

Nutrition Information

In The Thought Diet I gave some examples as to how to break down your meals. Not being a nutritionist or a registered dietician, I cannot give you specific advice. What I can do is give more basic information about nutrition. So, in this section you will find useful nutrition information to help you understand the basics.

Proteins, fats and carbohydrates

What are Proteins?

Generally, 25-35% of your daily intake of food should come from protein. Proteins are very large molecules made of amino acids, of which there are twenty. Eight of these amino acids are "essential," meaning that they cannot be synthesized within the body even though they are necessary for life so they must be consumed from sources outside the body.

You can find high levels of protein in meats like beef (ground sirloin), chicken (boneless and skinless breast), fish, pork, sausage (chicken, turkey, pork), turkey (skinless and boneless breast), lunch meats and soy products. Most steaks are a great source for protein but can be high in fat. Other sources of protein can come from dairy products and some legumes. Dairy products such as milk, yogurt, cheese, and cottage cheese are all good sources for protein. Legumes that have a good source of protein are peanuts, soy nuts, lentils, red beans and black beans.

For every gram of protein there are roughly 4 calories (4.3 to be exact). So if you had a food item that has 15g of protein it would equate to about 60 calories.

When changing meals within a structured meal plan (if you choose to do so), remember that protein and fat usually accompany each other so if you take out a lean protein and replace it with a higher fat protein, make sure you adjust for the higher fat content by cutting the fat somewhere else.

Lastly, with the latest craze of protein diets on the market, it is easy to get drawn into believing that consuming high levels of protein will be a sure-fire way of getting lean. This may work well for some individuals but it's not for everybody. Our body needs protein but it is important to have an adequate level of carbohydrates as well as fats in our diet. An ideal intake of protein is 0.8 grams per kilogram of body weight. Excess protein is defined as more than 1.6 grams per kilogram of body weight. For an average-size, seventy- kilogram man, this amounts to $70 \times 1.6 = 112$ grams.

Exceptions:

People who are highly active in sports are breaking down muscle through exercise and should eat more protein than the average person. If you are not highly active, and you think you simply feel better on a very high protein diet, you may have an enzymatic condition in which protein and fat is metabolized especially well in your body. I suggest

that you consult your nutritional medicine doctor to determine the perfect type of diet for you.

What are fats?

Fats should make up about 30% of your total daily intake. The fat (or fatty acids) I am suggesting are unsaturated fats. Unsaturated means the fat that is not saturated with hydrogen atoms, which means they do not have as much energy (i.e. fewer calories) when broken down. Mono means that there is only one certain type of bond (double bond) in the fatty acid chain and poly means that there are multiple bonds. For every bond there a hydrogen atom eliminated. So, saturated fat is actually saturated with hydrogen atoms.

Fat are used in making energy for the body, reducing the chance of cancer (from polyunsaturated fats), helps the blood flow through the arteries, tends to lower blood cholesterol and helps the blood flow of the body. Unsaturated fats are also used to give the body nutrients.

Fats can be found in things like meats, cheeses, vegetable oils, butter, margarines, shortening, soybeans, corn, avocado and sunflower oils. Vegetable oil is potentially the best of all direct fats and polyunsaturated oils such as sesame, safflower and soy oil are better than monounsaturated oils such as olive oil. Coconut oil is a saturated fat and therefore undesirable in foods containing vegetable fat.

Butter contains a larger percentage of unsaturated fat than most margarine, including many of those made from special oils. If you are determined to eat margarine, avoid any containing cottonseed oil, as this plant is heavily pesticide treated during cropping and pesticides tend to concentrate fats. Soft margarines, which are only partially hydrogenated, and health food types, which contain fewer preservatives and are as perishable as real butter, are to be preferred.

Fresh, un-roasted, unsalted nuts are also good sources of oils in your diet.

Animal fat is a source of fat but is usually mostly all saturated fats. The rule of thumb is that if it is solid at room temperature it is a saturated fat.

For every gram of fat there are roughly 9 calories. So if you had a food item that has 15g of fat it would equate to about 135 calories.

Lastly, the media has led us to believe that fats are bad for us so we jump on the low fat bandwagon. Unfortunately, this is one of the things that has led 60% of our country's population to being overweight. The reason for this growth is that we stay away from foods that contain fat and eat low fat foods that are high in sugar and high in calories.

What are carbohydrates?

Carbohydrates should make up about 35-50% of our daily nutritional intake.

Carbohydrates (carbs) come in two basic forms: complex and simple. Simple carbs are one, two, or at most three units of sugar linked together in single molecules. Complex

carbs are hundreds or thousands of sugar units linked together in single molecules. Simple sugars are easily identified by their taste: sweet. Complex carbs, such as potatoes, are pleasant to the taste buds, but not sweet.

There are two groups of complex carbs: high-fiber and low-fiber. High-fiber, complex carbs are not digestible, at least not by human beings, because we do not have the enzyme to do the job. Even though fiber is not broken down chemically in the body it aids digestion, lowers blood cholesterol, and may help prevent some cancers and hypertension. The main stuff in high-fiber, complex carbs that is indigestible by humans is called “cellulose.”

High-fiber (high-cellulose) vegetable foods are the healthiest choices for human nutrition, and intake of these foods is associated with lower incidences of hypertension, cancer, arthritis, diabetes, etc. Examples are lettuce and broccoli. Examples of low-fiber, complex carbs are bananas, tomatoes, squash and all cereals and grains (therefore breads and pasta), potatoes and rice.

It matters not if a carb is simple or complex. After digestion, it appears in the circulatory system in the simple form, as glucose, on its way to the cells where it is used for energy. Complex carbs are transformed into simple sugars via an enzyme called amylase. Amylase is secreted by the salivary glands, which empties into the mouth and the pancreas, which empties into the digestive tract.

Complex carbs with lots of fiber should be consumed in a proper proportion for maximum health and vitality. Complex carbs with lots of fiber are rich sources of necessary vitamins and minerals as well as enzymes when in the raw state. The only time carbohydrates pose a “problem” is when they are altered by different processes, which strip much of their original food values and leads to empty calories. This is one reason why it is suggested to stay away from processed foods—your body has to compensate greatly for the lack of nutrients available.

A high-carbohydrate diet can cause the pancreas to produce large amounts of insulin, and if this happens from many years in a genetically predisposed person, the insulin receptors become resistant to insulin. Because the insulin’s action is to drive glucose into the cells, this results in chronic hyperglycemia, also called “high blood sugar.” A large portion of this sugar is stored as fat resulting in obesity.

Like proteins, every gram of carbohydrate has 4 calories. So if you had a food item that has 15g of carbohydrate it would equate to about 60 calories.

Lastly, because of the recent craze with protein diets, carbohydrates have gotten a bad rap. Even though carbohydrates are not an “essential” part of our nutritional intake as fat and protein are, we still need carbohydrates for energy production and healthy digestion.

Portion Sizes

The following are few different lists of portion sizes that show how to use everyday things to measure the size of different foods.

- A medium potato should be the size of a computer mouse.
- An average bagel should be the size of a hockey puck.
- A cup of fruit the size of a baseball.
- A cup of lettuce is four leaves.
- Three ounces of meat is the size of a cassette tape.
- Three ounces of grilled fish is the size of your checkbook.
- One ounce of cheese is the size of four dice.
- One teaspoon of peanut butter equals one dice. And
- One ounce of snack foods--pretzels, etc. equals a large handful.

3 ounces of meat, poultry, or fish is the same size as:

- The palm of your hand
- A deck of cards
- A cassette tape

1 cup of potato, pasta, or rice is the same size as:

- Your fist
- A tennis ball

1 ounce of cheese is the same size as:

- A pair of dice
- Your thumb

1 medium fruit is the same size as:

- Your fist

More tips that might help:

- Use smaller plates and dishes so your portions won't look lost.
- Don't measure your food every time you eat. If you feel like you need to get an idea of how much your dishes, bowls and glasses will hold, measure once. After that, visualize the portion size. But more importantly, trust your body to tell you when you've had enough!

Below is a list of some examples of what is considered a single serving size for different food groups as well as some comparisons for various portions sizes for foods within the same group.

The amount listed is considered one portion:

- Dairy:
 - 1 cup of milk or yogurt
 - 1 1/2 ounces of natural cheese
 - 2 ounces of processed cheese

- Meat, Poultry, Fish, Dry Beans, Eggs, and Nuts:
 - 2-3 ounces of cooked lean meat, poultry, or fish
 - 1/2 cup of cooked dry beans
 - 1 egg or 2 tablespoons of peanut butter count as 1 oz. of lean meat

- Vegetables:
 - 1 cup of raw leafy vegetables
 - 1/2 cup of cooked or chopped raw vegetables
 - 3/4 cup of vegetable juice

- Fruit:
 - 1 medium apple, banana or orange
 - 1/2 cup of chopped, cooked or canned fruit
 - 3/4 cup of fruit juice

- Bread, Cereal, Rice and Pasta:
 - 1 slice of bread
 - 1 ounce of ready-to-eat cereal
 - 1/2 cup of cooked cereal, rice, or pasta

Reading Nutrition Labels - What's In It For Me?

The nutrition label is one of the most useful tools in choosing foods for healthy eating. The nutrient labels support the Food Guide by helping people to choose foods. The nutrition label gives you the nutrient content of the food. Foods are labeled as sold, not as they might be prepared or used.

Nutrition Claims

A nutrition claim highlights a nutritional feature of a product. It has been known to influence people's buying habits. Since a nutrition claim must always be backed up by detailed facts relating to the claim, look for the nutrition label for more information.

Nutritional Claim Information

Here are a few of the claims that manufacturers are allowed to use on their products:

Fat-free: Less than 1/2 gram fat per serving.

Low fat: 3 grams fat or less per serving.

Reduced-fat: At least 25 percent less fat when compared with similar foods.

(X) Percent fat-free: The percentage is based on the amount of fat (by weight) in 100 grams of food.

Example: If 50 grams of food contain 2.5 grams fat, the food can be labeled "95 percent fat-free." (Turns out to be more like 89% fat-free)

Saturated fat-free: Less than 0.1 gram saturated fat per 100g serving.

Low saturated fat: 2 grams or less saturated fat per serving and no more than 15 percent of calories from saturated fat.

Reduced saturated fat: At least 25 percent less saturated fat per serving when compared to a similar food.

Calorie Expenditure

There are so many factors that go into figuring out how many calories your body burns in a given day but my true opinion still remains with the thought that whatever you believe about how you change your body or how your body works will be the determining factor in what works for you. Remember, the physical follows the emotional. Your metabolism is a direct reflection of your internal vibration about your body. But, since we are all here in this physical environment, physically focused, I can't take away the importance of learning and understanding the rules we play with in this physical environment so I will offer some ideas to consider in regard to your metabolism and your calorie expenditure.

Your body is a moving machine that needs energy to burn. That energy comes from calories. Your body gets calories from two places: food and your body. Food is anything you put in your mouth. It is broken down and delivered to areas that need physical energy. When your body is lacking in food energy it then starts to take it from your storage. Your body will internally metabolize either fat and convert it into fuel for your muscles (skeletal muscles and organs) or it will break down muscle tissue for energy. Most often when our body is not getting close to enough food it will start breaking down muscle tissue before it gets to the fat stores. This is because the body is going into starvation mode. It is accomplishing two things by eating muscle first. One, it is supplying the body with nutrients and energy needed to survive and two, by breaking down and eating muscle tissue it is slowing down the metabolism by eliminating the very thing that burns calories. The less muscle you have, the less calories you need.

This is why it is so important to increase lean muscle tissue through working out. You will increase the amount of calories your body expends throughout the day and easily put your body into a safe deficit—that is, if you are consuming enough to maintain your basic body weight.

How does one eat enough to maintain their basic body weight (or enough to keep the minimum working without going into starvation)? Well, the easiest way is what I had discussed in *The Thought Diet*. And that is, eating for your body and not your palette. Your body will tell you what it needs if you eat for your needs not just your taste buds. It's not to say you should eat things you do not like but eating things that are enriched with processed foods, saturated fats and chemicals will only create more craving.

Another way to determine your metabolic rate (or resting metabolic rate) is to have a reading done using a calorimeter. A calorimeter is a device, which you breathe into for about 10 minutes, that measures your resting metabolic rate by determining how much oxygen you consume, how much moisture is in your exhale, how much carbon dioxide is in your exhale, among many other things. This information is the scientific way of evaluating how many calories your body needs to provide you with basic living. Once you have your initial needs met, your body will more likely start to burn into fat storages a lot easier.

Using something like the calorimeter is a lot more accurate than using a formula to figure out your calorie expenditure as there are few too formulas that are consistent. Using a device like this is a great way to create awareness as to what your body needs if it is too difficult for you to pay attention to what your body is telling you it needs. If you have been over-eating for a long time, your sensory feedback system that tells you what it needs (from a body-need basis not a palette-need basis) will take some time to fine tune.

Lastly, I must also note that I have found that someone's emotional state will alter their reading on a calorimeter, which ultimately would elude to the fact that our emotional state certainly affects the amount of calories our bodies burn at any moment and it's efficiency in burning those calories. So, if you decide that going the scientific route and doing the calorimeter reading is what you want to do, I would suggest trying to into the reading as emotionally neutral as possible. Also note that if you test when you are in a neutral state, that is the state you want to try to maintain throughout your day as much as possible to keep your body working as close as you can to the way it was when you got your reading.