

## Chapter 9

### Low Glycemic Nutrition – The Cornerstone of Health

All energy is neither created nor destroyed, it is merely transferred. This is the key phrase I want you to remember when it comes to nutrition and feeding your body. If you want to be lean, strong, and healthful then you have to feed your body energy. The energy I am talking about comes from eating food from the earth, not man made processed food. If you want great results with any exercise program, lifestyle change, or hormone optimization plan then you must obey the rule of energy transfer. Violate this rule and you will get mediocre results. Obey this rule, feed your body real food, establish and maintain healthy eating habits and **YOU WILL ACHIEVE INCREDIBLE RESULTS.**

The following **Low Glycemic/Nutrient Timed/Controlled Fasting** guideline will help you make the most of any testosterone restoration therapy program. Simply, replacing your hormones is not enough. If you are making lifestyle changes and/or attempting to naturally improve your hormone levels, this chapter will help as well.

#### Key Concepts in this Chapter:

- Low Glycemic Nutrition
- Nutrient Timing
- Controlled Fasting

This chapter is designed to enhance any natural program of hormone optimization, testosterone restoration therapy, exercise, and/or supplementation plan.

The purpose of this **Low Glycemic/Nutrient Timed/Controlled Fasting** chapter is to give you a guide that makes it easy to implement into your lifestyle. This chapter explains goals and gives the basic nutritional guidelines to help optimize your hormones.

## **TRANSITIONING TO LOW GLYCEMIC/NUTRIENT TIMED/CONTROLLED FASTING**

Transitioning slowly helps you to adapt to a low glycemic, nutrient timed, controlled fasting lifestyle, which will give you control over your hormones. Nutrition is king when it comes to controlling not only your weight but also your health. Many people have food sensitivities they are not even aware of that affects their body in a negative way. This short transition will help you develop new habits and patterns, while allowing your body to reach its current peak abilities.

There can be an initial decrease in energy, which is sometimes experienced during the first week; this will subside as your body adapts to your powerful new low glycemic habits. After transitioning you may expand your food choices. It is a good idea to keep a food journal as well, noting your reactions to various foods. You will come to realize that there are foods, which provide you with incredible personal energy and others that do not. Stacking your nutrition with your “personal power foods” will give you that competitive edge.

## **GOALS**

### **Your Goal is Our Goal, Improve Strength, Energy, Libido and Fitness**

- Improved Strength and Endurance
- Enhance your Libido
- Increase Metabolism and Energy
- Optimize your Hormones
- Be the best you can be

A specific goal of this **Low Glycemic-Nutrient Timed-Controlled Fasting** plan is to optimize human growth hormone levels. Growth hormone shares the same receptor site on cells as insulin. Having high insulin levels will decrease the uptake of growth hormone by the cells. Following a **LG/NT/CF** plan will keep your blood sugar low, which means stable insulin levels and higher levels of natural growth hormone.

## **THE TWO PILLARS TO MAINTAIN YOUR METABOLISM**

The first is maintaining your lean muscle mass and you accomplish this by exercising daily with a combination of both strength training, also called resistance training, and aerobic exercise like running, cycling, swimming, dancing, hiking, and rowing. Exercise dramatically increases your energy expenditure, which helps you to rid yourself of excess body fat and increase important hormones, like epinephrine, which control lipolysis, which is the breakdown and utilization of fat for energy. Exercise also helps your body increase the number of mitochondria you have and improve the functioning of the mitochondria that already exist. These little powerhouses in each and every cell in the body are critical to your maintaining and improving your metabolism. The more you have and the more efficient they are the faster your metabolism and the easier it is to control your weight and increase your energy levels.

The second pillar is maintaining a balanced internal hormonal environment and this is accomplished by combining healthful daily nutritional habits with regular stressful exercise and supplementation with multivitamins and minerals. Maintaining a balanced internal hormonal environment starts with eating healthful, whole foods on a regular basis. These are the foods our bodies were designed to eat, foods that come from the earth, off a tree or bush and from animals. We were never designed to eat man made, highly processed foods loaded with additives and chemicals on a regular basis. Limiting or eliminating these from your diet will significantly improve your overall health and your metabolism.

So I am going to keep this short, simple and sweet since your nutrition plan has been created for you. The goal of this plan is to provide your body the energy it needs to perform the exercises in your workouts while also helping you to rid your body of excess, unwanted fat. You want to look and feel your best each and every day, so you have a very specific goal, which gives us a very specific nutrition plan. Perfect because the more specific the goal the easier it is to focus on our goal, which is to provide the right internal environment to power our bodies and get rid of the excess fat and optimize hormones.

## **Low Glycemic Nutrition**

The cornerstone of all health is nutrition. Consuming foods that cause high blood sugar spikes will drop your testosterone production and the resultant high insulin levels from the high blood sugar will compete with growth hormone for the same receptor site. Other benefits of following low glycemic nutrition plans are: consistently high energy levels, eating satisfaction, efficient immunity, maintenance of healthy weight, and potential for increased longevity.

When a low glycemic meal is consumed, blood glucose elevates at a slower pace, allowing the pancreas to moderate the amount of insulin released so it is relative to the volume of glucose. Because there is less insulin circulating in the blood stream, fewer cells absorb glucose; levels never fall below optimal range. Food cravings and low energy crashes diminish once you adjust to the low glycemic diet, as the body is consistently able to utilize body fat as its primary source of energy.

Consuming balanced, low glycemic meals maintains a consistent balance of hormone levels, allowing the body to function efficiently with optimal health.

## **Nutrient Timing or Carb Cycling**

We are going to use a carb cycling plan that is timed with your daily workouts with a planned increase in calories at the end of the week. And it's money! Your lean proteins will come from sources like eggs, fish, chicken, turkey, beef and some dairy. Your carbohydrates are going to come from fruits, vegetables, oatmeal, and sweet potatoes. And your fats will come from nuts, olive oil and avocados. Oh.....and you'll have to eat a dozen sardines every day. Just kidding!

Your free meal, which comes once per week, this day is not an all-out feeding frenzy. But, feel free to have whatever you like for one meal, but do not stuff yourself. Remember to drink plenty of water and to take that 20-minute walk on your free day. Also, there is no alcohol on your free day. Remember, you want to power up your body not deplete it of energy!

So exactly how does this carb cycling work? Well research has demonstrated that alternating the amount of food every other day releases a protein called Sirtuin 1. And

every organism tested demonstrated that calorie restriction lowered cancer rates, increased activity, decreased body fat weight, inflammation, disease and premature aging.

Sirtuin 1 also known as NAD-dependent deacetylase sirtuin-1 is a member of the sirtuin family of proteins. What is interesting about Sirtuin 1 and its activation is that it shows potential to increase fatty acid utilization, fat cell metabolism and mitochondriogenesis and decreases lipid profiles, lipogenesis, adipogenesis, and inflammation in the intestines, lung and heart and also decreases neurodegeneration in the brain and central nervous system.

So exactly what does this mean? Well Sirtuin 1 acts to repair the damage done by the free radicals. It also helps the mitochondria to produce more energy and helps with weight loss by inhibiting fat storage and by increasing fat cell metabolism. All of these sounds like winners to me! All you have to do is eat more on the days we strength train and eat less on the days we train aerobically. And we do this by increasing and decreasing our natural starchy carbs on these days. It’s really that simple!

### **Controlled Fasting or Intermittent Fasting**

*Fasting is defined as an act of willingly abstaining or reduction from certain or all food, drink, or both for a period of time. An absolute fast is normally defined as abstinence from all food or liquid for a defined period, usually a single day, or several days.*

I know, “what do you mean don’t eat”? Not quite, you get to eat, it’s just that we like you to eat during a specific window of time during the day and then abstain from food during a period of time when you are most likely relaxing and preparing to rest for the evening. So, Why?

Intermittent fasting boosts testosterone by increasing the expression of satiety hormones including insulin, leptin, adiponectin, glucagon-like peptide-1 (GLP-1), colecystokinin (CKK) and melanocortins, all of which are known to potentiate healthy testosterone actions, increase libido and prevent age-related testosterone decline.

But what about eating breakfast? “Isn’t it the most important meal of the day?” Well, breakfast just means to “break the fast” and we still are “breaking the fast” just a little later in the morning. It is still an important meal and I will get to that in just a minute.

## **So Let's Talk About Calories for a Minute**

Calories or Food energy is the amount of energy obtained from food that is available through cellular respiration. Carbohydrates, proteins, and fats, all release energy during respiration—this is often called 'food energy'. When nutrients react with oxygen in the cells of living things energy is released. Calories are about energy. And when it comes to humans, energy that is not used is stored as fat.

So what does this mean for YOU and YOUR health: Eat too many calories and not enough exercise and calories get stored as fat. Eat the right amount of calories and exercise and your body takes energy from the stored fat when it needs more energy. Think of calories as YOUR fuel when it comes to having energy to do the things YOU want to do. Think of the calories you put into your body as like the primary and reserve fuel tanks on a plane. When you eat your body uses the "fuel" you put into your stomach first, the primary tank, and then if it needs more "fuel" your body goes to your fat stores or reserve tanks for more "fuel". But it always uses what's in the primary tank first.

## **So a Calorie is a Calorie right?**

Well this is where many people are confused and I at one time was no different! It turns out that this is not entirely true. Thanks to the field of nutrigenomics we now understand that all calories are not created equal and their effects on the human body can be quite dramatic and even have different effects on different people.

Studies have now revealed that diets that are made up of high glycemic carbohydrates that are rapidly absorbed sugars spike your blood sugar levels which in turn spike your insulin levels and constant high insulin levels promote fat gain, high triglycerides and cholesterol, insulin resistance, fatty liver, obesity, inflammation and all the disease associated with it.

So let's play a game I call "*Pick the Better Breakfast*". Which one of these three breakfasts will supercharge your body giving it all the vitamins, minerals, and nutrients that it needs to power up your day, all while keeping your blood sugar levels stable. Here is the tricky part; they are all "healthful foods".

- A. *Scrambled eggs with diced peppers on a bed of arugula with 10-grain bread sliced avocado and one cup of berries.*
- B. *Steel cut oats with added flax, walnuts, and a cup of berries.*
- C. *Rolled Oats with a cup of berries and a glass of orange juice.*

Picking the right one can make a huge difference as to whether you gain weight or lose weight. Seems pretty straight forward but there is actually an enormous difference in the way your body metabolizes the different foods you choose to eat each and every day.

You see foods that are digested quickly, enter the bloodstream quickly, which means higher blood sugars, which can mean a hormonal disturbance and weight gain. Compared to a food that is digested slowly which means more stable blood sugars, which means hormone balance. In addition some of these foods have anti-inflammatory properties and others inflammatory properties.

You see not all calories are not created equal. Let's take a look at a patient question. Tom asks: *Which is better for you apple juice or an apple?* Seems straight forward enough they are both made of the same food material right? Well, one enters the bloodstream very quickly because of its processing; the apple juice has had one of the important parts, the fiber, removed from it. However the apple in its natural state contains all of the vitamins, minerals, phytonutrients, antioxidants, and fiber! Everything your body needs. The rate at which the apple is digested is slower which means your body has time to utilize the energy from the apple. Eating apples promotes hormonal balance. Drinking juice can promote weight gain and hormonal imbalance.

In our examples of the 3 different breakfasts, they are all healthful foods. However that is where the similarity ends. You see each one of these breakfasts will be digested at different rates resulting in either rapid or slow escalation of blood sugar.

That difference alone can make all the difference in your overall health and in hormone balance. By maintaining stable blood sugars throughout the day you promote health, wellness, consistent energy, and utilization of digested and stored energy.

So which breakfast is our winner? While breakfast C is certainly healthy its consumption results in consuming roughly 80% more food later in the day than breakfast A. Breakfast B is certainly a healthy way to start the day, but its consumption led to eating 51% more food later in the day than breakfast A. Which makes breakfast A our winner!

The combination of eating eggs, peppers, arugula, avocado, and berries was not only a breakfast with low sugar content, but one with anti-inflammatory properties as well which means stable blood sugars, fats, insulin, and adrenaline levels. This group of foods sends a positive hormonal message.

The interesting fact here is that the types of food we eat not only supply our bodies with energy they also send distinctive hormonal messages. This is great news because we can directly control the foods we choose to eat.

### **Now Back to Controlled Fasting**

I personally use a controlled fast daily as a way of giving my body a break from all the digestive work and as a way of giving myself freedom from food. It's amazing how much you can accomplish when you do not have to take breaks to eat.

You may think that you'll have no energy and that you will starve. But, quite the opposite happens. Your energy levels and productivity will soar! You will more than likely feel unbelievably energized too! You have more than enough energy stored in your body to exist for this very brief period, 12-18 hours without solid food. Heck, for 8 hours you will be sleeping anyways. During this controlled fast drink plenty of water with lemon to stay well hydrated. Also at any time during this period, you are in control, you can choose to end your controlled fast whenever you like and still have amazing benefits.

It's easiest to start with the simplest controlled fast, the 6pm to 6 am. You are asleep for most of this 12-hour period; you should be hitting the rack around 10 p.m. Then work your way to a 16-18 hour fast. You are always in control and can choose to end your fast whenever you like. When you choose to eat, remember to eat appropriately and not overeat. Chances are you will feel full quickly even with a small amount of food.

### **Planned Controlled Fasting Schedules:**

Schedule 1: 6pm to 6am (beginners and the easiest)

Schedule 2: 6pm to 10 am (move from a 12 hour to 16-18 hour once every 2 weeks)

Schedule 3: 6pm to Noon

Schedule 4: 8pm to Noon

Schedule 5: Any 16-18 hour period that fits your schedule.

Short-term fasting has been shown to have the following health benefits, which were found after as little as 12-24 hours of fasting!

- Decreased body fat & body weight
- Maintenance of skeletal muscle mass
- Decreased blood glucose levels
- Decreased insulin levels & increased insulin sensitivity
- Increased lipolysis & fat oxidation
- Increased norepinephrine & epinephrine levels
- Increased glucagon levels
- Increased growth hormone levels
- Decreased food related stress
- Decreased chronic systemic Inflammation
- Increased cellular cleansing

### **These are all drinks that would be allowed during your fast:**

- Black Coffee
- Green tea
- Herbal tea
- Water with lemon slice
- Sparkling Water

## **LOW GLYCEMIC-NUTRIENT TIMED-CONTROLLED FASTING GUIDELINES**

### **1. EAT DURING A 8-10 HOUR PERIOD EACH DAY**

- Eat 3 meals each day
- Have 2 snacks each day
- Eat lean proteins
- Keep to healthy fats
- Keep to low glycemic vegetables
- Eat the starch carbs in the hour after your workout

### **2. FAST FOR A 12-16 HOUR PERIOD EACH DAY**

- 6 pm to 6 am is the easiest
- You may break your fast at any time, you are in complete control

### **3. DRINK PLENTY OF WATER**

- Water, nonfrizzante or frizzante, only the Italians can make water sound so good!
- Add a slice of lemon to your water
- Limit coffee to 1 cup in the morning
- Limit Green Tea to one cup daily
- Avoid soda and energy drinks
- Protein shakes as snacks

### **4. HAVE ONE "FREE MEAL" EACH WEEK**

- Go for it!
- Do not over eat
- Have whatever your heart desires
- Some of you may require 2 free meals each week

## What is Body Fat?

The body is made up of multiple components and not all weight is fat. There is water or fluid weight, excess materials, muscle, bone, and fat weight. Fat's main role is to provide a place for energy storage and it is highly efficient at doing so! One pound of fat roughly contains 3500 calories of stored energy, which is enough to walk almost 30 miles if your body could purely burn it. Ultimately to make a real impact we are talking about losing fat weight and keeping that super active metabolically demanding muscle. Men love to store fat viscerally and around the belly. They also can lose it very quickly. The most common type of fat storage we see in women is lower body fat storage, waist, hips, thighs, and buttocks. And a wonderful hormone known as estrogen, which is great from an evolutionary, reproductive standpoint gets accused of being the villain here. However, it's just not that simple because estrogen has both positive and negative effects depending on what tissue, what time of the month and what physiologic process we are discussing, and research shows that we are just beginning to understand fat cell metabolism and all of the numerous factors that control this complex hormonal process.

And as research progresses we are coming to realize that there is an incredible balancing act occurring between all the hormones in our bodies to control our weight. Hormones like thyroid, leptin, insulin, estrogen, testosterone, progesterone, atrial natriuretic peptide, glucagon, growth hormone, cortisol and the catecholamines: adrenaline and noradrenaline. Enzymes like, cyclical adenosine monophosphate, carnitine palmityl transferase and hormone sensitive lipase. Adrenoreceptors in fat cells called alpha-2 and beta-2 receptors and factors such as blood flow, transport, uptake and utilization.

Now, there is no such thing as targeted fat loss. However, a low glycemic diet combined with specific types of exercise is effective for liberating fat from these areas. You see low glycemic diets are great for inhibiting alpha-receptors in fat. Alpha-receptors are the "bad" receptors in fat and inhibiting them is good for fat loss. There is another kind of receptor in fat and these are called beta-receptors and they are the "good" receptors in fat. And you can activate them with the specific kinds of exercise you are going to perform and by using a little bit of caffeine. Warning!!! Taking more caffeine is not better and will not make you lose more weight or fat! You will just stress your adrenal glands and end up suffering from caffeinism. I'm not sure why I felt the need to include this very superficial, partial overview of a complex subject such as

fat cell metabolism. I think it's just the fitness geek in me. Just know this....all YOU have to do is follow the plan.

### **Fat Cell Metabolism-The Unavoidable!**

We all have fat cells and they are important for our bodies to function appropriately. Fat cells play a critical role in our immune system function. There are specific events that can occur in the life cycle of a fat cell. *Lipolysis* is the breakdown of fat in the fat cells to be used as energy. *Lipogenesis* is the formation of new fat in fat cells that occurs from eating way to many processed carbohydrates in particular and not getting enough exercise. *Apoptosis* is the death of a fat cell. And finally *hyperplasia*, which is an increase in the number of fat cells.

The life cycle of a fat cell is unavoidable and is why it is referred to as a futile cycle. The body is constantly breaking down fat for utilization and storing fat for future use. If you are eating more than what your body requires you will store the excess as fat and if you are eating less than what your body requires, your body will look to its fat stores for energy. It's really that simple.

### **Stopping Inflammation - another reason to eat Low Glycemic Foods**

Guys love cars and cars have engines and so do our bodies. Your favorite car has an engine in it and that engine takes fuel to run it so you can go to the places you wanted to see. Well when the engine processes the fuel thru the act of combustion it gives off by-products collectively called emissions. Some of those emissions like water vapor are not so bad, but others like carbon monoxide are, and these emissions destroy the environment in which we live.

Well the trillion or so cells that make up our bodies each have an engine in them and these engines are called mitochondria. Mitochondria take the nutrients from the foods that we eat and in turn, turn it into usable energy for the body. Well, in the process of generating this energy by-products are given off called free radicals. Some of these free radicals play an important role in cleaning up damaged cells in the body and others actually cause destructive processes to take place in the internal environment of our bodies.

Left unchecked these free radicals cause inflammation in the body and this is referred to as oxidative stress. Our bodies require an internal “catalytic converter”, just like in a cars exhaust system, to clean up these dangerous, inflammatory causing free radicals, and they are called antioxidants. Antioxidants clean up the free radicals created by the mitochondria during the production of energy so the mitochondria can continue to produce energy efficiently and keep our bodies healthy. We get these antioxidants from the healthful foods that we eat on a regular basis and by supplementing our diet with vitamins and minerals.

If you have a very poor diet, then you will have a buildup of excess free radicals, and too many free radicals will lead to internal inflammation of the body. When the body becomes overrun with too much inflammation, chronic disease will set in inevitably.

Our bodies have other cleansing mechanisms, which are designed to clean up the waste products in the body, and the liver plays a major role in detoxification of free radicals. But when our bodies systems become overloaded with excessive levels of free radicals from oxidative stress, inflammation sets in and not far behind the inflammation is chronic disease.

### **Insulin Resistance**

Insulin resistance is a condition where the cells in the body become resistant to the effects of insulin. This means higher levels of insulin are needed in order for insulin to have its effect. Now insulin is an amazing hormone with numerous roles but, chronic high levels of insulin in the bloodstream from poor dietary habits is bad. This can lead to different components of metabolic syndrome such as obesity, high blood pressure, high triglycerides, high glucose levels, inflammation, hormone derangement, and accelerated aging.

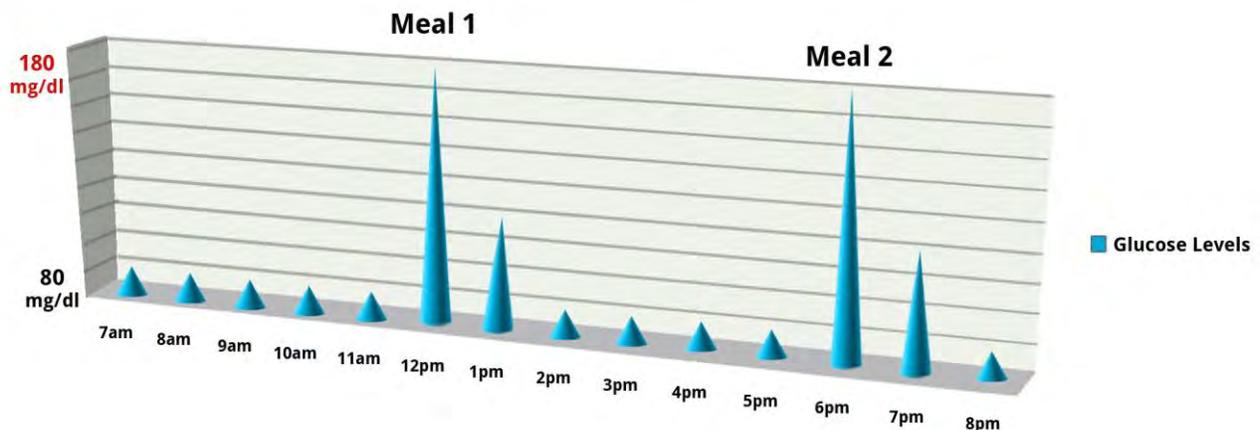
Insulin has multiple important roles in the regulation of our metabolisms one of which is the metabolism of fat. Insulin is primarily under the control of our diet and is easily affected by changing the quality and quantity of the carbohydrates we eat. Insulin levels will be reduced if you simply eat carbs that are lower on the glycemic index or reduce the quantity of the carbs that you eat. By addressing this issue from two different angles: reducing the quantity of starchy carbohydrate to every other day and limiting carbohydrates to vegetable only on the cardio days you can effectively control

insulin and hence control its fat storage property when it is at higher levels in the bloodstream. Appropriate levels of insulin in the body have beneficial anabolic effects.

The major cause of insulin resistance is the lack of exercise and poor dietary habits, especially the consumption of excessive amounts of processed carbohydrates. Remember this, the poorer your dietary habits the more resistant you become to your insulin and your body has to make more insulin in an attempt to control your blood sugars and more insulin means more fat storage, hormone derangement, poorer health, and faster aging!

## HIGH GLYCEMIC FOODS

### Unhealthy Glucose Levels



High glycemic processed foods like; cakes, cookies, candies, chips, bread, increase blood glucose quickly which results in high insulin levels. Because insulin is a "storage" hormone it promotes the absorption of sugar but insulin also inhibits cells from releasing their stores of fatty acids. Fatty acids comprise stored fat tissue. So when you have high insulin levels the body cannot use body fat as a source of energy.

## **WHAT HAPPENS WHEN YOU EAT A HIGH GLYCEMIC FOOD**

- Unpredictable energy
- Food cravings
- Always hungry even though you just ate
- Unusual Fatigue
- Weight gain especially around the midsection

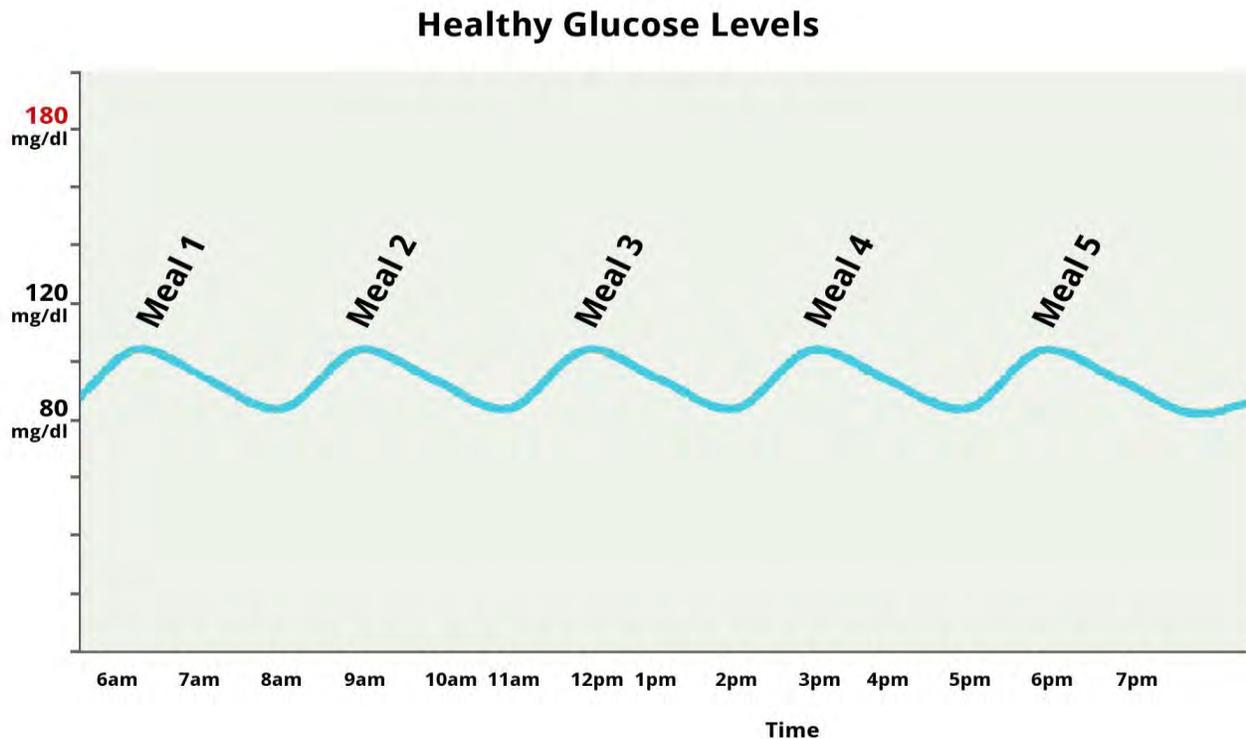
*Now how about a diet that has low amounts of sugar and timed carbohydrates?*

## **LOW GLYCEMIC FOODS**

On the other hand when a low glycemic food is eaten like apples, blueberries, celery, mushrooms, hummus, sweet potato, and quinoa, your blood glucose rises slower which allows the pancreas to release a smaller amount of the storage hormone insulin. Since there is a smaller amount of insulin in the blood stream less glucose is absorbed. Because there are stable insulin levels the body can utilize fat stores more efficiently.

## **WHAT HAPPENS WHEN YOU EAT A LOW GLYCEMIC FRUITS & VEGETABLES**

- High energy levels
- Strong immunity system
- Efficient metabolism
- Healthy Weight
- Optimized hormones
- Increased Growth Hormone



**Healthy frequent meals equal steady state glucose and insulin levels, increased metabolism and decreased cravings. Steady state glucose and insulin levels equal increased fat utilization and decreased fat production.**

### WHILE YOU ARE TRANSITIONING

While you are transitioning to a healthier nutrition lifestyle you will eat minimal “starchy carbohydrates”. (ie: sweet potatoes, squash, brown rice, black beans, quinoa) You will eat protein, healthy fats, and “fibrous carbohydrates”, which have positive effects on blood sugar regulation. At the end of the chapter there are tables of carbohydrates the *carbs with the asterisks do not raise your blood sugars*. These are your “free carbs” that can be eaten at every meal.

Example: 6 scrambled eggs, (protein) 2 cups with a mix of onion, celery, mushroom, spinach, (free carbs) and 1 cup of avocado (healthy fat). The 2 cups of onion, celery, mushroom, and spinach are examples “free fibrous carbohydrate” that has numerous cardiovascular, endocrine, and digestive health benefits that promote healthy blood sugar metabolism. Eat these fibrous, healthy carbs freely.

## HOW MANY CALORIES DO YOU NEED?

**Here is a simple way of calculating your individual energy requirements. There are many formulas and adaptations of formulas. Whether you use this one or one on the Internet, pick one and calculate your specific dietary needs.**

Everybody is different when it comes to the necessary number of calories they require to power their individual bodies. Just follow along here with this simple formula to know your specific nutritional needs. It's that simple. First you need to know your Ideal Body Weight and a very simple way to figure out your Ideal Body Weight is to use the HAMWI Formula for Ideal Body Weight: There are videos explaining the HAMWI formula at <http://bit.ly/afidealbodyweight>

### HAMWI FORMULA FOR IDEAL BODY WEIGHT:

If you are a man:  $106 + 6$  pounds for every inch over 60 inches  
 If you are a woman:  $100 + 5$  pounds for every inch over 60 inches  
 So if you are 5'8" man with a large frame:  $106 + 6 \times 8(48) = 154$  pounds  
 If you have a large frame add 10 %, if you have a small frame subtract 10%  
 So our example has a large frame  $154 \times 10\% = 15.4 + 154 = 169.4$  pounds is his IBW.

Now how many calories do you eat each day? On the days that you do strength training multiple your IBW by 12 and on the days that you do Interval Training multiple your IBW by 10. So:

On the days our example does strength training, multiple IBW by 12 so:  $169 \times 12 = 2028$  calories to consume for the day

On the days our example is doing cardio for exercise, multiple IBW by 10 so:  $169 \times 10 = 1690$  calories to consume for the day.

Now there are 3 main food groups that you will build your nutrition from that are going to build that strong, healthy, fit body you want. Those groups of foods are called macronutrients. And they are Proteins, Carbohydrates and Fats. But how much do you eat of each?

I'm glad you asked because I have an answer for you:

**30% Protein, 15% Carbohydrate and 55% Fat**

OK, now our 5'8" male with an IBW of 169 consumes 2028 calories on the day he does strength training. So,

2028 calories x 30% protein = 608 calories from protein

2028 calories x 15% carbohydrates = 304 calories from carbohydrates

2028 calories x 55% fat = 1115 calories from fats

And 1690 calories on the day he does cardio exercises. So,

1690 calories x 30% protein = 507 calories from protein

1690 calories x 15% carbohydrates = 253 calories from carbohydrates

1690 calories x 55% fat = 930 calories from fats

Now convert your calories into grams because it will be so much easier and you won't have to worry at all about counting calories. It's way easier to add up the grams from nutrition labels. And if you would like to know more one of my favorite sites to get nutrition information is [nutritiondata.com](http://nutritiondata.com).

9 calories per gram of Fat

4 calories per gram of Protein

4 calories per gram of Carbohydrate

Our 5'8" man with an IBW of 169 pounds who eats 2028 calories on Strength Training days needs:

Fat: 1115 calories /9 grams = 124 grams per day

Protein: 608 calories/ 4 grams =152 grams per day

Carbohydrates: 304 calories/4 grams = 76 grams per day

So our 5’8” man with an IBW of 169 pounds who eats 1690 calories on Cardio exercise days needs:

Fat:  $930 \text{ calories} / 9 \text{ grams} = 103 \text{ grams per day}$   
Protein:  $507 \text{ calories} / 4 \text{ grams} = 127 \text{ grams per day}$   
Carbohydrates:  $253 \text{ calories} / 4 \text{ grams} = 63 \text{ grams per day}$

So how many times are we going to eat in in your 8-hour period? Most likely it will be 3 meals.

So we have to divide our total grams we eat each day by 3.  
So our 5’8” man with an IBW of 169 pounds who eats 2028 calories on Strength Training exercise days needs:

Fat:  $1115 \text{ calories} / 9 \text{ grams} = 124 \text{ grams} / 3 = 41 \text{ grams per meal}$   
Protein:  $608 \text{ calories} / 4 \text{ grams} = 152 \text{ grams} / 3 = 51 \text{ grams per meal}$   
Carbohydrates:  $304 \text{ calories} / 4 \text{ grams} = 76 \text{ grams} / 3 = 25 \text{ grams per meal}$

So our 5’8” man with an IBW of 169 pounds who eats 1690 calories on Cardio Exercise days needs:

Fat:  $930 \text{ calories} / 9 \text{ grams} = 103 \text{ grams} / 3 = 34 \text{ grams per meal}$   
Protein:  $507 \text{ calories} / 4 \text{ grams} = 127 \text{ grams} / 3 = 42 \text{ grams per meal}$   
Carbohydrates:  $253 \text{ calories} / 4 \text{ grams} = 63 \text{ grams} / 3 = 21 \text{ grams per meal}$

**CALORIE WORKSHEET****STEP ONE: CALCULATE YOUR IDEAL BODY WEIGHT (IBW)**

106 + 6 x \_\_\_\_\_ inches over 60 inches = \_\_\_\_\_ your Ideal Body Weight in pounds

*\*If you have a large frame add 10%*

*\*If you have a small frame subtract 10%*

Strength training multiply your IBW by 12. \_\_\_\_\_ Your IBW x 12 = \_\_\_\_\_ calories for the day

Interval Training multiply your IBW by 10. \_\_\_\_\_ Your IBW x 10 = \_\_\_\_\_ calories for the day

**STEP TWO: CALCULATE YOUR CALORIES****STRENGTH TRAINING DAYS**

\_\_\_\_\_ Calories x 30% protein = \_\_\_\_\_ calories from protein

\_\_\_\_\_ Calories x 15% carbohydrates = \_\_\_\_\_ calories from carbs

\_\_\_\_\_ Calories x 55% fat = \_\_\_\_\_ calories from fats

**INTERVAL TRAINING /CARDIO/OFF DAYS**

\_\_\_\_\_ Calories x 30% protein = \_\_\_\_\_ calories from protein

\_\_\_\_\_ Calories x 15% carbohydrates = \_\_\_\_\_ calories from carbs

\_\_\_\_\_ Calories x 55% fat = \_\_\_\_\_ calories from fats

**STEP THREE: NOW CONVERT YOUR CALORIES INTO GRAMS**

**STRENGTH TRAINING DAYS**

Fat \_\_\_\_\_ calories /9 grams = \_\_\_\_\_ grams per day  
Protein \_\_\_\_\_ calories/ 4 grams = \_\_\_\_\_grams per day  
Carbohydrates \_\_\_\_\_ calories/4 grams = \_\_\_\_\_grams per day

**INTERVAL TRAINING /CARDIO/OFF DAYS**

Fat \_\_\_\_\_ calories /9 grams = \_\_\_\_\_ grams per day  
Protein \_\_\_\_\_ calories/ 4 grams = \_\_\_\_\_grams per day  
Carbohydrates \_\_\_\_\_ calories/4 grams = \_\_\_\_\_grams per day

**STEP FOUR: CALCULATE YOUR GRAMS PER MEAL**

**STRENGTH TRAINING DAYS**

Fat \_\_\_\_\_ calories /9 grams = \_\_\_\_\_grams/3 = \_\_\_\_\_grams per meal  
Protein \_\_\_\_\_ calories/ 4 grams = \_\_\_\_\_grams/3 = \_\_\_\_\_grams per meal  
Carbohydrates \_\_\_\_\_ calories/4 grams = \_\_\_\_\_grams/3 = \_\_\_\_\_grams per meal

**INTERVAL TRAINING /CARDIO/OFF DAYS**

Fat \_\_\_\_\_ calories /9 grams = \_\_\_\_\_grams/3 = \_\_\_\_\_grams per meal  
Protein \_\_\_\_\_ calories/ 4 grams = \_\_\_\_\_grams/3 = \_\_\_\_\_grams per meal  
Carbohydrates \_\_\_\_\_ calories/4 grams = \_\_\_\_\_grams/3 = \_\_\_\_\_grams per meal

**STEP FIVE: STARTING THE TRANSITION****STRENGTH TRAINING DAYS:**

Do not eat more than 100 grams of starchy carbohydrates out of you total carbs

**INTERVAL TRAINING /CARDIO/OFF DAYS:**

Do not eat more than 50 grams of starchy carbohydrates out of you total

**STEP SIX: AFTER TRANSITION****STRENGTH TRAINING DAYS:**

Do not eat more than 200 grams of starchy carbohydrates out of you total

**INTERVAL TRAINING /CARDIO/OFF DAYS:**

Do not eat more than 100 grams of starchy carbohydrates out of you total

**Sample Meal Plan**Training Day

Breakfast: 6 scrambled eggs, (protein), 2 cups with a mix of onion, celery, mushroom, spinach, (free carbs) and 1 cup of avocado (healthy fat).

Lunch: 6 oz. of Beef Teriyaki (protein), 2 cups of Brussels sprouts and ½ cup of raw almonds (healthy fat).

*EXERCISE: 2 scoop of whey protein before workout*

Dinner: 5 oz. of grilled chicken breast, 12 asparagus spears light dressed with olive oil and sea salt, 1-cup sweet potato (starchy carb).

Evening Snack: 2 hardboiled eggs

***Note Well: I eat all my starchy carbs after I exercise. “Back loading starchy carbs” to glycogen load my muscles. This keeps me low glycemic the entire day, optimizing hormone balance and ensuring I replenish muscle glycogen without increasing insulin dramatically.***

### Non-Training Day

Breakfast: 6 scrambled eggs, (protein), 2 cups with a mix of onion, celery, mushroom, spinach, (free carbs) and 1 cup of avocado (healthy fat).

Lunch: 6 oz. grilled tilapia (protein), 2 cups of lightly steamed Brussels sprouts, (free carbs) and ¼ cup of almonds

*EXERCISE: Afternoon 20 minute walk*

Dinner: 5 oz. grass fed beef (protein), 2 cups of lightly steamed broccoli/cauliflower mix (free carbs), 1-cup avocado (healthy fat) and ½ cup sweet potato (starchy carb).

### **LESS IS MORE**

Our ancestors ate nutrient-dense and calorie light foods such as fruits, vegetables, lean meats, and essential fats, with no refined or processed fats or simple carbohydrates. Human beings ate from what the earth provided. If it grew from the ground, fell from a tree, swam in a river, or ran through the woods, we killed it and we ate it.

Our DNA is of ancient design, unchanged over thousands of years, and modern food over the last 80 years has destroyed the health of generations. The rates of heart attacks, type II diabetes, obesity, strokes, hypertension, and gastrointestinal disorders in this country continue to explode. Adopting these healthful behaviors will drastically reduce the risks for all of these conditions.

**SMART TIPS**

- Eat organic
- Eat free range and grass fed
- Avoid foods that are genetically modified
- Avoid artificial additives and preservatives.
- Consume foods from the earth not from a box
- Avoid foods stored in plastics
- Eat wild fish not farm raised
- Use Ezekiel bread over white bread
- Consume Natural peanut, almond, or cashew butter
- Limit portions to 6 ounces
- Eat your vegetables raw or steamed
- Choose low glycemic fruits like apples and berries
- Eat walnuts which are loaded with omega 3
- Consume avocado
- Eat olives
- Use extra virgin olive oil
- Use coconut oil
- Drink plenty of water
- Avoid artificial sweeteners
- Drink a full glass of water before you eat
- If you think you are hungry, drink water first you may just be thirsty
- Eat when you are hungry, stop when you are no longer hungry

## Fuel for Your Body: Understanding the Macronutrients

First, I am going to discuss the macronutrients. These are the fuel for your body—eating the right portions of each macronutrient group will help you lose weight and maintain a healthy, active, lean body and optimize your hormones.

### Proteins

The first macronutrient food group that I am going to talk about is proteins. I am not going to bore you with the things that happen to proteins when they are digested and how they fuel your body. Here are the important points. Proteins are the building blocks for tissue and proper immune function. Proteins are made up of amino acids. Some amino acids are called essential amino acids because the body requires them. Amino acids are the primary building blocks for new tissues in the body. Amino acids also enable vitamins to play a key role in the regulation of the body. Sources of complete proteins are eggs, turkey, beef, chicken, and fish. Eggs provide the optimal mixture of essential amino acids. Also, if one eats a variety of fruits, vegetables, and grains, all of the essential amino acids can be consumed.

### Proteins

<b>Salmon</b>	<b>Swordfish</b>	<b>Duck</b>	<b>Lamb</b>
<b>Shrimp</b>	<b>Sardines</b>	<b>Pheasant</b>	<b>Egg Whites</b>
<b>Flounder</b>	<b>Tilapia</b>	<b>Greek Yogurt</b>	<b>Almond Butter</b>
<b>Sole</b>	<b>Grouper</b>	<b>Liver</b>	<b>Filet</b>
<b>Trout</b>	<b>Sea Bass</b>	<b>Turkey</b>	<b>Rabbit</b>
<b>Tuna</b>	<b>Bison</b>	<b>Chicken</b>	<b>Veal</b>

### Carbohydrates

The second macronutrient group is carbohydrates. Experts are always in disagreement as to how many carbohydrates should be consumed, but they are in agreement about one thing— carbohydrates are important fuel for your body if you are going to maintain an active healthy lifestyle. They help maintain protein in the body and help your central nervous system function properly. Not eating healthy carbohydrates will be detrimental to your goal of optimizing your hormones and will prevent your workouts from being productive.

Learning about carbohydrates can be confusing—there are just so many different kinds. They can be divided into simple versus complex, natural versus refined, starchy versus vegetable, slow versus fast and high glycemic index versus low glycemic index. But we are not going to worry about all these subcategories of carbohydrates. You do not need to understand all of that to make healthful choices.

First, let me discuss the carbohydrates that you must absolutely avoid to lose fat and optimize your hormones. These are man-made, refined carbohydrates. What are manmade, refined carbohydrates? Things like flour, chips, cakes, cookies, candies, crackers, bagels, pretzels, white bread, sugar, and syrup in all its forms (corn, maple, rice, brown, white, confectioners). After consuming refined carbohydrates, there is a large blood glucose surge. This leads to high levels of insulin, high levels of fat in the blood stream, and increased production of fat. Frequently eating refined carbohydrates decreases the body's response to insulin and the body's tissues become resistant to the positive effects of insulin. This results in the body requiring more and more insulin to control the consistently high blood sugar levels.

When the body can no longer make enough insulin to control the blood sugar, you get type 2 (insulin resistant) diabetes.

Conversely, fiber-rich carbohydrates, such as those in fruits, grains, and vegetables create lower blood glucose and insulin response and lower fat levels. These carbohydrates allow for the positive effects of insulin to occur, significantly decreasing the chances for weight gain.

Every meal should contain either a vegetable or fruit carbohydrate. When it comes to vegetable carbohydrates, the greener the better. For fruit carbohydrates, bear in mind that all fresh fruit is healthful, however keeping to the low sugar fruits like blueberries, raspberries, blackberries, strawberries, and apples will significantly improve your blood sugar levels.

Look at the chart below for examples from each of the three healthful carbohydrate categories:

<b>Vegetable Carbohydrates</b>	<b>Starchy Carbohydrates</b>	<b>Fruit Carbohydrates</b>
<b>Asparagus</b>	<i>Beans (navy, kidney, great northern, black pinto)</i>	<i>Apples</i>
<b>Artichokes</b>	<i>Breads (whole grain, Ezekiel, wheat)</i>	<i>Banana</i>
<b>Broccoli</b>	<i>Potatoes (red, white)</i>	<i>All berries (blueberries, raspberries, strawberries)</i>
<b>Lettuce (herb mix, baby leaf, romaine, Italian mix)</b>	<i>Rice (brown), rice &amp; quinoa cereal, quinoa</i>	<i>All melons</i>
<b>Swiss chard</b>	<i>Yams or sweet potato</i>	<i>Dates</i>
<b>Mushrooms</b>	<i>Corn</i>	<i>Figs</i>
<b>Peppers (green, yellow, red)</b>	<i>Oatmeal (steel cut)</i>	<i>Grapes</i>
<b>Peas</b>	<i>Cream of wheat</i>	<i>Grapefruit</i>
<b>Tomatoes</b>	<i>Tortilla (gluten free)</i>	<i>Oranges</i>
<b>Spinach</b>	<i>Pastas (wheat &amp; egg)</i>	<i>Pears</i>
<b>Zucchini</b>	<i>Red river hot cereal</i>	<i>Pineapple</i>
<b>Celery</b>	<i>Popcorn</i>	<i>Raisins</i>
<b>Cucumber</b>	<i>Squash (acorn, butternut)</i>	<i>Plums</i>
<b>Fennel</b>	<i>Hummus</i>	<i>Apricots</i>
<b>Cauliflower</b>		

## **A-OK Fats for Life**

Patients often ask me which fats are ok for their diet. I like to keep it simple and I have 3 fats that I really like and my body responds well to and they are easy to remember.

**A-OK**, avocados, olive oil, and nuts. I know the “k” in nuts is silent. My 3 favorite nuts are almonds, walnuts, and pistachios. All of these fats are referred to as MUFAs or monounsaturated fats. These fats are found in a variety of plants, oils and nuts and are known to improve blood cholesterol and blood sugar levels, which improves circulation and can decrease your risk for heart disease and even cancers.

**Avocados**-are one I consider to be super foods that are versatile to use and taste great. Avocados contain a MUFA known as oleic acid, which is known to lower cholesterol, improve circulation, decrease heart attacks, decrease blood pressure, protect from strokes and are helpful in cancer protection. Avocados are full of vitamins, minerals, and antioxidants. My favorite way to have avocados is with scrambled eggs in the morning, but they are easy to add to any dish that you like and a great way to get your healthy fat for the day.

**Olive Oil**-This smooth flavorful monounsaturated oil contains a wide variety of antioxidants that are beneficial to your overall health. There is a large body of clinical evidence that the regular consumption of olive oil, 2 tablespoons a day, offers significant heart health benefits, decreased cholesterol, anti-clotting, anti-inflammatory and anti-hypertensive benefits. Something the Sicilians must already know! On my last trip to Sicily I saw a table of 90 year old plus men drinking olive oil and eating tangerines with black pepper. They must know something. I like to add olive oil to my protein drinks and use it as salad dressing. 2 tablespoons of extra virgin olive oil, half a fresh squeezed lemon, a clove of crushed garlic, and Italian spices and then whisk with a fork and Voila! Pour on top off some freshly stemmed vegetables, add to mashed cauliflower or use it on a salad.

**“K” Nuts**-Almonds, walnuts, and pistachios are at the top of my list of ways to get healthy fat. It is sufficiently and heavily documented that a diet, which includes these crunchy little powerhouses, makes it easier to lose weight and keep it off. Nuts are loaded with vitamins, minerals, and antioxidants. They are best consumed in their raw and natural state, so remember, no more than a handful at a time.

**Healthy Fats:**

- Almonds
- Pistachios
- Walnuts
- Olives (non-pitted)
- Olive oil, extra virgin
- Fish & Fish Oil
- Avocado
- Dr. Rob's salad dressing (2 tbsp. olive oil, crushed garlic, Italia seasoning, lemon and wisk)

There is another healthful fat referred to as PUFAs or polyunsaturated fats and these are also found in a variety of oils and plants. There is one in particular, called omega-3-fatty acids, an essential fatty acid, that is especially beneficial to your heart and is found in fatty fish like salmon, sardines, and walnuts. If you do not like eating these particular foods then supplementing with an omega-3-fatty acid is very beneficial. Omega-3-fatty acids are also cardio protective by decreasing cholesterol, decreasing inflammation in blood vessels therefore decreasing plaque buildup, decrease blood clotting and decreasing overall body inflammation. Another important benefit to having a diet with plenty of omega-3-fatty acids is that it has been numerously documented that a diet rich in omega-3-fatty acids creates an environment idea for weight loss and hormone balance.

***Remember This: "YOU CAN NOT OUT TRAIN POOR DIETARY HABITS."***

**What's this glycemic index?**

The glycemic index is a scale that measures the effects of food on blood sugar levels. Glucose is the base number of the index with a value of 100. Carbohydrates are given a numerical value relative to glucose on how fast they are broken down into glucose and moved into the bloodstream. The higher the number the faster it moves into the bloodstream and the lower the number the slower it moves into the bloodstream. A Dr. Jenkins from the University of Toronto developed this concept in the early 80's to help understand which foods were best for people with diabetes to eat. The body building community and health care professionals to manipulate fat loss has since used it widely. The hormonal concept is that when blood sugar is kept stable then insulin levels are stable. Insulin is a storage hormone that when high encourages the storage of fat in the fat cells. Stable insulin levels mean more energy and fewer cravings, which mean fat weight loss.

Foods with a high glycemic index, which is 70 and above are white bread, many breakfast cereals and white rice. Medium glycemic index carbohydrates, which are between 56-69, are sweet potatoes, basmati rice and whole-wheat products like pastas, bagels and more. Low glycemic foods are the majority of fruits and vegetables, oatmeal, brown rice, nuts, and legumes.

The majority of foods in the tables at the end of the chapter are low glycemic carbohydrates for this very reason. Maintaining stable insulin and blood glucose levels will lead to long-term success. There are times when I do utilize high glycemic carbohydrates like after a period of fasting prior to a workout to “frontload” carbs or after a particularly aggressive workout, like an endurance leg workout, when “back-loading” carbs is necessary to immediately shuttle nutrients into waiting muscle to promote growth and recovery.

## **TWO WINDOWS OF OPPORTUNITY**

There are two major windows of opportunity to feed your body. It is crucial to take full advantage of these times to care for your body. First is BREAKFAST and it literally means, “to break the fast”. Your body has rested for the night and is primed and ready to be fed. But we are going to wait until 10am-12noon to eat to maintain our 16-18 hour fasting period. Feed it and feed it well. BREAKFAST IS THE FIRST IMPORTANT MEAL OF THE DAY; it’s just that we wait to eat it!

The second most important meal of the day is in the hour immediately following your workout. Your body is primed again and ready to be fed within that golden hour after exercise. I like to use whey protein powder shakes right after exercise to feed my body. Whey protein is assimilated by the body at a faster rate, than casein protein powder.

## **CARBOHYDRATES ARE BEST AFTER EXERCISE (Back loading Carbohydrates)**

***“Adrenaline, which is released during exercise from the adrenal glands and terminal nerve endings, remains active for approximately one hour post-exercise and suppresses insulin. This creates a one-hour time frame when starchy carbohydrates can be readily absorbed to replenish muscle glycogen without increasing insulin.”***

## Spice for Flavor & Anti-inflammatory Properties

Just because you are eating healthy, doesn’t mean it has to be boring. Spices are a great way to add flavor and help your body stay lean and trim. Here are **10** great ways to spice up your life and lose inches from your waist!

1. **Cinnamon**-the powerful antioxidants found in this sweet with heat spice help to keep blood sugar and your energy levels consistent. Add this to your morning oatmeal.
2. **Cayenne**-this fiery spice contains capsaicin, which helps to improve insulin sensitivity. Add this to your fish, chicken or vegetables.
3. **Coriander**-this lemony spice has a sedative effect that can help with insomnia and anxiety. Add this to any meat, chicken or fish.
4. **Ginger powder**-this tangy spice has anti-inflammatory properties that can aid sore muscles. Try adding this to vegetables sautéed in olive oil or ginger tea.
5. **Paprika**-this smoky hot spice has vitamin A in it, which aids in vision, immunity and bone growth. Try adding this to your eggs, chicken or fish.
6. **Chili Powder**-this fiery spice can help to decrease your appetite. Add this one to whatever you like!
7. **Curry Powder**-sweet tasting; curry has antioxidant properties that may help to reduce coronary artery disease. Add this to fish, chicken, shrimp, or beef.
8. **Saffron**-this red, slightly bitter spice may help to decrease PMS. Use this spice with chicken or lighter fish, like tilapia.
9. **Nutmeg**-this sweet spice contains myristicin that is known to help fight infections. Use this spice on top of butternut or acorn squash.
10. **Fennel**-this spice is one of my favorites! It has a licorice flavor. I prefer to use fresh fennel and slice it and grill it with olive oil. You can also make a fantastic sauce for pasta. Fennel aids in digestion and helps to freshen your breath. Here is my recipe; heat up 2 tablespoons of olive oil, add 2 cloves of chopped garlic and one finely chopped fennel bulb, add a little sea salt and black pepper. Top on a fine, long pasta and Voila!

## The Importance of Supplementation

Everyone needs a good multivitamin and mineral supplement daily. The use of a multivitamin and mineral formula has the benefit of increasing your micronutrient profile by almost 40%. Vitamins are required by the body and are found in foods. Regardless of how healthful you try to eat supplementation with vitamins is required to obtain optimum health. Minerals are elements that come from the earth and must be ingested, as any living organism does not make them. An inadequate intake of the essential vitamins and minerals may increase the risk for cancer and other disease states.

The National Foundation for cancer research has stated that an inadequate intake of the essential vitamins and minerals may increase the risk for cancer. Their data has indicated that deficiencies in nutritional factors may contribute upwards of 60% of the cancer cases in the world today.

I highly recommend the daily use of vitamins and minerals. I encourage you to do your own research on this topic. I have found in my experience that the best formulations are found with small manufacturers of multivitamins and minerals.

*Nearly all of the supplements and Lifestyle Medicine Programs listed in this chapter are available at <http://www.alphamaleinstitute.com/the-alpha-male-store/>*

**\* These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.**

## **SUPPLEMENTS**

### **Citrus bioflavonoid complex**

A large group of anti-oxidants found in citrus fruits that are sometimes referred to as Vitamin P. Citrus bioflavonoids are essential for the effective utilization of Vitamin C by the body. They are believed to have anti-inflammatory, anti-viral and anti-allergy properties.

### **Bilberry fruit extract**

Bilberry fruit contains high concentrations of tannins, which are substances that act as an anti-inflammatory. This fruit also contains flavonoid compounds called anthocyanin, which have anti-oxidant properties. Anthocyanin helps to build strong capillaries and improve circulation throughout the body. The bilberry fruit has been associated with the care and treatment of atherosclerosis, cataracts, diabetes, diarrhea, and vision disorders

### **Broccoli sprout extract**

Broccoli sprouts contain a substance called sulforaphane. This substance is known to have anti-bacterial and anti-cancer properties. It can be found in cruciferous vegetables such as cauliflower, broccoli, cabbage, brussel sprouts and radish. Studies show that a diet rich in these cruciferous vegetables are beneficial to your health. Benefits of this extract include helping the body rid itself of toxins, alleviate allergy and asthma symptoms, boost the immune system, protect the skin from UV damage, and help reduce the risk of bladder, prostate and stomach cancer.

### **Chromium**

Chromium is a team player with other elements to keep our metabolism running efficiently. It is estimated that the majority of Americans only get about half of what is needed. Chromium is needed to help maintain normal blood sugar.

## **Manganese**

Manganese is a mineral element that plays an important role in numerous physiologic processes. Manganese plays a role in metabolism, bone development, wound healing and as the principal antioxidant in mitochondria. Insufficient levels of manganese have been associated with osteoporosis, glucose intolerance and epilepsy.

## **Iodine**

Iodine is a non-metallic trace element that is required by the human body for proper synthesis of thyroid hormones. Deficiency of iodine can lead to hypothyroidism, goiter, fatigue, weight gain, cold intolerance, and constipation.

## **Vanadium**

Vanadium is a trace mineral that is essential for maintaining a healthy body. Vanadium works in concert with molybdenum. Intriguing studies indicate that vanadium may help to normalize blood glucose levels, lower blood pressure, and enhance athletic performance. There are also studies that suggest that vanadium may help individuals with bipolar disorder.

## **Inositol**

Inositol plays an important role in the body as it helps the nervous system to function. While it is not essential to the human diet, it helps to maintain cell membranes of highly specialized cells such as in the brain, eyes, bone marrow and intestines. Inositol helps to promote hair growth and may also have a role as an anticancer agent. People who drink caffeine or take numerous antibiotics may have an increased need for inositol because both these interfere with its effectiveness.

## **Selenium**

Selenium is a trace element that is essential in small amounts. Selenium deficiency has been associated with an impaired immune system and increase progression of viral disease. There is a great deal of evidence that selenium reduces the incidence of cancer and that deficiency of selenium is associated with an increase in prostate and lung cancer.

## **Magnesium**

Magnesium is involved in well over 300 metabolic reactions in the human body. Over 60% of the magnesium in the body is found in the skeleton and about 30% found in the muscle. Magnesium plays an important function in energy production, synthesis of molecules, cell signaling, iron transport, cell migration, and nutrient interactions. Deficiency in healthy individuals who are eating a healthy diet is rare as magnesium is abundant in both plant and animal sources. Magnesium can help to prevent hypertension, cardiovascular disease, osteoporosis, diabetes, migraines, asthma, and vascular disorders.

## **Zinc**

Zinc is an essential element for all forms of life. Zinc plays an important role in the structure of proteins and cell membranes. Numerous aspects of cellular metabolism are zinc dependent. Zinc plays a significant role in growth and development, neurologic function, immune response, testosterone production and reproduction.

## **Calcium**

Calcium is the most common mineral in the human body. About 99% of calcium is found in the bones and teeth. Calcium is the major structural element in both bones and teeth. Calcium may help to prevent colorectal cancers, osteoporosis, hypertension, and premenstrual syndrome. Individuals with diets that have sufficient calcium intake are associated with a reduced incidence of being overweight.

## **Biotin**

Biotin is a water-soluble vitamin that is required for enzymatic function in the human body. Deficiency is rare unless an individual is receiving parenteral feedings without biotin and in individuals who consume raw egg whites. Adequate biotin helps to prevent birth defects, diabetes, hair loss, and brittle fingernails.

## **Riboflavin**

Riboflavin is a water-soluble B vitamin, also known as vitamin B2. Riboflavin also has oxidation-reduction (redox) functions, antioxidant functions, and nutrient interactions.

## **Vitamin B12**

Vitamin B12 has the largest and most complex structure of all the vitamins. Methylcobalamin is required for the folate dependent enzyme, methionine synthase. This enzyme is required for the synthesis of the amino acid, methionine, from homocysteine. Inadequate function of this is associated with an increased risk of cardiovascular disease. Vitamin B12 deficiency affects 10-15% of people over the age of 60. Absorption of vitamin B12 from food sources requires normal function of the stomach, pancreas, and small intestine. Symptoms of vitamin B12 deficiency include megaloblastic anemia, neurologic symptoms, gastrointestinal symptoms, cardiovascular disease, dementia, Alzheimer's disease, increase incidence of breast cancer, and depression.

## **Vitamin B6**

Vitamin B6 must be obtained from the food as humans cannot synthesize it. Vitamin B6 plays a vital role in over 100 enzymatic reactions. It is necessary for nervous system function, red blood cell formation and function, niacin formation, hormone function, and nucleic acid synthesis. Vitamin B6 helps to prevent cardiovascular disease, improve immune function, and cognitive function.

## **Niacin B3**

Niacin is a water-soluble vitamin (also known as nicotinic acid or vitamin B3). Living organisms derive most of their energy from oxidation-reduction reactions (redox), which is a process involving the transfer of electrons. As many as 200 enzymes require the niacin coenzymes for redox-reactions. Niacin deficiency can result in pellagra, increased incidence of cancer, diabetes, cardiovascular disease, and high cholesterol.

## **Thiamin**

Thiamin is a water-soluble B vitamin, aka (vitamin B1 or thiamine). Thiamin is necessary for enzymatic function. Deficiency of thiamin can lead to beriberi. Thiamin helps to prevent cataracts, Alzheimer's disease, congestive heart failure, and cancer.

## **Vitamin K**

Vitamin K is a fat-soluble vitamin. Vitamin K is essential for the functioning of several proteins involved in blood clotting. Although vitamin K is a fat-soluble vitamin, the body store very little of it, and its stores are rapidly depleted without regular intake. Vitamin K is also important in bone mineralization, cell growth, osteoporosis, and cardiovascular disease.

## **Vitamin D**

Vitamin D is a fat-soluble vitamin that is essential for maintaining normal calcium metabolism. Vitamin-D3 can be synthesized in humans by the skin by exposure to sunlight, or it can be obtained through diet. Vitamin D is also important for cell differentiation, immunity, insulin secretion, and blood pressure regulation. Deficiency of Vitamin D can lead to rickets, osteoporosis, osteomalacia, muscle weakness, colorectal cancer, breast cancer, depression, and pain.

## **Vitamin C**

Vitamin C, also known as ascorbic acid, is a water-soluble vitamin. Humans do not make vitamin C, so we must consume it. Vitamin C is necessary for the synthesis of collagen. Collagen is an important structural component of blood vessels, ligaments, tendons, and bone. Vitamin C also plays an important role in the synthesis of norepinephrine. A neurotransmitter that is critical to brain function. Vitamin C is required for the synthesis of carnitine, which is essential for the transport of fat into cellular organelles called mitochondria, where fat is converted into energy. Vitamin C is a highly effective antioxidant. Vitamin C deficiency can cause scurvy. Vitamin C helps to prevent coronary heart disease, strokes, cancer, cataracts, gout, hypertension, diabetes, and helps to bolster the immune system.

## **Copper**

Although copper is an essential trace element, supplementation is unnecessary as copper is found extensively in a wide variety of foods. The average dietary intake of copper on a daily basis exceeds the recommended dietary intake. There are studies that indicate that excess copper is associated with a decreased immune function, lower antioxidant status, increased atherosclerosis, and mental decline.

**Folic acid**

There is disturbing evidence that excess folic acid supplementation may encourage tumor growth. Folate is found naturally in grains, fruits, and vegetables, and in its natural state is of no concern and the preferred way of intake. There is sufficient folic acid added to numerous products that in combination with supplementation an individual can easily exceed the daily-recommended allowance.

**Iron**

While iron is an essential element, it is potentially toxic. Accidental iron overdose is the single largest cause of poisoning fatalities in children. Iron supplementation only needs to occur in a deficient state. Individuals at increased risk of iron deficiency are those with; chronic blood loss, pregnant, celiac disease, h. pylori infection, gastric bypass, strict vegetarians, and those who engage in regular intense exercise. It is recommended to have your iron levels checked to see if supplementation is necessary.

**Beta Carotene and Vitamin A**

Beta-carotene is the precursor to vitamin A. There is research to suggest that in excess it may increase the risk of cancer. The problem is believed to result when beta-carotene is ingested without other carotenoids that are present if it is ingested as real food. Once again, eat your fruits and vegetables. A person that is eating a reasonably healthy diet will be converting beta-carotene to vitamin A and as such supplementation is unnecessary. Vitamin A in excess is toxic to the liver and increases the risk of hip fracture.

Here is my list of the most important supplementation I believe every individual should be using on a regular basis to optimize their health. As we age and our nutritional habits and exercise choices change so does our additional supplementation requirement. But below is the basic daily supplementation I use daily regardless of my current exercise plan.

- Phyto-Multivitamin and Mineral Supplement
- Omega 3 Essential Fatty Acids purified and mercury free
- Ubiquinol/CoQ10
- Resveratrol
- Beverly International Quadracarn (a carnitine supplement)
- Vitamin D3 liquid 5000IU

I highly recommend discussing this supplementation list with your physician so you can tailor your supplementation needs to meet your nutritional requirements. Here is a list of additional herbal remedies and supplementation to utilize to optimize your health:

### **Ashwagandha**

This Indian herb is a commonly used stress reducer and immune booster or adaptogen. The recommended dose is 150mg once or twice a day.

### **Capsaicin**

This is an extract of cayenne pepper and can be used to reduce cholesterol and lower blood pressure, but is often used as a topical painkiller for arthritis. The supplement dose is measured in heat units.

### **Cinnamon**

Recent studies have found cinnamon to be a potent aid in normalizing blood sugar in people with diabetes at doses of 1 to 2 grams. It can be taken as a supplement in capsule form.

## **Cocoa**

My favorite of antioxidants! I like to use dark chocolate greater than 60% cocoa and limit to one ounce daily.

## **Bromelain**

Bromelain is the most well-known anti-inflammatory enzyme. It is found in pineapple stems and helps in many inflammatory problems such as asthma, arthritis, and colitis. The dose is about 600 mg a day taken three times daily.

## **Fenugreek**

Fenugreek can significantly lower blood sugar and blood fats. For people who have significant sugar problems, this can be a helpful herb.

## **Molybdenum**

Molybdenum is a trace element that is found in several tissues of the body and is necessary for certain enzymatic activities to occur.

## **Ginger**

This is another great addition to your day. I like to put it fresh ginger in my water. It can help thin the blood, lower cholesterol, and prevent nausea as well as act as a potent anti-inflammatory. Use fresh ginger in cooking or take ginger two to four 500mg capsules per day.

## **Ginseng**

Panax ginseng-Chinese or Korean

Panax quinquefolius-American ginseng

There is some evidence that ginseng may help regulate insulin and blood sugar, and enhance immunity and adrenal function, as well as improve your ability to cope with stress. Take 200mg twice daily.

## **Green tea**

This everyday beverage in china contains a class of compounds called polyphenols that boost liver detoxification and reduce cholesterol, inflammation, and oxidative stress, and can help prevent cancer and heart disease. Green tea is also thermogenic and may help increase metabolism and help with weight loss.

## **Milk thistle**

Milk thistle is sometimes used as a natural treatment for liver problems. These liver problems include cirrhosis, jaundice, hepatitis, and gallbladder disorders and to boost glutathione levels. Milk thistle may help to lower cholesterol and help with insulin resistance. Milk thistle may however mimic the effects of estrogen and if you are allergic to ragweed you may want to avoid its use.

Milk thistle is also known as silymarin. This is an old herbal remedy for liver disease that has been shown in controlled studies to improve liver function in people with alcoholic and infectious hepatitis. It works by increasing the synthesis of glutathione as an antioxidant and by increasing the rate of liver tissue regeneration. The standard dose is 70 to 210mg a day.

## **Quercetin**

This potent plant bioflavonoid from onions and garlic and fruit has anti-inflammatory and antihistamine properties. In part it acts by preventing the release of histamine from mast cells and can help with food and environmental allergies.

## **Rhodiola**

This relative newcomer to the herbal world of adaptogens is called Arctic root. It has few side effects and gently boosts energy and increases your resistance to stress.

## **Turmeric**

This is the yellow spice commonly found in curry or yellow rice. It can be a powerful ally against inflammation and oxidative stress, useful in many inflammatory conditions.

### **Acetyl L-carnitine**

This is another important amino acid that helps transport fat into the mitochondria for use. It has been shown to help prevent damage and improve the activity of mitochondria in aging. My favorite combination of carnitine is Beverly International's Quadracarn.

### **Alpha lipoic acid**

Alpha lipoic acid is a powerful antioxidant and metabolic booster that has been shown to reduce blood sugar and prevent diabetic complications. It helps recycle the antioxidants, including vitamin C, E, and beta-carotene, making them more available to combat free radicals and help the body make more glutathione.

### **L-arginine**

An essential amino acid that helps to dilate arteries, improves blood flow, and lowers blood pressure by increasing the body's natural production of nitric oxide. This increases the body's energy, strength, and endurance and may improve insulin resistance. Combined this with **Pycnogenol** which is French maritime pine bark which increases the body's natural production of nitric oxide and you have a potent combination that increases sexual function. ***If you are using nitroglycerin this combination of supplements can induce low blood pressure. Please discuss with your Doctor before taking!***

### **Aspartic acid combined with magnesium**

A dose of 400mg a day to help boost energy production in the mitochondria.

### **B Complex vitamins**

Your need for B vitamins increases with every kind of stress. B vitamins help us improve the metabolism of stress hormones so we can process them. They are part of your basic multivitamin. However, some individuals require additional supplementation.

## **Coenzyme Q10**

CoQ10 is a part of a critical step in the mitochondria involved in energy production, and helps boost metabolism. It also acts as an antioxidant. People who take the class of cholesterol-lowering drugs called statins deplete their CoQ10 levels because the same step in the body that produces cholesterol also produces CoQ10. In Parkinson's disease toxins damage the mitochondria. CoQ10 has been shown to slow or stop the progression of Parkinson's when given in high dosed (1200mg a day), without any side effects. It is my opinion that everyone over 40 should be taking CoQ10.

## **Creatine Powder or Chews**

Creatine is another amino acid used for energy production in the mitochondria. It is commonly used by body builders to increase muscle mass. It can be used to build muscle and improve stamina and help your mitochondria produce energy. I personally use the chews, as they are not as gritty as the powder.

## **D-Ribose**

This sugar is the raw material for energy production and the creation of ATP in the cells. It helps your mitochondria generate more energy along with carnitine and COQ10 and magnesium.

## **Vitamin C**

We have no ability to increase our vitamin C production like most mammals can under stress. Taking extra vitamin C helps support your adrenal glands and your immune system during stress. There has also been good evidence that those with higher vitamin C levels excrete heavy metals such as lead and mercury easier. High doses of vitamin C can cause loose stools, if this occurs, stop the vitamin C.

## **GLA or gamma linolenic acid**

This is one of the good and essential omega-6 fats that our body can't produce. It is helpful in reducing inflammation and can help lower blood pressure and cholesterol, as well as improve fat metabolism in people with diabetes. Taking one or two grams of GLA is a good way to get these essential fatty acids.

### **Glucomannan or konjac root fiber**

This is the super fiber that is very viscous and soaks up fat, sugar, and water in the gut and reduces the overall glycemic load of any meal you eat. I have found this a powerful and safe way to promote weight loss, lower blood sugar and cholesterol.

### **Magnesium**

Magnesium is relaxation mineral. When we are stressed more magnesium is excreted in our urine. If we are deficient in magnesium we get headaches, constipation, palpitations, muscle cramps, and can become irritable. If you tend to be constipated, use magnesium citrate 150mg once to twice a day. If you have a sensitive stomach like me, use magnesium glycinate 150mg once a day.

### **N-acetylcysteine (NAC)**

This amino acid-derived, sulphur-containing molecule is a key part of the way the body manufactures glutathione. Glutathione is produced by the liver and is the body's super hero recycling antioxidant. All toxins stick to glutathione to be removed from the body. In fact, it is used in emergency rooms to treat acetaminophen overdose and liver failure, and to prevent kidney failure for patients in hospitals getting X-rays or angiograms using dye, which can damage the kidneys. Taking this supplement can boost the body's own glutathione, which is one of the critical antioxidants that protect the mitochondria. N-acetyl cysteine can be used for detoxing heavy metals such as mercury and lead.

### **Probiotics**

Use probiotic supplements, which include lactobacillus acidophilus, lactobacillus rhamnosis, and bifidobacteria. By restoring the normal gut flora they reduce overall immune activation and have been proven effective in many inflammatory diseases. They work by balancing the gut associated lymphoid tissue. Probiotics are found in the refrigerated section of most health food stores. Look for capsules containing 5 to 10 billion live organisms. Higher doses are often used in severe inflammatory conditions.

**NADH**

This is another little molecule the body makes that can get depleted, part of the critical energy production process in the mitochondria. This has been used effectively in patients with Chronic Fatigue Syndrome- a condition of malfunctioning and poisoned mitochondria. It can have an energy boosting and alertness effect like caffeine without the jitters. Take 5 to 20mg a day.

**Zinc**

Zinc is important for almost every function of the body, as well as in the normal function of the adrenal glands, modulating stress hormones and supporting the immune system. It is also one of the most common nutritional deficiencies. If you are feeling extra stressed take an additional 15 to 30mg of Zinc a day.

**Dr. Rob's Fast Five Supplements for Leaning Out**

**CLA-Conjugated Linoleic acid** helps to prevent the storage of fat you consume by forcing it to be burned for fuel. Take 2-3 grams with breakfast, lunch, and dinner.

**Caffeine**-Caffeine binds to the fats cells and encourages them to release more stored fat. There are multiple ways to get caffeine whether its by pill or liquid. I recommend using it just before exercise to access its full benefit. No more than 300mg is necessary to accomplish this. Cycle your caffeine 21 days of use with 7 days

**Decaffeinated Green Tea Extract**-Green tea extract increases your metabolic rate, which allows your mitochondria to burn fat for fuel. Take 500mg 2-3 times per day.

**Carnitine**-helps to move fat to the mitochondria where the fat is burned away for good. Take 1-3 grams three times daily. My favorite combination of carnitine is Beverly International's Quadracarn.

**Glucomannan**-Amorphophallus konjac is a dietary source of fiber that will make you feel full and helps to bind fat, sugar, and water and eliminate them from your digestive tract. 1-3 capsules with water before a meal.

### **Dr. Rob's Fast Eight Supplements for Cellular Energy**

**D-Ribose**-the raw material for the creation of ATP in the cells, which means creating energy. 1 scoop daily in 12 ounces of water or 1 chewable daily.

**L-arginine**-raw material that is needed by mitochondria for energy production. 1-2 pills daily.

**Alpha-Lipoic Acid** – 300 mg twice daily to help protect against free radicals.

**D-Aspartic Acid**- raw material that is needed by mitochondria for energy production. 1-4 750 mg capsules daily as recommended by manufacturer.

**NAC**(N-acetylcystiene)-an amino acid supplement that helps to restore the body's antioxidant levels. 600 mg capsule daily.

**NADH**-assists in the breakdown of fats and sugars and the production of ATP. 1 5-10 mg sublingual tablet daily.

**Creatine Chews**- is an amino acid used for energy production in the mitochondria. Tastes way better than the powder. 2-4 chewable tablets daily.

**Essential Amino Acids** – 3 tabs 3 times daily with meals. I prefer Beverly International's Density EAA Supplement

All of these are supplements that can fine tune your progress and take you to the next level but none of these supplements are as important as following the basic foundations of human health and wellness. ***Eating healthy nutrition, regular meaningful exercise, drinking plenty of water, and getting appropriate periods of rest and sleep are the foundations of human health.***

***I encourage you to talk with your Doctor about any and all of the supplements you wish to start taking.***

All of the supplements listed in this chapter are available in our store  
<http://www.alphamaleinstitute.com/the-alpha-male-store/>

**\* These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.**

## **The Good and the Bad of Coffee/Caffeine**

Ah, the almost indescribable aroma of freshly brewed espresso in the morning! I love the rush of chemicals in my brain as I inhale the chocolaty aroma and taste the fruity flavor of some earthy berry grown in a distant land. For me the act of making and drinking espresso in the quiet of the dark of the morning is such a calm way to start the day before the mad rush of ferrying children to school and dashing off to work.

You may also think coffee tastes good and it may get you going in the morning, but what will it do for your health?

There is a growing body of research shows that coffee drinkers, compared to nondrinkers, are less likely to have type 2 diabetes, Parkinson's disease, and dementia and have fewer cases of certain cancers, heart rhythm problems, and strokes. But, coffee is not proven to prevent these conditions.

It is possible that coffee drinkers have other advantages, such as better diets, exercise more, or have protective genes.

So there isn't solid proof. But there are signs of potential health advantages and of course a few cautions.

If you're like the average American, who drinks an estimated 1.5 8-ounce cups of coffee each day you might want to know what all that caffeine is doing for you, or to you.

Coffee scores big points when it comes to the prevention of diabetes and the vast majority of studies on coffee have shown a distinct benefit when it comes to the prevention of diabetes. This holds true for both caffeinated, decaffeinated and tea drinkers.

It is believed that it is the very strong antioxidant capacity in coffee that provides the

benefit. Also coffee contains minerals such as chromium and magnesium, which help the body regulate the hormone insulin. And we know consistent high levels of insulin are bad.

Studies reveal that coffee has been linked to lower risks for heart rhythm disturbances in men and women, and lower risk for strokes in women.

In a study of about 130,000 Kaiser Permanente health plan members, people who reported drinking 1-3 cups of coffee per day were 20% less likely to be hospitalized for abnormal heart rhythms than nondrinkers regardless of other risk factors.

A study of 83,700 nurses enrolled in the long-term Nurses' Health Study showed a 20% lower risk of stroke in those who reported drinking 2 or more cups of coffee daily compared to women who drank less coffee or none at all.

Coffee has also been linked to lower risk of Parkinson's disease, dementia, and Alzheimer's disease. A 2009 study from Finland and Sweden showed that, out of 1,400 people followed for about 20 years; those who reported drinking 3-5 cups of coffee daily were 65% less likely to develop dementia and Alzheimer's disease, compared with nondrinkers or occasional coffee drinkers.

Coffee consumption also has been linked to a decrease incidence of liver cirrhosis and liver cancer.

### **Coffee/Caffeine the Angelic Side**

- Stimulate the release of dopamine, which helps us focus
- Increases lipolysis to use fat for energy
- Increases athletic performance
- Decreased incidence of diabetes
- Decreased incidence of neurocognitive disorders
- Decreased incidence of liver cancer
- Decreased incidence of stroke
- Decreased incidence of heart arrhythmias
- Decreased incidence of basal cell carcinoma
- Decreased incidence of depression
- Strong antioxidant capacity
- Boost sex drive

## Coffee/Caffeine the Dark Side

Now what about the dark side of coffee/caffeine? A lot of patients ask me about coffee/caffeine. Caffeine is a drug like many others, and I recommend using it in a limited quantity. It is my opinion that one or two cups of coffee first thing in the morning is fine, but drinking caffeine throughout the day is something you want to avoid or you can end up with caffeinism.

Caffeinism or caffeine intoxication, is a condition where you end up suffering with elevated blood pressure, rapid heartbeat, nervousness, insomnia, stomach cramps, muscle twitching, stomach upset, dehydration, stressed adrenal glands, and more. For those of you who are excessive caffeine drinkers, I would definitely wean yourself off of the caffeine. For example, if you are drinking six cups a day, I would decrease by one cup a day until you get to one or two cups daily.

Not everyone responds to caffeine the same way. Some people metabolize coffee differently than others and the gene involved is called CYP1A2. Our detoxification pathways are genetically determined. Which is why some people have one cup of coffee and are nervous and irritable and can't sleep for days and others like myself can have coffee any time of the day and sleep very well.

But this was not always the case. While I was in the Army in the 80's stationed in Germany I drank over "10 cups of Joe" every morning and I suffered from caffeine intoxication. So much so I could hardly hold a pen because my hands shook so much. I drank ridiculous amounts of coffee every morning mostly out of boredom. There's a lot of "*hurry up and wait*" in the military and I had a platoon sergeant that would reprimand us for reading books, but it was ok to smoke cigarettes and drink coffee while we sat and waited for our assignments for the day.

Coffee and Caffeine is most likely safe for most adults when used in **moderation**. However, caffeine can cause:

- Insomnia
- Nervousness and restlessness
- Anxiety
- Agitation
- Chest pain
- Headache
- Nausea and vomiting
- Increased heart rate and respiration
- Stomach irritation (regular and decaffeinated coffees)
- Depletes neurotransmitters like dopamine
- Caffeine is a mild diuretic so it makes you urinate which means you, can become dehydrated faster
- Ringing in the ears.
- Raises blood pressure
- Raises adrenaline
- Raises cortisol
- Raises homocysteine
- It's addictive

### **Caffeine can make these conditions worse!**

- Anxiety
- Bipolar disorder
- Bleeding Disorders
- Heart conditions
- Diarrhea
- Irritable Bowel Syndrome
- Glaucoma
- High Blood Pressure
- Osteoporosis

A single cup of coffee with nothing added is about 15 calories. But start adding milk and sugar and the calories skyrocket to upwards of 500 in a single cup! So if you are trying to lose weight, remember this tip: **Keep your coffee simple.**

<b>Frappuccino</b>	<b>400 calories</b>
<b>Frappuccino w whipped cream</b>	<b>430 calories</b>
<b>Café late</b>	<b>165 calories</b>
<b>Café au lait</b>	<b>155 calories</b>
<b>Café mocha</b>	<b>570 calories</b>
<b>Cappuccino</b>	<b>150 calories</b>
<b>Carmel macchiato</b>	<b>320 calories</b>
<b>Coffee Black</b>	<b>15 calories</b>

That being said there is evidence on *both sides of the fence* as to whether coffee/caffeine is good or bad for you. ***What appears to be the key here is moderation.*** So let me share my opinion with you, if you are a healthy adult, one or two cups of coffee a day is unlikely to hurt you. There is evidence to suggest that mild caffeine consumption aids in weight loss through increased lipolysis, which is the breakdown of fat in the fat cells, elevates your metabolism, may prevent cancer, diabetes and neurocognitive disorders because of antioxidant properties and increases athletic performance. Those all sound like winners to me, however if you are not a user of coffee or are sensitive to the effects of caffeine then it is best left on the shelf for someone else but you.

### **Alcohol. It’s got to go to Boost Your Hormones**

The great American institution that is the weekend party and there are endless reasons to party. Beloved by both men and women everywhere will destroy your hormone optimization goal period. My strong recommendation to you is to eliminate alcohol completely for the next 30 days. One night of tying one on with the jolly captain or favorite bandito will set you back 5-7 days.

This is what boozing it up will do to you during your transition period. It will slow the recovery of your body from the workouts you are doing daily. These workouts are depleting the glycogen stores in the liver and muscles, which means your muscles are in need of repair post workout. Drinking alcohol absolutely stalls this recovery process. Alcohol causes your glycogen stores to go even lower and we need glycogen for repair and recovery.

Drinking alcohol means you are adding extra calories to your diet, not what you want to do. Now your body has to detox all the alcohol first before it gets around to burning off all the fats and carbs. Alcohol also increases the levels of the stress hormone cortisol, which promotes the storage of visceral or belly fat. Can you say, I'd like a muffin top or spare tire please? Alcohol also interrupts your sleep patterns and does not allow you to get adequate sleep because it decreases sleep duration and increases wakefulness during sleep. Because your sleep cycle is disrupted human growth hormone, which is partially responsible for muscle growth is reduced by up to 70%.

Alcohol's caustic properties also irritate the lining of the stomach, which in turn inhibits the absorption of nutrients. And because of alcohol's diuretic effect, it makes you pee, you become dehydrated easily. Even minimal dehydration decreases your athletic performance and your ability to lose weight and boost your hormones. Alcohol during the next 30 days is best left on the shelf. This is a matter of priority and since you are reading this book your health must be a priority. So let's leave the booze alone for at least thirty days.

**Here is a list of some alcoholic drinks and the amount of non-nutritional calories in just one drink:**

<b>Vodka—one shot</b>	<b>125 calories</b>
<b>Whiskey—one shot</b>	<b>125 calories</b>
<b>Tequila—one shot</b>	<b>115 calories</b>
<b>Southern Comfort—1.5 ounces</b>	<b>180 calories</b>
<b>Scotch—one shot</b>	<b>115 calories</b>
<b>Rum—one shot</b>	<b>125 calories</b>
<b>Bud Light</b>	<b>109 calories</b>
<b>Budweiser</b>	<b>146 calories</b>
<b>Coors</b>	<b>142 calories</b>
<b>Miller</b>	<b>152 calories</b>
<b>Miller Genuine Draft</b>	<b>148 calories</b>
<b>Amstel Light</b>	<b>93 calories</b>
<b>Wine, 4 ounces, white</b>	<b>90 calories</b>
<b>Cabernet</b>	<b>90 calories</b>
<b>Chardonnay</b>	<b>90 calories</b>
<b>Chianti</b>	<b>100 calories</b>
<b>Merlot</b>	<b>95 calories</b>
<b>Zinfandel</b>	<b>90 calories</b>

## **FOOD SENSITIVITIES**

Despite following a healthful nutrition plan, many people have sensitivities to certain foods or food groups. These sensitivities can lead to reactions that cause symptoms such as headaches, runny nose, bloating, indigestion, cramps, constipation, diarrhea, belching, muscle aches and pains, brain fog and more.

An IgG Food Sensitivity Test will measure the presence of IgG antibodies to specific foods. If food specific binding occurs between the patient's IgG serum antibodies and the antigen protein then a symptomatic response to that food can occur causing symptoms and inflammation which can affect the persons overall health, wellness and hormones.

Eliminating these food sensitivities from you nutrition and rotating your food selections will decrease inflammation and help to improve nutrient assimilation in the digestive system leading to overall improved health and wellness - a necessary step in raising your hormones naturally.

On the following page is part of an IgG Food Sensitivity Test on a patient who was having constant bloating, gas, and severe abdominal distention after eating and difficulty losing weight. He had been to a gastroenterologist and had both an esophagogastroduodenoscopy (EGD), which is a test to examine the lining of the esophagus, stomach, and first part of the small intestine and a colonoscopy that both failed to disclose any disease process.

However on closer examination with food sensitivity testing we can see that he has significant dairy sensitivities to cheese, yogurt, milk, whey and casein proteins. Part of his daily routine was 2-3 protein shakes per day using casein protein powders. Upon elimination of casein protein shakes within 2 weeks his gastrointestinal symptoms had resolved and by the 6 week mark his weight decreased by 18 pounds. Simple elimination and rotation of foods can have profound impact on your overall health.

**Comprehensive IgG Food Allergy Test + *C. albicans*, *S. cerevisiae* (94) - Dry Blood Spot**
**Dairy**

Casein		6.29
Cheese		6.75
Goat Cheese		3.88
Milk		5.53
Mozzarella Cheese		6.57
Whey		5.05
Yogurt		4.82

**Legumes - Beans and Peas**

Garbanzo Bean		2.80
Green Bean		2.63
Kidney Bean		3.54
Lentil		3.76
Lima Bean		2.38
Pea		2.66
Pinto Bean		3.33
Soybean		2.54

**Fruit**

Apple		2.78
Apricot		2.17
Banana		2.49
Blueberry		1.96
Coconut		3.18
Cranberry		2.17
Grape		2.35

Gliadin		2.87
Millet		2.84
Oat		2.41
Rice		1.79
Rye		1.97
Sorghum		2.05
Wheat Gluten		2.63
Wheat		2.08

**Fish / Seafood**

Cod Fish		3.03
Crab		2.29
Halibut		3.95
Lobster		2.18
Salmon		2.63
Sardine		1.87
Shrimp		1.81
Tuna		1.88

**Meat/Fowl**

Beef		2.81
Chicken		3.56
Egg White		3.57
Egg Yolk		2.88
Lamb		2.52
Pork		2.17
Turkey		2.39