

# Body Composition Basics



When it comes to improving your physical appearance, your individual goals can be broken down into two major categories. These are either getting leaner, or getting bigger. Getting a little bit bigger and a little bit leaner at the same time is generally either known as “toning” or “recomposition.” Regardless of the terminology used, depending on your training experience and genetics, it is possible to build a little bit of muscle while shedding a significant amount of fat, but it is virtually impossible to build a whole lot of muscle while also shedding a whole lot of fat. Here’s why:

1. In order to lose fat, you need to consume less calories than you burn (negative energy balance)
2. In order to gain muscle, you need to consume more calories than you burn (positive energy balance)

People who build muscle and lose fat at the same time tend to compromise between building more muscle or losing more fat, so they get a bit of each but not a whole lot of both. They get the extra calories needed for muscle growth from the fat that they burn and lose their body-fat on a small caloric deficit. This often means the fat is lost slower than it could be, and muscle is built slower than it could be. For that reason, if you have a significant amount body fat to lose (I would define "significant" as anyone with a body fat level greater than 12%), you need to concentrate on getting relatively lean before you attempt to gain substantial muscle mass. As you will see later, some fat accumulation (although this can be minimized) is usually unavoidable for optimal gains in lean muscle mass gains to occur. So first focus on getting your body-fat down under 10%, then focus on eating to build muscle mass.

# Part I – Getting Lean

Now, I'm gonna start off talking about getting lean. In order to shed body-fat you're going to have to make some changes in your diet. So where do you start? It's best to start making simple, easily implementable changes, rather than trying to do a complete overhaul all at once. Take baby steps and make slow changes in your diet instead of trying to change everything at once. Making too much of a change often just leads to frustration and mental burnout, not to mention lots of physical deprivation. Here are a few easy steps you can begin to take.

**Change the structure of your diet and timing of your meals-** I'll get into this more later, but you'll need to begin paying more attention to what you eat, when you eat, and how often you eat. Ideally, you'll want to increase the frequency and number of your meals and decrease the volume of food in those meals. Going all day without eating and then having a large meal fit for a king before bed is not optimal for changes in body composition. You'll need to focus more on eating more nutrition protein and natural carbohydrates while cutting back on non-nutritious junk. You can gradually start to eliminate or replace junk foods in your diet and do so without feeling overly deprived. First you'll want to start to limit or avoid the 3 C's. Cokes, Candy, and Cakes!

## The 3 C's

**Cokes-** The average American teenager drinks about 30 ounces of pop per day. This is equivalent to more than two 12-ounce cans per day. Each 12-ounce can or serving of pop supplies an extra 150 calories and 16 teaspoons of sugar with zero nutritional value. If you drink as much pop as the average teenager you could theoretically lose about 1 pound of fat per week just by giving up this habit. Do this. Go in your kitchen and take an empty glass, jar of sugar, and a teaspoon. Take your teaspoon and pour 16 teaspoons of the sugar into the empty glass and look at it. Now that's what you're consuming every time you drink a pop, soda, or even fruit juice! If you were to drink a big 44-ounce pop you'd be getting about 56 teaspoons of sugar!

**Candy-** Just like soda, any candy is made up of sugar along with fat and offers nothing but empty calories with zero nutritional value.

**Cakes-** Donuts, pastries, etc. definitely are tempting but offer no nutritional value and are high in both fat and sugar.

Gradually pay attention to your consumption of the 3 C's and any other sugar consumption. If you're like most people, you'll probably find that simply cutting back on consumption of those items will pay immediate dividends. You'll be eliminating a lot of unnecessary, highly dense, junk calories, so you'll lose body-fat. More importantly, you'll also have much more stable energy levels. Sugar wreaks havoc on your energy levels and blood sugar levels. It often will give you a quick burst of energy, however, this is quickly reversed and 30 minutes to an hour later you end up feeling hungry and tired.

Also pay attention to other food and beverage choices.

**Avoid “drinking” calories-** Anytime you drink calories you’re taking in highly concentrated nutrition that does not do much to contribute to filling. Think of this. What fills you up more, eating 2 whole apples or drinking a big glass of apple juice? They both contain the same amount of calories and carbohydrates but the apple has more density. This gives you more filling. Whenever you need to watch your daily caloric intake it’s better to avoid consuming calories that don’t fill you up. Anytime you “drink” calories through beverages, you generally also take in a lot of sugar, which should be limited when trying to lose body-fat. Even so called “healthy” drinks, like fruit juices, sports drinks, energy drinks, etc, are nothing more than sugar and won’t do much besides quench your thirst and add inches to your waistline.

For the guy or gal focused on dropping body-fat, the only time you’ll ever want to take in any calories through beverages is with your post-workout drink, which we’ll cover later. Instead of consuming pop and fruit juice make a concerted effort to consume more water. You can also drink iced tea, coffee, sugar-free lemonade, and diet soft drinks in moderation.

**Cut down on all other sweets-** Sugar sweetened cereal, ice cream, milkshakes, etc. are all very high in sugar and don’t do much else besides supply empty calories and stimulate appetite.

### **Choose more whole foods over processed foods**

Processed foods are foods that have been chemically treated to store longer. Today, probably 80% or more of the foods you find in a grocery store are processed. Processing tends to cause a given food to behave in your body more like sugar would. Most foods contribute less nutritional value after processing. The processing causes the food to be absorbed quicker and contribute less to a feeling of fullness. Common processed foods include chips, crackers, cereals, and many types of breads. For the most part, anything that crackles, crumbles, or crunches is processed. Take a look at the following foods to give you an idea.

<b>Processed</b>	<b>Non-processed</b>
Cereal	Whole oats
Wheat crackers or bread	Whole-wheat flour
Potato Chips	Potatoes
Fruit juice	Fresh fruit

How do you determine if something is processed or not ? This is very simple. If you can shoot it, grow it, cook it, and eat it, without any additional steps, it tends to be less processed. Your body was meant to survive on fresh, natural foods, not foods that have been treated with hundreds of chemicals and preservatives to make them taste better and last longer. Vegetables, fruits, and meats all fit the bill. Spend more time getting to

know the produce section of your local grocery store. I recommend you place an emphasis on green, non-starchy vegetables like broccoli, salads, and a host of other foods that fit this bill. These foods are excellent for losing body-fat and staying healthy. They provide a very high ratio of nutrients and are usually very low in calories. All fresh meats, produce, and veggies are for the most part, fair game. If you eat like this you won't have to worry about counting calories because the more natural foods you eat, the more difficult it becomes to take in more calories than you burn.

Here are more sample foods that you should begin getting more of:

All fresh meats, eggs, cottage cheese, veggies, fruits, dairy, natural cereals such as oatmeal, cream of wheat, and cream of rice, whole wheat bread, beans, sweet potatoes, salad greens, beans, nuts, seeds

### **What about fat?**

Fat is far from the evil it has been made out to be. It turns out sugar is much more of a fat gaining culprit. If we take a look at the many diverse groups of people and societies throughout history one thing keeps coming up. Whenever sugar is introduced into society that society consistently starts to develop problems like obesity, heart disease, diabetes, and dental problems. Today over 2/3 of the United States population is overweight and it's only getting worse. In the last 10 years people in the US have been led to consume less fat and more sugar, yet the weight problem continues to get worse. Nearly 25% of the US population either has, or is at high risk of having, diabetes, a disease of blood sugar metabolism that is affected more than anything else by the amount of sugars and processed carbohydrates in the diet. When people eat more protein, more natural and less processed carbohydrates, and **MORE** fat, these problems tend to alleviate.

Certain fats, such as those coming from deep-water fish and certain vegetables, are highly beneficial and should be consumed in abundance. The fats to avoid are the hydrogenated fats, and trans-fats. These fats do nothing to improve health and in fact do much to contribute to ill health. These fats are man made so that they will stay solid at room temperature. This allows them to be added to packaged and processed foods. The combination of processed carbohydrates and trans-fats/hydrogenated fats, is deadly and should best be avoided

### **Reading Labels, Understanding Macronutrients, and Counting Calories**

The only way you can be certain of the energy you are consuming daily is by becoming more aware of the number of calories you ingest.

### **What is a calorie?**

A calorie is simply a measure of heat. We use calories to describe how much energy we take in. Caloric balance is energy in versus energy out. If you take in more energy than you burn then you gain weight. If you burn up more energy than you take in you lose

weight. There are a lot of other things like hormones, activity levels, and nutrient timing that help determine energy balance but simple calories in vs calories out is the basic gist of it.

## The Macronutrients

First, we need to talk about the three primary sources from where we consume our daily energy: protein, carbohydrates, and fat. These are known as the macronutrients. Their caloric value is as follows:

Protein: 4 calories per gram

Carbohydrates: 4 calories per gram

Fat: 9 calories per gram

As you can see, a gram of fat contains just over twice the energy of both protein and carbohydrates. Because of this, fat has been labeled as a dietary evil. Despite its negative reputation, adequate fat intake is necessary to promote optimal hormone levels, central nervous system function, and overall health. Consumption of certain fats like omega 3 fish oils, have even been correlated to a loss of body-fat! Therefore, although the majority of your dietary focus should be on protein and vegetable sources of complex carbohydrates, you shouldn't fear eating some fat as well. In fact, you should be getting between 20-30% of your calories from fat, regardless of your goals.

Lets use an example to see how to figure up your daily macronutrient intake. Let's take, for example, Joe, who will be consuming 2800 calories daily, 30% of which is fat.  $2800 \times .30 = 840$  calories from fat. Since fat is 9 cal/g, you simply divide the total calories from fat by 9 to give you your daily gram total. For Joe, this would be  $840/9$  or ~90 grams of fat daily.

Now, for optimal results I also recommend you consume between 1.25-1.5 grams of protein per pound of lean bodyweight per day. Lean bodyweight is your total bodyweight minus your fat weight. How do you figure this? Since Joe weighs 185 lbs and is 10% body fat, his lean body-weight is  $185 \times .90$  or 166.5 lbs. Now, to get his daily protein intake, we simple multiply his Lean bodyweight(166.5) by 1.25, which equals roughly 208g of protein daily. Since protein is 4 calories per gram, Joe will be consuming 832 calories (208g of protein x 4cal/g) from protein daily.

The last macronutrient to calculate is carbohydrates. We can do this by simply subtracting the calories already accounted for by fat and protein from the daily total. Remember the daily total for Joe was 2800. We already have 832 (calories from protein) plus 840 (calories from fat) = 1128 calories left over for carbohydrates. Since carbohydrates are 4 calories per gram, this individual will be consuming 282g ( $1128/4$ ) of carbohydrates daily.

Now we have established Joe's daily gram needs for each macronutrient. Here they are again:

Protein: 208g  
Carbohydrates: 282g  
Fat: 90g

The cool thing about converting everything to grams is that you no longer have to worry about counting calories. You simply count the grams of each macronutrient you consume. This makes things much easier considering the way our food labels are organized.

To illustrate this, let's take a look at a typical healthy fat burning breakfast and obtain the figures we need from the respective food labels.

2 servings of Protein powder  
1 cup of dry oatmeal

**Supplement Facts:**

Serving Size: 1 scoop  
Servings per Container: 31

**Calories** 109 From Fat: 5

**Total Fat** .5g

Sat. Fat .5g

Cholesterol 5mg

**Carbohydrates** 4g

Dietary Fiber 0g

Sugars 0g

**Protein** 22g

Vitamin A 3IU

Vitamin C 0mg

Calcium 49mg

Iron 0mg

Sodium 170mg

**Protein Powder**

**Ingredients:**

Low Temperature Processed Micellar Casein, CFM Whey Isolate, Hydrolyzed Whey Peptides, Maltodextrin, Glutamine, Natural Flavoring, Sucralose, Xanthan Gum.

**Nutrition Facts:**

Serving Size: 1/2 cup dry

Servings Per container: 16

**Calories** 150 From Fat: 25

**Total Fat** 3g

Sat. Fat .5g

Cholesterol 0mg

**Carbohydrates** 27g

Dietary Fiber 4g  
Sugars 1g  
**Protein 5g**

To prepare this breakfast you'd just add water to the oatmeal and stir in the protein powder for a tasty, nutritious breakfast. Now, let's take a look at the food labels below to get the macronutrient content of each product.

The first thing that needs to be considered when reading any food or supplement label is the serving size, usually located at the top of the label. Because all the information on the label pertains to a specific amount of the product, serving size is critical. As you can see, 1 scoop of powder is one serving. Since Joe consumed 2 scoops, he simply needs to double the information given on the label (these figures easily stand out as they are in bold, and usually appear in the order of Fat, Carbohydrate, Protein) Two scoops of protein powder contains 44 grams of protein, 8 grams of carbohydrates, and 1 gram of fat.

As for the oatmeal, the serving size is ½ cup dry. Joe consumed double this amount and once again needs to double the macronutrient information. Two servings contain 10 grams of protein, 54 grams of carbohydrates, and 6 grams of fat.

After adding the gram numbers from the protein powder and oatmeal together, we get 54 grams of protein, 62 grams of carbohydrates, and 7 grams of fat.

Essentially, you would add up and record the grams of each macronutrient consumed at each meal. At the end of the day, the goal is to get close to your predetermined daily need for each macronutrient. You don't need to be concerned with getting this down to an exact science, but do get in the habit of paying attention to food labels and how much of each macronutrient you're getting.

Now let's get into some of the more advanced information that will help you understand how you can structure your meals to easily burn that fat off. Many things effect how much you can eat and how quickly you will drop fat. Ever notice how some people can eat and eat and never gain weight while other have to subsist on very little just to maintain? The reason for this variance is because of individual variance in metabolism.

**Metabolism-** Is the speed at which your body burns calories- This is largely influenced by how frequently you feed your body and by the types of food you eat. The more often you eat, the faster metabolism tends to run. Other things influence metabolism include:

- 1. A concern for muscle:** Muscle is the most metabolically active tissue in our body. Due to it's rich blood supply, each additional pound of muscle requires up to 20 additional daily calories to maintain. A pound of fat requires very little calories, thus the more muscle you build or maintain the faster your metabolic rate.

2. **Exercise-** Exercise greatly increases metabolic rate overall. Certain types of exercise such as intense weight training or anaerobic conditioning cause the metabolic rate to be elevated as long as 24 hours.
3. **Macronutrient ratios-** Protein has the largest effect on metabolic rate followed by carbohydrates and then fat. What this means is that the consumption of protein takes a lot of energy for digestion and causes our body to release hormones that are optimal for fat burning to take place. Carbohydrate requires some energy for digestion and fat requires very little.
4. **Thermogenesis-** The production of body heat. Remember that calories are just a measure of heat. Likewise, the higher our body temperature, the more calories are burned. The higher the body temperature the higher the metabolic rate and vice versa. Whenever a meal is eaten, body-heat, and thus metabolic rate and calorie burning, temporarily rise in response to digestion and release of energy. Some foods are more effective at producing heat than others and thus more thermogenic. Protein is the most thermogenic food followed by carbohydrate and then fat.

Remember the macronutrient calorie counts

Protein= 4 calories per gram

Carbohydrate= 4 calories per gram

Fat= 9 calories per gram

### **Guidelines As To What Macronutrients and Combinations are Best and Why**

#### **Rule #1**

- Protein Every Meal
  
- Protein Requirements

Up to 1.5g per pound of Lean Body Mass. Although many are under the misguided assumption that large amounts of protein are only useful for those training strenuously in bodybuilding or who desire more muscle mass, this is far from the truth. Because of its effect of putting the body hormonally in a fat burning state, protein is of prime importance for those seeking a loss of body-fat.

The word protein is actually taken from a latin word which means “comes first”. When protein is eaten, the body releases glucagon, a hormone that signals the release of free fatty acids from the liver. Protein is also more thermogenic, or heat releasing, than either fat or carbohydrate and has a positive effect on blood sugar control because of its positive effects on insulin and blood sugar. For every 100 calories of protein you digest, you’ll burn 20 to 25 just to do the work of digestion! When insulin levels are high, as they are when consuming a diet high in carbohydrates, this creates hunger and also prevents

lipolysis, or fat burning. Protein intake is also positively correlated with the body's release of CCK, which is a potent natural appetite suppressant.

## **Can't I get fat from eating too much protein??**

Theoretically, you can put on fat overeating any of the macronutrients, but of the 3, protein is the most difficult for the body to convert into body-fat and for this reason more lean protein can be eaten without worry of getting fat in comparison to overeating on carbohydrates or fat. Excessive protein can be converted into carbohydrate in the body, which can then be converted into fat, but this conversion is costly and is actually fueled by the burning of fat. Oftentimes, excessive cravings for carbohydrates can stem from a lack of amino acids in the brain and bloodstream that come from protein, and these cravings can often be lessened with adequate protein consumption. So definitely make sure you get protein often and in substantial quantities!

## **Ideally eat between 4-6 Meals per Day**

When you consume frequent and smaller meals, the body is better able to utilize all of the nutrients with little worry of fat gain. Cravings and hunger are better stabilized and energy levels are more consistent. Frequent meals also have a positive effect on appetite regulation and prevent large peaks and valleys in blood sugar levels, which contribute to binges. Since a calorie is in fact a unit of heat, if we ingest calories that help us to burn greater numbers of calories in the process of digestion, while eating rather frequently, we gain a metabolic advantage. You can do this by eating frequent meals with each meal containing protein. Every time we eat, our body temperature, and thus metabolic rate, rises. This is known as the thermic effect of food (TEF). It's better to eat little bit less per meal, with more total meals and frequency, than it is to eat only once or twice per day. The real killer for most people are the high calorie evening meals, which tend to be much larger and coupled with desserts, alcoholic beverages etc. Since you're going to sleep soon after the evening meal, what happens to all these calories eaten before bed?? They go right into **STORAGE**, which is not a good thing. It's better to eat larger meals earlier in the day when those calories can be burned off and taper down as the day winds down.

## **The Thermic Effect of Food – Chew Your Food!**

When food is eaten the body responds by increasing energy expenditure in order to digest and assimilate the food. This can actually account for a significant portion of daily calories so it is essential that most calories be consumed in an "edible", "chewable" form rather than taken in as beverages. The only beverages you want to be "drinking" that contain calories would be protein drinks.

## **Snacks – Emphasize Protein and Fibrous Vegetables**

Snacks can be a good thing but most people make the mistake of not eating often enough. Therefore, when they snack they are hungry for sugars, sweets, and other easily digestible

carbohydrates. When carbohydrates like these are eaten alone, the effect on blood glucose and insulin is dramatic. In general, when eating a carbohydrate only snack or meal the energy is supplied quicker than the body can burn it, which can lead to fat accumulation. Blood glucose levels quickly rise, which leads to a large release of insulin. Because of the high insulin levels, blood sugar is also quickly driven back down within an hour or so, which often leads to only more cravings. It's better to snack on either protein and fat sources or a mix of protein/fat and carbohydrate so that energy is released and supplied slower. Examples of good snacks include any leftovers, cold cuts, peanuts, seeds, celery sticks, jerky, and fruit.

## You Can & Should Take it With You When You Go

- Zip-Lock Bags & Tupperware
- Insulated Lunch Bag

Make it convenient to get your meals in. If you go too long without a meal you often run into problems with energy level and cravings. You should be eating every 3 hours throughout the day. In order to do this most of you will have to use the aforementioned items.

## Understanding the Hormone Insulin- It Can Work for or Against You

Insulin is secreted in response to high blood sugar in the body and is the body's most powerful storage hormone. Insulin signals both muscle cells and fat cells to open up and receive glucose for energy. Therefore, it lower blood sugar. Very little insulin is released when protein and fat foods are consumed, but carbohydrates break down into glucose, or blood sugar, which stimulate insulin to drive blood sugar back down. This doesn't necessarily mean carbohydrates and the resultant insulin surge that comes from eating are always a bad thing. However, we want the insulin and subsequent nutrient storage it stimulates to be taken up into muscle cells and not fat cells. The lower the levels of insulin, the greater preference for nutrient storage in muscle vs fat.

Muscles require amino acids for growth and carbohydrate storage for energy, so there are certain times when high levels of insulin can enhance muscular storage which is a good thing. Timing and food selection is everything! The times when it is preferential to have high insulin levels, or when the body is best apt to use the insulin to direct nutrients towards muscle and not fat is when the muscle **insulin sensitivity** is highest; When they're in a depleted or semi-depleted state. At these times it takes less insulin to get the muscles to take up nutrients. These times are generally:

**Breakfast** (We haven't eaten all night so our glycogen levels are low)

**Post-workout** Within the 3 hours after a bout of exercise. Exercise, especially higher intensity exercise, makes the muscle cells much more responsive to insulin so at this time insulin directs nutrients into muscle cells rather than fat cells.

For optimal fat loss, at all other times it is best to avoid **high** insulin levels as the muscles are less receptive and elevating insulin levels by eating super high sugar and high carbohydrate meals will lead to more storage of nutrients in fat, instead of in muscle.

You can still consume carbohydrates throughout the day and at other times, but you should emphasize “complex carbohydrates” rather than sugars, which break down slower and stimulate a low to moderate insulin release.

The key point to remember is that:

## When Insulin Levels Are High, Fat Burning is Low!

So how do I best eat to control insulin levels the rest of the time?

Avoid eating foods that cause a large increase in blood sugar and a corresponding large increase in insulin (simple carbohydrates and high volumes of starchy carbohydrates). Eat a substantial helping of protein with each meal and cut down on high glycemic carbohydrate sources such as sugar, white flour, grains, cereals or any packaged carbohydrate source. Increase consumption of high fiber green veggie carbohydrate sources. Increase consumptions of good, heart-healthy fats while decreasing hydrogenated and trans-fats. Pay attention to meal combinations and meal timing. Limit the majority of starchy and simple carbohydrate consumption to those times when insulin sensitivity is highest, breakfast and post-exercise.

### **Insulin Resistance**

Insulin resistance is a pre-diabetic condition that probably 50% or more Americans have to a certain extent. When you have constantly high insulin levels in the blood, due to eating too many processed carbohydrates and fats, the muscles become resistant to insulin so they don't open up and store nutrients as easily. Because of this insulin resistance the body has to produce more insulin. When insulin levels are high all the time, nutrients are directed towards fat and away from muscle. This leads to gains in fat mass. Furthermore, with consistently elevated insulin levels it becomes difficult to burn fat. The only way to get your body to tap into its fat stores and use them for energy is to manage your insulin levels. The first step is exercise. Exercise improves insulin sensitivity in the muscle so less insulin is required to do the job. The next step is eating in manner that manages insulin so you can burn fat while feeding the muscles.

### Food combinations that best manage insulin and improve Body Composition

I recommend you combine your macronutrients in a certain manner. Some of your daily meals should consist mostly of protein and fat (P + F) w/ minimal carbohydrates, and the rest of your meals should be comprised mostly of protein and carbohydrates (P + C) with minimal fat. In other words, you want to consume protein at each meal, but along with the protein, the object is to never combine carbohydrates and fats in significant amounts in a single meal. Why? Because your body will tend to use one or the other as fuel but not

both at the same time. Carbohydrates are best as a short term energy and energy replenishment source. Therefore you'll want to consume them when you need short term energy and energy replenishment. (e.g. During the earlier part of the day for energy and post-workout for energy replenishment) Fats are more of a long-term energy source. Therefore you'll want to lean towards fats and away from carbohydrates when you have no real need for short-term energy (e.g. At night).

**Protein + Fat Meals (P+F)**- Protein and fat cause little insulin release. When combined together into a meal they provide more satiety and blood sugar control without elevating blood sugar into a range that would call on the body to start depositing calories into fat. Without high insulin levels stemming from carbohydrate consumption, or less than 10 grams of carbohydrates in the meal, the fat floating around in the bloodstream after consumption of the meal will most likely be burned as fuel rather than stored. This type of meal combination is especially beneficial for those who have a hard time with carbohydrate cravings or those who can't seem to control their appetite no matter what they do. The fat in the meal prolongs digestion and without the quick rise and fall of blood sugar appetite is better regulated.

#### **Examples of Protein + Fat food choices (P+F)**

Whole eggs, full-fat cottage cheese, hard cheese, steak, dark meat chicken and turkey, lean ground beef, pork, nut butters, canned fish, buttered fish, buttered or oiled vegetables, guacamole, mayonnaise in moderation, flaxseed oil, full-fat salad dressings in moderation (note: **remember 10 grams of carbohydrates are fine with a p+f meal**) Most green type vegetables and salads, even though they're generally regarded as carbohydrate foods, can be included because it takes a substantial quantity of them to equal 10 grams carbohydrate.

#### **Protein + Carbohydrate Meals (P+C)**

This combination does elevate insulin, but if you place an emphasis on low-glycemic carbohydrates, or carbohydrates which give a low rise in insulin and blood sugar; and vegetables with little fat present in the meal (5 grams of fat or less), and use proper timing in relationship to activity levels, the carbohydrates will go towards replenishing muscle glycogen (energy) with little danger of spillover.

#### **Examples of Protein + Carbohydrate (P+C) food choices**

Egg whites, light cottage cheese, chicken breast, turkey breast, lean pork, whitefish, tuna, venison, buffalo, ostrich, any other lean protein source

Oatmeal, rice, sweet potato, beans, legumes, fruit in moderation, unsweetened cereals in moderation, any vegetable other than guacamole (guacamole is high in fat)

### **FOOD COMBINING RULES**

For a protein + carbohydrate meal fat should be restricted to approximately 5 grams or less.

-For a protein + fat meal carbohydrates should be restricted to approximately 10 grams or less.

Even during a Protein + Fat meal, this still allows plenty of room for fibrous, green veggie type carbohydrates as their carbohydrate level is made up of lots of **fiber**. Since fiber is an indigestible form of calories, it can be subtracted from the total carbohydrate count of a given meal. This makes high fiber vegetables very beneficial for a dieter! Take for instance a bag of broccoli. After subtracting grams of fiber, a one-pound bag of broccoli has a net carbohydrate content of only 10 grams! This means that you could eat a steak plus an entire pound of broccoli and still be following the guidelines perfectly providing you don't have any other carbohydrates with that particular meal!

## A Combination You Want to Avoid

Fat + Carb Meals (F+C)

or

Protein + Fat + Carb – *“the Devil”!*

Combining large amounts of Fat + Carbohydrate in the same meal causes a greater insulin response than carbohydrate alone. Not only this, but the insulin levels also stay higher for longer periods of time which blunts any fat release from stored body-fat. Eating carbohydrate alone and having elevated insulin alone, does not automatically make us store fat, but what it does do is shut down lipolysis, or the burning of fat. You want your body to be burning fat as often as possible. When insulin levels are elevated **and** fat is consumed, the fat calories are guaranteed to go straight into storage rather than being burned!

Although insulin's primary function is to shuttle glucose into skeletal muscle, it also carries many other nutrients to their storage sites; this includes fat. If you ingest a lot of carbohydrates this stimulates insulin secretion and will cause those carbohydrates to be stored, which isn't a bad thing. However, if you simultaneously ingest a lot of fat, the elevated insulin levels will also send that fat straight into fat storage. Therefore, the combination is a no-no. By avoiding the above, you will be able to consume more calories while still achieving a good rate of fat loss.

## Your Secret Weapon Carbohydrate Manipulation & Timing

Make an effort to take in the majority of your starchy carbohydrates and simple carbohydrates when your insulin sensitivity is at the highest. These times are:

- Fasted State (Breakfast)
- Post Workout (Within the 4-6 hour period after your workout)

A Reduction in starchy and simple carbohydrates the rest of the time results in an increase in the burning of stored bodyfat. Remember that you want to be a fat burning machine! If your body has lots of sugar available it will tend to burn that sugar before tapping into your fat stores. If you feed it in a manner that you allow it to tap into your fat stores and use them for energy you lose fat successfully! Your body will get its energy either from carbohydrates or from fat.

### **Do You Want to be a “Fat Burner” or a “Sugar Burner”?**

In a Perfect World Fats & Carbohydrates Would Ride a See-Saw

- Fat + Carbohydrates (Eaten Together) = Fat Storage
- On an overall Carbohydrate restricted Diet, when carbohydrates go down, fat must go up, for appetite control and to minimize muscle catabolism.
- At Times of High Carbohydrate Intake (P+C meals) Fat should be severely restricted.
- At Times of High Fat Intake (P+F meals) Carbohydrate should be severely restricted

## **What Exactly *are* Carbohydrates?**

### **Good Carbohydrates and Bad Carbohydrates**

Carbohydrates are grouped into two general classes: complex carbohydrates and simple sugars. Complex carbohydrates are nothing more than a simple sugar linked together into long chains. Your body digests the complex carbohydrates into simple sugars and releases them into the bloodstream as glucose. In the end, all carbohydrates are converted into glucose before they are used. Based on this, you might think it wouldn't make any difference whether you get your carbohydrates from starch or simple sugars but it does. Simple sugars, which tend to be high glycemic, or carbohydrates that induce a high response of insulin, are released into the bloodstream immediately, causing a rapid increase in blood sugar level and an insulin surge. Because simple sugars are released faster than the body can burn them for energy or store them as glycogen, insulin causes the excess to be converted to fat. For this reason it's best to avoid simple carbohydrates most of the time. The one time when it is permissible to have some simple sugar is immediately within an hour following a workout. At this time the sugar will quickly be sucked up into the muscles with little ill effects.

Complex carbohydrates, which tend to be low glycemic carbs, must be broken down and digested, a process that slows down their rate of release into the bloodstream, resulting in a more moderate insulin release and a more uniform energy level. Also, since they don't cause a large insulin release, complex carbohydrates are not as prone to be converted to fat. One hundred grams of sugar will have a different effect on your body than one hundred grams of starch, even though both supply 100 grams of carbohydrate! However, eating lots of complex **starchy** carbohydrates like potatoes, oats, bread beans, etc will still elevate insulin enough to prevent you from using your own body-fat as energy. For this reason they should be consumed in a "strategic" fashion. They should be consumed when your body is most likely to quickly use them as fuel. The other type of complex carbs, the green veggie or fibrous carbs, can be consumed as often as you'd like.

**Simple carbs-** consist of glucose, fructose, lactose, galactose, dextrose, maltose.

**Complex carbs-** consist of maltodextrin, starch, and cellulose, an indigestible fiber which provides bulk and is good for the intestines.

- **Good Carbohydrates – Increase Health & Satiety**

- Can be consumed with both (P+C) and (P+F) meals.
- Green Veggie Carbs
- Provide lots of fiber and cellulose with little calories and total net carbohydrates (total carb content after deducting fiber). Boost health and satiety. Can generally be consumed in near unlimited quantities as it's about impossible to eat enough of them to worry much about excessive caloric intake.
- Provide antioxidants, alkalize our bodies and provide a host of other health and protective benefits.
- Include: broccoli, cauliflower, any salad greens, zucchini, spinach, onion, artichoke, green beans, asparagus, cucumber, peas, squash, mushrooms, celery, beets, Brussels sprouts, peppers, spinach, okra, carrots, bamboo shoots, cabbage.

- **Special-Purpose Carbohydrates (Starchy Carbs)**

- Best eaten in moderation or as part of (P+C) meals. Even though they're complex carbohydrates they still increase glucose and insulin, which can prevent fat burning.
- Oatmeal, Beans and Lentils, Potatoes (all varieties), rice, bread (sprouted), pasta, corn, tomatoes, popcorn, barley, wheat and all other non-processed grains.

- **Bad Carbohydrates – Increase Fat Stores**

- Best if consumed very infrequently and only during the 1 hour post-workout period.
  - Sugar
  - Honey
  - Corn Syrup

- High Fructose Corn Syrup
- Fructose
- Galactose (milk sugar)
- Lactose (milk sugar)
- Anything made from white flour, or anything which uses “enriched” flour

## What about Fruit?

Fruit is generally considered a healthy food and does supply a wide variety of vitamins and nutrients not found elsewhere. It contains the natural fruit sugar fructose, which has a negligible impact on blood sugar levels and insulin. However, for body composition improvement, its consumption should be limited to no more than 2 or 3 pieces per day. Fruit consists of simple sugars, mainly fructose + glucose. Fructose is unlike the other sugars in that it can only be stored in the liver for immediate energy. The liver can only store approximately 50 grams of total carbohydrate. When the liver glycogen, or storage is full, any excess fructose consumed will be converted to body-fat and stored, rather than being used to replenish muscle glycogen, or carbohydrate storage. The muscles, on the other hand, can store between 200-500 grams of carbohydrate depending on size and activity level. It should be obvious that the potential storage in the liver pales in comparison.

- Carbohydrates in a Box vs. the Real Thing

As mentioned early on, packaged and processed carbohydrates have been processed to the extent that they become more “simple” upon consumption. Rather than releasing energy slowly the processing causes them to behave in the body like simple sugars. It’s definitely a good idea to limit any packaged carbohydrate sources that tend to “crunch” or “crumble”. These include chips, crackers, cereals, as well as white flour, which has been stripped of all its nutritional value.

## Good Fats, Bad Fats

The bulk of fat in your diet should be primarily unsaturated and in the form of essential fatty acids. These include deep-water fish and fish oil, flax seeds and/or flax seed oil, sunflower seeds and/or sunflower seed oil, hemp oil, olive oil, raw nuts, all natural peanut butter, and avocados. Consuming some saturated fat from cheese, red meat, and whole eggs is fine as these fats have a positive effect on anabolic hormone levels such as testosterone. Trans-fatty acids should be avoided at all costs; consumption of these fats have been shown to have the highest correlation to heart disease, decrease "good" cholesterol (HDL) levels, and increase "bad" cholesterol (LDL) levels. Therefore, avoid all fried foods and any product that contains "hydrogenated" or "partially hydrogenated" oils in its list of ingredients.

- High-Performance Fats

- Fish Oil
  - Flaxseed Oil
  - Udo’s Choice
  - Walnuts
  - Olive Oil
- **OK FATS (In moderation)**
    - Saturated fats from animal sources
    - Fats from vegetable sources (safflower oil, canola oil, peanut oil)
- **Bad Fats**
    - Deep-Fried Foods
    - Trans-fatty Acids
    - Hydrogenated & Partially Hydrogenated Oil

## Good Protein, Bad Protein

The bulk of the protein that you consume should be from complete animal sources that are known as “complete” proteins. These include chicken breast, turkey breast, fish, lean pork, lean red meat, fresh ham, eggs (whole or whites), cottage cheese, and milk protein powders (whey and casein).

### Good Protein

Try to focus on getting as much good protein as you can.

chicken, whole eggs, egg whites, any seafood, turkey, lean steak, extra lean ground beef, venison, buffalo, ostrich, veal, lean cuts of pork, cottage cheese, whey protein powder, casein protein powder, egg protein powder.

### Protein + Fat “special proteins”- (generally used as snacks)

Nuts, seeds, hard cheeses, richer meats such as liver, trail mixes, beef jerkey

- **Bad or “Not Quite as Good” Protein due to packaging, preservatives, and sodium**
  - Bacon & Sausage
  - Cold-cuts & Deli Meat
  - Beef Jerky with Sodium Nitrate
- **How about Meal Replacement Products & Bars?**

Meal replacement drinks and shakes are generally ok, providing you don’t develop gastric distress or allergy type symptoms when consuming them, but protein bars are

best avoided. They usually consist of lots of simple sugars and their protein is of questionable quality, typically consisting of a gelatin type protein, which is useless for the body.

## Allergies & Food Intolerances

- **Cravings and Fatigue-**

If you experience constant cravings for certain foods in your diet, extreme fatigue after eating certain foods, gastrointestinal distress, joint pain, or any other “hard to put your finger on” symptoms, you might have an intolerance to a specific component of that particular food. If this is the case, that food needs to be eliminated for a couple of weeks. Intolerance affects probably 50% of all individuals to some extent and after eliminating these problematic foods the body responds favorably in many ways.

- **Most Likely Allergenic Foods**

- Wheat, Corn, Dairy, Nightshade vegetables (tomato, potato, eggplant, pepper,) Peanuts, Soy, Yeast, Shellfish, Eggs.

- **Figuring Your Caloric Requirements – *only a Starting Point!***

Protein- Contains 4 calories per gram

Carbohydrate- Contains 4 calories per gram

Fat- Contains 9 calories per gram.

Total lean bodyweight in multiplied x 15 is generally a good starting maintenance point for most people, although this number can be off in either direction some 30%. This number minus 500 calories per day will, on paper, generally lead to a loss of 1 lb per week. The tough thing is, a calorie isn't always a calorie and hormones and individual biochemistry influence this more than anything else.

- **Why don't calories matter?**

Well lets say hypothetically you were able to lose weight while ingesting 1800cals per day. This has your caloric deficit figured in, being arrived upon by the traditional method which is to multiply your LEAN mass by 15 – 500 calories. So, you eat six meals per day, 300cals each meal, for a grand total of 1800cals per day. So, it stands to reason that since you are lower than what your calculations gave you number wise to lose weight, you would lose a lot of fat, right? Based on the numbers it would seem as if it would happen very quickly for you.

Ok, for an understanding of why macronutrients and their timing is so important, we will make all those meals you eat something like pizza, hamburgers, cakes, crackers, pasta w/meat of some kind, or any high insulin inducing food combined with fats. Do you still think that you are not going to gain fat eating this way? For the most part, even if you are

consuming only 1800cal, the food choices you made will likely cause you to pile on plenty of blubber!

See, the important thing in changing body composition is not the mere amount of calories you consume each day (which, sadly, is the basis on which most diets are built on). It's rather the impact your eating has on your hormonal state that is the real key. What type of activity did you just do? What will you do later in the day? These questions will influence the type of meal you are going to have at any given time. After each meal, your body doesn't just know how many calories you will end up consuming at the end of the day, all it knows is what type of nutrients it just received. In fact, badly planned eating patterns coupled with a low caloric intake could very well make you gain some fat while losing muscle mass at the same time. Not very good!

Make no mistake about it, it's the macronutrient breakdown of each individual meal, and how it revolves around your activity patterns that will allow you to make the most dramatic improvements in body composition. From a daily standpoint, look at it from a meal to meal perspective. It's much easier to analyze what section or meal of your diet is faulty rather than looking at the total caloric breakdown and merely reducing that amount if the diet is not working. Many simply do not know about all this and it actually varies quite a bit from person to person. Food choices and their timing, combinations, volumes etc all play a bigger part in your body transformation journey than simply counting calories. I'm not saying that you can eat 1000 calories above maintenance and still lose fat, but you get the idea. If you do not have the proper macronutrient breakdown for each meal, simply counting calories is of no use at all. You basically have to self-monitor your diet and ask yourself these questions:

#### **What activity are you going to do?**

- Exercise requires more energy than sleeping. Exercise also burns up carbohydrates so it makes sense that a meal eaten within a few hours prior to exercise can be bigger and require more carbohydrate foods than a meal eaten prior to sleep. High intensity activity requires more carbohydrates than low intensity activity.

#### **What type of energy source will it require and what nutrients do you need to recover from that activity??**

- An hour of weight-lifting and an hour of fast walking are both forms of exercise, however, the nutrients they burn are different. Weightlifting burns primarily carbohydrates for energy whereas walking burns primarily fat.

#### **What have you just done?**

Again, depending on the form of exercise or what you've done structure your meals accordingly. Most forms of exercise allow one to take in carbohydrates within a few hours after the exercise bout and these carbohydrates are directed

towards muscle tissue and away from fat. More to come in the post-workout recovery section.

### **How do I feel after eating?**

This is most important. Your body will typically tell you if a food or food combination is working for you or not. If you feel tired, bloated, or experience negative symptoms from a food it's best to avoid it. You should get lasting energy from your meals!

### **What time of the day is it?**

Your body can handle more carbohydrates and more food earlier in the day and less as the day goes on. But what do most people do? They eat the biggest meals, and the most junk food at night! Most people could make changes in their body composition just by simply reversing the order. Eat less carbohydrate and less total food at night instead of more. Ask yourself 2 questions. The first question is what you will be doing for the next 3 hours? If your going to be sedentary for the next 3 hours then you don't require a lot of carbohydrate to fuel that activity. Also ask yourself what you've been doing for the "last" 3 hours? If you've been exercising then your metabolic rate will be revved up, and you'll also need to replenish some of the energy you burned up. If you've been sitting on your butt then you won't have any depleted energy stores to "replenish", thus you'll have no real need for quick sources of energy (sugars).

This is the way to get maximum results. Your nutrition plan, training program and lifestyle must work in synergy, not as separate parts.

### **So if I choose to do it how do I go about counting calories?**

The easiest thing to do is establish a rough, baseline caloric intake level, then establish a protein intake and level with the appropriate macronutrient %'s and play around with the carbohydrate intake until body-fat is coming off at around .5-1 lb per 100 lbs bodyweight per week. If obsessively counting every calorie is not for you than just eat when you're hungry, follow the guidelines and emphasize portion control and hormonal manipulation through following the nutritional guidelines. Most will find that they aren't hungry at all when following the program correctly.

- **Protein Requirements per Meal**

Since protein is to be consumed at each, and every meal, figure out how many meals you'll be eating per day and how many calories you'll be eating. Protein is 4 calories per gram so for someone with 120 lbs lean body mass, eating 1.5 grams per lb of lean body mass, this would equate to a total protein intake of 180 grams per day, or 720 calories. So this individual would need 45 grams protein per meal if eating 4 meals per day and 30 grams per meal if eating 6 meals per day. For those who wish to forego this, just

remember that one serving of lean protein (meats) is about 4 ounces and is about the same size as the palm of an average sized hand. This will typically net between 25-30 grams of protein and 120-150 calories. For reference, the following highly consumable protein foods will all net about 35 grams of protein after cooking:

- Chicken breast...4 ounces
- Pork tenderloin...4 ounces
- Albacore tuna.....6 ounces
- Salmon.....6 ounces
- Shrimp.....6 ounces
- Eggs.....5 eggs or 10 whites
- Hamburger.....4 ounces
- Sirloin steak.....4 ounces
- Cottage Cheese (1%)..1.5 cups

An even easier method is to pick 1 meat for every meal (at the serving size specified) and all of the vegetables you want from the list above, the “good carbohydrate” list. Do NOT go hungry. Eat until you are full. **The veggies from that list will NOT make you fat!**

- **Carbohydrate Requirements**

The above individual, with 120 lbs lean body mass, starting off with a diet of 15 calories per lbs of lean bodyweight would need a total of 1800 calories per day. Eating 180 grams of protein accounts for 720 calories or 48%. This leaves the remaining 52% to be evenly divided between carbohydrate and fat. The carbohydrate portion would net 468 total calories and, at 4 calories per gram, would be a total of 117 grams to be spread throughout the day with the majority of these carbohydrates coming earlier in the day and immediately following exercise.

- **Fat Requirements**

Same as for carbohydrate requirements except fats supply 9 calories per gram so the total amount would be 52 grams consumed throughout the day.

- **How to Keep a Food Log**

Keeping a food log, although tedious and optional, can make the entire process much easier when first starting out. This can be very beneficial because most people vastly underestimate the amount of food they consume per day by 50% or more! To do this you will need measuring cups, spoons, food scale, and a nutritional desk reference or other food counts book and/or program so that you will be able to chart and log every morsel you consume for the next few weeks. You’ll also need to get compulsive about reading labels but labels are there for a reason! First sit down and map out a plan to follow with the appropriate caloric and macronutrient levels. To do this you’ll have to weigh, measure, and look up a wide variety of foods that you plan on consuming.

You'll also have to get in the habit of reading all the food labels. Next try to stick to this plan as closely as possible while monitoring your bodyweight and body-fat at least once weekly and write down any daily changes in your diet. Once you get good at it you'll find you no longer have to look anything up and it will all become 2<sup>nd</sup> nature!

### **Examples of How to Structure Meals**

#### **Eliminate or severely limit**

- Juice
- Soda
- Milk & milk products containing sugar- (yogurt, milk, ice cream etc.)
- Honey
- Sugar
- Fried foods
- Bread (sprouted grains are OK in moderation)
- Corn and processed corn products (crackers, etc.)
- Anything that you "drink" in the form of calories. Drink water, tea, coffee, diet soft drinks, sugar free lemonade etc. but no "energy drinks" etc. as they're usually very misleading.
- Any packaged product with high fructose corn syrup
- Any sauce or flavoring that uses sugar

#### **Condiments**

Use good oils such as olive oil, flax oil, Molly McButter, I Can't Believe it's Not Butter Spray, Vinegar, Lite Vinaigrette dressing, Fat free Italian dressing, mustard. Any seasonings and spices are ok. Butter, full-fat dressing, and mayonnaise are ok as long as you're not eating large amounts of starchy carbohydrates with the meal, but no more than 1-2 tablespoons per meal.

#### **Sample Meal Plan**

The following meal plan contains 5 meals with 3 (P+F) meals and 2 (P+C) meals. Notice how the (P+C) meals are eaten when insulin sensitivity is highest, breakfast and post-workout.

##### Scenario #1

Meal # 1 (Protein + Carb) – 1.5 cups cottage cheese + 1 piece of fruit, 1 serving oatmeal

Meal # 2 (Protein + Fat) – Chicken, beef, turkey, or fish + large salad, large helping of green veggies. (1 Tbsp butter + 1 TBSP full fat dressing)

Meal # 3 (Protein + Fat) Snack- Bag of peanuts, cashews, or almonds, Beef Jerkey, or deviled eggs

Meal #4 (Protein + Carb) (after workout) Dinner- Large helping of lean Fish or Chicken with medium size potato, or 1 cup rice, salad with vinegar or fat free Italian dressing, helping of vegetables

Meal #5 (Protein + Fat) Snack- Sugar free jello with whipped cream or celery sticks with small amounts (2 tablespoons) of full fat dressing or peanut butter.

### Scenario #2

This scenario contains 3 P+F meals with 2 smaller P+C snacks.

Meal #1 (P+F) scrambled eggs with cheese or whole hardboiled eggs.

Meal #2 (snack) (P+C) 1 piece fruit (Apple, pear) Celery sticks or any other fresh veggies.

Meal #3 (P+F) Large chicken breast with small salad and large helping of steamed veggies with cheese melted over the veggies.

Meal #4 snack (P+C) 1 cup lite cottage cheese with ½ piece fruit

Meal #5 (P+F) 6 oz steak with veggies and salad

### How many carbohydrate or fat meals will I require??

This varies depending on many factors. The best thing to do is customize your own meal plan based on your preferences, activity levels, number of meals you like to eat per day and type of diet you respond best to. Some people feel better when eating less carbohydrate while some are the complete opposite. Generally speaking, for those who desire to lose weight, those who feel better eating more carbohydrates tend to do better with 3 or more meals containing lighter (P+C) meals and no more than 1 or 2 (P+F) meals. Those who are high protein types do better with only 1 (P+C) meal per day. Those in the middle usually fit the above 2 scenarios with (P+C) meals eaten for the first meal of the day and after a bout of exercise. However, depending on the types of food one enjoys the diet plans can be customized to fit anyone.

### Cheat Meals or “Re-feeds”

If properly done, slacking up on your diet every once in a while by having a cheat meal of something you’ve been craving can enhance your results. Cheat meals or re-feeds boost leptin (a starvation hormone) levels, growth hormone levels, replenish glycogen levels, thyroid hormone levels and ultimately rev up your metabolism, causing you to burn more calories.

Properly done, re-feeds will **ENHANCE** fat loss! As long as you're losing at least 2 pounds per week, your re-feed is going to be two meals, each containing approximately 100 grams of carbohydrates, 1 day each week. Pretty much any carbohydrate source is fair game including cereals, low fat pastries, ice cream etc but meat and fat needs to be kept to a minimum. Fat must be kept minimal. Your carbohydrate refeed can be any 2 consecutive meals of the day.

### **How do I know if I need a re-feed?**

Depending on the dietary program you're following and how quickly you're losing weight, the lower your carbohydrate intake, the lower your caloric intake, the more rapid you're losing weight and the leaner you are the more often you can or "need" a cheat meal. If you're making good progress but really having cravings and finding it hard to stick to your diet than the "controlled" carbohydrate re-feed can be replaced by one all out **CHEAT** meal one day per week in which **ANYTHING** is fair game including all you can eat buffets! As long as the program is adhered to before and after the indulgence, the positive effects on mood, energy, hormone levels and anti-starvation hormones will far outweigh any negatives. Most people get better long term results if they allow themselves to slack up a little bit at least one meal per week and enjoying something they normally wouldn't.

## **Rules for Working Out**

### **More is Not Better**

- **Visceral Fat vs. Subcutaneous Fat**

Visceral, or internal fat tends to respond best to **CALORIC RESTRICTION**, whereas subcutaneous fat, or the fat on the outside, that you can pinch, tends to respond best to **EXERCISE**. For this reason a combination of exercise and caloric restriction leads to the most favorable results.

- **Cardio**

You should do cardiovascular training no more than 4 times per week with each session lasting 30-45 minutes. More is not necessarily better. You want to do enough cardiovascular activity to rev up your fat burning machinery but not so much that you lead yourself into overtraining. More is not necessarily better!

### **High Intensity Interval Training is The Most Effective Form of Cardio**

Any exercise is better than no exercise! Activities such as leisure walking, cycling or practically anything involving movement is a good place to start! Once you determine it is time to crank it up a notch consider switching to higher intensity cardiovascular activities. Basically, high intensity can consist of anything where the heart rate and exertion rate is significantly elevated to the point of having to stop and rest or slow down

every 15 seconds to 1 minute. Any exercise typically done in long duration fashion can also be done in high intensity fashion. Rather than walking, consider jogging interspersed with walking. If you normally jog consider sprinting interspersed with jogging.

But won't this take me out of my fat-burning zone?

The fat burning zone is the % of maximum heart rate in which the greatest % of calories coming from fat are being burned. Going for a leisurely walk or sleeping actually burn a very high % of fat calories but if the only activity we did was sleep all these fat calories being burned aren't going to do much for our physique! Fat is not actually burned much during exercise unless you are doing relatively light exercise. Fuel selection during exercise works like a pendulum. If you increase carbohydrate burning during exercise it just causes more fat to be burned after exercise for things like lactate conversion and glycogen storage. For example, if you were to take off and run as fast as you could for 30 seconds and then stop, you would likely still be breathing hard for several minutes afterwards. This is called excess post exercise oxygen consumption (EPOC) and even though during the actual sprint you would burn zero fat, during the recovery period you would be burning a lot of fat. Repeat the above scenario for 20-30 minutes and you'll not only be breathing hard for a long time, your entire metabolism will be **stimulated** for a long time! The most important thing during a bout of exercise is the total calories burned and the hormonal and cellular responses. High intensity cardio burns the most calories and also has the best effect on positive hormonal and cellular responses. The metabolism and nervous system stay elevated for hours and the cells behave in a much "leaner" fashion, with excess calories being shuttled into the "lean" compartment and away from the "fat" compartment. Regular cardio working in the target heart zone provides none of these benefits. For evidence just compare the physique of a marathon runner to that of a 400-meter sprinter!

## Weight-Bearing/Weight Training Exercises

The effect of weight training on the body is much like that of High intensity cardio training with the added bonus of muscle growth. Virtually every system in the body is enhanced and optimized. Muscle cells are fuel hungry machines! Consequently, any exercise that increases the size of muscle cells and makes them work more often will increase metabolism for optimal fat loss. When we increase our metabolism we increase our need for fuel. The whole physiology of someone who lifts weights is geared up to burn calories. The opposite is true of aerobicisers, whose physiology is like that of a Honda Civic; stretching a gallon of fuel for 40 miles. When you want to lose fat, you want to be like a Cadillac or a Hot Rod; you want to be fuel inefficient! Therefore you want to do exercises in such a manner that fuel efficiency is sacrificed. That means weight training, high intensity cardio, or even a combination of both at the same time.

Studies have shown that intense whole-body weight training sessions burn calories long after the workout is over. In fact in a study a group of people did 4 sets of 10 for the squat, bench press, and power clean. They burned about 350-400 calories during the 1

hour workout itself. Yet, over the next 48 hours they burned 700 ADDITIONAL calories in addition to what they burned in the workout. Aerobic training might burn an additional 50 calories after the workout is over so there is a huge difference. Weight training or calisthenic type exercises using compound exercises with minimal rest between sets provide the best of both worlds. Here are the guidelines for weight-training.

- A Minimum of Three Days Per Week
- A Maximum of Five Days Per Week
- Sessions Should be No More than 60 Minutes
- Focus on the Larger Muscle Groups – i.e., Legs, Back & Chest – and Compound, Multi-Joint Exercises

## Post-Workout Nutrition

- Following a Weight-Bearing Workout, the Goals are to:

- Increase Protein Synthesis

Since muscle tissue has been torn down and the cells are in a depleted state the body is eagerly looking for nutrition to repair the damage.

- Reduce Cortisol Levels

Cortisol is a catabolic “stress” hormone that is released whenever we encounter a large stress. Physical stress definitely can increase cortisol levels and proper nutrition after a bout of exercise will work to tame this hormone allowing recovery and regeneration to take place.

- A Correctly Formulated Post-Workout Recovery Drink or Meal Will:

- Reduce D.O.M.S. (Delayed Onset Muscle Soreness) The quicker we can initiate repair the less soreness will be a factor.
- Start the Process of Refilling Muscle Glycogen Stores. During intense exercise stored carbohydrate is used up within the muscles and they will be in a primed state to replenish these stores. The quicker we can fill them up the faster we can recover and be ready for our next session.

A proper post-workout recovery drink or meal consumed within 1-hour post exercise will accomplish all of the above and should consist of between 20-40 grams liquid protein (whey) and 30-70 grams liquid simple carbohydrate (glucose, dextrose, or maltodextrin). This is the **ONE** time where it is advisable to consume liquid, simple carbohydrates to boost insulin, as the body is quickly able to receive and assimilate this liquid nutrition at this time. Remember that insulin is a storage hormone? Well at this time post-workout we’ve created a big demand in our muscles for storage. Uptake of nutrients will preferentially be redirected towards muscle and away from fat.

As an alternative to the liquid nutrition, any normal protein source along with 30-70 grams of low fat simple carbohydrates from solid food sources may be consumed. If

you're going to eat sugar it's best to do so after a bout of exercise when it will actually have somewhat of a positive effect! A scoop of whey protein and a bowl of cereal or oats always makes a good post-workout meal.

## “Obsession”

A word used by the weak to describe the committed!

**Master Food List** (Use this list as a starting guideline as needed)

Proteins: 1 oz = 7 grams protein. (Meats are weighed before cooking)  
Chicken breast, Turkey breast, Fish, Eggs- 1 egg = 8 grams protein whites (2 large whites = 7 grams protein) Lean beef: 93 to 96% lean ground beef, lean sirloin, filet mignon, round steak, flank steak Fat Free or 2% Cottage Cheese (1/2 cup = 2 oz lean meat), Fat Free cheese, 100% Egg White Protein (11 gm / TBS), Whey protein (11 gm/TBS)

Non-Starchy Vegetables: 1 serving ( 5 grams carb) = ½ cup cooked or 1 cup raw  
Asparagus, broccoli, green beans, cabbage (all varieties), carrots (small amounts...), cauliflower, celery, cucumbers, kale, lettuce (all varieties), onions, peppers (green, red, yellow, hot, etc.), radishes, spinach, string beans, squash (summer varieties only), tomatoes.

Fresh Fruits (not dried or canned): 1 serving (15 grams carb) = 4 oz (on average) Apples, cantaloupe, cherries, grapefruit, grapes (small amounts), honeydew melons, nectarines, oranges, papaya, peaches, plums, raspberries, strawberries, blueberries, mangos, watermelon, etc. (Unsweetened frozen fruits are acceptable as part of your total fruit intake.)

Starchy Carbohydrates: Brown rice (37 gms / cup), white rice (40 gms / cup), medium potatoes (with skins), yams and sweet potatoes= 25 grams , oatmeal= 25 grams per 1 cup cooked or 1/3 cup uncooked, cream of rice 3 tbsp= 25 grams , beans and legumes 1 cup = 30 grams

## Part II – Gaining Muscle Mass

The first section dealt with losing bodyfat. This section has to deal with gaining muscle mass. Are you skinny as a rail and find it difficult to gain weight no matter what you do? Have you tried training harder and harder and find that when you really apply yourself you just end up staying the exact same, if not losing weight? If so you're not alone. Many young athletes, especially the naturally thin, find it difficult to put on any amount of measurable muscle mass no matter what they do. They find that all too often their bodies have a tendency to maintain the same weight no matter how much food they're eating or how much they're working out. In America today most people are overweight if not obese so you've probably found people have little sympathy for your “problem”. But it

really can be a challenge. If anything, it can actually be harder for a hard-gainer to gain weight than it is for a naturally plump person to lose weight! The good news is that if you follow a program correct for your body type and metabolism, you **CAN** gain plenty of muscular bodyweight. Let's take a look at some of the factors that contribute to you being rail thin and unable to gain weight and then show you how to remedy these problems.

## **WHY CAN'T YOU GAIN WEIGHT?**

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Though there may be many reasons why you may be thin, lean, and lack muscular size and strength, the most apparent reason is due to genetics. Chances are if your parents are naturally thin and have a small body frame, then you will most likely have the same small body type. Our genetics tend to dictate the natural pattern our body wants to follow. If you were naturally plump, then your body would want to stay that way and you would have a more difficult time than most losing weight. If you're naturally small and lean your body will want to stay that way, **UNLESS** you take specific measures to overcome your body's natural tendencies.

Your natural body size and tendencies to be either lean or big can also be affected in large part by your metabolism and activity level. If you find it difficult to gain weight of any kind (fat or muscle), then you most likely have a fast metabolism. That simply means that your body burns calories at a faster than normal rate. Not only this but people with a fast metabolism tend to respond to overeating with an even more hyped up metabolic rate. What this means is even though you may be eating enough on paper to gain weight, whenever you do overeat your metabolism simply speeds up in an effort to keep you at the same weight. You also have to consider that your body is probably growing in height and stature anyway, so this requires a lot of additional calories. You must take this into account whenever you are considering a particular diet or training program. If you find it difficult to gain weight even when you're not doing anything strenuous and you follow a high volume exercise program requiring a lot of exercise, which burns even more calories, then it is going to be even harder for you to gain weight of any kind.

Many hard-gainers tend to be very active and find it hard to sit still. If you're always doing something active then that physical activity adds up very quickly and requires lots of additional food to make up for. This leads us into the number one key to muscular weight and really the only reason people have a hard time gaining weight and that is simply because they don't eat enough. This leads us into our first key, which is to eat more food! Weight training is definitely important as well but we'll delve into that later. For building muscle, nutrition is the most important factor, so get your nutrition and diet right, then worry about training.

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### **Key #1 Eat, Eat, and Eat some more!**

Most hard-gainers don't eat enough, or in particular, eat often enough. I know you probably "think" you eat a lot. Many hard-gainers can sit down and eat an entire large pizza and half a gallon of ice cream without gaining an ounce. But what and how much do they eat the rest of the day? Unless one is eating a minimum of 5 meals per day, even when consuming lots of high calorie food, it still can be difficult to pack on the pounds. It's a common law of thermodynamics. If you eat enough you will gain some weight. What is "enough" for you can be very individual. It might be 4000 calories per day, 5000, 6000, or even 10000. The average American requires about 2000 calories to maintain their weight. Unless you're eating a minimum of twice that much you'll unlikely see any weight gain. Many hard-gainers make comments like "I'm getting tired of everyone telling me to just eat more. I eat as much as I can, 3 or 4 times per day, but just don't gain any weight. How can I eat more if my stomach is about to pop?" Well unfortunately for guys like this there aren't any magical appetite stimulants that really work to stimulate appetite. The real key lies in being dedicated to the act of eating. If eating 3 or 4 times per day isn't enough then try bumping it up to 5 or 6 times per day. If that still doesn't work then add even more food to those meals. If that doesn't work then eat 5 or 6 times per day and add a couple of protein shakes. If that still doesn't work then try eating and drinking calories all day long!! Eventually you will reach a point where results show up in the form of weight gain. To give you an idea on what "real" eating consists of, here is a sample diet that when used in conjunction with a properly designed weight training program, has proven effective for many hard-gainers. It consists of multiple meals with the addition of substantial snacks and drinks.

**8 AM, Breakfast:** 6 whole eggs, 4 slices of whole grain bread, and 4 packets of instant oatmeal.

**12 PM, Lunch:** 4 tuna fish sandwiches made with 2 cans of tuna and mayo, 1 cup vegetables, 1 piece fruit,

**4 PM, Evening Meal:** 1 pound of chicken, 1 cup vegetables, 2 cups rice

**8 PM, Post-workout:** half pound of pasta (weighed before cooking), tomato sauce, ½ pound lean ground beef.

**Before bed:** 1 large 24-ounce container of cottage cheese, 4 slices of whole grain bread.

Also, to supplement the diet, ideally you'd mix up a large jug of water or milk each morning and add several scoops of protein powder. In addition, for between meal snacks carry around a bag of bagels and jar of peanut butter. Spread the peanut butter on a bagel and sip on the protein drink mixture all day long when an actual meal isn't being eaten. If you're not eating then you're not growing!

This plan will get the scale moving in the right direction for practically anyone, but the point is not to give you an exact diet to follow, rather it's to illustrate how important it is to push the limits of what it really takes and become dedicated to eating. I'll get into specific nutrition plans for you later. The good thing about it is if you push yourself like this your body soon adapts and it becomes much easier to eat more on a consistent basis.

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If weight gain is your goal, then you will need to eat more food. Period. In most cases, you will need to eat more than you are normally accustomed to. Many people who find it difficult to gain weight just don't have much of an appetite for consistently large meals. Oh yeah they can put away the food when they're hungry but the hunger isn't always frequent. If you're one of these people, you'll have to force yourself to eat at each meal. Usually after a couple of weeks your appetite will grow and you'll become hungry before each meal and you'll quickly get used to it.

If you have this problem and just don't have much of an appetite, you still must eat something, no matter how much. Start off making yourself eat something small liked mixed nuts, jerky, or fruit every few hours. Then, as your appetite grows, gradually move into more real food. What this will do is gradually get your body accustomed eating at regular intervals. When eating more, you will need to make sure that you are getting plenty of good quality protein. Protein is a nutrient that is essential for building muscle. Every meal that you eat should contain some form of protein. Meal Replacement Powders and protein drinks are excellent for this purpose. They can be a real asset because not only do they supply high quality protein, but instead of "eating" your calories and you can "drink" them.

You should also strive to eat more often throughout the day. Going long periods without eating will cause your body to breakdown muscle tissue for the calories it needs. This is especially true for those with fast metabolisms.

Spreading your meals throughout the day will give you more manageable meal sizes, improve nutrient assimilation, and make sure that your body always has the calories and amino acids it needs for muscle building and repair. I recommend eating a high protein meal every 3 hours. During normal waking hours, that usually equals about 6 meals.

Now you might be wondering or saying "Wow how can I eat that much and that frequently when I barely have enough time as it is?" Well if you want something bad enough you'll figure out how to get it done. It may seem very inconvenient at first, but once you get in the habit of doing it, it will become second nature and you don't have to give it much thought.

Will a high calorie diet like the one mentioned above put weight on you? Sure. Will it put only solid muscle weight on you without an ounce of fat? That depends on many things but probably not. That leads us into key #2 which is:

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## **DON'T TRY TO GAIN MUSCLE AND LOSE FAT AT THE SAME TIME!**

Many people don't gain weight because they are afraid of gaining fat. This is a valid fear as I've met very few people who actually want to get fat! The problem is when people try to achieve or maintain an ultra low body-fat percentage with ripped abs while at the same time wanting to gain a significant amount of muscle size and bodyweight. Unfortunately, doing lots of aerobic activity and eating a low calorie diet, 2 things that are essential when trying to become extremely lean, make it about impossible to build any muscle. Training to lose fat requires different methods than training to gain muscle. Losing fat involves eating a lower calorie diet, while building muscle requires a higher calorie diet.

This is a point that most hard-gainers don't realize. If you want to get bigger and gain more muscle, you will have to deal with the fact that you're probably not going to become leaner while doing so. In fact, in order to gain a lot of muscle you'll probably also have to also gain some additional body-fat. This is due to high calorie diet that you must eat to build more mass. Some people will be able to gain muscle and lose fat at the same time, but unless you're very advanced in your training and diet methods for most this is not a reality. The best long-term strategy is to first just worry about getting bigger and stronger, and only after you've built a strong foundation should you worry about trying to sculpt that foundation down to 5% body-fat with cuts, striations and veins popping out everywhere.

Many people look at the bodybuilder photos in magazines and see the pictures of the pros and don't realize that the pros don't look the way their projected in the magazines unless they're dieting down for a contest which only happens once or twice a year for most. Right after a contest the magazines take photos of these bodybuilders while they're in this extremely ripped and lean condition. These photos then run in the magazines throughout the year so that's what you see. What you don't see is how most of the year these bodybuilders carry much more body-fat because they eat a lot more in an effort to grow even larger. Also when looking at the photos and reading the testimonial stories about people gaining pounds of muscle while losing pounds of fat in the process, realize that most of these people were carrying an excess amount of fat to begin with. Their training is focused on losing fat and they also put on a few lbs of muscle along the way. If you, as a hard-gainer, were to go on a fat loss diet, you would lose fat, but the low calorie diet couple with your fast metabolism will likely cause you to lose muscle mass rather than gaining!

For maximum results, you either have to train and diet to gain muscle or lose fat but not both simultaneously. The most effective way for hard-gainers to build a large amount of muscle mass quickly is to focus on gaining the weight first, then later on, go on a short-term fat loss diet to lower your body-fat levels.

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### **Key # 3**

## **IF YOU WANT TO GROW YOU MUST RECOVER**

Muscles grow when they rest, not when they're trained. Because many hard-gainers tend to be active and high strung to begin with, they often don't get enough recuperation between workouts. When a muscle is trained it is damaged. The muscular damage is what causes soreness after you workout. After a muscle has become damaged, if you do everything right, the body will rebuild it a little bit bigger and stronger than it was the last time to better deal with the training stress you're putting on it. This is called super-compensation. There are 4 really important factors when it comes to muscular recovery. These are:

1. Getting enough rest between workouts- If you don't give your body enough time between workouts to recover and super-compensate from your previous workout you won't progress at all.
2. Limiting other activities- The body can only do and recover from so many things at once. If you engage in too many additional activities that take energy away from training and recovery from that training your gains will be much slower
3. Consuming enough food You need to consume enough food and give your body the nutrition it needs to fuel recovery, repair, and energize you for your training sessions while consuming enough additional food for weight gain.
4. Getting enough sleep- Most recovery actually happens during sleep. You know of the importance of muscular recovery but recovery of the nervous system is also important. The nervous system is the backbone behind the muscular system and if it is not sufficiently recovered then your performance in all activities will be sub-optimal. For this reason, 8 hours of sleep per night is recommended.

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### **Key #4**

## **STIMULATE YOUR MUSCLES YET DON'T ANNIHILATE THEM**

The only way we can get our bodies to build muscle and grow is to do 2 things:

1. Eat a lot of calories
2. Train with heavy weights

Eating more calories than your body is used to will result in weight gain. This is the most important factor in gaining bodyweight. Yet if all you did was eat you'd probably just get fat! In order to ensure muscle gain you also must stimulate the muscles enough to send the body a signal to add more muscle tissue to deal with the stress you're imposing on them. The weight training and eating both work together. The weight training overloads the muscles and stimulates growth, while the food you eat provides the necessary building blocks to repair and build new muscle tissue.

Note the emphasis on the word, "stimulate". You must understand that for most hard-gainers less is more. Most people actually train too often and most people still believe that the more you train, the bigger you will get. Only genetically gifted athletes can get away with super-high volume training programs. If more training always equaled more muscle then all you'd have to do is workout 8 hours every day and you'd be huge. Unfortunately, it doesn't work that way. One of the most successful bodybuilders in the world, Dorian Yates, trained a total of 4 hours per week and he was Mr. Olympia 8 times! Remember you do not get bigger by working out but only when you recover. Your muscles do not grow in the gym they only grow when they're resting. Also realize that a muscle can only grow so fast. You can train enough in a certain workout to stimulate your muscles to grow but that doesn't mean that if you stimulate them more that they grow more prior to the next workout. So the key is to train just enough to "stimulate" your muscles and make consistent gains from workout to workout. It is rare to see someone not training hard enough or frequently enough to grow. Most people mess up in the other areas such as nutrition and recovery.

The only purpose of weight training is to stimulate growth. After that, your body needs rest and food to build the muscle. Hard-gainers tend to need less training and more rest and more food than others to grow so training longer and harder is not the answer. Working out too often doesn't allow your muscles the necessary time to recuperate. Not only will your gains be less than optimal, but you'll also likely set yourself up for chronic injuries from overtraining. When a workout lasts much more than an hour the anabolic hormones, which are responsible for muscle mass and strength increases, begin to decline. This is why your weight training workouts should always be restricted to around an hour or less. Your goal should be to get in, stimulate the muscles through heavy, compound movements, and get out.

As far as training frequency goes, you want to ensure as much recovery as possible and constant progress so I recommend no more than 3 one-hour workouts per week and 2 workouts will be enough for many people. This is a system that has proven successful for many hard-gainers. Because you're not spending so much time in the gym your body is more likely to grow.

The real reason most people don't make the gains they desire is because of improper diet and overtraining. Go to any gym and you'll see guys working out 5, 6, or even 7 days a week for 2 hours at a time and look exactly the same year after year after year. Training smarter is always a lot more productive than training harder.

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## Key #5

### **TRAIN WITH FREE WEIGHTS**

The best way to stimulate your muscles and gain muscle mass is to use free weights for the majority of your training. When you use free weights you work the muscles in a more natural environment. Not only are your target muscles working but you also get help from the stabilizer muscles, which are used for balance. Most machines are a waste of time. They limit development because they help to support the weight. Try this little test to verify this. See how much weight you can press on machine. Now try the exact same movement with free weights. Which can you lift more weight on? Likely you can lift more on the machine because it does the job of balancing the weight for you. Which exercise is more difficult?? Free weights are more difficult but they also work much better. Usually, if an exercise is harder or less comfortable than its alternative, you should choose the more challenging exercise. It's usually harder because it works more muscles! The more muscles you work, the more muscles you stimulate. If you only have a certain amount of time to workout, the more stimulation you can get in that time frame the more growth you stimulate.

Free weights make you support the weight along the entire path of the movement, which helps to stimulate more muscle fibers, while also strengthening smaller/weaker muscles. If your stabilizers are weak, your larger muscles won't grow. Follow the lead of pro bodybuilders and professional athletes who use free weights almost exclusively for quick gains.

You should focus the majority of your workout time on multi-jointed lifts such as squats, deadlifts, bench presses, bent over rows, dips, and pull-ups. Multi-jointed exercises are those that stimulate the most amounts of muscle fibers. Unlike isolation exercises, which only work individual muscles, multi-jointed lifts work many different muscle groups simultaneously. For those needing to gain weight, this is ideal because these lifts put your body under the most amount of stress. This is the stress that causes the greatest release of the anabolic muscle building hormones such as testosterone and growth hormone. This results in a large ripple-like effect. Throw a pebble into a pond of water and you barely get any ripple. Now throw a big boulder into a pond of water and what do you get. A huge tidal wave! The effect of heavy multi-joint exercises on your body is similar to throwing a large rock into the pond. You get a ripple effect all over your body. This results in increased muscle gain all over the body. You can still do some isolation work; however it should not be the focus of your workouts, and should only come after your multi-jointed lifting is complete.

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## Key #6

### **TRAIN WITH THE CORRECT SETS, REPS, AND WEIGHT**

You should always lift a weight that is challenging for you but one that you can lift with good form. Always terminate a set whenever you can no longer complete your reps with perfect form. It is not necessary to train to the point of failure on each set, or the point at which you can no longer lift the weight and need help from a training partner. In fact, you're more likely to progress if you stop each set a couple of reps shy of failure and strive for consistent increases in weight each week.

Building mass involves lifting relatively heavy weight. This is necessary because the muscle fibers that are most responsive to muscle growth are best stimulated by heavy weight. What's heavy to you may not be heavy to another person and vice versa so only pay attention to the weight that YOU can lift. A heavy weight is one that allows you to perform between 4-8 reps before your muscles fail. Using a lighter weight and doing more reps can stimulate some muscle growth but more importantly it stimulates a pump, or blood rush to the trained muscle. The "pump" feels good, looks good, and really can be addictive, but realize the pump you get from higher rep training is purely temporary. As soon as your workout is over that blood will leave and the pump will dissipate and the pump training really doesn't stimulate much actual muscle growth in comparison to heavier sets. If you are a hard-gainer and already have a difficult time gaining weight, it's best to prioritize your time with the use of heavy weights and leave the pump training for when you have developed enough muscle to "pump up".

Whenever you perform your repetitions you should focus more on the eccentric, or negative, portion of the exercise. To describe the negative portion of a lift realize that when you lift a weight, it can be divided into three distinct periods. The concentric, the eccentric, and the isometric. The concentric or "positive" motion usually involves the initial push or effort when you begin the rep. The isometric is signified by a short pause before reversing and returning to the starting position. The eccentric, or "negative" portion of each lift is characterized by your resistance against the natural pull of the weight.

For example, when doing bench presses, the positive motion is the actual pushing up motion. The negative motion begins when you start to lower the weight back down. Most would simply lower the weight as fast as they pushed up, but you should slow down this portion. Slowing down the eccentric portion of the lift will help to stimulate more muscle growth because each fiber is under more tension during this phase. So actually instead of focusing on "lifting" weights you should focus on "lowering" weights. Aim for at least a 3 second negative on each lift.

As far as how many sets per muscle group this is going to depend on your training split and workout frequency, but generally no more than 8 sets per muscle group. It is not necessary to do large amounts of exercises for each body-part trying to target every muscle and hit every "angle". This should only be a concern for someone with a mature physique who is trying to improve weak areas. Don't waste your time trying to "sculpt" a muscle if you don't have enough raw muscle to sculpt in the first place.

A sculpture starts out as a large unfinished piece of rock. You should strive to have a big enough “rock” to sculpt before you worry about sculpting. If your chest is small to begin with, don’t concern yourself with trying to target inner, outer, upper, lower or whatever. Just work your chest. You should do no more than 2-3 exercises per body part for 3-4 sets each. That’s it. Doing more than that won’t build more muscle, faster. In fact it could possibly lead to muscle loss. Long training sessions not only cause a reduction in muscle building anabolic hormones but they also cause catabolic hormone levels to rise dramatically. Catabolic hormones are responsible for breaking down muscle tissue resulting in MUSCLE LOSS.

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## **Key #7**

### **SET A GOAL AND CREATE A PLAN**

Think of your plan as a road map and your goal as your destination. Without a plan and a specific goal you will be without focus and can easily get lost or side-tracked. Failure to plan is planning to fail. You should **KNOW** exactly what you’re going to do and how you plan to get there. How much food are you going to eat per day and what will those meals consist of? Nothing is worse than running out of food in the middle of a weight gain cycle so make sure you shop in bulk and always have enough food. How many times per week are you going to work out and on what days? Once we set a goal and commit ourselves to that goal and write that goal down most of the work is already done. The most important thing you can do for your progress is to set out a map by writing your goals down. What do you want to accomplish in the next year? How much weight do you want to gain? How will you feel about yourself when you accomplish those goals? Even if you were to take out a piece of paper and write those goals down and never look at them again, you still have an 80% chance of hitting those goals within the next year. Most people in the gym just do whatever without any real direction or focus. They wonder why they don't make progress. They have no focus. After you write your goals down break them down into smaller increments. Have daily, weekly, and monthly goals. Your daily goal might be to meet your daily caloric intake goal. Your weekly goal might be to gain 1 lb or train 3 times without missing any sessions. If you continue to repeat those smaller goals over and over again they add up.

After you write your goals down and develop a plan of action for them you’ll need to start keeping a daily food and exercise log. Every day you should write down everything you eat and every exercise you do. This will allow you to have a daily reference to work from. This requires daily action and soon leads to daily habit. After 21 days what you do will become a habitual part of you and it will no longer require conscious effort on your part. Having a specific program to follow allows you to take action each day. This action is focused on specifically getting you to your destination quickly. There is no thinking, debating or guessing. You just do it. A specific plan provides necessary daily structure that not only keeps you on the road moving forward, it also helps to develop good eating and training habits that will benefit you long after you have reached your destination.

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## **KEY #8**

### **HAVE CONFIDENCE IN YOURSELF AND BE CAREFUL WHO YOU LISTEN TO**

Most people who begin any type of self-improvement program such as fitness find getting started to be half the battle. The other half will be staying motivated throughout the times when enthusiasm is low. Being able to train and push yourself when you're feeling happy, energetic, and enthusiastic is one thing. Being able to do it when you're not so enthused is another. One of the things that can contribute to a lowering of enthusiasm is constant negativity from others.

People hate change and because of this are sure to question and ridicule what you're trying to accomplish. These people will often be your closest friends and family members. They'll question your dedication, your eating habits and probably laugh at you and mock you. Deep down it makes them insecure, because they suddenly discover there's more to you than they were probably willing to admit. They fear that you may actually achieve your goal. It makes them look less "superior".

Once you have begun your plan, you must have faith and believe in what you are doing but don't expect anyone else to. In order to stay focused and concentrated you may have to keep your business all to yourself. Don't let negativity from others bring you down. If you adhere to your plan long enough you'll find that over time the same people that attempt to bring you down the most will step out and admit how much they admire you. Until that point don't allow the success or failure rest in the hands of others. Take responsibility for what you do and accomplish and realize it's all yours for the taking.

Yet another topic related to other people and their influence on you is the type of advice you get from others who are trying to help you. Some people mean well and can sound quite convincing, but many times you'll get ridiculous advice from people in the gym on things like training, diet, etc.

If someone bigger than you and older than you tells you something like, "you're training all wrong and need to train 5-6 days a week, and aim for more reps during your workout", You have to question where that advice is coming from. Was this person a hard-gainer? Has he ever had difficulty making progress? Oftentimes the people who are best at a particular endeavor are the worst to ask for advice because they never had to struggle to make progress, and this goes for anything. Do you ask the genius how to become a genius? In many areas of life, those who weren't dealt such good cards and have to struggle for what they achieve are the ones who really end up knowing what they're talking about. Just because someone has an impressive physique that elevates him to the elusive "listen to me if you want to look like me" level in the gym doesn't mean they really know what's right for you even if they're bigger than you. Don't judge the validity of what a person says by how they look. Just because the guy is huge doesn't mean he has advice that is right for you. Many people that have big physiques are big despite of their training, not because of it. Some huge guys actually know very little

about training and dieting correctly. They can do whatever and still gain muscle; unfortunately, hard-gainers are not that way, so we much approach things in a more intelligent way. So if you're making progress, don't change your program just because someone who has what you want says that's what you should do. This could be a mistake and severely limit your progress.

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## **KEY #9**

### **STAY COMMITTED TO YOUR CURRENT PROGRAM**

You must give your program at least 6 weeks before making any determination into its effectiveness. If you've followed your program and aren't making muscular gains then you should analyze everything else that you're doing outside the gym. Are you eating enough? Are you getting enough rest? Are you getting stronger? If you want to change programs after just a few weeks because you read about a new workout in a magazine you'd probably be better off staying focused on your current routine. Many people are very enthusiastic when starting a new program, but they never follow it long enough to actually see any results. They love to drop whatever they're doing to chase after something that sounds more enticing. Usually this never leads to any positive results.

It takes time to make gains from any new stress on the body. If you haven't made any gains and you've been training for 6 weeks or longer, then you might want to look at your program. But up until that point, likely what's holding you back is probably something unrelated to what you're doing in the gym. To be successful, you must follow a program consistently. There are many different training methods and interesting routines out there, but you can't do them all at the same time and jumping around won't allow enough time for any of them to actually be effective for you. Pick one that is focused on your current goal and stick with it. There will be plenty of time to try the others later.

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## **Key #10**

### **NUTRITIONAL SUPPLEMENTS FOR WEIGHT GAIN**

Actually this really isn't a "key" to progress but I thought a section on supplementation for mass gaining would be appropriate. The fact is that supplements are **NOT** necessary. Strongmen and bodybuilders back in the day still gained plenty of muscle mass long before the first nutritional supplement became available. If anything, the average man back then was stronger and more masculine than today. Many people who use nutritional supplements attempt to use them to make up for a bad diet and spend way too much time, energy, and money on supplements when they could make far more progress paying attention to heavy and hard eating and training. Having said that, certain nutritional supplements can help you achieve your goals but they will still never make up for a good diet. Realize that "supplements" should supplement a good diet not replace a good diet. Supplements are not magic. Too many people think that just because you buy the latest product, it guarantees that you will automatically begin to pack on the pounds. This is far from the truth.

To illustrate this I'd like to give you an example. Give me two scrawny 16 yr old male identical twins of the same height and weight. We'll call one twin "A" and the other twin "B". Since they have identical genes, their response to training and diet will be very similar. In this hypothetical situation, both of them have a goal to increase strength and muscle size and they follow the exact same training program, which they are both consistent with. Twin "A" does nothing more except eat a very high calorie diet. He eats 6 large meals everyday with an emphasis on protein and drinks a gallon of milk per day. Twin B pays no real attention to diet. Rather he spends \$1500 per month on all the latest supplements. After 3 months which one do you think would gain the most muscle mass? I would put every cent in my bank account on Twin "A". He'd blow twin "B" out of the water in sheer muscle mass gains. Supplements can add to nutrition but can't replace it.

So now that you've had that beat into your brain here are some supplements you might consider. I'll break them up into categories.

**Supplements For Convenience:** Using food supplements like meal replacement drinks and protein powders help to eliminate the common problem of 'not enough time', by providing you with a quick, efficient way to get your required nutrients each day. They make eating large amounts of calories and protein easier for people with low appetites.

**Supplements for Strength:** Products that contain Creatine monohydrate enable you to swing the odds of gaining more weight in your favor by increasing your strength output. Creatine enables you to lift heavier weights, which will stimulate more muscle fibers and cause more muscle growth. There is not really a big need to fall prey to the ads marketing sophisticated blends of creatine. Just stick to regular old creatine powder. Nowadays, even Wal-Mart carries good creatine.

**Supplements For Enhancing Your Immune System:** Weight training increases the body's need for many minerals and vitamins. A good multi-vitamin ensures that you are not deficient in any major essential vitamin or mineral. Deficiency symptoms include muscle weakness and suppression of the immune system, muscle cramping and fatigue.

**Supplements For Increasing Your Body's Production of Muscle Building Hormones:** Certain supplements like magnesium and zinc help recovery, which indirectly increases your body's natural testosterone production. More testosterone equals more muscle. Fish oil or cod liver oil contains essential fatty acids, which are vitally important for all sorts of hormonal functions in the body.

Using supplements is a choice that you must decide for yourself. You will be spending your money on these products, so make sure that you get your moneys worth and that you know their place in your program, just don't expect any miracles.

## **SAMPLE ROUTINES**

### **Option #1**

**The 2/1 workout-** In this workout you hit a body-part twice one week and then once the next week.

## **Monday**

Squat or squat equivalent- 4 sets x 6-10 reps (add weight and decrease reps with each set)

Stiff-legged deadlift from just below the knees (4 sets x 6-8 reps)

Calf raise- 3 sets x 20 reps

Abs- weighted cable crunches- 3 sets x 15 reps

## **Wednesday**

Dip or bench press- 4 sets x 6-10 reps (add weight and decrease reps with each set)

Chin or pulldown- 4 sets x 6-10 reps (add weight and decrease reps with each set)

Overhead press- 3 sets x 6-8 reps

Seated Rowing- 3 sets x 8-10 reps

### **Friday (Same as Monday)**

Squat or squat equivalent

Stiff-legged deadlift from just below the knees

Calf raise

Abs

### **Monday (Same as Previous Wednesday)**

Dip

Chin

Overhead Press

Seated Rowing

## **Wednesday- (Same as previous Friday)**

Squat

Stiff-legged deadlift

Calf Raise

Abs

### **Friday (Same as Monday)**

Dip

Chin

Overhead Press

Seated Rowing

## **Option #2**

Twice-a-week divided program

**Monday**

Squat- 4 sets x 6-10 reps (add weight and decrease reps with each set)

Stiff-legged deadlift from just below the knees- 3 sets x 6-8 reps

Calf raise- 3 sets x 20 reps

Abs

## Thursday

Dip or Bench press- 4 sets x 6-10 reps (add weight and decrease reps each set)

Chin or pulldown- 4 sets x 6-10 reps (add weight and decrease reps each set)

Overhead press- 3 sets x 6-8 reps

Seated rowing- 3 sets x 6-8 reps

**Option #3**

Twice-a-week full-body program, same major exercises each time

## Monday

Squat or squat equivalent- 4 sets x 6-10 reps (add weight and decrease reps each set)

Stiff-legged deadlift from just below the knees- 3 sets x 6-8 reps

Dip- 3 sets x 6-8 reps

Chin or pull-down- 3 sets x 6-8 reps

Overhead press- 3 sets x 6-8 reps

Seated rowing- 3 sets x 6-8 reps

## Thursday (same reps and sets as Monday)

Squat or squat equivalent

Dip

Chin or pull-down

Overhead press

Calf raise

Abs

**Option #4**

Twice-a-week full-body program, different exercises each time

## Monday

Squat or squat equivalent- 4 sets x 6-10 reps

Stiff-legged deadlift from just below the knees- 3 sets x 6-8 reps

Dip- 4 sets x 6-10 reps

Chin or pulldown- 4 sets x 6-10 reps

Overhead press- 3 sets x 6-8 reps

Seated Rowing- 3 sets x 8-10 reps

# Thursday

Leg press- 4 sets x 10-12 reps  
Back extension- 3 sets x 12-15 reps  
Bench press- 4 sets x 6-8 reps  
One-arm dumbbell row- 3 sets x 8-12 reps  
Dumbbell press- 3 sets x 6-8 reps  
Calf raise- 3 sets x 20 reps  
Abs- 3 sets x 15 reps

What about smaller muscle groups like arms you might ask? Remember our goal is to send a big “ripple” effect by performing exercises that require a lot of metabolic stress and economize our training time. Most people find their arms grow significantly even without any direct arm training, when doing a routine like this. The goal is to make progress in either weight lifted or weight each session. Consistent strength increases always bring about an increase in muscle size as well.

Option #5 – (higher volume option)

(4-5 sets x 8-12 reps on each exercise – What days you train is not important. You can train every other day or 2 days in a row. Try not to train more than 2 days in a row without a day off. Train as often as 5 days per week)

Day 1: Squats, 30-degree Incline DB Bench Press

Day 2: Dips, Supine Grip Pull-ups, Incline Bench Biceps Curls

Day 3: Deadlift, Standing DB Military Press, Calf Press in a Leg Press Machine

**After 4-6 weeks switch to the following exercises and change the sets reps to 10 sets of 4 reps per exercise**

Day 1 Squats, Incline Bench Biceps Curls

Day 2: Dips, Supine Grip Pull-ups

Day 3: Deadlifts, Calf Press in a Leg Press Machine

Day 4: 30-degree Incline DB Bench Press, Standing DB Military Press

**After 4-6 weeks switch to the following exercises and change the sets and reps to 6 sets of 6-8 reps per exercise**

Day 1: Squats, 30-degree Incline DB Bench Press

Day 2: Dips, Supine Grip Pull-ups, Incline Bench Biceps Curls

Day 3: Deadlifts, Standing DB Military Press, Calf Press in a Leg Press Machine

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## **Fitting the Workout in with the Jump Or Speed Training Workouts**

It is quite simple to fit these workouts in with the vertical jump training workouts. Those workouts usually have you training lower body twice a week, such as Monday and Friday. Simply add an upper body workout each Wednesday following the guidelines from above. Then at the conclusion of Monday and Thursday's workout add in 1 exercise each for the upper body. It might look something like this:

**Conclusion of Monday's workout-** Pull-ups- 4 sets x 6 reps

### **Wednesdays Workout-**

Dip or Bench press- 4 sets x 6-10 reps (add weight and decrease reps each set)

Overhead press- 3 sets x 6-8 reps

Seated rowing- 3 sets x 6-8 reps

Incline bicep curl- 3 sets x 8-10 reps

**Conclusion of Fridays workout-** Incline Bench Press- 4 sets x 6-8 reps

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## **Putting Together Your Nutrition Program**

One of the questions I am asked most often is how fast one should go about trying to gain weight, or how much muscle can you gain per week, per month or per year. Generally, I recommend you try to gain about 1 lb. of weight per week, every week, for an extended period of time. That may not sound like much on a weekly basis, but if you were to do that for a whole year you'd be over 50 lbs heavier. To gain this pound per week will require a plan that requires certain things you must do every day and every week.

I've developed a series of guidelines that will help you eat what you need to get big without putting on an excessive amount of fat. You won't need to spend all day in a kitchen or on the toilet. You won't need a private cook, or to quit your day job. You won't

need to obsess all day about calorie counts and macronutrient ratios. It's not much more complicated than taking a fork and cramming things into your mouth!

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### **The Basic Guidelines**

1. Weigh yourself on a reliable scale preferably first thing in the morning, or if not first thing in the morning at least note what you were wearing, what time of day it was (morning or night), and on what day.
2. Set a goal for how much weight you want to gain. I recommend twenty to thirty pounds. Remember that all this weight won't be pure muscle but you can easily diet the excess off later.
3. Shoot for a gain of 1 lb every week and make sure you weigh yourself the same time of day each day. You don't have to weigh yourself everyday, but at least 3 times per week. If you start on Monday weighing 150 pounds, by the following Monday, at some point, you will weigh 151 or more. That's at least one pound. Every subsequent week, on Monday, you will add one pound. If, after three days, you weigh 153, don't consider your goal fulfilled. The important thing is that the following week, starting that Tuesday, you will try to weigh 151.
4. If you make your weight before the weigh-in day for the next week, don't try to go any higher until the following week. Simply try to stay at this higher weight until the week's deadline has passed. Realize that your first week you're likely to see a gain of up to 5 lbs but after this the goal is to gain a pound per week for an extended period of time; not to add ten pounds in 2 weeks and then quit because you get an upset stomach from eating so much.
5. Limit your outside the gym activities. Excessive activity such as cardio should be kept to a minimum. Also limit other activities such as pick-up basketball games, flag football and strenuous household labor. Too much excessive activity will interfere with your muscle gain goals. This diet is not for fat-loss. You can do maybe 20 minutes of cardio once or twice per week if you like but keep it minimal.

6. Get your rest. If you work a strenuous job for 8 hours a day, you won't be able to gain much weight. If you work construction, stack merchandise in a warehouse, play every single sport at school, or do anything else requiring lots of effort there's no way in the world you'll gain an ounce of weight. If your situation sounds like that you might want to try for a half-pound a week. You'll also need to make sure you get 8 hours of sleep a night.

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## **CALORIC INTAKE**

There's only one way to determine how many calories you need to consume each day and this is to pay attention to what the scale is telling you. Everybody has a different metabolism, different lifestyle, etc. The only hard and fast nutrition rule is that you need to make sure you get at least 1 gram of protein per pound of bodyweight per day. If you even make any effort to eat much food hitting your required protein intake won't be difficult at all.

Keeping traditional records and counting calories can be tedious and ineffective. It takes months of dedicated effort to learn how to calculate calories without weighing and measuring every single morsel you eat and any calculation of your daily calorie needs is going to be flawed and dependent on what activities you're doing that day. It's hard to guess exactly how many calories are in each piece of food you eat. If you pack your lunch in Tupperware and eat the same things every day, you'll be fine, but what are you going to do when you go out to dinner at a restaurant? You can't weigh all that is on your plate and ask how many grams of protein are in it. If you have a choice between obsessively logging everything you eat and just shoveling it in, I bet most of you will choose the latter. Gaining weight is hard enough without turning it into a research project.

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### **Timing of Calories**

You should be eating every two or three hours throughout the day. This means at least six meals. This is the key to success. Even if you have the ability to eat 6000 calories in 2 meals that doesn't mean you'll be able to digest all those nutrients. One big meal at an all you can eat buffet is not going to put any weight on your frame. One big week or an entire month at an all you can eat buffet is a different story! The key is to eat big consistently.

Eating infrequent really large meals are usually not effective for hard-gainers. Think about Thanksgiving dinner. The average person consumes around 5000 calories during this once a year feast. Recall your last Thanksgiving. Three hours after the meal were you hungry again? Its likely you were sitting somewhere watching TV, too tired and bloated to even move. If you were to choose between being known for being able to eat a lot of food at one sitting or being known for eating constantly you should pick the latter. Always be eating! Eat just after you get up, before lunch, lunch, before training, after training, dinner, and before bed. If it's time to eat and you aren't hungry just have something small like a protein drink and a couple of pieces of toast.

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## WHAT KINDS OF FOODS TO EAT

Everybody knows that eating high-fat foods all day isn't healthy. Or are they? Most studies correlate health problems with being fat and since the average American, even lean American, eats too much fat it is assumed that fat is the cause of all the health problems. The truth is there are plenty of populations who maintain leanness eating a high fat diet. Inactivity is the real culprit in our society. Regardless of whether a diet that is appropriate for adding pounds of muscle to your frame is the healthiest diet for you is not all that important. Lean people tend not to succumb to the health plagues of our society such as heart disease and even for those that do they show strong genetic tendencies where diet is not going to make much difference short term. Eating a very high calorie diet for several consecutive months isn't going to kill you. Doing it for years on end and becoming obese is a different story, but you probably don't have to worry about that right now.

**The following foods, in no particular order, should be staples in your diet.**

- Steak
- Eggs, yolks included
- Whole milk
- Bacon
- Pork
- Ice Cream
- Protein Powder
- Hamburgers/Cheeseburgers
- Sushi and Rice
- Salads
- Fruit
- Vegetables
- Chicken
- Whole Wheat Bread
- Peanut Butter
- Baked Potato and Sour Cream
- Tuna and Mayo

Salmon  
Brown Rice  
Oatmeal  
Cottage Cheese

Beans  
Turkey

As you can see by the above list, just about anything is allowed on this particular diet although you do want to emphasize protein. If you were to stick to eating only clean, low-fat foods you'd probably have a hard time getting enough calories in. However, one thing you should you should realize when it comes to junk food is that if you fill up and eat nothing but soda and chips, you'll feel like crap and probably won't make progress. Potato chips, like most processed junk food, contains empty calories that are devoid of nutrition. Don't worry about eating some junk food but just make sure you eat it in addition to the clean foods such as steak and veggies and not in place of those foods.

You may have also noticed that on this diet you pretty much do the opposite of what is taught with most weight loss programs with the exception of eating frequently throughout the day. Most diets don't allow you to eat fast food. On this weight gain diet, you not only can eat fast food but it's also not looked at as being negative. Oftentimes when you're busy and find it hard to get a meal in the only way you'll hit your daily caloric requirement is to get some fast food in.

When it comes to fast food there are some items you'll want to stay away from. Skip the fries. Some of these burger joints have a 99-cent menu that you can order from. Pick up four of their cheapest burgers and three of those half-pints of milk. At Taco Bell, try six soft tacos, beef or chicken or a bean burrito and a giant iced tea. The chicken and potato wedges at KFC are a go. Most fast food places offer good grilled chicken sandwich, which you can delight in to your hearts content. Whenever you eat out make sure you get a main dish that comes with a large serving of protein.

The most important time to eat is right after you workout. This is the most opportune time to give your body nutrition to build muscle with. After working out, and within an hour or two of having slammed down that last weight, make yourself an appropriately formulated post-workout drink consisting of protein and simple carbohydrates. Something along the ratio of 25 grams of protein and 50 grams of simple carbohydrates should do the trick.

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## Sample Diets

For best results it's normally good to try to eat pretty much the same basic foods every day. Purchase your food in advance by bulk and make sure you NEVER run out of food! Note that these diets are designed for someone who weighs about 200 pounds. If you

weigh less than this, you'll probably require less food. If you weigh more than 200, you'll need more. Many of these diets call for a large amount of milk. If this causes digestive problems, you'll need an alternative, like Lactaid.

### **The Busy Body — Someone Who Doesn't Have A Lot Of Time To Eat**

8 AM: 8 strips bacon, 4 eggs, 2 English muffin, orange juice and milk

11 AM: 1 large container cottage cheese and banana

1 PM: Go out for lunch, Burger King, Taco Bell, McDonalds or somewhere you can get your calories quickly and get back to work, keeping your boss happy.

3 pm - tuna with mayo, fruit, precut bits of steak, pork or chicken, yogurt, and of course, sandwiches are all good choices.

5 PM: 2 pieces of pizza on the way home

7 PM: Dinner consisting of steak, fish, or chicken with all the potatoes and veggies you can handle

8 PM: Train

9 PM: protein shake

11 PM: late snack: cheese, nuts, veggies, peanut butter, sardines, etc

### **College Student — where the only real meals to be found are at a dining hall with limited hours**

8 AM: Protein shake

11 AM: Dining hall meal: fruit, meat, pasta and salad, 24 ounces of whole milk

2 PM: Quick snack, 4 hard boiled eggs, banana, 16 ounces of milk, dessert

3 PM: Train

4 PM: Protein shake

6 PM: Dining Hall dinner: meat, starch, salad, dessert, milk and iced tea or fruit juice

9 PM: Protein bar or pizza and wings (hey, you're in college)

### **The True Hard-gainer —**

This is for the guy with a lightning-fast metabolism. This might be just what you need.

8 AM: Bowl of raisin bran with milk, 10 ounces of orange juice, 4 slices toast with jam

10 AM: 2 bagels with peanut butter, croissant filled with cheddar cheese, 2 eggs and bacon, 20 ounces of whole milk

Nap

2 PM: 6 ounces of steak, chicken or turkey, salad, 16 ounces of whole milk, baked potato, sour cream

4 PM: 2 cheeseburgers, mozzarella sticks, slice of pie, 16 ounces of whole milk,

6 PM: Protein shake made with whole milk and fruit

8 PM: 1 can solid white tuna, mayo, 1 yogurt, banana, protein bar, PowerAde

9 PM: Train

10 PM: Protein shake banana

Late night snack: pizza with extra cheese and toppings, juice or iced tea, along with cottage cheese, nuts, toast or anything else you desire

### **The Clean Eater Diet —**

This will show you how tough it will be to eat clean when putting away a lot of calories.

8 AM: 4 eggs, 6 ounces of steak, 16 ounces of orange juice, 2 pieces whole wheat bread

11 AM: 2 roast beef sandwiches with lettuce, tomato and cheese on whole wheat, 24 ounces of whole milk, celery and carrots

1 PM: 6 ounces of chicken breast, 1 cup yogurt, brown rice until you're full

4 PM: Banana, 16 ounces whole milk, bagel with cream cheese or sandwich

6 PM: Train

7 PM: Protein shake made with whole milk, but no ice cream

10 PM: 6 ounces of steak, salad, iced tea, 2 baked potatoes

### **The Easy Gainer Diet**

This is an example of a diet for someone who really doesn't have a hard time gaining weight.

8am: 2 serving of oatmeal plus one cup of cottage cheese

11am: 4 Whole Eggs w/ 1 cup of hash browns

2pm: 6 oz. chicken breast with 1/2 cup of rice

5pm: 4 whole eggs in a flour tortilla w/salsa

8pm: Meal replacement drink with flaxseed oil

11pm: 6 oz grilled salmon with large baked potato, 1-cup veggies

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## **WHAT IS POSSIBLE**

Make no mistake about it gaining large amounts of muscular bodyweight is never easy but it can be done. If you're naturally thin and follow this plan you WILL make fantastic progress as long as you dedicate yourself and stay consistent with your diet and training. No matter where you are now just imagine where you'll be in 6 months if you gain 1 pound per week each and every week! Stay focused and soon you'll be known as one of the big guys at the gym!

**-Kelly**

