

When Your Food & Drink Could Be Causing You Problems: Elimination Diets

What is an elimination diet?

An elimination diet is a tool that can help you find out if certain foods could be keeping you from feeling your best. It is not an official diet with set rules, like you might be asked to follow by a dietitian. It involves avoiding a food or a group of foods for a short time, and seeing if you feel better. After a set amount of time, you try the food or foods again to see if health problems come back. This helps you learn which foods may be causing problems.

Many people think they have food allergies or that some foods make them (or their family members) sick.¹⁻⁴ Many people (about one third) report that some foods bother them.³ For example, half of all people have trouble with lactose, a sugar found in milk.⁵ About 2% of people react to gluten or wheat.⁶ Around 7% of people cannot tolerate wine.⁷

A true food allergy is a specific type of immune response to a particular food. It usually occurs within minutes or hours after eating that food. People having an allergic reaction to a food can have itchiness or hives, swelling of the throat or tongue, trouble breathing, vomiting, or diarrhea. A severe food allergy is called “anaphylaxis” and is life-threatening. The foods that most often cause allergic reactions are milk, eggs, peanuts, tree nuts, fish, shellfish, wheat, soy and some fruits.⁸⁻¹¹ If you have a severe food allergy, speak with your health care provider before starting any new eating approach.

Some people have problems caused by eating certain foods, but those problems are not true allergies. These people may feel unwell after eating a certain food or a type of food. The food may change how their gut works or how their body processes different nutrients. Sometimes this is called “food intolerance.”

As you explore whether or not eliminating certain foods might help you, it is always a good idea to stay in contact with your health care team. Your dietitian or provider might have other suggestions to help you support your gut health, whatever way you decide to eat.

How can eliminating certain foods help me?

Some foods may make diseases or symptoms worse. Avoiding them may make you feel better and healthier. An elimination diet may be helpful for you if:

- You suspect you are sensitive to certain foods or notice that you have the same health issues whenever you eat a given food.
- You experience symptoms that have not gotten better with other treatments from your health care team.
- You don't feel your best, but your health care team cannot seem to find another cause.

Research shows that foods can be tied to problems like migraine headaches, irritable bowel syndrome (IBS), ulcerative colitis and Crohn's disease, and many others.⁸

Is it safe to eliminate problem foods?

Eliminating certain foods from the diet is safe for most people. In fact, when done with care, the new approach to eating might end up being more nutritious than the way you were previously eating. However, this approach is not recommended for some children or pregnant women. A child may not grow well if he or she doesn't get the right nutrients. For example, children with autism may eat only a few foods already. Further limiting their food options by removing some of the foods that they like may lead to poor nutrition.¹² A pregnant woman may not get the right nutrients for her baby to grow well if she stops eating groups of foods. Also, don't do an elimination diet if you have ever had an eating disorder.^{13,14} (Examples of eating disorders are anorexia or bulimia.) Work with your health care provider to make sure you are eliminating foods safely.

Is it difficult?

For most people, food is much more than just fuel; it can also represent comfort, family, culture, and connection. Changing the way you eat can be hard. Before you begin, make sure it is the right time in your life.¹⁵ You will likely have to plan new menus, find and make new recipes, buy new grocery items, and try new foods. This works best if you begin to plan a couple of weeks ahead. It can be challenging if you don't have the time or cooking skills needed to make all-new foods.¹⁶ If possible, choose a time when you don't have holidays, major family events (birthdays, weddings), travel plans, or a lot of added stress in your life. It is helpful to have family and friends who will support you or even eat the same way as you.

How do I start?

Choose a time in your life when you feel ready to change your diet. Keep a food and symptom diary, so you can record how you feel as you avoid foods and later, when you try eating them again to see if your problems come back. For the first three weeks, remove foods you think might cause problems and keep your overall eating as healthy as possible. Most people (about 75%) feel better with just doing that.¹⁷ Learn to read labels carefully to find all of the ingredients in a food.

For the first three weeks:

Here are some suggestions you can follow during the first three weeks when you want to eliminate problem foods.

- 1) Avoid the following:¹⁷⁻¹⁹
 - Food additives (e.g. preservatives, flavor enhancers, emulsifiers, artificial colors, and natural and artificial flavors)

- High fructose corn syrup (found in sodas, sweetened beverages, and other processed foods such as ketchup)
- Sugar-sweetened beverages (soda, bottled sweet teas, energy drinks, bottled coffee, sports drinks)
- Artificial sweeteners (anything that is sweet and says “diet” or “sugar free”)
- Trans and partially hydrogenated fats (packaged snacks, cakes, pies, cookies, margarines)

2) Reduce the following:

- Alcohol
- Caffeine
- Highly processed foods (chips, crackers, other foods that come in boxes or other packaging and typically have a long shelf life)
- Added sugars (can have many different names on food labels, like sucrose, dextrose, mannose, caramel, and high-fructose corn syrup)
- Saturated fat (found in fatty beef, butter, lard, cream, cheese, lamb, pork, coconut oil)
- Red meat

Of course, as your plan allows, keep doing all the other things that are healthy when it comes to food and drink. Get plenty of fluids, eat fruits and vegetables, eat nuts and whole grains as able, and try to only eat if you feel hungry, within reason. Be sure you are getting enough food, including enough vitamins. Ask your care team if needed.

I've done the first few weeks as recommended, but I still don't feel any better. What do I do next?

At least three weeks is needed to notice any changes.^{18,19} If, after the first three weeks you don't feel any better, you may extend the time to four, six, or eight weeks. If you choose a longer time, you may find yourself feeling a little nervous about adding foods back in, but it is still a good idea to try, to be sure they are what was causing your problems.

You might also want to try a more focused diet. For example, many people find it is helpful to take gluten or dairy out of their diets. You could try removing either or both of those for three weeks too. It is not easy to do. Gluten is found in wheat, rye, barley, spelt and farro. This means most breads, cereals, crackers, pastas, and baked goods. Dairy products include milk, butter, cheese, yogurt, and cream. About half of all people have difficulty digesting dairy products.

Sometimes, it can help to remove foods you feel 'addicted' to or that are comfort foods.

It can be helpful to speak with your health care provider or dietitian for support.

Once I've eliminated foods from my diet, how do I add them back in?

Adding foods back in is an important part of an elimination diet. You should do this even if you feel really well after removing foods from your diet. This is how you will truly know which foods

you can tolerate and which ones are a problem. Keeping a diary of how you feel when you add back foods will help you keep track. Add only one new food at a time, every three days.

- **Day 1:** Add back in a small amount of one food item. If you are eliminating gluten, this could be one piece of toast.
- **Day 2:** Add in a larger amount of the same food—such as two pieces of toast.
- **Day 3:** On the third day eat a larger portion of the same food—perhaps a bowl of pasta and a couple pieces of bread throughout the day.
- **Day 4 onwards:**
 - If you feel well the first three days, then continue to eat that food. If you eliminated more than one thing, start to add back a second food. Follow the same steps as you did for the first three days with the first food.
 - If you feel worse at any point, as you are adding the foods back in, that tells you to really think about avoiding the food for an even longer time. Write down which foods made you feel sick. Some people may have anxiety when they add foods back in. If you find yourself struggling with that, speak with a care provider.

When adding back foods, some people may have increased mucus production, fatigue, trouble concentrating, digestive problems, constipation, diarrhea, bloating, mood swings and drowsiness.²⁰

Once I've figured out which foods make me feel worse, what do I do then?

Remove the foods you've identified for at least three to six months. Then add them back into your diet, slowly, to see if you still react to them.²¹

For you to consider:

- Is there anything in particular that grabs your attention in this handout?
- Do you want to try an elimination diet?
- If you have any concerns about starting an elimination diet, contact your health care provider or a dietitian to help guide you.

The information in this handout is general. **Please work with your health care team to use the information in the best way possible to promote your health and happiness.**

For more information:

ORGANIZATION	RESOURCES	WEBSITE
University of Wisconsin Integrative Health Program	A variety of Integrative Whole Health handouts on your surroundings	https://www.fammed.wisc.edu/integrative/resources/modules/

This handout was adapted for the University of Wisconsin Integrative Health Program from the original written for the Veterans Health Administration (VHA) by Suhani Bora MD, Integrative Medicine Family Physician and former Academic Integrative Medicine Fellow, Integrative Health Program, University of Wisconsin Department of Family Medicine and Community Health. The handout was reviewed and edited by Veterans and VHA subject matter experts.



References

1. Moore LR. "But we're not hypochondriacs": The changing shape of gluten-free dieting and the contested illness experience. *Social science & medicine* Mar 2014;105:76-83. doi:10.1016/j.socscimed.2014.01.009
2. Arranz LI, Canela MA, Rafecas M. Dietary aspects in fibromyalgia patients: Results of a survey on food awareness, allergies, and nutritional supplementation. *Rheumatol Int*. Sep 2012;32(9):2615-21. doi:10.1007/s00296-011-2010-z
3. Lied GA, Lillestol K, Lind R, et al. Perceived food hypersensitivity: A review of 10 years of interdisciplinary research at a reference center. *Scand J Gastroenterol*. Oct 2011;46(10):1169-78. doi:10.3109/00365521.2011.591428
4. Bohn L, Storsrud S, Tornblom H, Bengtsson U, Simren M. Self-reported food-related gastrointestinal symptoms in IBS are common and associated with more severe symptoms and reduced quality of life. *American journal of gastroenterology*. May 2013;108(5):634-41. doi:10.1038/ajg.2013.105
5. HRQoL questionnaire evaluation in lactose intolerant patients with adverse reactions to foods. *Intern Emerg Med*. Sep 2013;8(6):493-6. doi:10.1007/s11739-011-0630-7
6. Volta U, Bardella MT, Calabro A, Troncone R, Corazza GR. An Italian prospective multicenter survey on patients suspected of having non-celiac gluten sensitivity. *BMC medicine*. 2014;12:85. doi:10.1186/1741-7015-12-85
7. Wigand P, Blettner M, Saloga J, Decker H. Prevalence of wine intolerance: Results of a survey from Mainz, Germany. *Dtsch Arztebl Int*. Jun 2012;109(25):437-44. doi:10.3238/arztebl.2012.0437
8. Bora S, Rindfleisch A. The elimination diet. In: Rakel D, ed. *Integr Med*. 4th ed. Elsevier; 2017.
9. What is a food allergy? Learn about food allergies, what causes them and more. Accessed April 28, 2022, <https://www.foodallergy.org/resources/facts-and-statistics>
10. Allergenic Foods and their Allergens, with links to InformAll. Accessed February 28, 2019,
11. Food Allergies: What You Need to Know. Updated September 26, 2018. Accessed February 28, 2019,
12. The changing concept of sudden infant death syndrome: diagnostic coding shifts, controversies regarding the sleeping environment, and new variables to consider in reducing risk. *Pediatrics*. Nov 2005;116(5):1245-55. doi:10.1542/peds.2005-1499
13. Larramendi CH, Martin Esteban M, Pascual Marcos C, Fiandor A, Diaz Pena JM. Possible consequences of elimination diets in asymptomatic immediate hypersensitivity to fish. *Allergy*. Oct 1992;47(5):490-4.
14. Elder JH. The gluten-free, casein-free diet in autism: An overview with clinical implications. *Nutrition in clinical practice* Dec-2009 Jan 2008;23(6):583-8. doi:10.1177/0884533608326061
15. Madonna Swift K, Lisker I. Current concepts in nutrition: The science and art of the elimination diet. *Altern Complement Ther*. 2012;18(5):251-258.
16. Leffler DA, Edwards-George J, Dennis M, et al. Factors that influence adherence to a gluten-free diet in adults with celiac disease. *Dig Dis Sci*. Jun 2008;53(6):1573-81. doi:10.1007/s10620-007-0055-3
17. Ogden J, Leftwich J, Nelson M. The development and evaluation of a nurse led food intolerance clinic in primary care. *Patient Educ Couns*. Nov 2011;85(2):e1-5. doi:10.1016/j.pec.2010.10.020
18. Sampson HA. Update on food allergy. *J Allergy Clin Immunol*. May 2004;113(5):805-19; quiz 820. doi:10.1016/j.jaci.2004.03.014
19. Joneja JMV. *Dietary Management of Food Allergies & Intolerances: A Comprehensive Guide*. JA Hall Publications; 1998.
20. Johnson K. The elimination diet and diagnosing food hypersensitivities In: Rakel D, ed. *Integr Med*. Elsevier; 2003.
21. Pastorello EA, Stocchi L, Pravettoni V, et al. Role of the elimination diet in adults with food allergy. *J Allergy Clin Immunol*. Oct 1989;84(4 Pt 1):475-83.