

## What should you eat?

A diet rich in fruits and vegetables, whole grains, monounsaturated fat, and lean meats. Avoid processed foods and excess sugar.

**Carbohydrates** should make up 45 - 65% of calories taken in. They are necessary fuel for the body, it provides energy for physical activity and aids proper organ function. Athletes should consume between 2.7 and 4.5 grams of carbohydrate per lb of body weight. The best sources of carbohydrate are fruit, vegetables, whole grains, and beans.

**Protein** intake should be between 0.5 - 0.8 g/lb of body weight and make up 10 - 35% of calorie intake. Fish and Poultry are the best sources of animal protein. Red meat should be limited, but does not need to be avoided entirely

**Fat** isn't all bad! Mono unsaturated and poly unsaturated fats are healthy fats. Try to cut out saturated fat. It is recommended to take in 20-35% of calories from fat.

**Hydration** is super important! Water and electrolytes which are lost through sweat need to be replaced. Water is the best fluid source, but sports drinks may be beneficial post exercise and during endurance exercise that is longer than one hour in duration because they contain sodium and carbohydrate.

## When Should I Eat?

Meal timing is important for meeting energy needs and performance ability.

### Before Exercise

It is essential to eat a well balanced meal to have the energy required to workout and perform at your best. In general you should not eat within an hour of exercise, however if you are hungry, a small snack relatively high in carbohydrate and moderate in protein can be beneficial. It should be something familiar, easily digested, and eaten fifteen minutes prior to working out.

### After Exercise

Refueling can begin as soon as fifteen minutes of finishing a work out, is most beneficial if done within two hours of working out, and should continue every four to six hours after that. Fluid, carbohydrates, and protein are necessary for rehydration, replacing glycogen stores, and providing amino acids to build and repair muscle tissue. A piece of fruit is the perfect after work out snack

### Meal Frequency

Eating 4-5 meals a day is more beneficial than eating 3 or less. Appetite control and decreased hunger are both increased with more frequent meals.

## Food Group Details:

### Protein

- Try to eat only lean cuts of meat and a variety of different types of protein.
- Protein Foods include: meat, poultry, eggs, seafood, beans and peas, and nuts and seeds
- There are two types of protein; complete and incomplete. Most complete proteins are from animal sources and contain all the essential amino acids. Incomplete proteins are mostly from plant sources and do not contain all the essential amino acids. Pairing two incomplete proteins that are complimentary can make a complete protein.
- **Leanest cuts of Beef** include: round steaks and roasts (eye of round, top round, bottom round, and round tips) top loin, top sirloin, chuck shoulder, and arm roasts. Choose the leanest ground beef possible (should be able to find at least “90% lean” if not 93 or 95 %
- **Leanest cuts of Pork:** Pork loin, tenderloin, center loin, and ham
- **Poultry** examples: boneless, skinless chicken breasts or turkey cutlets, ground chicken or turkey, goose, duck
- **Sandwich meats:** lean cuts of turkey, roast beef, or ham. Read labels for sodium levels, try to find the lowest amount of sodium
- **Seafood:** seafood rich in Omega 3 fatty acids are most beneficial. Some examples of those are salmon, trout, sardines, anchovies, herring, Pacific oysters and Atlantic and Pacific mackerel, cat fish, tuna, and sword fish
- **Beans and Peas** are excellent sources of protein, zinc, and iron. Beans, peas, and soy products can be incorporated in to a main dish and replace the traditional meat used. Some examples are stir-fried tofu, chili w/kidney or pinto beans, baked beans, black bean enchiladas, rice and beans
- **Beans and Peas** examples: black beans, black eyed peas, chickpeas, kidney beans, lentils, split peas, lima beans
- **Nuts and Seeds:** Unsalted nuts can be a great snack, added to salads, or in replacement of meat or poultry. Ex. Add cashews to a vegetable stir fry instead of meat or use pine nuts in a pesto sauce \*careful not to eat too many nuts, they are healthy but can be fattening\*
- **Nuts and Seeds** examples: almonds, cashews, peanuts, peanut butter, pecans pistachios, pumpkin seeds, sesame seeds, sunflower seeds, walnuts

### Vegetables

- Vegetables can be eaten raw or cooked
- Fresh, frozen, canned, or dried are all healthy (and listed in order of healthiest form)
- There are five subgroups based on nutrient content. They are: dark green, red and orange, beans and peas (also a protein), starchy, and other
- **Dark Green** vegetables are the most nutrient dense. Some examples: broccoli, spinach, kale, bok choy, collard greens, dark green leafy lettuce
- **Red and Orange vegetables** include: carrots, acorn squash, red peppers, tomatoes (tomato juice) sweet potatoes
- **Beans and Peas** are excellent sources of fiber, potassium, and folate causing them to be considered a vegetable as well as a protein.
- **Beans and Peas** include: Black beans, black-eyed peas, chickpeas, kidney beans, lentils, soy beans, split peas, white beans, and navy beans \*Note Green beans and green peas are not included in this group
- **Starchy Vegetables** include: corn, green peas, green lima beans, plantains, potatoes

- **Other Vegetables** include: artichokes, asparagus, avocado, cabbage, celery, cucumber, eggplant, green beans, mushrooms, onion, iceberg lettuce, parsnips, turnips, zucchini, brussel sprouts

### Dairy

- Choose low fat or fat free dairy products
- Foods made from milk that do not retain their calcium content such as cream cheese or butter are not considered dairy products
- Cows milk has the most calcium and protein
- Calcium fortified Soy milk is considered a dairy product
- Common Dairy products include: milk, milk based desserts such as ice cream and frozen yogurt, cheese, and yogurt

### Grains

- Any food made from wheat, rice, oats, cornmeal, barley, or any cereal grain is a grain product.
- There are two subgroups of grains. Whole grains and Refined grains
- Whole grains contain the entire grain kernel (the bran, germ, and endosperm)
- Whole grains include: whole-wheat flour, bulgur (cracked wheat) oatmeal, whole cornmeal, and brown rice
- Refined grains are processed for a finer texture and longer shelf life. This results in removing dietary fiber, iron, and several B vitamins
- Refined Grains include: white flour, degermed cornmeal, white bread, and white rice
- Some refined grains are enriched to replace the B vitamins, however whole grains are more nutrient dense
- Commonly eaten Whole Grains: brown rice, buckwheat, oatmeal, popcorn, some cereals, quinoa, whole wheat bread, whole wheat pasta, whole wheat tortillas, whole rye, whole grain barley, wild rice
- If the package does not say 100% whole (grain/wheat) it is most likely a refined grain

### Fruit

- Any fruit or 100% fruit juice counts as part of the fruit group
- Fruits can be fresh, frozen, canned, or dried
- Adding a variety of fruit to any diet is beneficial
- Examples of fruits include: apples, bananas, strawberries, blueberries, cherries, grapefruit, grapes, kiwi, lemons, limes, mangoes, cantaloupe, honeydew, watermelon, nectarines, oranges, peaches, pears, pineapple, papaya, prunes, raisins, tangerines

### Fat/Oils

- Oils are fats that are liquid at room temperature
- Oils/Fats are not actually a food group (anymore)
- They come from plants and fish
- Most oils or fats are monounsaturated or polyunsaturated fat (read the label)
- Some common oils are: canola oil, corn oil, olive oil, safflower oil, sunflower oil, and soybean oil
- Foods naturally high in oil include: nuts, olives, some fish, and avocados
- Foods that are mainly oil include: mayonnaise, some salad dressings and soft tub margarine without trans fat (read the label)

- Solid fats are fats that are solid at room temperature such as butter, milk fat, beef fat, chicken fat, pork fat (lard) stick margarine, shortening, and partially hydrogenated oil
- Saflower oil is the healthiest fat to cook with and monounsaturated margarine is a healthier alternative to butter
- You do not need to make an effort to include fat/oil in your diet. You will get enough of it through everything else you eat

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No.1

[Mypyramid.gov](http://Mypyramid.gov)

## FAQ

### **What should I be eating if I am doing Crossfit?**

The CrossFit community largely supports the Paleo diet. (<http://www.crossfit.com/cf-info/start-diet.html>) However if you go to the CrossFit main site and look up their nutritional advice you will see they advise a diet based on 30% Protein, 40% Carbohydrate and 40% Fat. Not much different from what we have listed above. The bottom line is all athletes need to fuel their body for performance and health. A diet based largely on lean meats, vegetables, leafy greens, nuts, and seeds is the most beneficial with a limited amount of dairy, starchy grains, and alcohol. Avoid excess sugar and processed foods, make all grains whole grains

### **So, more carbs? I thought when training, I should eat more protein?**

A high protein diet has been proven beneficial for athletes and weight loss, however, our bodies main fuel source is glucose which is most abundant in carbohydrates. Low glycemic carbohydrates are more favorable because they induce a lower insulin response. High glycemic index foods such as white bread and processed foods cause a high insulin response. Chronic elevation of insulin can cause hyperinsulinism which has been linked obesity, high blood pressure and several other diseases.

### **What is the difference between a lower and higher insulin response and how does it affect my body/health?**

Insulin regulates our blood glucose levels. When we eat our body releases insulin in order to convert glucose to usable energy. Eating foods with a high glycemic index index, such as white bread, causes an increased insulin response. Over years of increased insulin response (hyperinsulinism), the body can develop an insulin resistance or a decreased ability to secrete insulin which results in higher blood glucose levels. High blood glucose levels can lead to diseases such as hypertension and diabetes.

### **I am a vegetarian. How can I be assured I am getting the necessary amount of protein?**

Vegetarians can make sure they are getting enough protein through milk, soy milk, tofu, nuts, seeds, beans, lentils, legumes, and whole grains. It is also possible to increase protein intake through protein supplements, however food sources are always the best sources.

### **What is the Paleo diet?**

(A 2011 survey of experts by [US News & World Report](#) ranked the Paleo diet the worst of the 20 diets evaluated, remarking that there was little evidence supporting the diet's effectiveness). The Paleo diet or the Caveman diet is a diet based on lean meats, fish, vegetables, fruit, nuts and seeds. It discourages the consumption of refined sugars, dairy and grain products. To learn more about the Paleo diet go to <http://thepaleodiet.com/>

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### **I want to lose weight. What diet should I follow?**

In order to lose weight you need to create a caloric deficit. There is no universal diet for everyone. You need to find what works for YOU. What foods do you like, what fits in with your lifestyle, etc. On average a healthy weight loss for an individual is

between one and two pounds per week. Caloric intake should never go below 1200 cal/day. Eating a well balanced variety of foods from each food group is important in order to get all the essential vitamins and minerals. Avoiding fried foods, processed foods, soda, candy, and excess sugar is a good place to start when trying to change eating habits, loose weight, and become healthier. In order to loose weight and keep it off, you need to change your lifestyle. Find a diet that you can LIVE on, not one that you can only stick to for a few weeks.

### **I want to gain weight. What diet should I follow?**

Again, there is no universal diet that works for everyone. You need to find what works specifically for YOU. To gain weight you need to consume more calories than you burn. Building muscle mass will also help you to gain weight. Eating nutrient dense and energy dense (high calorie) foods is essential for healthy weight gain. Avoid “empty calories” or high calorie junk foods. While they may help you gain weight, they may also have adverse health effects. The same healthy balance of carbohydrate, protein, and fat still applies, you simply need to eat more. You can increase caloric intake by eating larger meals or more frequent meals. A few examples of nutrient and energy dense foods are legumes, nuts, seeds, olives, and avocados.

### **How often should I be eating during the day?**

You should eat between 3 and 6 meals a day or on average every 4-5 hours

### **Should I eat before I workout?**

If you are hungry. A small snack up to fifteen minutes before a work out can be helpful in providing energy for the work out and fight off hunger pains during the work out. It should be a familiar, well tolerated snack that won't cause stomach upset. Eating a meal an hour before the work out is also acceptable and may be beneficial for sustained energy during the work out.

### **How soon should I eat after I workout?**

Refueling after a work out can begin fifteen minutes after finishing the work out. Moderate amount of protein and carbohydrate are most beneficial for muscle repair and energy replacement.

### **When is the best time to eat when I am training?**

When it fits into your schedule. Eating a larger breakfast helps you to have energy for the day. A modest lunch and dinner with smaller snacks in between help maintain energy levels. Eating more frequently helps to control the appetite and prevent over eating. If you know what time during the day you will be training you can plan your meals around that.

### **Should I be taking any vitamin supplements?**

A well balanced diet should provide all the vitamins and minerals needed, however if you exclude a food group from your diet you may need to add a supplement to compensate. A multi vitamin can be helpful to assure adequate intake of all essential vitamins and minerals, but is not necessarily needed. It is also very common for those trying to gain weight and build muscle to add a protein supplement to their diet or

### **How do I know if I need to take vitamins?**

Consulting with your doctor or a registered dietitian is the best way (and safest) to determine if you need to add a vitamin or supplement to your diet.