

Bricks and Blueprints

The information that follows will be the backbone of your success in the F.I.T. program. Like building a home, you need the correct materials and a flawless, yet flexible plan of action. This is your foundation. By using solid information, you can build a masterpiece as great as your imagination. This powerful knowledge will be taught to you systematically and in great depth during our relationship. As we progress, these principles of nutrition will become part of your day-to-day routine.

If there is one part of choosing a fitness plan that spells confusion, it is sorting through the multitude of conflicting diets out there and the jargon associated with them. The health and fitness industry is largely unregulated, and we are presented with a constant flow of fad diets, recycled quick fixes, and band aid solutions. These only serve to overwhelm and confuse the average person who is looking for answers to his or her fitness questions. We also need to realize that ultra-scientific, intensely strict, calorie-counting diets are only necessary for individuals who plan to compete. Our goal at Active Body Clinic is to implement a simple diet strategy that is flexible, easy to understand, and adaptable. The science behind the diet will be thoroughly explained, and examples will be given to ensure a complete understanding. Your coaches will give you the answers you need regarding how to eat for optimal energy, improved body composition, and long-term health.

Take a look at humans from an evolutionary standpoint. All animals adapt to run optimally on the food sources that are naturally available in their environment. Humans are no exception. During thousands of years of our evolution, engineered foods did not exist. Processed foods have only become part of our diet in the past few centuries of our existence, and our bodies are not designed to run on this type of fuel. If you want proof of this statement, simply look at the people all around you. As a society, we eat processed carbohydrates constantly: white bread, white pasta, refined sugar. Our body compositions have declined *drastically* because of this. We are simply not built for this type of calorie intake, and our bodies cannot compensate for it. We now face an epidemic of obesity, diabetes, and cardiovascular disease, primarily because of the foods we consume.

When it comes to diet, we are looking to achieve maximum physical and mental energy, optimal body composition, and long term health. A diet that fits these requirements is largely comprised of natural, unprocessed items. The one exception to this will be our post-workout meal, which can include supplementary protein and simple carbohydrates. This is due to the altered body chemistry resulting from exercise, and the increased potential for uptake into the muscles during the post-workout window. Modern sports nutrition science can supercharge our body for growth and leanness, allowing us to achieve our goals more quickly.

Most members of society have fallen into the trap of what is easy. This includes fast food, pre-packaged meals, canned foods, and microwave dinners. They may seem like a convenient shortcut, but you are borrowing from your future quality of life in order to save a little bit of time today. Be the exception. Be the one person you know who does not fall into that trap, and who reaps the rewards for it. Be lean and healthy, in the midst of a culture that is built around terrible quality foods. Don't kid yourself; life is not easy when you are an overweight diabetic with cardiovascular disease. Don't go down that

road. And if you are already on that path, your coaches are here to help you turn things around.

Food Choices

Protein, fat, and carbohydrates are the foods that make up the bulk of our diet. Comprehensive lists and values can be readily found on-line (try www.nutritiondata.com).

a) Protein:

Almost all of the protein you will be eating should come from chicken, turkey, fish, lean cuts of red meat, lean cuts of pork, whole eggs and egg whites, cottage cheese, yogurt and protein powder.

Always check for labels if available and gauge serving size by the total contents in package. To calculate the protein content of some common sources, you can use the following guidelines:

100g of Chicken/Turkey Breast = 20g protein / minimal fat

100g of Fish = varies, but approximately 20g protein / minimal fat

- exception: 100g Salmon = 20g protein / 10g fat (note higher fat content)

1 whole egg = 6g protein / 5g fat

1 egg white = 4g protein / 0g fat

250ml packaged liquid egg whites = 25g protein / 0g fat

125ml Cottage Cheese

- 0% fat = 15g protein / 6g carb / 0g fat
- 1% fat = 15g protein / 6g carb / 1g fat
- 2% fat = 15g protein / 6g carb / 2g fat

Yogurt = varies (see label)

Beef & Pork = varies (see label)

Low Fat 4% Cheese and Cheese Slices - 5-10g protein per slice or serving / check fat content

Protein Powder

- Most trainees will require supplemental protein in the form of an easily mixed, high quality powder. 20-30g protein per serving

b) Fat:

It is very easy to get enough fat through the wrong sources, so always stay clear of hydrogenated and trans fats. These fats have been chemically mutated in the processing of foods and your body has a very difficult time doing anything but sticking

them to your gut. Our diets will never include these fats, so you don't have to worry when you are following the plan. Always read the labels.

The fat in your diet will come from three sources:

1. Saturated fat: all animal fats and whole eggs
2. Monounsaturated and Polyunsaturated Fat: olive oil, vegetable oils and nut oils and butters
 - 1Tbsp oil = 14g
 - 1Tbsp Nut Butter = 8g
 - Nuts = varies
3. Omega 3 Polyunsaturated Fat: fish oils, flax oil
 - These are the fats we have to supplement because of the lack of availability in our regular food. The health benefits and physique altering capabilities are considerable (see the supplements section of this guide).

c) Carbohydrates:

Most of your carbohydrates are going to come from unprocessed sources such as green vegetables, other veggies, fruit, oatmeal (large flake, not instant), beans, whole grain cereals and pasta, and rice. Eat green vegetables any time throughout the day and ideally with every meal. Do not worry about carb counting with these; have as much as you want. Eat fruits as stand-alone snacks or with meals following exercise. There are typically between 15-25 grams of carbohydrate in one fist-sized piece. Oatmeal and the other moderately processed carbohydrates are to be ingested at breakfast or included with your meals following exercise. At these times, they are best utilized for replenishing muscle glycogen instead of being stored as fat.

Large Flake Oatmeal: 1/3 cup dry = 20g

Rice/Pasta: 1cup dry = 60g

Beans: varies

Cereal : varies (e.g. Kellogg Vector : 1 ¼ cup serving = 44g)

Save any sugar intake for right after your workout where it will be shuttled to muscle tissue preferentially.

Food Combinations and Food Timing

The old adage "timing is everything" holds true when it comes to manipulating diet to add lean mass and eliminate fat. Without getting too scientific, the key to this strategy is the manipulation of the storage hormone insulin. Insulin works to shuttle nutrients to the body's tissues. Without it, these tissues would starve and the organism would not survive (this occurs in Type I Diabetes). Under normal conditions, food is eaten and when blood sugar is raised to a certain level, insulin is released to transport nutrients to hungry tissues. However, if insulin is repeatedly and chronically released due to poor dietary habits (high intake of sugars and processed foods) the organism becomes obese and insulin resistant (this occurs in Type II Diabetes). This second type of diabetes is an epidemic in North American society due to our horribly unhealthy eating habits.

Diets of the past were not subject to the processed foods and massive amounts of sugar, massive serving sizes and engineered fats and chemicals we have today. Consequently, obesity and lifestyle induced ailments were much less of an issue.

Our plan is to manipulate insulin release by keeping blood sugar levels steady throughout most of the day, and spiking them when our body is most hungry for nutrients (during and after intensive training).

Here are the guidelines to follow:

- 1) Have a complete protein source at every meal. Protein supports calorie burning, building lean tissue and keeping insulin and blood sugar in check. It is essential for nearly every chemical reaction in the body.
- 2) Given that carbohydrates (aside from vegetables and some fruits) raise blood sugar and stimulate the release of insulin to some degree, we will only be eating them around the times we train and for breakfast when the body is in a fasted state.
- 3) Given that insulin release shuttles and stores whatever was eaten with the carbohydrate, we will avoid mixing fats and carbohydrates in the same meal as much as possible. We do not want to store fat.
- 4) For the same reason outlined in #2, we will be sure to eat protein with every meal containing carbohydrates. We do want to store protein to build healthy strong muscles.

So throughout most of the day when we are generally inactive, we will eat meals consisting of protein and fats (P+F). When our body requires energy and replenishment, we will eat meals consisting of protein and carbohydrates (P+C).

Inactive = Protein + Fats (P+F). This represents most of the day.

Active = Protein + Carbohydrates (P+C). This includes during your workout, 1-2 hours post workout, and maybe for breakfast.

If you are determined to lose fat, you should ingest 4 (P+F) and 2 (P+C) meals per day.

If you're committed to gain lean mass, you should ingest 3 (P+F) and 3 (P+C) meals per day.

Hopefully you now have a firm grasp on the basic concepts of what to eat and when. If you put this into practice, you will soon see for yourself how effective it is! These simple guidelines, when applied consistently, make a tremendous difference in energy levels, mental clarity, and body composition. Like any significant change, you will need to get into the proper mindset and train the new habit. However, it is simply a learning process, and you have to sacrifice very little in switching to this style.

Post Workout Nutrition:

After your workout, your entire body (particularly your muscle tissue) is drained of vital nutrients needed to maintain health. This includes water, glycogen (muscle

carbohydrate) and muscle protein. Most people know this intuitively, but even advanced athletes can forget to take the proper steps to correct this problem.

A post-workout drink consisting of fast-absorbing protein (whey powder) and fast-absorbing carbohydrate (commercial sports drink, dextrose, fruit juice) is essential for quickly replenishing muscle glycogen and for repairing overworked muscle. Immediately following your workout there is an *anabolic* (muscle building) window of opportunity lasting approximately one hour, during which time muscle refueling is most efficient. This opportunity must not be missed, as it will directly affect our ability to heal from the current workout and prepare us for the next. If you miss this opportunity, your results will come much more slowly.

You can either ingest this drink after the workout, or ingest $\frac{1}{2}$ during and $\frac{1}{2}$ after. For thin individuals looking to gain lean muscle mass, it is advisable to ingest one whole drink during and one again after exercise.

This drink creates a rapid rise in blood sugar, and a resultant insulin release that shuttles the nutrients to very sensitive muscle cells. Many serious athletes use commercial sports drinks (such as Gatorade) during and immediately after a workout because the mixture includes sodium (salt), which helps to drive and keep water and nutrients in muscle cells. There are many post-workout drinks on the market that are designed to have this effect.

Having a post-workout meal of a chicken breast with rice and vegetables almost completely misses the brief post-workout anabolic window. These whole foods cannot be absorbed quickly enough to facilitate the desired response. Have a meal like this an hour after the shake when the window is still slightly open but the immediacy of need is not so severe.

So, have a post-workout shake, and one more (P+C) meal an hour later to take full advantage of your opportunity for recovery and growth. The application of this concept is essential to your long-term success