Food Intolerance

What is food intolerance?

When ingestion of a particular food or food additive causes unpleasant symptoms, a person is said to be intolerant to that food or additive. Symptoms occur as a result of either poor absorption from the intestine into the bloodstream or less commonly by the release of chemicals within the body occurring as a result of contact of the food/additive with the body. The most common symptoms are gas, bloating, nausea, diarrhea and abdominal pain. Less common symptoms include shock, welts, fluid retention, rash, wheezing, inflamed sinuses/eyes/nose, vocal cord swelling and, rarely, a migraine headache.

Which foods commonly cause problems?

Foods containing sugars (lactose, fructose, sorbitol), and gluten are the most common cause of problems. Foods containing monosodium glutamate (MSG), sulfites or histamines cause symptoms in far fewer people.

Sugars

Sugars that are not absorbed in the small intestine pass into the large intestine where bacteria feed on them and produce gas and other breakdown products that can cause symptoms of bloating, gas, diarrhea, nausea and cramps.

Lactose Intolerance

The most common food intolerance by far occurs in people who lack the ability to digest significant amounts of lactose, the predominant sugar in milk. This results from a shortage of the enzyme lactase, which is normally produced by the cells lining the small intestine. Lactase breaks down milk sugar into simpler forms that can be absorbed into the bloodstream. When there is not enough enzyme to digest the amount of lactose consumed, nausea, cramps, diarrhea, and bloating are common.

Symptoms usually begin 30 minutes to two hours after eating or drinking food containing lactose (e.g., milk, cottage cheese, ice cream, cheese). The severity of the symptoms depends on the amount of lactose an individual can absorb in relation to the amount ingested.

How do I get lactose intolerance?

For most people, lactose deficiency develops naturally with age as the small intestine lining cells gradually lose the ability to make the enzyme lactase. Most people develop symptoms as adults. Some ethnic and racial groups are more commonly affected. The condition is least common in persons of northern European descent, whereas 90% of Asian-American and 75% of African-Americans are lactose intolerant.

How is lactose intolerance diagnosed?

Formal tests for lactose intolerance exist, but most cases can be diagnosed by avoiding lactose containing products and finding significant, if not complete, improvement of symptoms. Milk, dairy products, ice cream, and cheese are the most common lactose-containing foods. These should be completely avoided for several weeks to see the effect on symptoms. If the symptoms return after re-challenging the person's digestive system with lactose-containing food after noticing a dramatic reduction in symptoms with avoidance, the diagnosis of lactose intolerance is likely.

How is lactose intolerance treated?

Avoiding lactose-containing foods, or limiting the amount is effective treatment for most people. Dietary control depends on each person's learning, through trial and error, how much lactose he or she can handle. For people who develop symptoms from very small

amounts of lactose or have trouble limiting their intake of lactose-containing foods, lactase enzymes are available in both liquid and chewable tablet form for use with either liquid or solid lactose-containing food. Calcium supplementation is recommended for anyone who significantly limits their dietary intake of milk products.

Lactose is hidden in some foods such as whey, curds, milk by-products, dry milk solids, and nonfat dry milk powder. In addition, lactose is used as a base for about 20% of prescription drugs and 6% of over-the-counter medicines. Individuals with very low tolerance for lactose will need to read all food/medication labels very carefully in order to control their symptoms.

Other Sugars

Fructose is found in many common foods, such as figs, pears, prunes, and grapes. It is also found in corn syrup which is used to sweeten foods, gums, candies and sodas. In people who cannot properly absorb fructose, symptoms similar to lactose intolerance occur. Sugarless or diet foods, beverages, and even some low calorie gums are sweetened with sugars which are poorly absorbed by most people. If enough of these foods/beverages are ingested, the large load of non-absorbed sugar which reaches the large intestine can again cause symptoms similar to those of lactose intolerance. Sorbitol, mannitol, and xylitol are sugars commonly used in this fashion.

What is Celiac Disease (sprue)?

People with Celiac Disease have an intolerance to a protein called gluten found in wheat, rye, barley and oats. Eating simple foods like wheat bread will damage the intestines, so food cannot be absorbed normally. Severe weight loss, bloating, gas, weakness and a change in bowel habits often occur.

Celiac Disease is diagnosed by a combination of blood tests, biopsy of the small intestine lining and by improvement in symptoms after removing gluten from the diet.

Treatment consists of removing gluten-containing products from the diet (wheat, rye, barley, and oats). Obvious sources of gluten, such as baked goods, wheat/oat-containing cereals, noodles, and spaghetti are easily avoided. Unfortunately, wheat is often used in processed food such as ice cream, salad dressing and canned vegetables/soups. It is also found in many brands of instant coffee, ketchup, mustard, candy bars and some over-the-counter medications. As a result, a successful adherence to a gluten-free diet requires careful label-reading since gluten can be present in many seemingly unlikely places.

Less Common Intolerances

Monosodium glutamate (MSG) sensitivity is the most common problem in this group of less common intolerances. MSG is used as a flavor enhancer and is popular in Chinese food. This has led to the name "Chinese Restaurant Syndrome" for symptoms of headache, chest tightness, nausea, sweating, burning neck and facial pressure which occur in some people 15 minutes to a few hours after ingesting Chinese food containing MSG.

Histamine containing foods such as cheese, spinach, eggplant, red wine, tuna, mackerel, and yeast can produce symptoms similar to allergic reactions in some people. These symptoms include headache, flushing, rapid heart rate, fainting and wheezing.

Foods, medications and cosmetics containing sulfites, tartrazine, benzoates, pargenes, and many dyes have been reported to cause a variety of symptoms. Asthma-type attacks of wheezing in response to ingestion of sulfites found on sprayed/dipped vegetables and fruits have received the most publicity.

Sugar, chocolate, caffeine and various additives have been suggested as agents which worsen migraine headaches, and/or attention deficit hyperactive disorder in some individuals. Dietary restrictions have been reported as helpful in controlling and improving symptoms in some individuals with these problems.

What should I eat?

A well balanced, nutritious diet is required to maintain good health and proper weight. Symptoms of abdominal bloating, nausea, diarrhea, gas, cramps, or weight loss may indicate intolerance to food or food additives. Less common symptoms include shock, rash, hives, generalized swelling, wheezing, inflamed eyes/nose/sinuses, vocal cord swelling, and migraine headache. Should you develop these symptoms, especially if they occur repeatedly, you should see your doctor and ask about the possibility of food sensitivity.

Accurate diagnosis of food intolerance is important to avoid unnecessary diet restriction which might lead to poor nutrition, higher food costs, social inconvenience/isolation, and preventing a more serious underlying disease from being left undiagnosed.

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