench Press	1	8-12
Lying Biceps Curl	1	8-12
Seated Shoulder Press	1	8-12
Rear Deltoid Rows*	1	8-12
Seated Triceps Extension	1	8-12
Seated Abdominal Crunch	1	8-12

## GUIDELINES Week 5&6

All exercises should be practiced with one set of 8 to 12 repetitions. The style of performance is very important. The movement for each repetition should be 4 seconds in the positive phase and 4 seconds in the negative. Keep the motion slow and smooth. When 12 repetitions are accomplished, increase the resistance by approximately 5 percent. Keep the time between exercises to a minimum, no longer than **30** seconds. No workout should take more than 30 minutes to complete. Perform each workout three days a week.

Exercise	Sets	Reps
Leg Curl	1	8-12
Leg Extension	1	8-12
Leg Press	1	8-12
Bench Press	1	8-12
Lying Biceps Curl	1	8-12
Shoulder Pullover	1	8-12
Reverse Fly	1	8-12
Rear Deltoid Rows*	1	8-12
Seated Triceps Extension	1	8-12
Seated Abdominal Crunch	1	8-12

\* The Upright Row exercise was used in Dr. Darden's original study. Although many people have used this exercise for years, recent information in the Physical Therapy field has caused the authors of this manual to caution against performing this exercise because of the unnatural twisting movement created in the shoulder joint. We suggest you substitute Rear Deltoid Rows for the upright Row exercise.

# Eating Guidelines

You will be following a reduced-calorie nutrition program, which is divided into three two-week segments. The program is a proven method for achieving maximal fat loss over a six-week period. It consists of a carbohydrate-rich, descending-calorie eating plan, and a superhydration routine.

## Follow a Carbohydrate-Rich, Descending-Calorie Eating Plan:

Approximately 60 percent of the daily calories should be from carbohydrates. The other 40 percent will be equally divided between proteins and fats. The 60:20:20 ratio of carbohydrates, proteins, and fats is ideal for maximum fat loss.

## Keep Menus Simple and Food Substitutions to a Minimum:

Research has established that successful dieters prefer the same foods each day for breakfast and lunch. They like variety, however, for dinner. Detailed menus and food choices are included later in this manual.

If you must vary from the menu items, try to stay within the 60:20:20 ratio of carbohydrates, proteins and fats.

For Example			
Daily Amount	Carbohydrate	Protein	Fat
Calories	60%	20%	20%
2000	1200	400	400
1900	1140	380	380
1800	1080	360	360
1700	1020	340	340
1600	960	320	320
1500	900	300	300
1400	840	280	280
1300	780	260	260
1200	720	240	240
1100	660	220	220
1000	600	200	200

## Avoid Too Much Stress:

Too much stress of any kind can cause the body to actually preserve fat stores. You should relax more. An after—dinner walk at a leisurely pace is helpful. Extra sleep is suggested, since sleep facilitates fat loss and muscle recovery. Furthermore, to keep the body well rested, **no other exercises or activities are allowed during the six—week program.** This is a scientifically proven program that works. More is not better. Any additional exercise other than the amount recommended can and will harm your fat loss.



# Superhydrate Your System

Drinking plenty of water is essential to the success of this program. Drinking the recommended amount of water can seem like a challenge at first. Stick with it. Carry a large sports bottle or similar item with you throughout the day. After several weeks, you will find that you actually thirst for more and more water, and the amounts recommended are easily reached.

Superhydration aids fat loss in a number of ways. First, the kidneys are unable to function without adequate water. When they do not work to capacity some of their load is dumped onto the liver.

This diverts the liver from its primary function, which is to metabolize stored fat into usable energy. Because it's performing the chores of the water-depleted kidneys, the liver metabolizes less fat.

Second, overeating can be averted through water intake, as water can keep the stomach feeling full and satisfied between meals.

Third, ice-cold water requires calories to warm it to core body temperature. In fact, **1 gallon of ice cold water generates 123 calories of heat energy.**

You'll be drinking from 1 to 1 5/8 gallons of water each day on the following superhydration schedule:

**Week 1** = drink 4 32-oz. bottles of ice-cold water per day.

**Week 2** = drink 4.5 32-oz. bottles of ice-cold water per day.

**Week 3** = drink 5 32-oz. bottles of ice-cold water per day.

**Week 4** = drink 5.5 32-oz. bottles of ice-cold water per day.

**Week 5** = drink 6 32-oz. bottles of ice-cold water per day.

**Week 6** = drink 6.5 32-oz. bottles of ice-cold water per day.

Don't be surprised if you have to make more than a dozen trips to the restroom, especially during the first week of the program. Remember, your body is an adaptive system, and it will soon accommodate the increased water consumption.

**Note:** *Although it is doubtful that you could ever drink too much water, a few ailments can be negatively affected by large amounts of fluid. For example, anyone with a kidney disorder, or anyone who takes diuretics, should consult a physician before going on the recommended water-drinking schedule. If you have any doubts about the recommendations, play it safe and check with your doctor.*

# The Eating Plan

The menus in the Bowflex eating plan are designed for maximum fat-loss effectiveness and nutritional value. For best results, follow them exactly.

Every attempt has been made to utilize current popular brand names and accurate calorie counts, which are listed in the menus. But as you probably realize the products are sometimes changed or discontinued. If a listed item is not available in your area, you'll need to substitute a similar product. Become an informed label reader at your supermarket. Ask questions about any products you don't understand. Supermarket managers are usually helpful. If they don't have an answer to your question, they will get it for you.

Each day you will choose a limited selection of foods for breakfast and lunch. Most people can consume the same basic breakfast and the same basic lunch for months with little modification. Ample variety during your evening meal, however, will make daily eating interesting and enjoyable. Additionally, the eating plan includes a mid-afternoon and late-night snack to keep your energy high and your hunger low.

Begin Week 1 on Monday and continue through Sunday. Week 2 is a repeat of Week 1. Calories for each food are noted in parentheses. A shopping list follows on page 74.

The eating plan for the next six weeks descends:

**Week 1 & 2:**

Men 1500 calories per day.  
Women 1200 calories per day.

**Week 3 & 4:**

Men 1400 calories per day.  
Women 1100 calories per day.

**Week 5 & 6:**

Men 1300 calories per day.  
Women 1000 calories per day.

You'll always have a 300 calorie breakfast, a 300 calorie lunch, and a 300 calorie dinner (women), or 500 calorie dinner (men). With each two-week descend, only your snack calories will change: from 400 to 300 to 200 calories per day (men), or 300 to 200 to 100 calories per day (women). For each of your five daily meals, you'll have at least three choices.

Everything has been simplified so even the most kitchen-inept man or woman can succeed. Very little cooking is required. All you have to do is read the menus, select your food choices, and follow the directions. It's as simple as that.

If you find that you wish to vary from the outline menu items try to stay with in the 60:20:20 ratio of carbohydrates, proteins, and fats.

# The Eating Plan

**Breakfast = 300 calories.**

**Choice of bagel, cereal or shake.**

## **Bagel**

1 plain bagel, Sarah Lee (frozen) (210)  
3/4 ounce light cream cheese (45)  
1/2 cup orange juice, fresh or frozen (55)  
Any beverage without calories, caffeine, or sodium, such as decaffeinated coffee or tea.

## **Cereal**

1.5 ounces (42 grams) serving equals approximately 165 calories.  
Choice of one: Kellogg's Cracklin' Oat Bran, General Mills Clusters, Post Honey Bunches of Oats, General Mills Honey Nut Cheerios  
1/2 cup skim milk (45)  
3/4 cup orange juice (82)  
Noncaloric beverage

**Shake** (choice of one)

## **Banana—Orange**

1 large banana (8 3/4 inches long) (100)  
1/2 cup orange juice (55)  
1/2 cup skim milk (45)  
2 tablespoons wheat germ (66)  
1 teaspoon safflower oil (42)  
2 ice cubes (optional)  
Place ingredients in blender. Blend until smooth.

## **Chocolate or Vanilla**

1 packet Carnation Instant Breakfast, Ultra Slim-Fast, or another diet shake powder that contains the appropriate calories (100)  
1 cup skim milk (90)  
1/2 large banana (8 3/4 inches long) (50)  
1 teaspoon safflower oil (42)  
1 teaspoon Carnation Malted Milk powder (20)  
2 ice cubes (optional)  
Place ingredients in blender. Blend until smooth.

**Lunch = 300 calories.**

**Choice of one of three meals:**

## **Sandwich**

2 slices whole wheat bread (140)  
2 teaspoons Promise Ultra Vegetable Oil Spread (24)  
2 ounces white meat (about 8 thin slices), chicken or turkey (80)  
1 ounce fat-free cheese (1 1/2 slices) (50)  
(Optional: Add to bread 1 teaspoon Dijon mustard (0))  
Noncaloric beverage

## **Soup** (choice of one)

Healthy Choice Turkey Vegetable, 15-ounce can (240), or Campbell's Healthy Request Hearty Chicken Rice, 16-ounce can (240)  
1 slice whole wheat bread (70)  
Noncaloric beverage

## **Chef Salad**

2 cups lettuce, chopped (20)  
2 ounces white meat, chicken or turkey (80)  
2 ounces fat-free cheese (100)  
4 slices tomato, chopped (28)  
1 tablespoon Italian, fat-free dressing (6)  
1 slice whole wheat bread (70)  
Noncaloric beverage

## **Mid-Afternoon Snack**

Men = 200 calories for Weeks 1&2; 150 calories for Weeks 3&4; 100 calories for Weeks 5&6.

Women = 150 calories for Weeks 1&2; 100 calories for Weeks 3&4; 50 calories for Weeks 5&6.

1 large banana (8 3/4 inches long) (100)  
1 apple (3-inch diameter) (100)  
1/2 cantaloupe (5-inch diameter) (94)  
5 dried prunes (100)  
1 ounce (2 small 1/2 ounce boxes) raisins (82)  
1 cup light, nonfat, flavored yogurt (100)

# The Eating Plan

## **Dinner = 500 or 300 calories.**

Men = 500 calories, Women = 300 calories

Choice of one of three meals:

### **Tuna Salad Dinner**

In a large bowl, mix the following:

- 1 6-ounce can chunk light tuna in water (180)
- 1 tablespoon Hellmann's Light, Reduced-Calorie Mayonnaise (50)
- 2 tablespoons sweet pickle relish (40)
- 1/4 cup whole kernel corn, canned, no salt added (30)
- Noncaloric beverage

Men add:

- 1/2 cup sliced white potatoes, canned (45)
- 2 slices whole wheat bread (140)

### **Steak Dinner**

- 3 ounces lean sirloin, broiled (176)
- 1/2 cup sweet peas, canned, no salt added (60)
- 1/2 cup beets, canned (35)
- 1/2 cup skim milk (45)
- Noncaloric beverage

Men add:

- 2 slices whole wheat bread (140)
- 1 teaspoon Promise Ultra Vegetable Oil Spread (12)
- 1/2 cup skim milk (45)

### **Frozen Microwave Dinner**

Choose one of five recommended meals:

#### **Glazed Chicken Dinner**, Lean Cuisine (240)

- 1/2 cup skim milk (45)
- Noncaloric beverage

Men add:

- 2 slices whole wheat bread (140)
- 2 teaspoons Promise Ultra Vegetable Oil Spread (24)
- 1/2 cup skim milk (45)

#### **Lasagna with Meat Sauce**, Lean Cuisine (240)

- 1/2 cup skim milk (45)
- Noncaloric beverage

Men add:

- 2 slices whole—wheat bread (140)
- 2 teaspoons Promise Ultra Vegetable Oil Spread (24)
- 1/2 cup skim milk (45)

#### **Macaroni and Cheese**, Weight Watchers (260)

- 1/2 cup skim milk (45)
- Noncaloric beverage

Men add:

- 2 slices whole—wheat bread (140)
- 2 teaspoons Promise Ultra Vegetable Oil Spread (24)
- 1/2 cup skim milk (45)

#### **Broccoli & Cheddar Cheese Sauce over Baked Potato**,

Lean Cuisine Lunch Express (250)

- 1/2 cup skim milk (45)

Noncaloric beverage

Men add:

- 2 slices whole-wheat bread (140)
- 2 teaspoons Promise Ultra Vegetable Oil Spread (24)
- 1/2 cup skim milk (45)

#### **Country Inn Roast Turkey Classic**, Healthy Choice (250)

- 1/2 cup skim milk (45)

Noncaloric beverage

Men add:

- 2 slices whole-wheat bread (140)
- 2 teaspoons Promise Ultra Vegetable Oil Spread (24)
- 1/2 cup skim milk (45)

### **Late-Night Snack**

Men = 200 calories for Weeks 1&2; 150 calories for Weeks 3&4; 100 calories for Weeks 5&6.

Women = 150 calories for Weeks 1&2; 100 calories for Weeks 3&4; 50 calories for Weeks 5&6.

Afternoon snacks on page 72, plus the following:

- 1/2 cup low-fat frozen yogurt (100)
- 2 cups light, microwave popcorn (100)

# Shopping List

Quantities needed for listed items will depend on your specific selections. Review your choices and adjust the shopping list accordingly. It may be helpful for you to photocopy this list each week before doing your shopping.

## **Staples**

Orange juice, skim milk, whole-wheat bread, Promise Ultra Vegetable Oil Spread, Italian fat-free dressing, Dijon mustard, safflower oil, noncaloric beverages (tea, decaffeinated coffee, diet soft drinks, water).

## **Grains**

Bagels, Sarah Lee (frozen)  
Cereals — 1.5 ounce serving equals approximately 165 calories; Kellogg's Cracklin' Oat Bran, General Mills Clusters, Post Honey Bunches of Oats, General Mills Honey Nut Cheerios.  
Wheat germ, malted milk powder, popcorn (microwave light).

## **Fruits**

Bananas, large (8 3/4 inches long), apples (3-inch diameter), cantaloupes (5-inch diameter), dried prunes, raisins.

## **Vegetables**

Lettuce, tomatoes, whole kernel corn (canned no salt added), sweet peas, (canned no salt added), sliced white potatoes (canned), cut beets (canned).

## **Dairy**

Yogurt (light nonfat), cream cheese (light), cheese (fat-free), low-fat frozen yogurt, Carnation Instant Breakfast packets, Ultra Slim-Fast Packets.

## **Meat, Poultry, Fish and Entrees**

Chicken (thin sliced), turkey (thin sliced), tuna (canned in water), sirloin steak (lean).

## **Canned soup:**

Healthy Choice Turkey Vegetable, Campbell's Healthy Request Hearty Chicken Rice.

## **Frozen microwave dinners or entrees:**

Lean Cuisine Glazed Chicken Dinner, Lean Cuisine Lasagna with Meat Sauce, Lean Cuisine Lunch Express Broccoli & Cheddar Cheese over Potato, Weight Watchers Macaroni and Cheese, Healthy Choice Country Inn Roast Turkey Classic.

# Q & A

**Q. I often get headaches when I eat only 1000 calories a day. What should I do?**

A. Your headaches may be caused by going longer than three hours between meals or snacks. Try spacing your meals and snacks where there are fewer hours between them.

Some people who are used to drinking regular coffee with caffeine notice headaches when they stop consuming coffee for several days. If this is the case with you, you might want to ease off the coffee more gradually.

**Q. I don't like red meat. I notice that the Lean Cuisine Lasagna with Meat Sauce contains beef. What can I substitute for it?**

A. Lean Cuisine has many other frozen dinners that you may substitute for Lasagna with Meat Sauce. Try to find one that contains the same calories, with approximately 15 to 20 percent of the calories coming from fat. Some of the Lean Cuisine dinners actually have too little fat for my nutritional requirements.

**Q. May I have dinner for lunch and lunch for dinner?**

A. Yes.

**Q. I tend to get a headache when I drink cold water. Can I drink water without it being chilled?**

A. Yes, but you won't get the 123 calories or more thermogenic effect from warming the cold water to core body temperature. Try a more gradual drinking of the cold water. You may have been consuming it too quickly.

**Q. Is it possible to drink too much water?**

A. Certainly. To do so, however, you'd probably have to drink four or five times as much per day as I'm recommending. There are a few ailments that can be negatively affected by large amounts of fluid. If you feel you have a problem, check with your doctor before starting the program.

**Q. Is bottled water better than tap water?**

A. Research shows that bottled water is not always higher quality water than tap water. The decision to drink bottled water or not is usually one of taste. If you dislike the taste of your tap water, then drink your favorite bottled water. But first you might want to try a twist of lemon or lime added to the water from your tap. Some people say it makes a significant difference in the taste.

**Q. I'm a middle-aged woman who gets black and blue marks on my legs when I diet. Am I doing anything wrong?**

A. I doubt you are doing anything wrong. Such black and blue marks are usually the result of an increased level of estrogen circulating in your body, which weakens the walls of the capillaries and causes them to break under the slightest pressure. When this happens, blood escapes and a bruise occurs. Estrogen is broken down in the liver, and so is fat. When you are dieting, your liver breaks down the fat, leaving a lot more estrogen in the bloodstream.

It may be helpful to supplement your diet with a little extra vitamin C each day to help toughen the walls of the capillaries.

**Q. I'm a 40-year-old woman with a teenage son and daughter. My husband and I both want to lose 10 pounds and the children would also like to lose some weight. Can I put the whole family on the program?**

A. It would be great if you could, but you cannot. The number of calories per day is the problem. Teenagers require significantly more calories each day than 1500, which is the highest level. Check with a registered dietician (RD) for appropriate recommendations.

Your teenage son and daughter, however, could follow the Bowflex exercise routines.

**Q. I'm afraid that I might get large, unfeminine muscles from some of the Bowflex exercises you recommend in this course. What can I do to prevent this from happening?**

A. You are worrying about large muscles unnecessarily. Building large muscles requires two conditions. First, the individual must have long muscles and short tendons. Second, an abundance of testosterone must be present in the blood stream. Women almost never have either of these conditions.

Under no circumstances could 99.99 percent of American women develop excessively large muscles. Progressive resistance exercise such as Bowflex will make your muscles larger – but not excessively large – and larger muscles will make your body firmer and more shapely.

**Q. Why is it so important I perform the Bowflex exercises with a 4-second count on the lifting and lowering?**

A. Because a slow, smooth 4-second lifting followed by a 4-second lowering involves more muscle fibers more thoroughly than faster speeds of movement. The more completely each involved muscle fiber works simply means you'll get better muscle-building results.

**Q. I'm confused about how to breathe during each Bowflex exercise?**

A. Let's say your goal is to do 10 repetitions on a specific Bowflex exercise that is performed in the recommended 4-second lifting and 4-second lowering style. Here are the proper breathing guidelines to follow:

- Breathe normally during the first five repetitions.
- Take shorter, more shallow breaths during the sixth, seventh and eighth repetitions.
- Emphasize exhalation more than inhalation, especially during the ninth and tenth repetitions. Focus on good form and slow movement.
- Do not hold your breath on any repetition. Practice relaxing your face and neck. Do not grit your teeth. Keep your eyes open and remain alert.

**Q. I'm not as disciplined and patient as I'd like to be. How can I better stay on track with the program?**

A. One suggestion is to team up with a partner. Most people are more motivated and make better progress if they go through the program with a friend. In selecting a training partner, here are several things to keep in mind:

- Your partner should be similar to you in age and condition.
- Your partner should be serious about getting into shape and making a commitment. That commitment means you'll be exercising together one hour, three times per week. Each of your joint training sessions should take approximately 50 minutes: 25 minutes for your workout and 25 minutes supervising your partner's workout.
- Your partner should be someone with whom you'll share a spirit of cooperation, not competition.
- Your partner should not be your spouse, brother, sister, or other family member. You do not want normal interpersonal problems to interfere with the training.

**Q. Why won't you allow me to do aerobic dancing on my off-days to speed up the loss of body fat?**

A. Because doing so doesn't speed up fat loss. Aerobic dancing – and other activities such as running, swimming, cycling, stair-stepping, and racquetball – do not contribute significantly to the fat-loss process. In fact, when added to proper strength training they can actually retard the reduction of fat.

Fat loss is retarded in two ways. Too much repetitive activity prevents maximum muscle building by using up your recover ability. A well-rested recover ability is necessary for muscle growth. Too much activity – especially if you are on a reduced-calorie diet – causes you to get the blahs and quickly lose your enthusiasm. If this happens, you're sure to break your diet.

The primary purpose of this program is to lose fat in the most effective and most efficient manner. Fat loss is prioritized and maximized by building muscle at the same time. The muscle-building process is optimized by a well-rested recovery ability, which necessitates keeping your strenuous and moderately strenuous activities to a bare minimum.

Once you get your body fat to a low level, you can add other activities — and I encourage you to do so — to your weekly fitness schedule. For now, follow the plan exactly as directed.

**Q. What happens after six weeks? How do I continue the program if I need to lose more weight?**

A. You should repeat the program for as long as it takes you to reach your goal. For example, it took Barry Ozer three six-week sessions – 18 weeks – to lose all of his excessive fat, which amounted to 75 pounds. There are, however, a few guidelines and modifications to apply.

Repeat the eating plan exactly as before: Men, go back to 1500 calories a day for two weeks. Women, go back to 1200 calories a day for two weeks. Then, descend your calories in the same manner.

Keep your superhydration schedule at the highest level. In other words, sip 1 5/8 gallons of ice-cold water each day.

Continue your Bowflex exercise routine at the highest level. Perform the same 10 exercises three times per week. Try to get as strong as you can in each exercise, while always focusing on the 4-second count in both lifting and lowering.

# Q & A

## **Q. I'm pleased that I lost the fat I wanted to lose. What do I do to maintain my new body weight?**

A. Once you've lost your excessive fat, your next task is to maintain that status. Here are the adjustments you need to make to your current practices.

### **Adhere to a carbohydrate-rich, moderate-calorie eating plan.**

Instead of eating from 1000 to 1500 calories a day, you'll be consuming from 1600 to 2400 calories per day. Maybe you can eat even more after your new body weight has stabilized. Trial-and-error experimentation is a must. Women should start with 1600 calories, and men with 2000 calories per day. Note what happens after a week. If your body weight keeps going down, raise the calories by 100 or 200, depending on how much weight you lost during the last week. Soon, you should reach a level where your body weight stabilizes. That level is your daily calorie requirement. Naturally, you'll be able to consume other foods than those listed in the Bowflex eating plan. By then, however, you should know the value of being a smart shopper and a wise eater. Read labels. Compare nutritional information. Be conscious of the ideal 60:20:20 ratio for carbohydrates, proteins, and fats.

### **Eat smaller meals more frequently.**

You've been limiting your five meals per day to 300 calories if you're a woman, or 500 calories if you're a man. You may now up the calories by 100. What happens if during a single meal you eat more than 400 calories if you're a woman, or 600 calories if you're a man? Don't panic. Simply understand that you will sometimes backslide. Learn to anticipate these urges and take corrective action.

### **Drink at least 1 gallon of cold water each day.**

You should realize by now the benefits of consuming plenty of water each day. Make your water bottle a permanent part of your lifestyle.

### **Train on Bowflex at least twice a week.**

There are two primary differences between maintenance and strength-building routines. First, for maintenance, you do not have to increase the resistance each week or so. If you can do 100 pounds for 12 repetitions on the leg extension, then keep it on 100 pounds and do not go up to 105 pounds. You can maintain the 100-pound level much easier that you can increase it. Second, you do not need to train three times a week. You can maintain your strength at twice a week.

## **Add variety to your Bowflex routines.**

Now is the time to introduce more variety to your routines by adding some new exercises while removing some old ones. Below are two sample routines.

### **Maintenance Routine 1**

1. Seated hip abduction
2. Seated hip adduction
3. Seated Straight Leg Calf Raise
4. Chest fly
5. Incline bench press
6. Shoulder pullover
7. Shoulder shrug
8. Standing biceps curl
9. Seated wrist curl
10. Seated wrist extension

### **Maintenance Routine 2**

1. Leg Curl
2. Leg extension
3. Standing lateral shoulder raise
4. Seated shoulder press
5. Rear delt row
6. Decline press
7. Reverse curl
8. Seated triceps extension
9. Low back extension
10. Abdominal crunch

Look in your Bowflex Owner's Manual for descriptions of the new exercises.

Be consistent with your Bowflex exercising, healthy eating, and superhydrating — and your accomplishments may well exceed your goals.

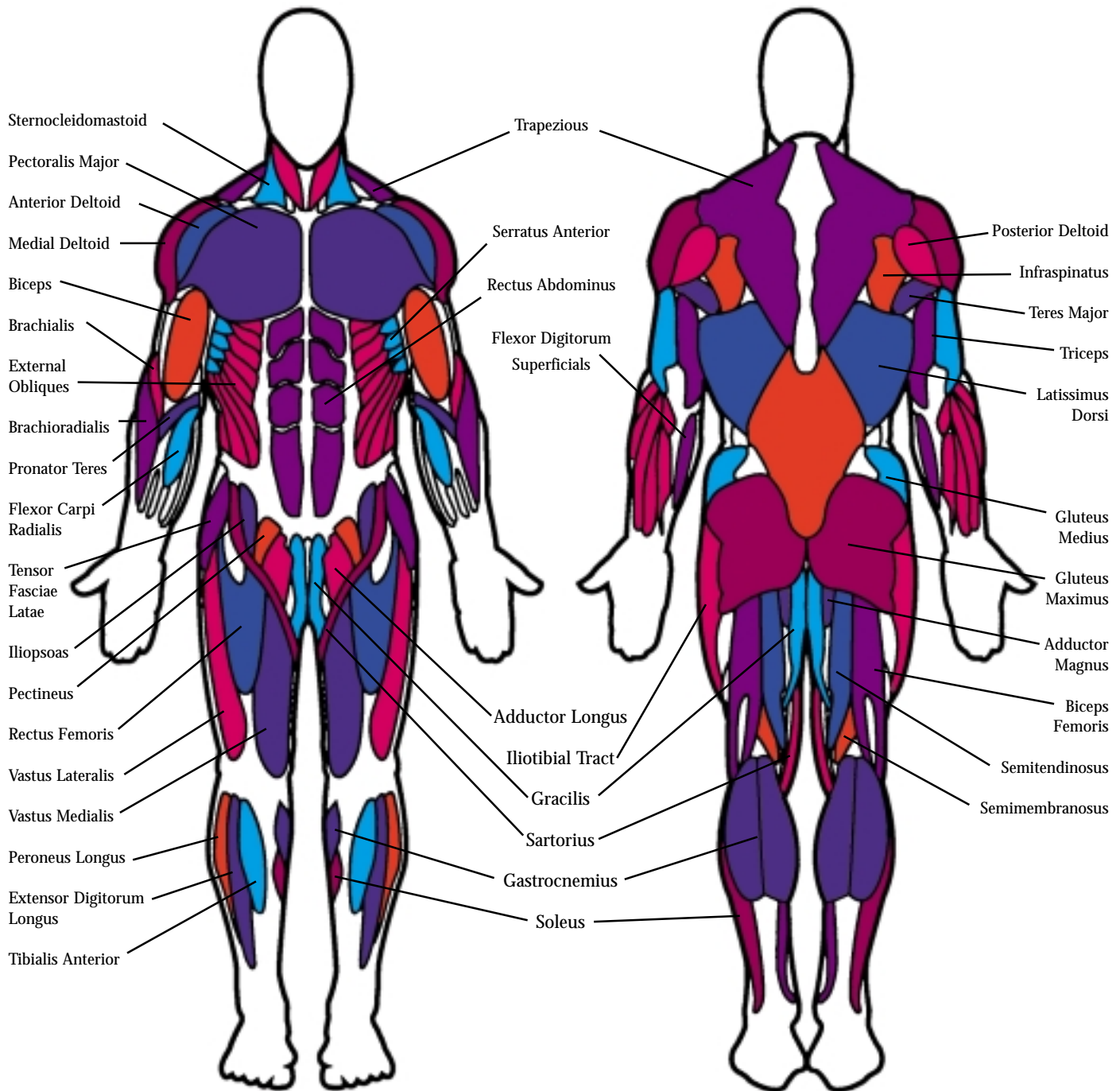


# Exercise Log

Please feel free to make copies of this chart to continue your exercise log.

EXERCISE		DATE	DATE	DATE	DATE	DATE	DATE
<i>Bench Press</i>	Sets	2					
	Reps	10, 9					
	Resistance	120, 130					
	Sets						
	Reps						
	Resistance						
	Sets						
	Reps						
	Resistance						
	Sets						
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	Sets						
	Reps						
	Resistance						

# Muscle Chart



**BOWFLEX®**

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**FITNESS**

This manual is written and designed by industry professionals.  
If you have any questions regarding your Bowflex or any instructions  
found in this manual please call 1-800-269-3539 for assistance.

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