

- 4 calories per gram of carbohydrate, 4 calories per gram of protein, 9 calories per gram of fat
- A calorie is a calorie, wherever it comes from. A surplus will always result in weight gain, and a deficit will always result in weight loss
- Whole foods are almost always better than processed; they have more micronutrients and only still exist because they have been conditioned over thousands of years to provide important nutrients for humans and animals. Processed foods (such as white rice, white bread, bleached flour, junk food, etc.) have been stripped of these micros (fiber, vitamins and minerals, etc.)
- Since humans have been eating solely whole foods up until about 100 years ago, they are what the body is used to and most efficient at absorbing. Many studies have shown that even though the nutrients may be the same between a whole food meal and a processed food meal, the effect on the body is still more positive with whole foods, including decreased disease and illness, more energy, etc. If the western diet of processed foods were continued for hundreds of years, evolution would eventually allow us to adapt to it and absorb it much better, but the western diet itself is something that is driven by business and is not nearly as healthy as whole foods can potentially be.
- This concept of natural selection of food also applies to the food you eat; cows have been historically grass fed, whereas recently they are grain-fed, and there are tons of proven benefits of grass-fed beef. Another example is organic plants; plants were all organic up until 150 years ago, grown in extremely fertile soil, so it is common sense that the food itself is superior due to what it takes in. Similar to how you are what you eat, your food is what it eats as well.
- Saturated and Trans fats are bad in surplus, but so is any other nutrient; the brain is literally 60% fat, and fat is important for maintaining proper hormone levels, testosterone being one of them, as well as insulating your organs. An extreme lack of fat is just as bad as a lack of any other macronutrient.
- If carbs must be limited for dieting reasons, they are best eaten in the morning and before the workout. In the morning, your body hasn't had food for several hours, so your body is depleted of resources and energy is key. Before your workout, you need energy and will use any carbs you eat. Carbs before your workout also ensure your muscles are as full as possible and can lift the most weight.
- The best times to eat protein are after your workout and before you go to sleep. Protein after the workout is best because your muscles are fatigued and need to be restored, as muscles are primarily made of protein after water. Carbs are also needed to recover your muscles, so something like milk with a protein shake or a grain is a good idea.
- Hydration is extremely important. Your body is 70% water, and your muscles similarly so. If you are lacking in water, you won't be able to lift as much weight, you won't sweat as much, you won't be as vascular, and you will just have less energy. Optimal hydration allows your body to perform at its fullest.
- Sodium before a workout will increase your pump, as it increases water retention. Too much without potassium, however, can result in an unhealthy imbalance.
- If you want to sate your appetite, you can:
  - ◆ Drink more water, it fills your stomach
  - ◆ Eat slower, and allow your stomach to react to the food it's taking in; usually takes about 20 minutes
  - ◆ Intermittent fast
  - ◆ Eat a lot of fiber
- Paying for your food, especially if it's expensive, can actually be a good thing for both dieting and appreciating food. Buying your own organic food from the farmer's market puts a high value on that food, and forces you to eat it economically to make the most of it. A big reason why dieting is so difficult in America is that food is really cheap, so you don't mind eating a ton of it, and on top of that, since the food often lacks micronutrients, your body still feels rather hungry, in the hopes of eventually attaining those micros, when in reality you're eating more of the same. It doesn't help either that buying junk food is about 100x easier than buying produce and cooking it yourself. Americans, unlike most of the rest of the world, also tend to eat based on external signals rather than internal

signals. For example, they eat until the bag is empty, or until everyone else in their group at the restaurant is finished. In French culture, for example, they eat slowly, often for an hour or more, and when they're full, they stop.

- A lot of people avoid fruit because it's sugary, but it is a great form of energy, and also contains tons of useful micros, as mentioned beforehand due to how they have been tuned and tweaked over thousands of years. On top of this, fruit often has fiber, which allows you to digest the sugars it contains more slowly, giving you more time to use the energy and absorb it over a period of time, as opposed to a refined sugar that would be gone very quickly and very easily converted to fat. This is a prime example of how the nutrition label doesn't explain everything; since the fiber satisfies your hunger and decreases your chance of eating sooner/more food, it is a much better form of sugar/carbs than a rice krispie, even if the sugar content may be the same.
- When you're dieting, and especially if you're trying to maintain a caloric deficit, refeeds every once in awhile, every few weeks maybe, are important. Refeeds are when you spend a day eating at a slight caloric surplus as opposed to your normal deficit, with most of your extra calories consisting of carbs. When someone stays at a deficit for a long time, their body starts to lower their metabolism to counteract the lack of food you're getting and prevent starvation. This is bad in the long run, because eventually you'll be suffering through a caloric deficit while still not really losing weight. Refeeds reset your leptin levels and bring your metabolism back to where it normally is, allowing your deficit days to remain deficit days.