

Foods That Help With ADHD and Foods to Avoid

Dietary Recommendations for Better Management

By Heather Jones | Updated on July 03, 2024

✓ Medically reviewed by Kira Graves, PhD

Although attention deficit hyperactivity disorder (ADHD) is not caused by—or cured by—any specific foods, diet can play an important role in helping you stay healthy and manage symptoms. While some foods may help with ADHD symptoms, others may be making your symptoms worse. People with ADHD can have nutritional deficiencies or intolerances to foods that may affect their ADHD symptoms.

This article will discuss how best to manage your eating habits if you have ADHD. Learn more about ways to address nutritional deficiencies and food sensitivities that can affect ADHD symptoms, and how to eat for health overall.

How Foods Affect ADHD

Evidence is weak to support a direct link between diet and the increase or decrease in ADHD symptoms. But healthy eating habits can improve overall health and reduce the likelihood of deficiencies, which in turn can help with ADHD.

Eating a diet high in fruits and vegetables, fresh foods, and a variety of healthy options but low in processed foods, sugar, and salt, is important for everyone, whether they have ADHD or not. A balance between carbohydrates, protein, and fat is also necessary for optimal nutrition.

Following a general guide for healthy eating such as the Department of Health and Human Service's Dietary Guidelines for Americans is a good overall practice for everyone.

■

For most people with ADHD, eating healthy looks the same as it does for anyone else. However, people with ADHD who have deficiencies or sensitivities, eating patterns might look a little different.

ADHD and Nutritional Deficiencies

Some research has found higher incidences of nutritional deficiencies in people with ADHD, particularly of:

- Iron
- Magnesium
- Zinc
- Omega-3 fatty acids
- Vitamins B2, B6, and B9

These deficiencies may result in symptoms that are similar to or heighten the symptoms of ADHD.

That said, there are foods you can eat that are high in the vitamins and minerals that are often found in low levels in people with ADHD.

Good sources of iron include:

- Lean meat
- Seafood
- Poultry
- Iron-fortified breakfast cereals and breads
- White beans
- Lentils
- Spinach
- Kidney beans
- Peas
- Nuts
- Some dried fruits (such as raisins)

Good sources of magnesium include:

- Legumes
- Nuts
- Seeds
- Whole grains
- Green leafy vegetables (such as spinach)
- Fortified breakfast cereals and other fortified foods
- Milk, yogurt, and some other milk products

These are food sources of zinc:

- Oysters (the best source of zinc)
- Red meat
- Poultry
- Seafood such as crab and lobsters
- Fortified breakfast cereals

Beans, nuts, whole grains, and dairy products also provide some zinc.

Good sources of omega-3 fatty acids include:

- Fish and shellfish: These foods provide EPA (eicosapentaenoic acid) and DHA (docosahexaenoic acid).
- Certain plant oils (such as flaxseed, soybean, and canola oils) and some other foods of plant origin (such as chia seeds and black walnuts) contain ALA (alpha-linolenic acid). Most of the research on omega-3s and ADHD focuses on EPA and DHA.

If you suspect you or your child may have a deficiency that requires a more specific diet plan or, possibly, supplements, check with your healthcare professional before making significant changes or starting supplements.

Supplements such as magnesium, zinc, and iron, can cause side effects, some of which can be severe in high doses. Iron, in particular, can be dangerous and even fatal to children if too much is ingested.

ADHD and Food Sensitivities

Some research suggests that food allergies, which cause an immune system

response, and sensitivities or intolerances, which are unpleasant but not an immune response, are associated with increased ADHD symptoms.

Some foods have been studied as possible sources of these sensitivities:

- Milk and other dairy products
- Eggs
- Gluten (protein found in wheat, barley, and rye)
- Artificial colorings
- Benzoate preservatives
- Chocolate
- Soy
- Wheat
- Corn
- Legumes (such as lentils, peas, and beans)
- Grapes
- Tomatoes
- Oranges

While tests can be conducted to determine allergies, sensitivities and intolerances are harder to predict.

Are Certain Foods Bad for People With ADHD?

Specific foods are not considered "bad" on their own, even for people with ADHD. If someone has an intolerance or allergy to a food, they should avoid that food, even if they don't have ADHD.

Evidence is inconclusive about whether eliminating any single food relieves ADHD symptoms. When elimination of a food is suggested, it tends to be indicated for people who are sensitive to it, not for people with ADHD in general.

ADHD and Sugar

Although it's been established that sugar does not cause ADHD, it's still unclear whether sugar consumption can influence ADHD symptoms. Some studies suggest

that refined sugar may worsen ADHD symptoms in some people, whereas other studies have found no such link.

In general, sugary foods can cause a rapid rise in blood sugars. This can influence your mood and your ability to focus and concentrate, and it can cause energy highs and lows. Regularly eating sugary foods can also cause you to eat less of the foods your body needs to be healthy.

So, while sugar does not cause ADHD, it can still affect your overall health and possibly influence some ADHD symptoms. That said, sugary foods are best enjoyed in moderation.

ADHD and Caffeine

Limited research suggests that caffeine may help improve symptoms of ADHD in adults by increasing alertness, focus, and motivation. However, more studies are needed to determine its therapeutic potential.

That said, it's also important to note that consuming caffeine in combination with ADHD medications (like Adderall or Ritalin) may increase your risk of having more serious adverse effects.

Food Dye and ADHD

Some research suggests that artificial food dyes may cause behavioral changes in children with or without ADHD, but these studies often contain flaws and are not conclusive.

In 2011, the Food and Drug Administration (FDA) concluded that color additives did not cause hyperactivity in children in the general population but may (along with other substances in food) heighten symptoms in certain susceptible children with ADHD.

More research is needed into the potential relationship between artificial food dyes and ADHD symptoms. If you notice that certain food dyes or additives negatively affect you or your child, a single-food elimination diet may give you some insight.

Types of Diets for ADHD

Elimination Diet

An elimination diet involves removing foods suspected of causing an intolerance. The following are two approaches:

- **Single-food elimination diet:** This diet eliminates foods suspected of causing an intolerance, such as eggs, one at a time.
- **Multifood-elimination diet:** An example is the six-food elimination diet, which eliminates the most common food allergens (cow's milk, soy, wheat, eggs, peanuts, and seafood).

All elimination diets use a two-step process, such as:

1. The diet is followed for a period of time.
2. If symptoms improve, foods or food additives are slowly reintroduced one at a time to see if symptoms return and to determine which food is likely responsible for the symptoms.

The length of time this takes depends on how many foods were eliminated and need to be reintroduced. A single-food elimination will take much less time than the few-foods diet, in which many foods need to be slowly reintroduced.

Some studies suggest that strict elimination diets such as the few-foods diet are promising for treating ADHD symptoms, particularly for those who have not seen results with medication or cannot take these drugs. Other studies question the efficacy, safety, and practicality of strict elimination diets for children.

Before starting even a minor elimination diet, consult with your healthcare professional to make sure it is safe and recommended to do so. More restrictive elimination diets should be done in cooperation with a nutrition expert, such as a dietitian, to monitor health and safety.

Few Foods Diet

The few-foods diet (oligoantigenic diet) restricts a person's diet to only a few uncommonly consumed foods (such as lamb, venison, quinoa, rice, pear, and others with low allergenic potential). Other foods are then slowly reintroduced over

time.

Because it is very restrictive, it is usually only used as a last resort option. This diet must be supervised by a qualified professional, such as a dietitian, to avoid nutritional deficiency.

Feingold Diet

The Feingold Diet focuses on eliminating certain chemicals and artificial additives that are thought to cause adverse reactions. These include:

- Artificial food dyes
- Artificial flavorings and fragrances
- BHA, BHT, and TBHQ
- Artificial sweeteners

This diet may also exclude foods and non-foods that contain salicylates.

Keep a Diary

If you suspect you may have a food allergy or intolerance, keeping a food diary can help you look for patterns between symptoms and foods. While this won't give conclusive results, it may provide an easy place to start.

Managing Food Issues with ADHD

ADHD can affect a person's ability to make and maintain healthy dietary habits. People with ADHD can have trouble with the steps involved in making a healthy meal at home, including:

- Meal planning
- Preparation
- Time management
- Decision-making
- Following multiple steps

This can lead to eating convenience meals (such as premade and processed foods) or eating out more often.

ADHD medications can also affect diet. Stimulant medications can reduce appetite. When taking these medications in the morning, a person may not be hungry for lunch and may skip eating.

These general tips can help people with ADHD get the most out of meals:

- **Include protein in your major meals:** This helps regulate blood sugar levels, which can indirectly help influence your ability to focus and concentrate.
- **Monitor general health, weight, and height (in children) when they are taking stimulants:** Under your healthcare professional's guidance, make sure the loss of appetite that can occur with medications for ADHD is not affecting health, nutrition, or growth.
- **Try "mechanical eating" if necessary:** Rather than relying on hunger cues at lunchtime, if stimulants are causing a lack of appetite, plan and eat a regular meal, even if you aren't hungry.
- **Meal plan using a menu rotation:** Plan your meals for a certain period (such as three weeks' worth of breakfast, lunch, and dinner), then repeat those menus over and over, rotating each week. This allows you to plan once, and then forget about meal planning for months.
- **Choose simple but nutritious meal options:** Look for recipes designed for people with ADHD, such as the Children and Adults with Attention-Deficit/Hyperactivity Disorder's (CHADD) "Cookbook For Busy Minds."

Summary

No foods cause ADHD, and no foods will cure it. Still, nutrition is important for people with ADHD. As in people without ADHD, a person with ADHD may have nutritional deficiencies and food sensitivities that might contribute to ADHD symptoms. Also, ADHD may contribute to unhealthy eating patterns.

Always consult with your healthcare professional to correctly identify nutritional deficiencies, food allergies, and food sensitivities. They can advise you on better dietary patterns and whether supplements are needed. An elimination diet might be one test given to identify sensitivities.

24 Sources

Verywell Health uses only high-quality sources, including peer-reviewed studies, to support the facts within our articles. Read our editorial process to learn more about how we fact-check and keep our content accurate, reliable, and trustworthy.

1. Del-Ponte B, Quinte GC, Cruz S, Grellert M, Santos IS. Dietary patterns and attention deficit/hyperactivity disorder (Adhd): A systematic review and meta-analysis. *J Affect Disord*. 2019;252:160-173. doi:10.1016/j.jad.2019.04.061
2. Cagigal C, Silva T, Jesus M, Silva C. Does diet affect the symptoms of ADHD? *Curr Pharm Biotechnol*. 2019;20(2):130-136. doi:10.2174/1389201019666180925140733
3. Children and Adults with Attention-Deficit/Hyperactivity Disorder (CHADD). Nutrition and ADHD.
4. Bener A, Kamal M, Bener H, Bhugra D. Higher prevalence of iron deficiency as strong predictor of attention deficit hyperactivity disorder in children. *Ann Med Health Sci Res*. 2014;4(Suppl 3):S291-S297. doi:10.4103/2141-9248.141974
5. Elbaz F, Zahra S, Hanafy H. Magnesium, zinc and copper estimation in children with attention deficit hyperactivity disorder (ADHD). *Egyptian Journal of Medical Human Genetics*. 2017;18(2):153-163. doi:10.1016/j.ejmhg.2016.04.009
6. Lange KW. Micronutrients and diets in the treatment of attention-deficit/hyperactivity disorder: Chances and pitfalls. *Front Psychiatry*. 2020;11:102. doi:10.3389/fpsy.2020.00102
7. Landaas ET, Aarsland TIM, Ulvik A, Halmøy A, Ueland PM, Haavik J. Vitamin levels in adults with ADHD. *BJPsych Open*. 2016;2(6):377-384. doi:10.1192/bjpo.bp.116.003491
8. Office of Dietary Supplements. Iron.
9. Office of Dietary Supplement. Magnesium.

10. Office of Dietary Supplements. Zinc.
11. National Center For Complementary and Integrative Health. Omega-3 supplements: in depth.
12. Office of Dietary Supplements. Iron.
13. Abd El Baaki OM, Abd El Hamid ER, Zaki ST, Alwakkad ASER, Sabry RN, Elsheikh EM. Diet modification impact on ADHD outcome. *Bull Natl Res Cent*. 2021;45(1):15. doi:10.1186/s42269-020-00466-x
14. Huberts-Bosch A, Bierens M, Ly V, et al. Short-term effects of an elimination diet and healthy diet in children with attention-deficit/hyperactivity disorder: A randomized-controlled trial. *Eur Child Adolesc Psychiatry*. Published online July 11, 2023. doi:10.1007/s00787-023-02256-y
15. Pinto S, Correia-de-Sá T, Sampaio-Maia B, Vasconcelos C, Moreira P, Ferreira-Gomes J. Eating patterns and dietary interventions in ADHD: A narrative review. *Nutrients*. 2022;14(20):4332. doi:10.3390/nu14204332
16. MedlinePlus. Hyperactivity and sugar.
17. Attention Deficit Disorder Association. Health and nutrition.
18. Llewellyn GC, Penberthy JK, Parker JM. Food color additives in the US food supply: Review of neurobehavioral safety. *J Pediatr Neurol Neurosci*. 2020;4(1). doi:10.36959/595/409
19. Background Document for the Food Advisory Committee. Certified color additives in food and possible association with attention deficit hyperactivity disorder in children.
20. Nigg JT, Holton K. Restriction and elimination diets in ADHD treatment. *Child Adolesc Psychiatry Clin N Am*. 2014;23(4):937-953. doi:10.1016/j.chc.2014.05.010
21. Kotchetkoff EC de A, de Oliveira LCL, Sarni ROS. Elimination diet in food allergy: Friend or foe? *Jornal de Pediatria*. Published online October 2023:S0021755723001304. doi:10.1016/j.jpmed.2023.09.012

22. Pelsser L, Frankena K, Toorman J, Rodrigues Pereira R. Retrospective outcome monitoring of ADHD and nutrition (Roman): the effectiveness of the few-foods diet in general practice. *Front Psychiatry*. 2020;11:96. doi:10.3389/fpsyt.2020.00096
23. Feingold Association of the United States. What is the Feingold Diet?
24. Briars L, Todd T. A review of pharmacological management of attention-deficit/hyperactivity disorder. *J Pediatr Pharmacol Ther*. 2016;21(3):192-206. doi:10.5863/1551-6776-21.3.192

Additional Reading

- Pelsser LM, Frankena K, Toorman J, Pereira RR. Diet and ADHD, reviewing the evidence: a systematic review of meta-analyses of double-blind placebo-controlled trials evaluating the efficacy of diet interventions on the behavior of children with ADHD. *PLOS ONE*. 2017;12(1):e0169277. doi:10.1371/journal.pone.0169277