What is Food Intolerance?

People with a food intolerance, also called food sensitivity, have difficulty digesting a particular food. It literally means that the gut cannot tolerate that food. And so, the person feels uncomfortable after ingesting it.

For instance, if you have an intolerance to milk, you'd probably get a stomachache or diarrhea after having milk with your cereal.

According to the scientific definition, food intolerance is a "non-immunological response initiated by a food or food component at a dose normally tolerated and account for most adverse food responses".

Is Food Allergy and Food Intolerance the same?

No, they are not the same. Food intolerances are related to the digestive system, while food allergies are associated with the immune system.

Food tolerances affect up to 20% of the population. In contrast, allergies are far less common, affecting only 1–2% of adults and less than 10% of children.

A food intolerance happens when the digestive system can't break down certain foods. So, if you are intolerant to a certain food, then you may feel sick or uncomfortable after eating it. But your life will not be in danger, and the few symptoms you have will eventually disappear.

In fact, if you consume only a small amount; you may even have no symptoms.

In contrast, food allergies are far more serious and can be life-threatening. A food allergy is an abnormal immune response to a certain protein or other food components. The body reacts by releasing proteins called immunoglobulin E (IgE), which cause hives, swelling, wheezing, or shortness of breath.

The reaction is immediate, even if the person only ingests a smattering of the allergen.

However, some allergies are deadly and can cause a severe allergic reaction called **anaphylaxis.** Peanuts or bee stings are prime examples of such allergens. It's common for people allergic to bee stings or peanuts to go into anaphylactic shocks within minutes or seconds after getting in touch with the allergen.

Only epinephrine treatment can usually save such a person.

Signs and Symptoms of Food Intolerance

Signs and symptoms of a food intolerance include:

- General abdominal discomfort and bloating
- Stomach ache
- Upset stomach

- Headaches or migraines
- Heartburn
- Headache
- Migraine
- Nausea

What Causes Food Intolerance?

There are several factors and that may be behind food intolerances.

1. Genetics

It is thought that people with lactose intolerance inherit the condition from their parents. This may be why people of Asian and Native American heritage are more lactose intolerant than other populations.

Lactose intolerance stems from an inability to digest the sugar in milk (lactose) due to a shortage of the enzyme ‘lactase’ in the small intestine. The result is diarrhea, gas, or bloating when eating milk products or drinking milk.

Lactose intolerance is not a serious condition, as most people only need to limit their milk intake.

2. Lack of Digestive Enzymes and Enzyme Defects

The gastrointestinal (GI) system secretes digestive enzymes into the digestive tract, where they break down food into fatty acids (fat), amino acids (protein), and sugars (carbohydrates) and help with nutrient absorption.

Since digestive enzymes are crucial to proper digestion, a lack of these enzymes can cause food intolerance. For instance, lactase shortage causes lactose intolerance.

Another example is fructose intolerance caused by the absence of aldolase - an enzyme that breaks down fructose. If the fructose can't be broken down, the body can't use it for energy.

3. Gluten Intolerance (Non-Celiac Gluten Sensitivity)

With gluten intolerance, people feel sick when they eat something that contains gluten, such as wheat. They may feel bloated, gassy, or fatigued.

It's easy to confuse gluten intolerance with Celiac disease, but they are not the same.

Gluten intolerance makes a person feel uncomfortable and bloated when they consume gluten-containing food such as bread made from wheat or rye. In contrast, Celiac disease is an illness caused by an immune reaction when eating gluten. If untreated, the illness can lead to other diseases.

4. Intolerance to Food Additives

The list of food additives runs into the thousands, so we won't attempt to go into all of them here. Food additives are added to processed foods to prevent them from spoiling and to enhance the taste, flavor, and appearance of food.

These substances can't be picked from a tree or caught in the ocean because, for the most part, they don't come from food or anything we would normally add to the food we prepare at home. These substances are mostly added to food produced and processed on a large scale.

Most highly processed foods display a long list of additives including preservatives, flavorings, emulsifiers, stabilizers, antioxidants, and food dyes and colorings.

Bonus Tips:

- *Scan the first three ingredients; if the first ingredients include refined grains, a type of sugar, or hydrogenated oils, don't buy the product.*
- *If you are not interested in reading food labels, just glance at them quickly. Choose food with short ingredient lists.*

Food Additives that Can Cause Adverse Reactions in Some People

A small number of people experience hypersensitivity to food additives. These intolerances are less severe than typical allergic reactions. We highlight five of the most common

a) Monosodium Glutamate

Monosodium glutamate (MSG) is used to enhance the flavor of savory foods. It is intensively used in Asian food. But you'll also find it in processed foods, especially processed meat and packaged soups.

MSG has been associated with metabolic syndrome. In a scientific review, several studies identified MSG consumption as a major contributor to some metabolic disorders, such as obesity.

People who are sensitive to MSG can experience intense stomach cramps, sweating, headaches, sweating, and numbness if they get a lot of it in.

b) Tartrazine and other artificial food colorings

Tartrazine, also called FD&C yellow, is a synthetic yellow food dye made from petroleum products, as are many other synthetic food colorings used to make food look more appealing. It is widely used in sodas consumed by children. One study found that 50mg can have adverse effects on children, causing behavioral problems.

Another study revealed that tartrazine caused significant DNA damage. While most damage was repairable, some persisted even after 24 hours.

Artificial food coloring is generally widely used in processed foods. These dyes have been closely linked to hyperactivity in children in several studies.

c) High-Fructose Corn Syrup

High-fructose corn syrup is a sweetener made from corn. It's widely used for sweetening juices, coffee, candies, breakfast cereals, breads, pastries, sweetened yogurts, soft drinks, and fast foods.

Corn syrup is a source of fructose - a sugar that is differently metabolized than glucose. When consumed in high amounts, it is considered a risk factor for serious health issues, including metabolic syndrome, Type 2 diabetes, obesity, heart disease, and even cancer due to its tendency to cause inflammation.

Corn syrup has no essential nutrients; but empty calories that contribute to weight gain.

d) Sodium Nitrite

Most people enjoy a slice of pastrami on a bagel, but that tasty treat comes at a price. Sodium nitrate is used as a preservative in processed meat. It also makes the meat salty and adds to its reddish color.

Several studies have reported that consuming processed meats may be linked to a higher risk of several cancers, including colorectal, breast, and bladder cancer.

e) Sodium Benzoate

Sodium benzoate is a preservative commonly used in soft drinks, fruit juices, salad dressings, pickles, and condiments. In combination with citric acid, it forms carcinogenic benzene. The levels of benzene increase if the product is exposed to heat and light.

One review in 2015 concluded that "benzene is a chemical hazard in food". Several studies have analyzed benzene concentration in food. Sodas, diet, and sugar-free beverages are all prone to benzene formation. However, it is important to note that in most of these studies, the benzene levels were often low and considered negligible.

The best way to avoid food intolerance linked to food additives is to avoid or at least reduce the consumption of processed foods.

See Also: The Ugly Truth About Overly Processed Foods!

We have highlighted only a few of the problematic food additives. Here is a list of other food additives that you should look out for:

- Guar gum
- Antioxidants such as BHA and BHT
- Artificial Sweeteners, including Aspartame
- Trans fats
- Artificial flavoring
- Yeast extract

- Sulfites

Most additives cause problems for only a few people and are mostly well-tolerated by most people. However, if you eat a lot of processed food, there may be an accumulation of undesired chemicals in your body that may cause health issues down the line.

Diagnosis

Although food intolerance is common worldwide, diagnosing it is often not that simple.

Diagnosing requires an understanding of all the associated symptoms, when they started, and how severe they are. To complicate matters further, food intolerances and food allergies can have similar symptoms, making it difficult to diagnose these conditions.

The symptoms of food intolerances are also very similar to the symptoms of other digestive conditions, such as irritable bowel syndrome (IBS).

Since there are no accurate or reliable tests to diagnose a food intolerance, therefore, doctors can only diagnose lactose intolerance and celiac disease with certainty.

Patients can, however, help their doctors make a diagnosis by keeping track of what they eat and their body's reaction to the food.

On the other hand, doctors can suggest **'an exclusion diet'**, also known as an elimination or diagnostic diet, to help with the diagnosis. Such a diet involves excluding specific foods or ingredients suspected of causing the undesired reactions, from your diet for some time.

During this time, you monitor your symptoms. Later, you systematically reintroduced the food that was excluded, one by one to see if there were any reactions.

This process usually helps to identify the problematic foods or ingredients causing the symptoms, paving the way for formulating a diet that eliminates these foods but is still balanced.

Sometimes, when you reintroduce the food that you avoided for a while, you can eat it again with no adverse effects. This is referred to as **'food tolerance'**. You can experiment to discover how much and how often you can eat the food without experiencing adverse effects.

Can You Cure a Food Intolerance?

Food intolerances cannot be cured like a lung infection might be cured with antibiotics. It is usually a chronic condition that you must find a way to deal with, as you can't take medicine for it.

The best way to handle a food intolerance is to avoid the food causing the problem.

If the food intolerance is not too severe, small amounts of the offending food or ingredient might not cause digestive problems. In this case, you can experiment with portion size to enjoy the food without any effects.

If these strategies are not effective, it's advisable to consult a gastroenterologist or allergist to manage food intolerances.

What are the 5 Most Common Food Intolerances?

1. Gluten

Gluten intolerance, also known as non-celiac gluten sensitivity (NCGS) or gluten sensitivity, is a sensitivity to gluten, a protein found mainly in wheat, barley, and rye. Gluten intolerance is a digestive response that causes people sensitive to gluten to feel sick after eating gluten.

Again, gluten intolerance is not the same as celiac disease - an autoimmune disorder that triggers an immune response to gluten. Celiac is a more serious condition which damages the small intestine.

Symptoms of gluten intolerance include digestive issues like bloating, abdominal pain, diarrhea, and constipation, as well as issues like headache, fatigue, joint pain, and depression. These symptoms occur after ingesting gluten-containing foods and improve when gluten is removed from the diet.

It is hard to know how many people are gluten intolerant because there isn't a diagnostic test to determine the presence of the condition. However, researchers suggest that gluten intolerance may affect 0.5 -13% of the population.

People who experience gluten intolerance feel better if they simply avoid food that contains gluten. However, gluten-free diets have been found to lack important nutrients such as proteins, vitamin B, and folate.

Foods to avoid:

- Bread
- Pasta
- Cereals
- Beer, ale, stout
- Pastries
- Crackers
- Sauces, dressing and gravies, soy sauce
- Most packaged food

If you suspect that you are gluten intolerant, consult with a nutritionist before you start excluding food from your diet.

2. Dairy Products

Many people are lactose intolerant as they can't digest the lactose sugar in milk due to a shortage of lactase - an enzyme necessary to break down lactose.

People who are lactose intolerant experience a range of unpleasant symptoms, from abdominal pain, bloating, and gas to diarrhea, nausea, and skin reactions. Approximately 65% of the world population is lactose intolerant, with large populations of East Asian descent not able to digest dairy products.

Foods to avoid:

- Milk

- Cheese
- Butter
- Yogurt
- Ice cream
- Products that contain milk

Many people who are lactose intolerant can tolerate some milk in their diets without serious symptoms. It's common for people to be unable to digest fresh milk but to be okay with milk products like yogurt or cheese.

It’s because the process of making these products involves fermentation, which partially breaks down the lactose.

Kefir is a fermented milk product that is safe for lactose-intolerant people. The fermenting process reduces its lactose content, but kefir is not lactose-free. But it's worth trying if you are lactose intolerant; since it is highly nutritious.

3. FODMAPs

FODMAPs stands for Fermentable Oligosaccharides, Disaccharides, Monosaccharides, and Polyols. These are short-chain carbohydrates (sugars) found in many foods. FODMAPs are poorly absorbed in the small intestine. Instead, they can ferment in the colon, causing digestive problems like gas, bloating, abdominal pain, and other digestive symptoms.

People who have been diagnosed with irritable bowel syndrome (IBS) tend to be sensitive to FODMAPs.

The different FODMAPs and the food they are found in:

- **Oligosaccharides:** Wheat, rye, onions, garlic, legumes, asparagus, broccoli, and cauliflower.
- **Disaccharides:** Milk, yogurt, and soft cheeses.
- **Monosaccharides:** Fruits (e.g., apples, pears, cherries), honey, and high-fructose corn syrup.
- **Polyols:** Certain fruits (e.g., apples, pears, stone fruits), some vegetables, and artificial sweeteners.

People with IBS or other gastrointestinal disorders can benefit from following a low FODMAP diet and slowly reintroducing certain foods to identify the food that triggers the symptoms.

But if you wish to make such changes, it's best to consult a registered dietitian to ensure your diet is not nutrient-poor.

4. Caffeine

Many people are sensitive to caffeine but experience adverse symptoms only if they consume too much of it. However, some people are hypersensitive to caffeine and so, experience adverse reactions after consuming just a small amount.

The symptoms of caffeine intolerance include:

- Rapid heartbeat
- The jitters
- Dizziness
- Nervousness
- Anxiety
- Insomnia
- Headaches
- Dehydration
- Restlessness

Most caffeine-intolerant people tend to avoid coffee and Ceylon tea. But the substance hides in many places including certain herbal teas and chocolate. Sodas and energy drinks contain enormous amounts of caffeine, and decaf coffee also retains some caffeine.

5. Fructose

Fructose is a simple sugar that doesn't raise blood sugar levels. In recent decades the consumption of fructose has skyrocketed. At the same time, there has been a dramatic increase in fructose-related diseases and fructose intolerance, also called fructose malabsorption.

Fructose intolerance occurs when the small intestine lacks sufficient amounts of the enzyme needed to break down fructose. In this case, the poorly absorbed fructose lands in the large intestine, where gut bacteria ferments it, causing digestive discomfort.

The ingestion of fructose has severe negative health consequences, including insulin resistance, obesity, liver disorders, and diabetes.

- Reflux
- Bloating
- Gas
- Abdominal pain
- Diarrhea
- Nausea
- Vomiting

People with a fructose intolerance are often also sensitive to other FODMAPs and can benefit from a low-FODMAP diet.

Foods to avoid are mainly sodas, honey, and certain fruits including apples, watermelon, mango, and grapes.

How can I prevent food Intolerance?

You can't prevent food tolerance. You can only be vigilant and notice what foods make you feel uncomfortable and exclude them from your diet. However, this should be done with caution and with the help of a nutritionist or dietitian to avoid nutrient deficiency.

FAQ:

Why am I so Sensitive to Food?

The specific reason for your intolerance may be related to your genetics, physiology, or other factors. Many food intolerances are caused by enzyme deficiencies, gastrointestinal conditions, such as irritable bowel syndrome, or sensitivity to food additives.

If you discover that you experience discomfort after consuming certain foods or beverages. Then, you may need to consult a medical practitioner to establish if you have a food intolerance or an allergy. Allergies are serious immune reactions and must not be ignored.

Can You Suddenly Develop Food Intolerance?

No, food sensitivity develops over time. People commonly develop symptoms gradually and slowly become aware of the problem.

Conclusion

Food intolerance or food sensitivity has increased in recent decades. Food intolerances cannot typically be cured by taking medication. However, you can manage the symptoms by avoiding the food or ingredient causing uncomfortable indigestion.

Food tolerance is not a serious health condition. You may even find that consuming small amounts of problematic food causes you little if any trouble at all.