

# PROGRAM GUIDE



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# Why It's So Important For Teachers To Be In Great Shape

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There is never a better time than NOW to start getting yourself in the best shape of your life. Here are some vital reasons to find the time to incorporate an exercise program into your life.

## **Be a Positive Role Model**

The number one most important reason why you should dedicate the time to getting in shape is because you are a huge role model for the students you teach. You quite possibly spend more time with your students than their parents do. Students have the uncanny ability to pick up on habits and unconscious behaviours of their role models. We are approaching a time, where for the first time in history, children may not outlive their parents due to obesity related diseases. There could not be a better time to start living and modelling a healthy lifestyle. Just imagine the impact you'll have on the rest of your students' lives!

## **Have More Energy & Reduce Stress**

Maintaining a high level of activity will work wonders for boosting your energy level! If you find that you fatigue easily or feel sluggish throughout the day when you teach, exercise will definitely help solve this problem!

Participating in regular strength and cardiovascular exercise would be best, however it is more important to find activities that you enjoy and will be able to stick with over the long term. By mixing up and varying your exercises, not only will you progress more quickly and not hit plateaus, but you will prevent boredom and stick to your program. You may even want to experiment with some yoga-based exercise to help reduce stress and improve your energy levels.

## **Get Sick Less**

Finally, the last reason why you should get in shape is because you'll find that the more regular exercise you incorporate into your routine, the stronger your immune system will be (when done in moderation). The stronger your immune system is the less you get sick. Considering all of the germs you are exposed to at school (yuk!), exercise is a great prevention strategy!

Any way you want to look at it, now is the perfect time for you to get in shape and start living a healthier lifestyle. Your students look up to you on a regular basis, so by being a positive role model, you'll be instilling excellent healthy behaviour that they'll hopefully maintain for a lifetime.

# 4 Powerful Fat Burning Secrets

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## 1. Resistance Training

Weight training is not only beneficial to the targeted muscle groups, but over time will also increase your metabolism. This means you will be able to burn more calories at rest and spend less and less time doing cardio. Maintaining a healthy weight is a lot easier than losing weight.

## 2. High Intensity Interval Cardio Workouts

Doing bursts of high intensity exercise will boost blood flow and oxygen levels. It also helps to build speed, stamina, and speeds up the weight loss process. Interval training will give you a higher caloric burn during your workout, which makes fat burn at a faster rate afterwards.

## 3. Fitness Training Variety

To avoid hitting a plateau and having “stale” workouts, change up your training program every 4-6 weeks. This will give your body new training stimulus and make it more challenging for your body to adapt to a new routine. Plus, it will keep your workouts fresh and exciting.

## 4. Targeted Nutrition

Ensuring that your diet is balanced and composed of high quality meats, fruits, vegetables, and other foods is the best way to achieve a healthy lifestyle. The goal is to create a program that you can maintain. Adopting a plan you can stick to for life is the key to being successful.

# Metabolic Resistance Training

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Traditionally, the cornerstone of most strength training programs has been performing exercises in a straight set format – perform a specified number of reps for a given exercise, rest for 30 seconds to a few minutes, and then repeat before moving on to the next exercise. Fat loss and endurance programs typically prescribe shorter rest periods, while strength and power programs prescribe longer rest periods.

*What's the problem with this format?* For one, it can get boring very quickly; and for most, that means the end of the program. Big problem! The other issue is the amount of time a traditional style workout can take.

For example, in most health clubs you'll typically see someone perform 3 sets of 10 reps for an exercise; let's use lunges as an example. You'll see ladies pump out their 10 reps, go to the water fountain, chat with some friends, check their Facebook, and then casually walk back to the bar to pump out set number two. By the time they're done with their third set, it's taken you 10 – 15 minutes to complete only one movement pattern (a single-leg knee dominant exercise). That means you'd need about an hour just to complete 4 - 6 exercises!

90% of members who join a health club do so to lose weight and look better. If that's you, a much more effective and time-efficient approach to ordering your exercises may be utilizing the alternating set format. Here you'll perform one exercise, rest for a short period of time, then perform another non-competing exercise, rest for a short period of time, and so forth.

Alternating sets allows you to work different areas of your body when you would otherwise be resting with the straight set format. Plus, by working another area of your body with a non-competing exercise you allow your body to recover from the previous exercise(s). The result is improved training economy and density: more work accomplished in less time, the cornerstone of any sound fat loss program. There are a number of different ways to perform alternating sets:

Supersets: Alternate between 2 different non-competing exercises (e.g. upper body and lower body such as pushups and lunges)

Trisets: Alternate between 3 different exercises (e.g. push, pull, and lower body such as pushups, rows, and lunges)

Circuits: Alternate between four or more different exercises

High-intensity Interval Training (HIIT) is an exercise strategy that employs an intense bout of exercise followed by a brief rest. HIIT protocols use a variety of work to rest ratios (i.e., 20 seconds on, 10 seconds off) and consist of 5 – 10 cycles per circuit. Typical workouts consist of 4 – 6 circuits lasting 20 – 30 minutes (not including warm-up and cool-down).

In 1994, researchers for the Metabolism Journal discovered that each calorie you expend during high-intensity exercise burns up to nine times more fat than the same calorie expended during steady state aerobic exercise! HIIT accomplishes this in the following ways:



➤ **Creates the Optimal Hormonal Environment for Fat Loss:** HIIT puts your body in a “fight or flight” mode. As a result, your body releases certain hormones that directly mobilize stored fat to be burned off as energy during exercise.

➤ **Burns a TON of calories both during and after exercise:** Excess Post-exercise Oxygen Consumption (EPOC), otherwise known as post-workout “AFTER-BURN” is a measurably increased rate of oxygen intake after strenuous activity. This after-burn creates an elevated metabolic rate

for 24-48 hours after exercise where fat is the primary fuel source. In other words, you burn more fat while you’re resting!

- **Increases glycogen storage:** HIIT training rapidly reduces glycogen (stored sugar in the muscle cells) during training. With proper post-workout refueling your muscle cells “learn” to store more sugar, thus preventing that unwanted sugar-to-fat conversion. Carbs aren’t the enemy when they have a place to go other than your butt and gut!

What’s an example of a HIIT circuit? Here’s one of my favorites. It’s an 8-exercise circuit that can be performed with a single resistance band anywhere:

- Exercise #1: High Pull
- Exercise #2: Front Squat
- Exercise #3: Overhead Press
- Exercise #4: Hammer Curl
- Exercise #5: Chest Press
- Exercise #6: Deadlift
- Exercise #7: Bent-over Row
- Exercise #8: Stiff-leg Deadlift

You will alternate between 20 seconds of work and 10 seconds of rest for all 8 exercises followed by 1 minute of rest. Perform this circuit 4 times for a 20-minute total body fat burning workout.

To recap, the key to creating the optimal hormonal environment for fat loss is to perform each exercise with maximal intensity while separated by brief rest periods in order to accumulate a high volume of total body work in the shortest amount of time possible. HIIT provides for the best of both worlds and is thus simply unmatched for simultaneously maximizing fat loss and lean muscle gain. It’s also a blast to perform!

Basically, in about the same time that it took to get in 3 sets of 2 exercises using the straight-set method approach you could have gotten in 4 sets of 8 different exercises for a staggering total of 32 sets! Not too shabby if you’re on a time crunch and you need an efficient no-excuses workout.

## Fat Burning FitCamp for a Bikini Body

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**If your goal is to burn as much fat as possible and get in the best shape of your life**, there is no disputing the ongoing science that demonstrates the effectiveness of HIIT workouts (high intensity interval training) performed in a non-competitive circuit pattern.

This can be accomplished in various ways including **super-sets** (alternating between two exercises that do not compete with each other such as pull ups and squats), **tri-sets** (alternating between three exercises that do not compete such as seated rows, squats and pull ups) and **circuits** (alternating between four or more exercises that do not compete with each other).

But in an effort to mix things up and keep it exciting, **I would like to introduce a modern-day twist on an old favorite of mine...**

### Fat Burning FitCamp!

If you want to crush your workout, max out your muscle building and torch fat, this is the answer. This combination of old school body building methods and modern metabolic training is going to burn, baby, burn—no matter what fitness level you are!

Fat Burning FitCamp (FBFC) works by purposefully over-working muscles through repeating multiple sets of the same exercise, stopping only for small breaks between sets. The result is peak **hypertrophy** (muscle growth)—just as a bodybuilder achieves.

In order to gain the most growth of your muscle, you need to use moderate to heavy weight (sixty-five to eighty-five percent of your one-repetition maximum) and moderate to high repetitions (three to six sets of six to fifteen repetitions). In order to be effective, each set must result in **momentary muscle failure**.

**Momentary muscles failure** simply means that you have lifted the weights to the point that you can no longer lift them. More than simple muscle fatigue; momentary muscle failure happens when the muscle fails completely at a number of repetitions or length of time that you have previously chosen. Don't let this scare you. You will eventually begin to enjoy it and have a good time finding out what it is like to dig deep and reap the rewards!

**What is happening when you work at this level?** Your muscles get “messages” that tell them to grow. Keep in mind that muscle is very metabolic: *the more muscle tissue you have, the more calories and fat you will burn even during times of resting.*

There are some researchers that have found that each new pound of muscle we gain increases the number of calories we burn each day by around fifty! So if you added just five pounds of new muscle, you would be burning an additional two hundred fifty calories each day (1,750 each week)! That is the same as one-half pound of lost fat each week while you are resting!

Even though there is some disagreement among scientists regarding the precise amount of calories that each new pound of muscle burns, they all recognize that *we burn more calories as we add muscle—and that's what is important!*

Now, if you are worried about looking like The Incredible Hulk or a muscle-laden bodybuilder, put your mind at ease. That is not going to happen. The people who look like that do it for a profession (and take loads performance enhancing drugs). Look at it this way: just one pound of muscle is about the size of your hand when you make a fist. Once you distribute this all over your body, it is nearly unnoticeable.

And women have even less muscle building testosterone in their bodies than men (ten to twenty times less!), and even so, lots of men have a hard time building up the muscle that they desire.



**WHAT WOMEN THINK  
THEY'LL LOOK LIKE IF THEY  
LIFT HEAVY WEIGHTS**



**WHAT WILL  
ACTUALLY HAPPEN!**

Bottom Line: as long as you stay away from the high doses of gamma radiation, buckets of steroids, and massive quantities of food you won't be busting through your favorite jeans. ;-b Instead, you will look tight, toned and defined. Who doesn't want that?

So the burning question is "HOW?" How can we join together the advantages of classic bodybuilding protocol and the newer, documented power of the high-intensity interval training (HIIT) workouts that we use in FitCamp?

The answer: **Fat Burning FitCamp**

We do density trisets and a HIIT finisher. You will do 3 exercises back to back for a specific number of reps. You will have 7-10 minutes to go through the triset as many times as possible. After a rest you will do go through one or two more trisets in the same manner. At the end you'll do a HIIT set for 6-8 minutes.

Be sure to choose a weight or exercise that will adequately challenge for the number of reps or the interval. Lower reps (5 or less) means use a heavier weight. Medium range (6-12) medium weight, over 12 use a lighter weight. Keep in mind that if you want to really boost muscle growth, you need to keep it intense. Push yourself to your limits (just keep your form in check) through all the sets. If your form starts to break down you need to either go lighter or stop.

During the recovery breaks your muscles will be highly fatigued, because the breaks are so small. This will cause your body to produce growth hormone, which will further encourage the development of your muscles as well as help you burn more fat. It is a great way to surprise your body and cause beneficial changes.

Each total-body workout contains four exercises and a finisher:



## Workout A

Post 1: Single-leg Deadlift Variation (Left)  
Post 2: Single leg Deadlift Variation (Right)  
Post 3: Chest Press Variation  
Post 4: Low Row Variation  
Metabolic Finish: Burpees Variation

## Workout B

Post 1: Front Squat Variation  
Post 2: Push-up Variation  
Post 3: Stiff-legged Deadlift Variation  
Post 4: High Row Variation  
Metabolic Finish: Mountain Climbers Variation

## Workout C

Post 1: Bulgarian Split Squat Variation (Left)  
Post 2: Bulgarian Split Squat Variation (Right)  
Post 3: Overhead Press Variation  
Post 4: Bent Row Variation  
Metabolic Finish: Skater Jumps Variation

It is very important to understand that because you will be training with max effort and a shortened recovery between each set, your muscles will be more sore than they would from a typical workout. Here are some suggestions to help:

- While you are in a recovery break, stretch and flex the particular body part that is susceptible to soreness.
- Before and after your workout session, massage any sore or tight areas. You can do this with your hands or with foam rollers, soft balls or other massagers.
- Eat plenty of protein and drink a lot of water before and after your workout as well as every two to four hours during the day. **Be sure to eat a meal with lots of protein and some starchy carbs after these workouts**

A final note...You will find a bonus sixty second, whole-body, metabolic finisher in each workout. This finishing exercise is there to give us a cardio-blast that will send our fat burners through the roof until the next workout. Remember, we want to build muscle AND put it to work for maximum fat loss.

Listen, you really need to get your mind prepared for this, because it is incredibly intense, but you CAN do this...

My suggestion is that you only use this workout for about three to six weeks at a time, and then make sure to follow with an active rest week. The majority of your muscle growth will likely take place while

you are in your rest week, because it is at this time that they can really regenerate after having been pressed to their maximum tolerance!

Let's get after it!

**SPECIAL NOTE: Be sure to check out our Teachers Appreciation FitCamp program this summer. This Fat Burning FitCamp will be one of our summer training phases!!**

# Cardio Interval Program

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Although performing metabolic circuits is a superior method for fat loss, I understand that many of our clients and readers are going to be performing cardio on machines, running outside, biking or any of the other numerous forms of cardio.

Don't get me wrong; I believe that you can be successful with cardio intervals. I have certainly been successful with them in the past, both personally and with clients. However, through my evolution as a world-class coach, I have realized that they may not be the most efficient use of time.

A few reasons that you might want to use cardio intervals:

- 1) You are deconditioned or a beginner and need to gain/re-gain a base level of conditioning before adequately performing metabolic circuits at the optimal level.
- 2) You are injured or recovering from an injury and cardio intervals (normally stationary biking) are the best way to get in your interval work.
- 3) You are hoping to get in some active recovery work.



The trick to cardio interval programs is to pick a method that you can perform at the highest intensity for the work period and then quickly transition to the recovery period at a low to moderate pace. This is usually difficult to do on a treadmill.

Your best bet for cardio intervals is to perform them outside on a grass field (this takes some of the stress off the joints when running) or on an air resisted stationary bike like the Schwinn Aerodyne.

These two methods are the easiest to use and work with in all types of intervals. They are also the most effective. I love running outside for intervals because it causes you to actually move and produce force into the ground to propel your body. This requires significantly more energy than running on a treadmill and it actually works different muscle groups.

The Schwinn is great because it is almost impossible to hurt yourself on a stationary bike (and I know as soon as I say this someone will do it!). You also can transition quickly between hard and easy intervals. I also like the fact that you can use your arms to increase your speed during the hard work periods.

If you choose to perform cardio workouts on your own, I've shared a great program on the next page...

*Which body is best for health and performance?*



The trick to designing an interval program is monitoring the work and rest periods. Start off with a 1:3 work:rest ratio and decrease that over time to ensure you are making progress.

		Tuesday		Thursday		Sat. or Sun.
		Work	Recover	Work	Recover	Steady State
<b>Phase 1</b>	<b>Week 1</b>	30 sec.	90 sec.	1 min.	3 min.	20 minutes
	<b>Week 2</b>	30 sec.	90 sec.	1 min.	3 min.	25 minutes
	<b>Week 3</b>	30 sec.	90 sec.	1 min.	3 min.	30 minutes
	<b>Week 4</b>	30 sec.	90 sec.	1 min.	3 min.	25 minutes
<b>Phase 2</b>	<b>Week 5</b>	30 sec.	60 sec.	1 min.	2 min.	30 minutes
	<b>Week 6</b>	30 sec.	60 sec.	1 min.	2 min.	35 minutes
	<b>Break</b>	Walk for 20 - 60 minutes 2-3 times this week				
	<b>Week 7</b>	30 sec.	60 sec.	1 min.	2 min.	30 minutes
	<b>Week 8</b>	30 sec.	60 sec.	1 min.	2 min.	35 minutes
<b>Phase 3</b>	<b>Week 9</b>	30 sec.	30 sec.	1 min.	1 min.	40 minutes
	<b>Week 10</b>	30 sec.	30 sec.	1 min.	1 min.	45 minutes
	<b>Week 11</b>	30 sec.	30 sec.	1 min.	1 min.	30 minutes
	<b>Week 12</b>	30 sec.	30 sec.	1 min.	1 min.	5k Time Trial

To properly perform these intervals you will need to adequately warm up. You should foam roll your lower extremities, perform a flexibility routine and then perform a 5 minute warm up using the method that you are going to perform in your intervals.

At the end of each interval work out you will cool down for 5 minutes and repeat your flexibility routine.

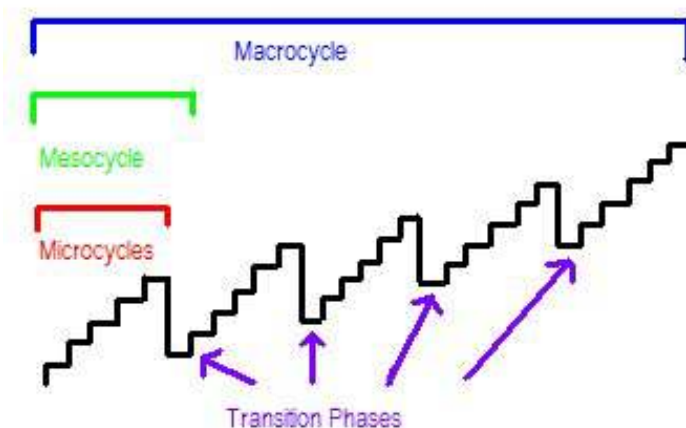
The work period in these intervals is supposed to be performed at maximal effort. You should barely be able to finish the required time. During the rest periods you will decrease your effort. On a scale of 1 to 10, with 10 being the hardest you have ever worked, you will work around a 3 or 4 for your rest periods.

To maximize your efforts and help track the interval time I strongly recommend you use an interval training timer such as the **iWorkoutMuse Pro** App found in the iTunes store.

# Rapid Fat Loss Exercise Program Schedule

One of the truly unique things about IronBody Fitness is our approach to program scheduling. While many programs may program their workouts week-to-week or even day-to-day, we design our workouts annually! Yes, every workout is pre-programmed out to ensure a proper training “flow” which provides our members the best possible results that last a lifetime.

This process is referred to as **periodization**. Periodization employs phase-specific variations of training each with a specific goal or training adaptation. Periodization systematically overloads the body to create a desired physical change while balancing work and rest to avoid overtraining, burnout, and/or injury. Ultimately, the annual training program (**macro-cycle**) aims at achieving the best possible, long-term results for our clients.



- **Meso-Cycles:** We divide our annual training program into 8 meso-cycles (phases). Each of these cycles is programmed with a specific training adaptation in mind taking into account the different muscle fiber types and energy systems you have. Each macro-cycle is approximately 6 weeks in length, although there is some variation based on the holiday/school calendar for your convenience.
- **Micro-Cycles:** A micro-cycle refers to a week of training. Each week consists of three training sessions that we label A, B & C. These training sessions are performed Monday, Wednesday & Friday respectively and are repeated each week for the duration of the macro cycle.
  - This is a very important training philosophy to understand – don't be fooled by marketing that preaches every workout will be different to “confuse” your muscles. We don't want to confuse your muscles, we want to develop them, make them stronger, and more metabolic...ultimately burning loads of unwanted fat! This can only be accomplished through repetition. As you become more skilled at an exercise each week, you'll be able to recruit more muscle fibers, do more work (weight x reps), and see greater results.

- **Training Sessions:** Each training session has a specific purpose in the program as well. During some meso-cycles (phases) each training session in the micro-cycle (week) will incorporate the same exercise:work ratio. This is a more traditional approach to interval training. Other times, the training sessions will incorporate different exercise:work ratios. This is known as undulating interval training. Both methods are beneficial and have their place in an overall training program.
  - For more details on our training sessions, see “The Anatomy of a Training Session” on the next page.
  
- **Recovery Weeks:** One of the most important but misunderstood secrets to smart fitness is the necessity of backing-off the volume and intensity. Exercising every day with no breaks can be detrimental to your overall fitness progress and cause *overtraining*. When you overtrain, you do not give your body time to recover and heal from the stress you place on it while exercising.
  - Overtraining makes you more vulnerable to muscle strain and injury. During normal exercise of all types, small tears in your muscles are normal. You may also from time to time notice a sore joint or some stiffness. Typically, these small inconveniences settle down with a good night's rest and an ice pack. But over time, these slight injuries can accumulate and intensify because your body doesn't get enough time off to fully recover. The result can be a full-blown injury or major slow-down in progress.
  - Your nervous system needs a break too. Following an intense workout schedule week after week takes its toll on your nervous system. When your nervous system gets overloaded, you may find that you feel irritable, weak and unmotivated. If you continue to ignore your body's plea for recovery, you will probably find that your symptoms only worsen.
  - Whether your goal is fat loss, muscle strength, cardio improvement or a combination of all three, recovery is vital. Your body must have a break from the stress.
  - Common symptoms of needing time off include:
    - An actual injury or illness
    - Persistent soreness
    - A halt in progression—hitting a plateau that won't budge
    - Feeling bored, unmotivated and/or dreading your workouts
    - General fatigue
    - A higher than normal morning pulse
    - Insomnia
    - Lack of appetite

Overall, there is a tremendous amount of thought and preparation that goes into designing our training programs at IronBody Fitness. You can rest assured knowing that we take great care in making sure our programs are best designed to help you achieve your weight loss, health and fitness goals!

# Supporting Fat Loss With Proper Nutrition

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The keys to a solid nutrition plan that will yield long-term sustainable results are: lean proteins, vegetables, healthy fats, small amounts of fruits, water, and a carbohydrate intake appropriate for YOU.

As you begin or continue on your journey to health please remember that what has worked for you to achieve “results” in the past or what works for your friend, co-worker, etc. may not be for you. You are an individual and everyone has a different body and different things going on inside of that body.

Before we get into the “nuts and bolts” of nutrition for fat loss, I want to talk about the fact that a calorie is not a calorie. If it were as simple as calories in vs. calories out, fat loss would not be as hard as it is. Being overweight or obese is a disorder of excess fat accumulation, not energy balance, not over eating, and not from sedentary behavior. Overeating and inactivity are compensatory effects; they are not causes. We don't get fat because we overeat; we overeat because our fat tissue is accumulating excess fat.

## The 3500-Calorie Myth

A calorie is not a calorie. The equation calories in vs. calories out says nothing about lean tissue and water; it states you will only lose fat. We know this is not true. If a calorie is just a calorie then they would all work the same way inside the body. We know this is not true as well. We know that lean proteins, vegetables, and healthy fat calories work different in the body than calories that come from sugar.

In his book [Why We Get Fat](#), Gary Taubes talks about *20 calories per day*. What he is referencing is that if you over eat by just 20 calories per day starting at age 25 you would gain 21 pounds in a decade. If you relied only on counting calories to lose weight you would need to have a .8% accuracy and let's face it, no one can do that.

Instead we need to focus on eating the right types of food to turn on our fat burning and turn off fat storing. This is where our hormones come into play. The hormone that has been talked about for the last 50-60 years in regards to storing fat is insulin. As of late, another important hormone that has been identified that must be balanced to achieve fat loss is leptin.

## Hormones

### Insulin

Insulin is the regulator of fat metabolism. It puts fat into fat tissue and it's insulin that suppresses fat mobilization. In order to get fat out of fat tissues you must lower your insulin. The bottom line is when insulin is secreted or chronically elevated, fat accumulates in the fat tissue. When insulin levels drop, fat escapes from the fat tissue and the fat deposits shrink. We secrete insulin primarily in response to the carbohydrates in our diet. Insulin is not an *on or off hormone* in our body, it is secreted in either a trickle, stream, or flood based on what we eat. Carbohydrates drive insulin. Insulin drives fat.

## Leptin

Leptin is a relatively “new” hormone that has only come onto the scene in the late 1990's. It is the king of all hormones and is the most powerful hormone in the human body because it is the “commander in chief” for the use of energy. When leptin is not working correctly lots of issues can arise such as: fatigue, depression, irritability, inability to focus, poor metabolism, faulty immune function, problems extracting energy from food, high cholesterol, high blood pressure, diabetes, obesity, and the list goes on and on.

Leptin is made in fat cells. If leptin is working well then you will have a healthy metabolism and your appetite will be at bay. If leptin is low you will have a slower metabolism and your appetite will be stimulated. So in theory if someone has a lot of fat stores they should also have a lot of leptin and have a high metabolism and not be hungry. However, in reality quite the opposite is true. Most of the time overweight or obese individuals have a slow metabolism and are hungry all the time.

### **Why?**

Their brains have become resistant to leptin and therefore think leptin is low which slows down their metabolism and increases their appetite. Insulin resistance and leptin resistance mean that the hormones don't communicate efficiently in response to food. Therefore, a person has to overeat in order to get enough leptin into the brain to get a full signal.

### **What causes leptin resistance?**

Caloric restriction, insulin and blood sugar issues, stress, overeating, increased triglycerides, and fructose (specifically high fructose corn syrup). Whenever insulin is negatively impacted, leptin is negatively impacted as well.

### **How do we manage leptin?**

We know insulin is increased when more carbohydrates than the body can handle are eaten, so you manage insulin by managing carbohydrate intake. Decrease stress and put in place stress management techniques (see section on stress). If cortisol is deregulated, you will have blood sugar issues despite a diet low in carbohydrates. Always including protein at breakfast and not overeating will also help to control leptin. If you are overweight, always try to finish a meal when you are slightly less than full. It takes 10-20 minutes for the brain to catch up and signal the body that you are full. Eating slowly can assist with this as well (try putting your fork down between bites). In the following section, *Meal Timing*, I will address other strategies to manage leptin.

## Meal Timing

Meal timing is key in managing blood sugar and hormones especially leptin. There are two strategies in which to do this: never eat after dinner and eat three meals a day.

Leptin follows a 24-hour pattern where levels are highest in the evening hours and peak late at night. It sets the timing for nighttime repair as well as coordinating the function of melatonin, thyroid hormone, growth hormone, sex hormones, and immune system function to carry out restorative sleep. Leptin will also burn fat at a greater rate at night but only if you allow it to do so. In a person with normal leptin function, the brain gets the signal that they are full and do not require any more food in the evening. However, those with leptin problems or leptin resistance never get a proper full



signal (until they overeat) and they are driven by subconscious urges to eat from the time dinner is over until the time they go to bed. Allow three hours between your last meal of the day and the time you go to bed. Space dinner and breakfast out so that there is at least 11-12 hours in between.

Leptin is what gives your body the full signal after you eat a meal. In order to avoid leptin issues in the evening, you must properly manage leptin during the day. No matter what you eat you will get some form of insulin response after you eat it. Depending on what you eat that response may be a trickle, stream, or flood of insulin. Once insulin has done it's job after a meal, only then can your body enter a true fat-burning state. Our body is not meant to handle eating and snacking all day. When a person eats a snack it raises insulin, no matter what that snack is. When insulin is secreted it shuts off fat-burning mode, and allows triglyceride levels to stay too high for proper leptin function, reducing proper leptin entry into the brain. This can cause excessive food cravings, an unstable energy level, poor head function, and unproductive sleep. Those with healthy leptin levels will end up burning 60% fatty acids during sleep, the prime fat-burning time. When leptin is managed well, fatty acids will be burned from the triglycerides that are stored in the abdominal area, hips, and thighs. If leptin is poorly managed throughout the day, fatty acids from triglycerides that are piled up too high in the blood will be burned during sleep instead.

Three to four hours after a meal blood sugar levels naturally begin to drop because insulin is done doing it's job of transporting calories into cells. Now our bodies can use stored calories for energy. The drop in insulin signals the pancreas to produce glucagon. Glucagon's job is to maintain blood sugar in absence of food. Glucagon then signals the liver to release glycogen (stored glucose) in order to maintain blood sugar levels. In a sense your body is getting a snack, just not from food. Between meals about 60% of fuel will come from sugar that was stored in the liver and under the signal from glucagon the liver will burn forty percent fatty acids. Triglycerides from fat stores are now being used as fuel. This starts happening three to four hours after a meal and continues until the next meal is eaten. This is fat-burning time. As long as energy levels are maintained the longer a person stays in fat burning mode the more fat they will burn. Snacking or eating too often confuses leptin and sooner or later this will catch up with you.

### Sample Meal Time Templates

Morning Workout	
<b>6:30 am</b>	Protein + Starch
<b>7:00 am</b>	WORKOUT
<b>8:00 am</b>	Protein + Starch
<b>9:30 pm</b>	Meal 1
<b>2:30 pm</b>	Meal 2
<b>7:00 pm</b>	Meal 3

Afternoon Workout	
<b>7:00 am</b>	Meal 1
<b>12:00 pm</b>	Meal 2
<b>4:00 pm</b>	Protein+Starch
<b>4:30 pm</b>	WORKOUT
<b>5:30 pm</b>	Protein+Starch
<b>7:00 pm</b>	Meal 3

## What to Eat

### Lean Proteins

Protein sources include but are not limited to: grass-fed beef, organic free range chicken, chicken sausage, organic free range turkey, organic pasture raised pork, nitrate-free sausages or bacon, wild Alaskan salmon, cod, scallops, white fish, shrimp, tuna, bison, ostrich, elk, venison, organic free range eggs, whey protein powder, vegetarian (rice, pea) protein powder, and goat milk, cheese, yogurt. If you can handle dairy, plain Greek yogurt, cheese and milk from organic grass-fed cows.

Eat complete, lean protein with every meal. To figure out protein intake per day, take your goal body weight and divide by 2.2. Take that number and multiply it by 1.5, and then by 2 to get your range of protein intake in grams per day.

All of the following equal 7 grams of protein: 1 ounce of meat, 1 egg, 3 egg whites, 1 ounce of cheese, 24 almonds, and 2 TBSP of nut butter.

For example: A female who's goal weight is 140 lbs. would want to eat 95-127 grams of protein per day. This would equate to about 30 grams of protein per meal plus a post-workout shake.

### Vegetables

Include 1-3 servings of vegetables with each meal and aim for 7-9 servings per day. One serving equals ½ cup of cooked, 1 cup of raw, and 2 cups of salad greens.

Non-starchy vegetables include but are not limited to: beets, red cabbage, red peppers, radishes, tomatoes, butternut squash, carrots, pumpkin, rutabagas, yellow summer/winter squash, yellow peppers, artichokes, avocados, broccoli, green cabbage, cucumbers, kale, green peppers, swiss chard, asparagus, green beans, Brussels sprouts, celery, lettuce, snap peas, spinach, zucchini, eggplant, cauliflower, jicama, mushrooms, onions, parsnips, and turnips.

Organic or not? The first priority is to eat the recommended servings of vegetables organic or not. Then focus on buying organic for the "Dirty Dozen." This includes: peppers, celery, kale, lettuce, and spinach.

Here are a few ideas to increase the amount of vegetables you eat everyday. Add spinach to a protein shake, I promise, you will not even taste it. Add spinach, peppers, onions, mushrooms, etc. to eggs. Substitute a vegetable for a starchy carbohydrate such as spaghetti squash or zucchini for noodles. Cauliflower or butternut squash for pizza crust. For rice, oatmeal, wraps or mashed potatoes use cauliflower as well.

### Fruit

If your goal is fat loss consume 0-2 servings of fruit per day. Males may be able to consume 0-4 servings per day. A serving consists of ½ banana, ½ large apple or pear, ½-¾ cup berries. The best fruits to eat are raspberries, strawberries, blueberries, blackberries, and red, green, or yellow apples.

Apples, strawberries, and blueberries are part of the "Dirty Dozen", so buy organic if possible.

## Healthy Fats

Nuts and seeds: almonds, pecans, brazil nuts, pistachios, cashews, pumpkin seeds, hazelnuts, sesame seeds, macadamia nuts, sunflower seeds, and walnuts.

Fats and oils to use: almond oil, macadamia nut oil, flax seed oil, coconut oil, sesame oil, extra virgin olive oil, butter (or Ghee), hemp seed oil.

When cooking with oils and fats, especially at high heat, saturated fats are generally a better choice. Use butter, ghee, or coconut oil when heating to high temps. Unsaturated fats are less stable and more prone to becoming trans-fats at high heat. Heat, light, and air can cause oxidation to these otherwise healthy oils.

Just because nuts and seeds are healthy fats does not mean you can eat as many of them as you want. Limit nut and seed intake to 1-2 ounces per day (a small handful).

Below are examples serving sizes of healthy fats per meal.

All oils and cooking fats (olive oil, animal fats): 1-2 thumb size portions

All butters (ghee, coconut butter, nut butters): 1-2 thumb size portions

Coconut (shredded or flaked): 1-2 open handfuls

Avocado: ½ to 1

Coconut milk: between ¼ and ½ of one (14 oz.) can

Fats and oils to avoid: soybean oil, canola oil, margarine, and hydrogenated oils (trans fats).

## Carbohydrates

Carbohydrates are not an essential nutrient like fat is. Most of us can get our carbohydrate needs for the day met through vegetables and a small amount of fruit if necessary. Remember what we talked about in the beginning of this manual with relationship to insulin. Insulin drives fat storage and eating carbohydrates drives insulin.

When fat loss is the goal, eat vegetables with each meal and “other carbohydrates” only after exercise or not at all. You must earn your starchy carbohydrates. If you are not seeing the results you want, you are most likely eating too many carbohydrates for your body. Everyone’s toleration and ability to process carbohydrates is different. When it comes to changing body composition, reducing or timing carbohydrate intake is the single most effective strategy to kick-start fat loss in people with stubborn and hard to remove body fat stores.

If you are going to consume “other carbohydrates”, make them gluten free. Gluten has been linked to 55 health issues and is highly inflammatory in the body. Gluten free carbohydrates include: brown rice, beans, corn tortillas, sweet potatoes, flax seed, beans, lentils, corn, red potatoes, and quinoa.

Keep portions to 1 serving for females and 2 servings for males if you choose to have other carbohydrates. Servings sizes are listed below:

1/3 cup of beans

1/3-1/2 cup of rice or quinoa

½ sweet potato

## Liquids

Don't drink your calories. Drink half your body weight in water each day. Your body is made up of 60% water and water is absolutely essential for a variety of physiological functions affecting your health, performance and body composition.

Eat your fruits and vegetables; drink water as your beverage. Fruit juice has little nutritional value and it will increase blood sugar much quicker than eating a piece of fruit.

Green tea is another great choice. Coffee can be enjoyed in moderation. However, don't use coffee to mask drops in energy or fatigue from improper nutrition or meal timing.

## Workout Shake

For maximum recovery after a high intensity interval training session, post workout nutrition is key and that is the only time it's ok to eat starchy carbs if you are trying to lose fat. A lean protein, some veggies and rice, a sweet potato or some pasta is ok with 90 minutes after a workout.

## Supplementation

A good quality multi-vitamin is essential to any supportive nutrition plan. It is VERY hard to achieve optimal levels through food alone.

Our soils don't have anywhere near the nutrients they once did. Commercial farming and fertilizers have dramatically changed the nutrients in our soils. Mineral content has been reduced by 85% over the past 100 years.

Exercise also increases the body's nutrient needs. Yet most people rarely increase their vitamin and mineral intake when they increase the amount and intensity of their exercise. This can result in decreased recovery abilities, decreased performance and a suppressed immune system.

Another result of inadequate amounts of vitamins and minerals is continued and unexplained cravings. Your body tells you to keep eating in hopes of meeting its nutrient needs. High-quality multivitamins can help avoid issues resulting in long-term deficiencies.

## Essential Supplements

Multi-vitamin – Pure Encapsulations

Fish Oil – Nordic Naturals

Probiotic – Up4 or Pure Encapsulations

# How to NEVER Gain Weight On Vacation

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1. Don't stress over food. It isn't always realistic to eat "perfectly clean" when traveling and vacationing. Aim for protein and veggies with each meal, and do your best to keep the starches to a minimum.
2. Book a hotel with a fitness center or bring [resistance-training bands](#) – that's what we do!
3. Schedule a workout every day. Mornings are usually best. This way you will not only get your workout out of the way, but it will give you more energy for the rest of your day! This is a great tip to reduce stress and help prevent weight gain on your trip!
4. Seek out active excursions on your trip – see the sites while working on your fitness. :-)
5. Organize your trip so you can walk to your destinations. Park further away and skip the trams.
6. Get at least 8-9 hour sleep – Hey, you're on vacation! Lack of sleep will actually cause weight gain and a host of other issues. Check out this [awesome article](#) on sleep.
7. Stay hydrated. Planes and hotels are dehydrating. Load up on water before you get on the plane and keep sipping while on it. Hotels are really dry, too so be sure to buy a few gallons to keep on hand.
8. Be germ conscious. Don't use the airline pillows and blankets, comforters on beds, and carry hand sanitizer with you always. BE CAREFUL OF THE BUFFETS! 1) They're laden with germs, 2) They encourage overeating.
9. PLAN AHEAD! Before leaving, find PHYSICAL activities you and your family can do in the area. Remember, kids love to play...so do adults when they actually do it. 😊
10. Try not to make the food the center of your trip. Enjoy it, but don't revolve around it. Vacations are about having fun, not eating food. Don't link the two.

# Letter From the Authors

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Dear Teacher,

Thank you for taking the time to read through our eBook: *The Teacher Appreciation Program Guide*.

We really hope you enjoyed the information and found some valuable health & fitness tips. It's our passion and our goal to provide the highest quality information possible. If you have ANY questions about the material presented in this eBook (or anything else in regards to exercise, nutrition, and/or supplementation) please feel free to contact us.

You can find more fitness tips and healthy recipes on our blog and our Facebook Fan Page:

- ❖ Blog: <http://www.Iron-Body.com>
- ❖ Fan Page: <https://www.Facebook.com/IronBodyFitness>

To learn more about our special *Summer Shape Up Program* just for YOU – **Teachers Appreciation FitCamp** – please visit <http://iron-body.com/teacherappreciation/>. Hurry though; **SPACE IS LIMITED!**

Once again, if you have any questions about your fitness program we're here to help. It would be our honor to serve you and help you achieve your goals.

**Thanks**

**Dave**

**P.S. – We're glad to extend special money-saving opportunities to YOU. We really value what you do, and enjoy the opportunity to give back.**