

The Five Factors of Fat Loss

Supportive Nutrition
Sensible Supplementation
Resistance Training
Smart Cardio
Personal Assistance

Traditional fitness programs isolate only one or two factors. The truth is **all factors MUST be in place in order to bring about a lasting, positive physical change**. If any one factor is neglected or missing, the program will fail to produce results.

You are about to gain insight into exactly what you need to do and why you need to do it in order to achieve your ultimate fitness goals. Not only will your body transform, but you will also develop a better understanding how your body works. You will learn how to make wise, informed choices around a balanced nutrition and exercise program. In the process you will be able to replace unsupportive habits and develop a new outlook how to take complete control over how your body looks and feels and achieve a consistent, long-term fit and healthy lifestyle.

Factor One: Supportive Nutrition

Nutrition has by far the greatest impact on fat loss. Eating supportively will not only allow you to improve your health and energy, and it also provides the ideal environment for your transformation - maintain lean muscle while reducing unwanted fat.

If your goal is to lose body fat, you must eat slightly fewer calories than you burn. This may seem simple, but when calories are reduced, the body becomes imbalanced. It is the body's job to restore balance, and it inevitably does so by either reducing the amount of calories it burns for energy (by using muscle instead of fat) or by forcing you to eat more through hunger and cravings. This is one of the main reasons why fad diets do not produce long term results. The goal of our program is to ensure that you lose fat, not muscle.

Most fad diets are simply low-calorie diets disguised by great advertising or a clever marketing gimmick. There are currently thousands of diets listed with the Food and Drug Administration (FDA). This number alone proves that no one diet works long term. If a magic diet or formula for fat loss existed, everyone would be on it and no one would be overweight.

But why is it that some people do lose weight on diets? The immediate success most people experience from fad diets is due to water loss, eating fewer calories or a combination of the two. However, less than five percent of these dieters are able to keep the weight off. Diets simply don't work long term because of improper nutrition and the failure to change exercise and eating habits for life.

America is fatter as a society today because we consume approximately 300 to 500 more calories per day than we did 10 years ago, yet we move less because of advances in technology such as computers, escalators and other labor-saving devices.

Supportive nutrition can be mastered by understanding that everything you eat and drink can either positively or negatively affect your fat loss goals.

Factor Two: Sensible Supplementation

Supplementation gives your body the nutrients it needs without adding calories. It is virtually impossible to satisfy your body's nutritional needs with the number of calories recommended to lose fat. In addition, due to a typically busy lifestyle, it is difficult to eat perfectly every day for the rest of your life. Therefore, when following a fitness program, muscles become undernourished, causing your body to shed the muscle it can't feed. By supplying the body with the natural nutrients it needs without additional calories, (e.g., whole food nutrient complex), you can help satisfy all your nutritional needs for repair and growth without exceeding the amount of calories your body needs to maintain the mandatory deficit for fat loss.

The benefits of using supplements as low-calorie nutrition during an exercise program are well researched. The daily use of a whole food nutrient complex has been found to be the most inexpensive nutritional insurance

The reason behind adding supplements to your daily meals is to supply the body with calorie-free nutrition and select, all natural compounds that have the potential to improve health, alter body composition and increase performance and metabolic rate.

The Categories and Uses of Supplements

A whole food nutrient complex is the foundation of any complete fitness program. Additional vitamins, minerals, enzymes, essential fatty acids and antioxidants will boost your nutrient intake beyond what is available through the foods you eat. These additional nutrients allow cells to reach their potential creating the ideal environment for positive physical change. Taking other supplements before creating a nutritional foundation is like adding expensive accessories to a car that doesn't run properly.

Altering Body Composition

It is difficult to get enough nutrients from your normal diet to support your fitness goals. Any time there is an increase in cellular activity, as during exercise, the body increases its use of nutrients. By supplying these nutrients without additional calories, the attempt is made to satisfy all nutrient needs for repair and growth without exceeding the amount of calories needed to sustain the mandatory deficit for fat loss. When undernourished, the body must shed the muscle it cannot feed.

Increasing Performance and Metabolism

Specific nutrients and combinations of nutrients have been found to improve exercise performance and increase the calories burned during and after exercise. Supplying the body with calorie-free nutrients can improve performance and, therefore, assist with fat-loss and muscle-gain goals.

Sensible supplementation is highly recommended in order to supply the body with the right combination of calorie-free nutrients and compounds that have the potential to enhance

performance, reduce body fat, increase muscle and improve health. Proper supplementation creates the environment your body needs to get maximum results.

Factor Three: Resistance Training

Resistance training is the superior method of exercise for reshaping your body and shedding unwanted fat. Want to raise your metabolism? Start by understanding that the main tissue that burns calories is muscle, even at rest. Muscle is in essence, your fat burning machinery. The surest way to raise your metabolism and burn fat is to build and maintain muscle.

Resistance training is performed by using weights, machines and even your own body weight to effectively work your muscles. The goal of resistance training is to gradually and progressively overload your muscles so they grow stronger. This signals your body that it's growing and healthy, not deprived and starving.

As you increase your lean body mass, you increase your metabolic rate and this makes it easier to lose fat. With a faster metabolism, you'll burn more fat all day long - even while you're sleeping! Fat doesn't require any energy at all to maintain - it just sits there. That's why resistance training takes priority over cardio based exercise for people who want to lose body fat. Resistance training addresses the core of the problem – the rate at which the body uses energy, 24-7.

There are numerous reasons for increasing muscle beyond making clothes fit better. One of the major benefits is in the possible prevention and rehabilitation of bone injuries. Since proper resistance training strengthens the muscles as well as the supporting structures around the joint, this form of exercise will protect our joints from the stresses of an active lifestyle.

Another benefit of resistance training is improving the ability to perform daily activities. By increasing strength through resistance training, you move more efficiently with daily activities such as; lifting your children, carrying groceries, playing sports, moving furniture, taking out the trash etc.

The most important aspect of resistance training is correct performance of the exercise. Too many people become concerned with how fast an exercise is performed or how heavy a weight is being used. This means that the exercise is done incorrectly. This can cause injury and most often results in endless resistance training without benefit or results.

It is recommended that you commit to a full body resistance training program designed specifically for your body type, abilities and fitness goals for 20-45 minutes, at a minimum of 3 days per week. Allow at least one day of rest between workouts for muscle recovery and growth.

The Benefits of Resistance Training

- ~ Increased Bone Density
- ~ Increased Lean Muscle Mass
- ~ Improved Posture
- ~ Improved Work Capacity

~ Increased Metabolism
~ Increased Self-Esteem

~ Reduces Depression
~ Increased Strength

Factor Four: Smart Cardio

Cardiorespiratory exercise is a term that best describes the health and function of the heart, lungs and circulatory system. This system is considered the body's transportation network for its functions by circulating blood throughout the body. The goal of any cardio workout should be to get as many large muscles working as possible. They not only need to work hard, but continuously, in order to burn the greatest amount of calories during and after exercise.

How much is too much? The Concept of "Smart Cardio":

It is important to perform "smart cardio" for your body quickly adapts to cardio-based workouts. The more you do, the more efficient your body becomes, causing you to burn fewer calories from your fat stores each time you exercise.

Because your body adapts so quickly, cardio-lovers are forced to adjust their workouts to last increasingly longer in order to provide the same calorie burn. This not only increases the amount of time you have to spend in the gym but also increases the odds that your body may start breaking down muscle instead of fat for fuel.

Additionally, the benefits are temporary. Aerobic activity doesn't increase the amount of fat you burn after your workout like resistance training. Your metabolism returns to normal shortly after stepping off the treadmill.

Smart Cardio will greatly enhance the rate at which your body burns calories. The most effective Cardio programs are design around the **FITT Principles**: Frequency, Intensity, Time and Type.

Frequency

Frequency refers to the number of times Cardio is performed per week. No less than three days per week, with no more than two days rest between workouts is recommended. For the first six weeks, beginners should work out every other day. However, if you are extremely overweight be careful performing weight-bearing type of cardio (jogging, aerobic dance, etc.), as it will be very stressful to your joints. Rest at least 36 to 48 hours between sessions to prevent injury.

Intensity

Intensity is described as the speed and/or the workload of a workout. When beginning a new exercise program, as we determine the intensity level most appropriate and effective for you. It is important that you continually monitor the intensity level to ensure that you reach your fitness goals in the least amount of time.

There are many ways to effectively monitor exercise intensity. One common method is the talk test. The talk test means that at low to moderate intensity, you should be able to breathe comfortably and rhythmically throughout the entire workout. A good rule of thumb that's pretty effective is: If you are doing your aerobic exercise and are too out of breath to carry on a conversation, the odds are that you are working too hard. You need to back off a little. If, on the other hand, you feel as though you could just belt out your favorite song, you're probably not working hard enough. As long as you keep these two boundaries in mind, you'll probably be at the right intensity. However during the typical IronBody class you should not be able to talk without effort. If you can talk you aren't working hard enough!

Another way to measure exercise intensity is with the use of a heart-rate monitor. A heart-rate monitor is considered the most accurate method of measuring pulse rate. If a heart rate monitor is unavailable, you can manually monitor heart rate by taking your pulse.

How to Take Your Pulse:

1. Place your index and middle finger on the inside of your wrist (about one inch from the top of wrist, on the thumb side).
2. Locate the artery by feeling for a pulse with the index and middle fingers. Apply light pressure to feel the pulse. Do not apply excessive pressure. It may distort your results.
3. When measuring the pulse at rest, count the number of times your heart beats in 60 seconds. Some factors that affect resting heart rate are digestion, mental activity, environmental temperature, biological rhythms, body position and cardio-respiratory fitness. As a result, resting heart rate should be measured immediately after waking or after you have rested for at least five minutes.
4. When measuring the pulse during exercise, count the number of beats in a six-second period and add a zero to that number.

Example: Number of beats in six seconds = 17. Add a zero = 170. Pulse rate = 170

Note: Use of the carotid artery in the neck is not recommended for measuring pulse rate. Pressure on the artery reduces blood flow to the brain, which can cause dizziness and an inaccurate measurement.

Time

Time is the length of time an exercise is performed, not including warm-up and cool-down. In order to gain Cardio-respiratory benefits, you need to exercise for 20 to 30 minutes per session. It is important to remember that as you become more fit, both intensity and time can increase. But remember, more is not necessarily better.

Type

Type refers to the activity used to create a stimulus. Before choosing an exercise, consider your goals, physical capacity, interests, available equipment and time constraints. Any activity that continuously uses larger muscle groups and is repetitive (rhythmic), in nature, is best.

Treadmill Walking (weight-bearing)

Walking is the most fundamental type of Cardio-respiratory activity. However, when performed on a treadmill, this simple exercise can become quite difficult for some participants. This difficulty may reside in the inability to maintain the necessary balance to perform the exercise properly and prevent injury. Maintaining balance involves controlling the position of the body's center of gravity. The center of gravity is the point around which the body balances. Therefore, when walking on a treadmill, focus on maintaining your center of gravity. Don't let your head move up and down, look straight ahead and keep your chest high to maintain balance and proper posture.

Running (weight-bearing)

Running is different than walking because of the additional impact it places on the body. Forces applied to the body while running are dramatic. Considering the fact that each foot strikes the ground 1500 times per mile, the potential for stress-related injuries significantly increases. To help prevent injury from overuse, gradually increase speed and/or distance. This will help your body adapt to the increase of force.

Stationary Cycling (non-weight bearing) Stationary bikes are another popular type of Cardio-respiratory exercise. Unlike walking or running on a treadmill, this non-weight bearing type of Cardio-respiratory exercise generally decreases the risk of injury. Before cycling, always adjust the seat height. Seat height is important because it influences the range of motion of the hip, knee and ankle while pedaling. The seat should be adjusted to match the standing height of the crotch. This will allow the knee to bend slightly at the bottom of the pedal stroke. Positioning of the feet is also important to consider while cycling. It is reported that the optimal foot position on the pedal is in the middle of the arch. Try to keep the force of the downward revolution in this area of the foot. When performed correctly, stationary cycling is considered a safe type of Cardio-respiratory activity.

Elliptical Training (low-weight bearing)

The word elliptical means shaped like an oval. The main difference with elliptical exercise machines is that although you are standing and bearing weight, which is important to building bone density, your feet never leave the footpads. So unlike treadmills or jogging, there is little impact on your joints and muscles. This provides a low impact, total body workout. The fluid, non-jarring motion makes the elliptical trainer ideal for anyone with back, knee, hips and joint problems. The dual action machines utilize both the legs and arm in providing a full upper and lower body workout.

Jumping Rope (weight bearing)

Jumping rope is an exercise we tend to overlook as adults. Jumping rope actually has a lot going for it as an exercise. Rope skipping can assist in developing agility, coordination, and balance, not to mention improvements in cardiovascular and muscular endurance. Because rope jumping is a fairly energetic exercise lots of calories can be burned during a twenty minute session of skipping. Current research is showing that high impact activities, such as jumping rope, can also help maintain and/or build healthy bones. Like all exercise programs, jumping for your health needs to be eased into. Jumping rope is a high impact, high intensity activity and those with health concerns should consult their physician before starting a jump rope program. As a coordination and agility builder, short bouts of jumping are sufficient. If you plan on using jumping rope as part of your aerobic routine, it's best to combine it with other aerobic activities, such as walking, biking, or running.

In the end, you want to make sure that your cardio is strengthening your heart and lungs and improving your cardio-respiratory efficiency, which is going to help oxygenate and feed every cell of your body. And you also want to make sure you're burning fat without sacrificing muscle tissue.

The IronBody Advantage

Because the workouts at IronBody Fitness use kettlebells in a dynamic manner your resistance training also becomes your cardio training. As you know the workouts we do are not only taxing to your muscles but also gets your heart rate way up and keeps it there. Initially, 3 days per week of our High Intensity Interval Training (HIIT) with kettlebells, bodyweight and other tools is plenty, however adding a day or two of brisk walking or other moderate activity will increase your fat burning abilities even more. Don't overdo it though. Listen to your body, you get results during rest. Your muscles grow stronger not during the workout but during rest after it. That is why rest and recovery is so important.

Energy Expenditure Chart

The number of calories you burn depends upon your weight, the activity you are doing and the intensity level you are exercising at. Any activity you perform can be done at a variety of intensity levels. If you exercise at a higher intensity level, you will be working harder expending more energy and burning more calories than someone who is not working quite so hard. Remember that one pound of body fat is equal to 3500 calories. In order to lose one pound of fat you must burn at least 3500 calories! The following chart is a comparison of the average calories **burned per 30 minutes** of common activity per pound of body weight.

Activity	120 lbs.	130 lbs.	140 lbs.	150 lbs.	160 lbs.	170 lbs.	180 lbs.	190 lbs.	200 lbs.	220 lbs.	240 lbs.	260 lbs.	280 lbs.	300 lbs
Aerobic dancing (low impact)	138	149	161	172	184	195	207	218	230	253	276	299	322	345
Aerobics step training, 4" (beginner)	174	189	203	218	232	247	261	276	290	319	348	377	406	435
Backpacking with 10 lb. Load	216	234	252	270	288	306	324	342	360	396	432	268	504	540
Basketball (game)	264	286	308	330	352	374	396	418	440	484	528	572	616	660
Basketball (leisurely, nongame)	156	169	182	195	208	221	234	247	260	286	312	338	364	390
Bicycling 10 mph (6 min/mile)	150	162	175	188	200	213	225	237	250	275	300	325	350	375
Bowling	66	72	77	82	88	94	99	105	110	121	132	143	154	165
Cross country snow skiing, leisurely	186	202	217	232	248	263	279	294	310	341	372	403	434	465
Gardening (moderate)	108	117	126	135	144	153	162	171	180	198	216	234	252	270
Golfing (walking , w/o cart)	120	130	140	150	160	170	180	190	200	220	240	260	280	300
Golfing (with a cart)	84	91	98	105	112	119	126	133	140	154	168	182	196	210
Hiking, no load	186	202	217	232	248	263	279	294	310	341	372	403	434	465
Housework	108	117	126	135	144	153	162	171	180	198	216	234	252	270
Ironing	60	65	70	75	80	85	90	95	100	110	120	130	140	150
Jogging, 5 mph (12 minutes/mile)	222	240	259	278	296	315	333	352	370	407	444	481	518	555
Raking	90	98	105	112	120	128	135	142	150	165	180	195	210	225
Running, 08 mph (7.5 minutes/mile)	366	396	427	458	488	518	549	579	610	371	732	793	854	915
Running, 10 mph (6 minutes/mile)	420	455	490	525	560	595	630	665	700	770	840	910	980	##
Skippping rope	342	370	399	428	456	484	513	541	570	627	684	741	798	855
Snow shoveling	234	253	273	292	312	332	351	371	390	429	468	507	546	585
Soccer	234	253	273	292	312	332	351	371	390	429	468	507	546	585
Stair climber machine	192	208	224	240	256	272	288	304	320	352	384	416	448	480
Swimming (25yds/minute)	144	156	168	180	192	204	216	228	240	264	468	312	336	360
Tennis	192	208	224	240	256	272	288	304	320	352	384	416	448	480
Vacuuming	90	98	105	112	120	128	135	142	150	165	336	195	210	225
Volleyball (game)	144	156	168	180	192	204	216	228	240	264	288	312	336	360
Walking 2mph (30 minutes/mile)	72	78	84	90	96	102	108	114	120	132	144	156	168	180
Walking 3mph (20 minutes/mile)	96	104	112	120	128	136	144	152	160	176	192	208	224	240
Walking 4mph (15 minutes/mile)	120	130	140	150	160	170	180	190	200	220	240	260	280	300
Weeding	120	130	140	150	160	170	180	190	200	220	240	260	280	300
Weight training (40 sec. Between sets)	306	332	357	382	408	433	459	484	510	561	612	663	714	765
Weight training (60 sec. Between sets)	228	247	266	285	304	323	342	361	380	418	456	494	532	570
Weight training (90 sec. Between sets)	150	162	175	188	200	213	225	237	250	275	300	325	350	375

A typical workout at IronBody Fitness burns anywhere from 250 to 450 calories, sometimes more. But it is dependent on your body-weight and how heavy you lift. You should always use the heaviest weight possible but still be able to complete the interval.

Some typical numbers you should be able to do in a 30 second interval:

- 12 -15 dead cleans per arm
- 20 swings
- 12 to 15 goblet squats
- 10 to 12 rows
- 18 to 20 high pulls
- 10 to 12 presses

Less than these numbers you are going heavy (not that it is bad but you may not be able to complete the interval), a lot more than the above numbers means you are going too light

Factor Five: Personal Assistance

The more customized your program is for you, the better your results will be. When you combine an effective fitness program with proper nutrition, supplementation and accountability, you can make incredible changes.

It is my job as a Fitness Professional to give you the right amount and type of work for your goal and ability. However, your body is naturally driven to adapt to this workload (i.e. plateau). A plateau occurs when the body adjusts to changes in internal and/or external conditions or circumstances. Science is still unable to predict when a person will plateau, but one thing is for certain – it will happen..

Doing the same type of exercise without variation or failing to increase the challenge when your body "adapts" to the present workload, are just two examples of conditions that will steer your results to a complete halt. In order to avoid a plateau during your transformation, we continuously change the workouts and modify your eating habits to help you reach the next level. The best way is not to do more of the same, but try new exercises or change the frequency, intensity, or duration of the routine.

Even though we individualize each of the components necessary to begin the journey toward your goal, it does not end there. There are many factors that may affect when and how significantly the other four components will need to be manipulated to keep you on the path to success. We will help you avoid plateaus by keeping your body in a caloric deficit (adaptation period) until you look the way you want. This can only be accomplished by following all 5 Components and correctly applying the information provided in this fitness handbook.