

# Food and mood



The arrival of winter can also mean the arrival of the “winter blues.” According to the American Psychological Association (APA), seasonal affective disorder (SAD) is a type of depression that affects many people and lasts for a season. It’s experienced most often during the winter months.

A mental health professional can help you identify and manage these winter blues, but what else can help? The APA recommends a few tips, including staying active, spending time with family and friends, and getting as much daylight as possible. Healthy eating is on this list as well.

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## Vitamins and mood

Humans need adequate amounts of 13 vitamins for their health and well-being. When these vitamins cannot be made by the body, we must consume them in the food we eat. This list is made up of vitamins A, C, D, E, K and the eight types of B vitamins.

### The B vitamins include:

- thiamine (B1)
- riboflavin (B2)
- niacin (B3)
- pantothenic acid (B5)
- vitamin B6
- folate (B9)
- vitamin B12

Vitamins K and D are two vitamins that the body can produce on its own.<sup>1</sup> Most people can get enough of the nutrients they need through a balanced diet. Studies have shown that the nutrients coming from the food we eat can have a direct impact on our mood, especially vitamins **B** and **D**. What are these key nutrients, what functions do they perform in the body and how can you get more of them in your diet?

# B vitamins

## B vitamins help the body in many ways:

- They help our bodies use the food we eat by turning it into energy.
- B vitamins are important in cell growth and help to create red blood cells.
- Vitamin B12 is important for helping your blood and nerve cells function, which helps to create DNA and brain chemicals like serotonin.
- Your body needs folate to help in cell division, which is especially important during pregnancy.

## Not getting enough of any of the B vitamins can cause many different symptoms, including:

- fatigue
- weakness
- anemia

Certain types of people are more at risk for being deficient in B vitamins than others. For example, women under 30 may not get enough folate in their diets. People with diabetes or prediabetes who are taking the medication Metformin may have trouble getting enough B12 because of Metformin's tendency to reduce absorption of that vitamin.<sup>2</sup>

When it comes to B vitamins and your mood, studies have shown that increasing B vitamin intake can help lower feelings of stress.<sup>3</sup>

## B vitamins can be found in:



**Vegetables** such as mushrooms, brussels sprouts, mustard greens, avocados, asparagus, spinach, broccoli and other dark leafy greens



**Fruits**, all kinds



**Meats:** Pork, beef, poultry, clams, fish and organ meats (like liver)



**Dairy:** Eggs and milk



**Potatoes** and other starchy vegetables



**Legumes** (such as black beans, soybeans and peas), seeds and nuts



**Whole grains** and fortified bread, grains, cereals, pasta and rice

# Vitamin D

Vitamin D helps your body in many ways. It helps your body process and absorb calcium, which keeps your bones and teeth strong. Your muscles need vitamin D to move. This key nutrient is also involved in nerve function, helping to carry messages between your brain and your body. Finally, vitamin D helps the immune system fight off invading bacteria and viruses, which can be especially important during those winter months.

One of the biggest risks of low vitamin D levels is the development of osteoporosis, which is a condition involving weakening of the bones as we age. However, there are other risks of being vitamin D deficient. Some studies have found a link between low blood levels of vitamin D and an increased risk of depression.<sup>4</sup>

While vitamin D is found in a few foods, the body creates vitamin D when bare skin is exposed to the sun. The shorter, darker days of winter can often have a negative impact on the amount of vitamin D people are able to get through sunlight compared to brighter summer months. To ensure you get enough vitamin D, it is recommended to spend 15 to 30 minutes in direct afternoon sunlight several times per week.

## Vitamin D can be found in:



**Fatty fish** like trout, salmon, tuna and mackerel and fish liver oils



**Mushrooms**



**Protein sources:** beef liver, egg yolks, yogurt and cheese



**Fortified foods:** Breakfast cereals, some brands of orange juice



**Dairy and non-dairy** milks like soy milk, almond milk and oat milk

Through routine bloodwork, a primary care physician can help you understand your key nutrient levels and decide what is the best course of action for getting the right levels of vitamins in your diet. In some cases, vitamin supplements can help. However, the best way to get the nutrients you need is through a balanced and healthy eating plan. Working with a dietitian can be one of the best ways to learn how to eat for your own unique nutrient needs.

"While there are so many factors that play a role in our mental health and overall mood, we don't want to forget about a key contributor here—which is the food that we eat! By enjoying a balanced diet, rich in vegetables, fruit, lean meats, healthy fats and whole grains, we are doing our best to get adequate amounts of these essential B and D vitamins that contribute to our mood."

Livongo Coach Sara Rosenblum, MS, RD, LDN, CDCES

<sup>1</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4772032/>

<sup>2</sup> <https://ods.od.nih.gov/factsheets/VitaminB12-Consumer/>

<sup>3</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6770181/>

<sup>4</sup> <https://ods.od.nih.gov/factsheets/VitaminD-Consumer/>

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