



Balance Diet





What is a balanced diet?

- A balanced diet is one that gives your body the nutrients it **needs to function correctly**. To get the proper nutrition from your diet, you should consume the majority of your daily calories in:
 - fresh fruits
 - fresh vegetables
 - whole grains
 - legumes
 - nuts
 - lean proteins



About calories

- The number of calories in a food is a measurement of the **amount of energy stored** in that food. Your body uses calories from food for walking, thinking, breathing, and other important functions.
- The average person needs to eat about 2,000 calories every day to maintain their weight. However, a person's specific daily calorie intake can vary **depending on their age, gender, and physical activity level**. Men generally need more calories than women, and people who exercise need more calories than people who don't. The following examples of daily calorie intake are based on United States Department of Agriculture (USDA) guidelines:



- **children ages 2 to 8 years: 1,000 to 1,400 calories**
- **girls ages 9 to 13 years: 1,400 to 1,600 calories**
- **boys ages 9 to 13 years: 1,600 to 2,000 calories**
- **active women ages 14 to 30 years: 2,400 calories**
- **active men ages 14 to 30 years: 2,800 to 3,200 calories**

The **source of your daily calories** is just as important as the number of calories you consume. You should **limit your consumption of empty calories**, meaning those that provide little or no nutritional value. The USDA defines empty calories as calories that come from sugars and solid fats, such as butter and shortening.



According to the USDA, Americans consume empty calories most often in:

Sausages, cakes, cheese

Cookies, doughnuts, energy drinks

fruit drinks, ice cream, pizza

bacon, sports drinks and sodas



Why a balanced diet is important

- A balanced diet is important because your organs and tissues **need proper nutrition to work effectively**. Without good nutrition, your body is more prone to disease, infection, fatigue, and poor performance. Children with a poor diet run the risk of growth and developmental problems and poor academic performance, and bad eating habits can persist for the rest of their lives. .
- Rising levels of obesity and diabetes in America are prime examples of the effects of a poor diet and a lack of exercise. The Center for Science in the Public Interest reports **that 4 of the top 10 leading causes of death are directly influenced diet** i.e. heart attack, cancer, stroke and diabetes.



How to achieve a balanced diet

At the core of a balanced diet are foods that are low in unnecessary fats and sugars and high in vitamins, minerals, and other nutrients. The following food groups are essential parts of a balanced diet.

Fruits

Besides being a great source of nutrition, fruits make tasty snacks. Choose fruits that are in season in your area. They're fresher and provide the most nutrients.

Fruits are high in sugar. **This sugar is natural, though, so fruit can still be a better choice for you than other foods with added sugar.** If you're watching your sugar intake or have a condition such as diabetes, you may want to opt for low-sugar fruits. People who are watching their carbohydrate intake may reach for fruits such as melons and avocado.



Vegetables

- **Vegetables are primary sources of essential vitamins and minerals.** Dark, leafy greens generally contain the most nutrition and can be eaten at every meal. Eating a variety of vegetables will help you obtain the bountiful nutrients that all vegetables provide.
- **Examples of dark leafy greens include:**
Spinach, Kale, green beans, Broccoli, collard greens, swiss chard.



Grains

- According to the USDA, people consume refined white flour more than any other grain. Refined white flour has poor nutritional value because the hull of the grain, or outer shell, is removed during the refining process. The hull is where the majority of the grain's nutrition lies.
- Whole grains, however, are prepared using the entire grain, including the hull. They provide much more nutrition. **Try switching from white breads and pastas to whole-grain products.**



Proteins

- **Meats and beans are primary sources of protein**, a nutrient that is essential for proper muscle and brain development. Lean, low-fat meats such as chicken, fish, and certain cuts of pork and beef are the best options. Removing the skin and trimming off any visible fat are easy ways to reduce the amount of fat and cholesterol in meats. The health and diet of the animal are important and influence the fatty acid profile of the meat, so grass-fed choices are ideal.

- 
- **Nuts and beans are good sources of protein** and contain many other health benefits, as well as fiber and other nutrients. Try to eat:

Lentils, beans, peas, almonds, sunflower seeds and walnuts.


Tofu, and other soy-based products are excellent sources of protein and are healthy alternatives to meat.

- **Dairy products provide calcium, vitamin D,** and other essential nutrients.



Oils

- **Oils should be used sparingly. Opt for low-fat and low-sugar versions of products that contain oil, such as salad dressing and mayonnaise. Good oils, such as olive oil, can replace fattier vegetable oil in your diet. Avoid deep-fried foods because they contain many empty calories.**



Besides adding certain foods to your diet, you should also reduce your consumption of certain substances to maintain a balanced diet and healthy weight. These include:

- **alcohol**
- **refined grains**
- **solid fats**
- **saturated fats**
- **trans fats**
- **salt**
- **sugars**

How to use the Pyramid

The recommended number of servings for children (from 5 years of age*) and adults is highlighted beside each shelf. For example, to get at least 4 servings from the fruit and Veg shelf you could have:

$\frac{1}{2}$ a glass of fruit juice = 1

3 dessertspoons of veg = 1

1 apple = 1

1 banana = 1

TOTAL = 4



DRINK WATER REGULARLY - AT LEAST 8 CUPS OF FLUID PER DAY


Folic Acid - An essential ingredient in making a baby. If there is any possibility that you could become pregnant, then you should be taking a folic acid tablet (400 micrograms a day)

* For younger children, start with smaller and fewer servings and increase up to the guidelines recommended, according to the child's own growth and appetite.



There are six major nutrients: Carbohydrates (CHO), Lipids (fats), Proteins, Vitamins, Minerals, Water.


- **Carbohydrates:** pasta, rice, cereals, breads, potatoes, milk, fruit, sugar. The Dietary Guideline recommends that carbohydrates make up 45 to 65 percent of your total daily calories. So, if you get 2,000 calories a day, between 900 and 1,300 calories should be from carbohydrates. Its deficiency causes **Hypoglycemia**.
- That translates to between **225 and 325 grams of carbohydrates a day**.


- 
- **Proteins**: meat, dairy, legumes, nuts, seafood and eggs. The DRI (Dietary Reference Intake) is 0.8 grams of protein per kilogram of body weight, or 0.36 grams per pound I.e. 56 grams per day for the average sedentary man. 46 grams per day for the average sedentary woman. Its deficiency causes Kwashiorkor.
 - **Lipids** (most commonly called fats): oils, butter, margarine, nuts, seeds, avocados and olives, meat and seafood. So if you're following a 2,000-calorie-a-day diet, your target range for total fat is 44 to 78 grams a day. Of that, saturated fat should make up no more than 22 grams. If you don't get enough lipids in your diet you'll have dry hair, scaly and flaky skin and nails.



Vitamins: common vitamins include the water soluble B group vitamins and vitamin C and the fat soluble vitamins A, D, E and K.

- **Vitamin A for men 900 mcg, for women 700 mcg**
- **Vitamin B₁; (thiamin) 1,4mg**
- **Vitamin C; for men 90mg, 75mg for women**
- **Fruits and vegetables are generally good sources of Vitamin C and A and folic acid.**
- **Grains and cereals are generally good sources of the B group vitamins and fiber.**
- **Full-fat dairy and egg yolks are generally sources of the fat soluble vitamins A, D and E.**
- **Milk and vegetable or soya bean oil are generally good sources of vitamin K, which can also be synthesized by gut bacteria.**

- 
- **Minerals:** (sodium, calcium, iron, iodine, magnesium, etc.): all foods contain some form of minerals. The amount of minerals we need is actually very small – much smaller than the amounts of carbohydrates, protein, and fats required for a healthy diet. Most adults need about **1,000 milligrams of calcium per day but only about 10 to 15 milligrams of iron and zinc per day.**
 - Milk and dairy products are a good source of calcium and magnesium, Red meat is a good source of iron and zinc.
 - Seafood and vegetables (depending on the soil in which they are produced) are generally good sources of iodine.
 - Its deficiency can cause **weak bones, fatigue and tiredness.**

- 
- **Water:** As a beverage and a component of many foods, especially vegetables and fruits. An adequate daily fluid intake is: **About 15.5 cups (3.7 liters) fluids for men. About 11.5 cups (2.7 liters) of fluids a day for women.**
 - As about 70 % of human body contains water, so dehydration can cause serious problems such as **kidney failures, burns, diarrhea, headaches, moodiness, mental fog, slower metabolism and vomiting.** As diarrhea worsen one can feel thirsty, sweat less and excrete less urine.



Malnutrition

Malnutrition is a condition that results from **eating a diet in which one or more nutrients are either not enough or are too much** such that the diet causes health problems. It may involve calories, protein, carbohydrates, fat, vitamins or minerals.

- Malnutrition can lead to:
- short- and long-term health problems
- slow recovery from wounds and illnesses
- a higher risk of infection
- difficulty focusing at work or school

- 
- Some deficiencies can trigger specific health problems. For example:

A lack of vitamin A

- Around the world, many children develop **vision problems** due to a lack of vitamin A.

A lack of vitamin C

- A **lack of vitamin C** can result in **scurvy**. **Scurvy** is rare, but can develop if a person does not have a vitamin containing diet with plenty of fresh fruits and vegetables.
- Older adults, young children, those who consume a lot of alcohol, and some people with certain mental health conditions may be particularly at risk.



An overall deficiency

- Lacking all nutrients can lead to **kwashiorkor** (due to **protein deficiency**), which is a “severe form of malnutrition.” One symptom of this condition is a distended abdomen.
- **Marasmus** is another potential result of severe nutritional deficiency. A person with marasmus will have very little muscle or fat on their body.



Symptoms

Some signs and symptoms of malnutrition include:

- a lack of appetite or interest in food or drink
- tiredness and irritability
- an inability to concentrate
- always feeling cold
- depression
- loss of fat, muscle mass, and body tissue
- a higher risk of getting sick and taking longer to heal
- longer healing time for wounds
- a higher risk of complications after surgery
- Eventually, a person may also experience difficulty breathing and heart failure.
- a lack of growth and low body weight
- tiredness and a lack of energy
- irritability and anxiety
- slow behavioral and intellectual development, possibly resulting in learning difficulties



Causes

Malnutrition can occur for various reasons. The sections below outline these potential causes in more detail.

- **A low intake of food**

Some people develop malnutrition because there is not enough food available or because they have difficulty eating or absorbing nutrients.

This can happen as a result of:

1. cancer
2. liver disease
3. conditions that cause nausea or make it difficult to eat or swallow



- **Digestive disorders and stomach conditions**

If the body does not absorb nutrients efficiently, even a healthful diet may not prevent malnutrition.

Examples of digestive and stomach conditions that may cause this include:

- 1. Crohn's disease**
- 2. ulcerative colitis**
- 3. celiac disease**
- 4. persistent diarrhea, vomiting, or both**



Alcohol use disorder

Consuming a lot of alcohol can lead to gastritis or long-term damage to the pancreas. These issues can make it hard to digest food, absorb vitamins, and produce hormones that regulate metabolism.

Alcohol also contains calories, so a person may not feel hungry after drinking it. They may therefore not eat enough healthful food to supply the body with essential nutrients.



Treatment

If a doctor diagnoses malnutrition, they will make a treatment plan for the person. The person may also need to meet with a nutritionist and other healthcare providers.

- It may include:
- making a dietary plan, which might include taking supplements
- treating specific symptoms, such as nausea
- treating any infections that may be present
- checking for any mouth or swallowing problems
- suggesting alternative eating utensils In severe cases, a person may need to; spend time in the hospital
- gradually start taking in nutrients over a number of days
- receive nutrients such as potassium and calcium intravenously.



Prevention

- To prevent malnutrition, people need to consume a range of nutrients from a variety of food types.
- Older adults, young children, people with severe or chronic illness, and others may need additional care to ensure that they **obtain the nutrients they need.**
- Anyone who starts **to show signs of malnutrition or under nutrition should see a doctor** for a diagnosis and treatment.



Conclusions

- All I want to say in conclusion is instead of being picky eaters we must get all of our nutrients and not only focus on the tastes our taste buds want. It is always said prevention is better than cure so we must take what we know is healthy for our body so we don't have to face unpleasant consequences.