

Nutrition 101

Updated: Sep 7, 2021

Nutrition is a very complex topic, and the scientific research on nutrition is always making new discoveries. This article will explain some basic information about nutrition and healthy eating. First, we will look at the three types of macronutrients: carbohydrates (carbs), fat, and protein. At the end, we'll look briefly at vitamins and minerals.

1. Carbohydrates (Carbs)

Carbohydrates are the main source of energy for your body. There are many types of carbohydrates:

1. Simple carbs
2. Complex carbs
3. Processed carbs
4. Natural carbs

Simple vs. Complex Carbs

Simple carbs have one or two sugar molecules in them. The most common sugar molecule is glucose. Think of **glucose** as 1 unit of energy for your body's cells. It is very quick and easy for our bodies to use simple carbs. When we eat simple sugars, we get very quick energy that also fades away quickly.

Examples of foods with simple carbs

- **Candy**, cookies, chocolate, etc.
- **Fruit**
- **White flour**: white bread, cakes, muffins, donuts, pancakes
- **Sweeteners**: white sugar, brown sugar, honey, maple syrup

Complex carbs have long chains of sugar molecules. It takes more time for the body to break down these chains into glucose to use for energy. Therefore, complex carbs give us a steady release of energy over a longer time period.

Examples of foods with complex carbs are

- **Whole grains**: whole grain bread, whole grain pasta, brown rice, quinoa, millet, oats
- **Starchy vegetables**: Potatoes, sweet potatoes, pumpkins
- **Legumes**: green beans, soy beans, red beans, black beans, chickpeas, lentils, peanuts

Simple Carbs



Complex Carbs



When choosing what to eat, we should eat more complex carbs because they give us sustained energy. Simple carbs taste good, but we will get hungry very fast afterwards. In terms of their healthiness and nutrients, we need to look if it is processed or natural.

Processed vs. Natural Carbs

Processed carbs (also called refined carbs) are carbs that have been stripped of all the outer bran, fiber, and nutrients due to factory processing. Examples include white flour, white rice, white sugar, and breakfast cereals.

You might be wondering why people would remove all those nutritious parts. One reason is because it makes cooking them easier and faster. But that's not necessarily a good thing, because as we talked about earlier, complex carbs keep us full and provide us with energy for a longer time period. The main reason is because of profit. Processed carbs are addictive. They taste good and they give the brain a quick "high" that makes the brain crave more of it in the future. Have you ever felt stressed or sad and instinctively felt like reaching for a sweet snack? That's proof of processed carbs' addictiveness.

Natural carbs are carbs that have not been processed. Examples include whole grains, fruit, and vegetables. Natural carbs are healthy. Many people mistakenly label fruit as unhealthy because it has simple sugars. Although fruit does have simple sugars, its sugars are not processed, which means those natural sugars are bonded to lots of vitamins and minerals inside the fruit. In other words, if you crave something sweet, eating fruits is a great and healthy choice.

Switching to Healthy Carbs

Now that we know about four types of carbs, it's clear that complex and natural carbs are healthy. Here are some simple things we can do in our diet to switch to healthy carbs.

INSTEAD OF EATING...	EAT...
Candy, cake, chocolate, cookies, etc.	Fruit
White bread	Whole grain bread
White pasta or noodles	Whole grain pasta or noodles
Instant oatmeal	Steel-cut or rolled oats
Sugary breakfast cereal	High fiber, low sugar cereal
Corn	Leafy green vegetables
White rice	Brown rice, millet, or quinoa
White sugar	Maple syrup, agave nectar
Ice cream	Frozen bananas and berries

2. Fats

Fat is necessary to support cell growth, protect organs, keep our body warm, and produce important hormones.

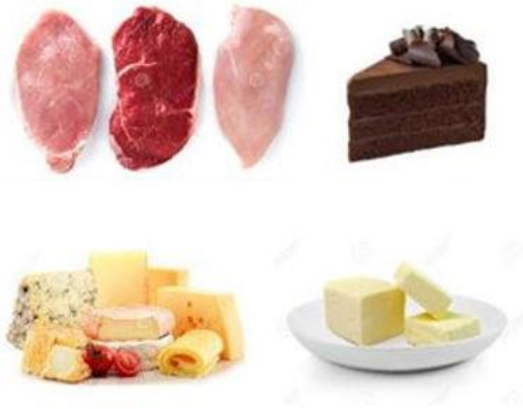
Fat is needed for a healthy body because our cells have fat. But too much fat, especially unhealthy fat, can lead to obesity and even disease. There are two main types of fats: saturated and unsaturated.

Saturated vs. Unsaturated Fats

Saturated fats tend to be solid at room temperature, such as the fat found in meat, butter, and cheese. Many sugary snacks are also high in saturated fat, such as cakes, pastries, and chocolate. They are called saturated fats because they are saturated with hydrogen molecules.

Unsaturated fats tend to be liquid at room temperature but not always. Examples include plant oil, nuts, seeds, and avocado. They are called unsaturated fats because the hydrogen molecules are broken up, so there's more space between the molecules.

Saturated Fats



Unsaturated Fats



Generally speaking, saturated fats are unhealthy, while unsaturated fats in moderate amounts are healthy. Keep in mind that saturated fats are often found in processed foods with little nutritional value, while unsaturated fats are found in natural foods dense in nutrients. According to a Harvard Health [article](#), eating a lot of saturated fats will increase bad cholesterol in the blood, and replacing saturated fats with unsaturated fats is a great way to lower the risk of heart disease.

Trans Fats

There's a third type of fat called **trans fats**. Trans fat was invented by food companies when they took vegetable oil and chemically altered it to stay solid at room temperature, which makes them last longer. It was for the purpose of profit, and now it is common knowledge that these trans fats are seriously unhealthy. Trans fats are found in many processed foods, and the US government is starting to ban them.

According to a Healthline [article](#), trans fats significantly increase the risk of heart disease. It also increases inflammation in the body, which can lead to many chronic diseases such as diabetes and arthritis.

To avoid trans fat, we need to read food labels carefully and not eat foods with anything that says "partially hydrogenated." Restaurants also often cook with oils that have trans fat. Examples of foods that are likely to have trans fat are

- **Some vegetable oils and margarines:** Check the label
- **Fried foods:** fried chicken, fried fish, French fries, hamburgers
- **Bakery products:** muffins, cakes, donuts, pastries, pies

- **Other junk foods:** Potato chips, pizza

When it comes to oil, healthy options include extra virgin olive oil and coconut oil. If you see cheap vegetable oil, you should check the label to see if it says anything about “partially hydrogenated”. That would indicate trans fat. Many processed foods and even restaurants use oils with trans fat because it is cheaper. Therefore, the easiest way to avoid trans fat is to avoid processed foods and junk foods.

Switching to Healthy Fats

Now that we know about three types of fats, it’s clear that natural unsaturated fats in moderate amounts are healthy, while trans fat and most saturated fats are not. Therefore, people should limit meat, dairy, and cheese because they are high in saturated fats. People should also avoid processed food, fried foods, and junk foods because they are high in trans fat. People should get healthy fat from foods like plant oils, nuts, seeds, and avocados.

3. Proteins

Proteins give us **amino acids**, which are the building blocks for muscle. When our body digests protein, it breaks it down into amino acids, which the body then uses to make proteins for itself. If our diet lacks carbs, then our body is actually able to convert protein in our body into carbs. That’s why when people don’t eat for many days, they start losing muscle.

Proteins are found in both animals and plants. **Animal based proteins** include chicken, beef, pork, fish, eggs, and dairy. **Plant-based proteins** include tofu, whole grains, nuts, seeds, lentils, chickpeas, soy beans, and other beans. There are also plant-based proteins that have a very similar texture to meat, such as seitan and tempeh.

Animal-Based Proteins



Plant-Based Proteins

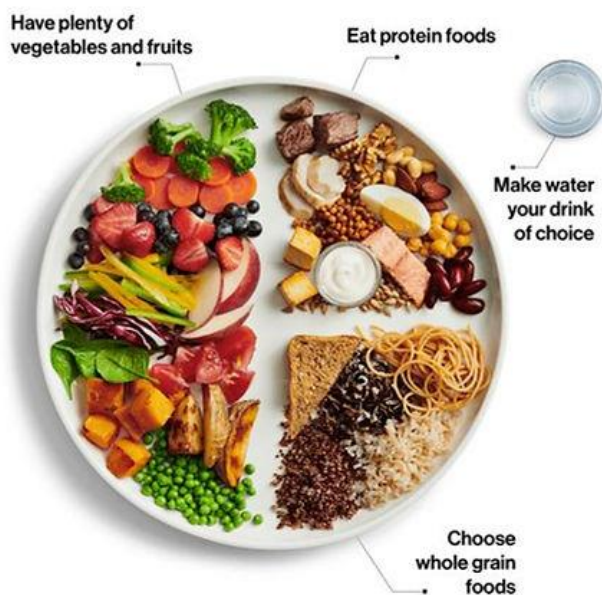


Animal protein has become extremely common in modern societies and modern diet. According to a [Harvard Health article](#), if people eat too much animal protein, they have a higher risk of diseases like kidney stones, heart disease, and colon cancer. However, a diet high in plant-based proteins may not have such risks.

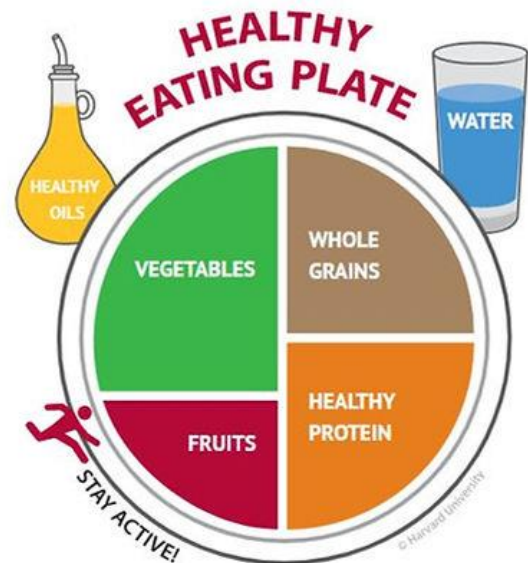
Balancing the Macronutrients

By now, you're probably wondering, "How much carbs, fats, and proteins should I eat every day?" First of all, there is no easy way to give you a clear answer. Secondly, don't focus so much on nutrients. Remember, we don't eat nutrients, we eat food. Healthy eating is not about hitting a particular number for our macronutrients, it's about eating healthy foods in a healthy proportion and avoiding unhealthy foods.

For a guide on how the proportion of macronutrients we should eat, we can check the [Canada Food Guide](#) and [The Harvard School of Public Health](#).



Canada Food Guide



Harvard School of Public Health

From the above pictures, we can see that around 50% of our foods should be vegetables and fruits. Around 25% should be whole grains, and another 25% should be protein and fats. Keep in mind that this is just a suggested guide, and different people may need different things.

Proteins, Fats, and Illness

According to the [Medical Medium](#), our current food industries promote protein heavily due to profit. If food companies really had the health of people in mind, they would promote fruits, leafy greens, and vegetables more. They would tell us to choose foods based on their vitamin, mineral, and antioxidant value, not on protein.

The Medical Medium also explains that the liver is responsible for turning amino acids into proteins for the body. Most of the proteins the liver makes are actually created from fruits, leafy greens, and vegetables, not from meat, eggs, tofu, fish, dairy, nuts, and seeds. We should not eat too much of the later mentioned foods because they are all high in fat, and a high fat diet is a big contributing factor to the development of chronic illness, and autoimmune diseases.

How does too much fat lead to disease? It's because fat stays in the blood and makes it thick, which then makes it harder for our cells to get oxygen from the blood. The liver cleans out our blood, so when our blood is thick with fat, the liver can't do its job properly, resulting in thick and dirty blood. It's like when a garbage bin gets filled faster than it gets emptied. The garbage piles up in the body and makes us sick. When you eat too much fat, it doesn't matter if the fat comes from meat or plants, too much fat burdens the liver.

The good news is that protein is actually found in all natural whole foods, so our options are endless. Raw spinach, potato skin, bananas, and tomatoes are just some examples. The Medical Medium urges us to eat more fruits, leafy greens, and vegetables, and if we eat animal protein, then limit it to one small serving per day. If you're worried about getting hungry too fast, then you should eat more complex carbs for a slow, long-lasting release of energy.

Vitamins and Minerals

Whereas carbs, fats, and protein are macronutrients (macro = big), vitamins and minerals are micronutrients (micro = small) that our body needs for normal functioning. Most of them cannot be made by our bodies, so we need to get them from food or supplements. A diet rich in vegetables, fruits, and whole grains should provide enough vitamins and minerals.

Many people wonder if they should take vitamin pills like multivitamins. [Harvard Health](#) asserts that most studies show no health benefit from taking multivitamins. The Medical Medium explains that multivitamin pills are usually a guess blend of various vitamins in forms that may or may not be beneficial. And they put so many vitamins in there that there's very little of each, and such a small amount won't really help our health. Vitamins from real food is much better and more easily absorbed into the body.

Here is some basic information about common vitamins and minerals from [Harvard Health](#).

Vitamin or Mineral	Benefit (in the right amounts)	Sources
Vitamin A	Good for eyes and skin	Orange foods like carrot, pumpkin, and sweet potatoes
Vitamin C	Good for skin and immune system	Most fruits
Vitamin D	Good for bones	Fortified milk, sunlight
Vitamin E	Acts as an antioxidant to protect cells	Wide variety of vegetables
Vitamin B6	Helps convert food into energy. Essential for healthy skin, blood cells, brain, and nervous system.	Whole grains, mushrooms, potatoes, meat, fish
Vitamin B12*	Helps make blood cells and DNA	Fortified soy milk, meat
Calcium	Protects bones and teeth.	Leafy greens, dairy
Potassium	Helps blood pressure and nerve impulses	Fruits, vegetables, grains, legumes, meat, milk
Zinc	Needed for immune system and wound healing. Helps with new cells.	Nuts, legumes, meat, fish
Iodine	Key for thyroid health, which helps set body temperature and influences muscle health	Salt, algae, seafood
Iron	Needed for red blood cells and other chemical reactions in the body	Leafy greens, fruit, grains, red meat
Copper	Helps with immune system and red blood cells	Nuts, seeds, beans, prunes, black pepper

*Regarding vitamin B12, the Medical Medium explains in this [article](#) that the best form of bioavailable B12 that our body can actually use is from unwashed or lightly-washed produced freshly picked from a garden. Examples include tomatoes, kale, herbs, sprouts, and microgreens.

To re-emphasize, this is very basic information, and the role that vitamins and minerals play is very complicated. Personally, I check with Medical Medium information when it comes to health and nutrition. According to his books, there are many types of the same vitamin and mineral. For example, real whole foods have bioavailable versions of vitamins and minerals that are easily digested into the body, whereas the vitamins in a pill are not as easily absorbed by the body. Another example: The copper in an apricot is very different from the copper in copper pipes. The copper from copper pipes is toxic to the body, whereas copper from an apricot can help remove the toxic copper from copper pipes.

Conclusion

When it comes to nutrition, the three main categories are carbohydrates, fats, and proteins. We should eat natural over processed carbs, and eat more complex than simple carbs. For fats, we should avoid saturated and trans fat, and focus on getting a small amount of healthy unsaturated fats. For proteins, it's important to get some but not too much since proteins are usually accompanied by fat in food.

To balance our macronutrient intake, experts recommend our plate should be 50% fruits and vegetables, 25% whole grains, and 25% protein and fat.

For vitamins and minerals, people will be fine as long they eat a well diversified diet rich in fruits and vegetables. Multivitamin pills, despite all their advertising, don't actually help with people's health. It's best to get vitamins and minerals from real food.

Healthy Eating 101

Updated: Sep 6, 2021

When it comes to healthy eating, there's a lot of different research and advice out there. This article will go over the basics. There are lots of food that taste great but are horrible for our health. Unfortunately, these foods are extremely common, and people think it's normal to eat them. This article will point out which foods to avoid, which foods to be careful about, and then the healthy foods that we can love, and they will also love us back.



Image Source: Unsplash

Part 1: Foods to Avoid

While health experts might disagree on what foods to eat for health, pretty much all health experts agree on which foods to avoid, which are junk food and processed foods. Most of eating healthy is actually avoiding unhealthy food. In our current society, unhealthy food is everywhere. Unhealthy food is easier to access than healthy food. Why? Because unhealthy food is addictive, and businesses can make lots of profit on unhealthy food. No one knew how harmful these foods are in the long-term, so no one banned these foods.

Chronic illness and mental illness are both higher than ever before in history, and our unhealthy food system is a major reason.

1: Junk Food

Almost everyone knows junk food (e.g., burgers, fried food, ice cream etc.) is unhealthy. But people still eat them because the taste is addictive and they don't feel anything bad

The reason these foods are unhealthy is because the companies add a ton of artificial sugar or salt or other flavoring to make it taste addictive. They also add a lot of preservatives so that the food can stay “fresh” for years. Think about that...if the food can stay fresh for years because of the preservatives, just think what those preservatives will do to your body!

3: Restaurant Food (especially if the price is low)

Restaurants are businesses, and most of them nowadays care about profit and not the health of their customers. They use cheap, unhealthy oil in their cooking. They add lots of flavoring like salt and MSG to make the meal taste better, but that’s very bad for the customer’s health.

Part 2: Foods to be Careful About

1: Non-Organic Meat

Meat is not the same as 200 years ago. In our modern society, meat comes from factory farmed animals. These animals are injected with growth hormones to make them extra big and grow really fast. They live in extremely crowded spaces with no hygiene. They barely have breathing space. They live extremely stressful and short lives, so their body is full of hormones related to fear, stress, and anger. They are also sprayed with lots of chemical pesticides to kill insects that carry disease. Moreover, the food that they eat is sprayed with up to 20 times more pesticides than what is allowed for human consumption.

When we eat meat from the grocery store or a restaurant, we are also eating all those dangerous chemicals and unhealthy hormones. In the short term, that creates stress and inflammation in the body. Compounded over time, that leads to disease.

2: Non-Organic Produce (Fruits and Vegetables)

Even produce is not the same as before. They have been genetically modified to be bigger, prettier, and resist bugs. Their taste is also much more bland as a result. Fruits and vegetables are grown in sick soil that’s filled with chemical fertilizers. These fertilizers are like the growth hormones injected into animals: they make the plants grow faster and bigger, but it’s not natural. The chemicals in the fertilizers hurt the soil, which then hurts the plants, which then hurts the people who eat them. The farmers also spray the fruits and vegetables with A LOT of pesticides. They use so much that they have to wear full-body suits with masks because breathing in those pesticides is harmful. And farms will have a “Do not enter” sign because it’s dangerous to breath all those pesticides.



[Image Source](#)

When we eat fruits and vegetables, it's very important to wash them thoroughly because we can't see or feel the pesticides on the produce, and eating it is very harmful.

3: Common Allergens

There is a diet called the **Elimination Diet** for people who have conditions like skin rashes, headaches, tiredness, stomach pain, or even mental illness. If you have any such symptoms, you can experiment with removing these foods for a period of time (usually 2-3 weeks), then reintroduce the foods one by one and see if the symptoms come back.

Common allergens include soy, nuts, gluten, corn, dairy, MSG, artificial flavors, food coloring, and preservatives.

The Medical Medium gives a similar list of foods to avoid:



[Image Source](#)

Here is a quick video of Dr. Daniel Amen explaining how he used the elimination diet to heal one of his patients from depression and suicidal thoughts:

1.00

[Video Source](#)

Part 3: Healthy Food

Now that we've looked at some unhealthy foods, let's talk about the healthy ones.

1: Organic and Free-Range

When you buy fruits and vegetables, try to get **organic** if your budget allows it. For animal products, look for **free-range**, which means it's not factory farmed. It's more expensive, but it's much healthier for you and for the Earth. Organic food also tastes so much better. You will enjoy the taste of the actual food and not want the taste of sugar, salt, or artificial flavors.

For example, I compared the taste of store tomatoes with organic tomatoes from my garden. The store tomatoes look nice and big, but have almost no taste. My garden tomatoes have 100 times more flavor than the store tomatoes. That's the difference between organic and non-organic.

2: Home Made Food

Instead of eating fast food, packaged food, and restaurant food, try to eat home-cooked food with fresh ingredients. Why? Because you know exactly what went into your meal. You know there's no artificial flavorings or preservatives.

Cooking can be very easy and simple. Just cut up a bunch of different colored vegetables and stir fry them in pan. Add a bit of salt for flavoring, and you have a great tasting meal. Now, for many people, that meal might taste bland, and that's because their tongue is so used to the excessive artificial flavors from fast food, packaged foods, and restaurant food. But if you stop eating those unhealthy foods for some time, your tongue will be able to taste vegetables again. And if you use organic ingredients, the taste will be very rich.

3: The Holy Four

In his book, *Life Changing Foods*, the Medical Medium explains four food groups that have healing powers for the body: fruits, vegetables, herbs, and wild foods. Fruits fight cancer, vegetables clean the body, herbs build the immune system, and wild foods help us adapt to stress.

The Holy Four Food Groups

From *Life Changing Foods* by Medical Medium.



Fruits fight cancer.



Vegetables cleanse the body.



Herbs build the immune system.



Wild foods help us adapt to stress.

Here are just a few examples:

- **Fruits:** Apples, bananas, berries, grapes, lemons, mangoes, melons, oranges, papaya, pears

- **Vegetables:** Asparagus, celery, broccoli, leafy greens (spinach, lettuce), potatoes, onions, cucumbers, sweet potatoes
- **Herbs:** Garlic, ginger, turmeric, cilantro, licorice root
- **Wild Foods:** Aloe vera, seaweed, mushrooms, coconut, raw wildflower honey, wild blueberries

It would take far too long to explain each food in detail, but he has a whole book on the healing benefits of over 50 foods in his book.

What about drinks?

It's probably not surprising to you that we should avoid processed drinks made in a factory, such as sodas and juices. These drinks have a lot of sugar, artificial flavors, and preservatives added to them.

The easiest way to be healthy with our drinks is to drink water. If you want, you can also drink natural fruit juices without added ingredients. You can even drink the juice of certain vegetables such as celery, which has tremendous health benefits.

Conclusion

Most of healthy eating is actually avoiding unhealthy food, which are extremely common in our current profit-driven society. We should avoid especially processed foods and cheap restaurant foods because they are made to taste really good but are very harmful for our health. We also need to be careful with non-organic food. Finally, we should try to add organic and home food foods into our diet, especially fruits, vegetables, herbs, and wild foods.