

# False alarms about food

*Allergies and intolerances to food can make some people sick. But myths about food reactions may also harm your health—and your pocketbook.*

A peanut-butter sandwich with a glass of milk is a classic American lunch. But the components of that meal are under attack. Because peanuts can cause fatal allergic reactions in susceptible individuals, some parents have called for peanut-free zones in school cafeterias—tables where peanut products would be banned, to shield allergic children from even the peanut dust that can send extra-sensitive individuals into shock. The Department of Transportation recently advocated similar zones around allergic airplane passengers.

Meanwhile, many “holistic” or alternative publications, practitioners, and food or diet companies are breeding fear of milk and wheat. On the Internet, for example, an outfit called Alpha Nutrition offers a checklist of symptoms that supposedly indicate allergy to gluten, a protein in wheat and other grains, that would supposedly warrant ordering the company’s gluten-free diet program. But those symptoms are so numerous and vague that virtually all people who read the list might conclude they’re allergic.

Then there are the makers of *Dairy Ease* and *Lactaid*—drops or pills containing the enzyme that breaks down lactose, or milk sugar. Both advertise bloated estimates of how many people have trouble digesting the sugar. One even suggests a supposed way to test for lactose intolerance, which requires drinking so much milk that people who could consume a smaller amount with no problem at all would still test positive for the disorder.

Such publicity has created the impression that food reactions are far more prevalent and serious than they generally are. Unfounded fears of food can cause you needless inconvenience and expense, deprive you of needed nutrients, and expose you to unproven or even dangerous treatments. Here are six such myths—and the facts about what to do if you truly can’t handle certain foods.

## ◆ Myth: Food allergies are common.

**Truth:** Allergies to what you eat or drink are decidedly uncommon, particularly in adults. In one large survey, 16 percent of the respondents thought at least one member of their immediate family was allergic to at least one food. But research based on actual tests for the condition suggest a true prevalence of only about 2 percent of adults and 8 percent of young children; allergy to multiple types of food is even rarer.

That’s fortunate, since genuine food allergy is a serious disorder, where the immune system mistakes a food for a dangerous invader. The resulting response may cause local symptoms in the regions exposed to

the food, such as swelling and discomfort in the lips, mouth, and throat, or upset stomach, gas, and diarrhea. It may also cause various systemic symptoms, such as runny nose, itching, rashes, and hives, or in more serious cases, wheezing and even potentially fatal reactions such as difficulty breathing or a drop in blood pressure.

A few people develop an atypical food allergy variously known as gluten sensitivity, celiac disease, or sprue. In that condition, the protein gluten, which is found in wheat, rye, barley, and possibly oats, triggers an unusual immune response that damages the intestinal lining, potentially causing severe digestive symptoms and malnutrition. But despite the belief in widespread wheat allergies, gluten sensitivity afflicts fewer than 1 of every 250 Americans, according to one study.

One reason why so many people mistakenly think they’re allergic to foods is that various other common problems—such as irritable bowel syndrome, gastritis, food poisoning, or just stress and anxiety—can cause similar digestive symptoms. But the one condition

that people most often mistake for an allergy is food intolerance—a habitual reaction to food that doesn’t involve the immune system at all and is virtually never life threatening.

Most food intolerances are simply digestive problems. For example, some people have particular difficulty breaking down high-fiber foods, such as bran, beans, and cruciferous vegetables (broccoli, brussels sprouts, cabbage, cauliflower, kale, and turnips). And some people have inadequate amounts of an enzyme needed to digest a particular nutrient, most often the milk sugar lactose.

The most common *nondigestive* reactions to food include asthma attacks provoked by the sulfites and other sulfur-based preservatives in wine, dried fruits, shrimp, peeled or processed potatoes, and several other foods; and migraine headaches, set off by histamines, tyramines, or other chemicals in items such as alcohol, aged cheese, chocolate, cured meats, organ meats, nitrate preservatives, and certain fruits and vegetables. Less often, the histamines can cause rashes or wheezing, just as allergies can. (That’s because histamines released by the body help produce allergic attacks.) But except for certain types of spoiled fish, food rarely if ever contains enough histamines to provoke a truly serious reaction.

Food intolerances, like food allergies, are far less common than many people think. In one study, for example, only about one in five people who claimed that they couldn’t tolerate a specific food actually

**Many people mistakenly think they’re allergic to foods.**

did react to that food when they didn't know what they were eating.

**2 Myth: If I'm lactose intolerant, I can't consume any milk or milk products.**

**Truth:** Overall, roughly one out of ten white Americans and a much higher proportion of certain specific groups, such as African-Americans and Ashkenazi Jews, have a low level of the enzyme that breaks down lactose. But a recent study found that a group of people who had difficulty digesting lactose could still tolerate an 8-ounce glass of milk at breakfast and dinner. (Two small studies suggest that regularly consuming small amounts of milk may actually reduce lactose intolerance.) Further, people with the disorder may tolerate other dairy products better than they do milk. For example, aged or hard cheeses, such as Swiss or cheddar, contain little lactose; cottage cheese and ice cream contain more lactose than



those cheeses but less than milk does. The bacteria in yogurt have already digested a portion of the lactose, and they help digest it further when you eat the food. (Look for the words "active" or "live" cultures on the label.)

Chocolate milk is less likely to cause symptoms of intolerance than unflavored milk, for unknown reasons. And eating dairy foods together with other, solid foods can make the dairy items easier to tolerate.

Of course, you could try lactose-free products if you don't mind the extra trouble or expense. Milk with no lactose typically costs about 70 percent more than regular milk. An often cheaper but less convenient alternative is to add enzyme drops to regular milk and let it stand in the refrigerator for 24 hours or more, which can eliminate anywhere from about two-thirds to nearly all of the lactose, depending on how many enzyme drops you use. The drops add about 30 to 90 percent to the cost of the milk. Taking enzyme tablets just before drinking milk digests only about half the lactose, at a cost of about 30 to 40 cents per glass, but the tablets can come in handy if you're eating out.

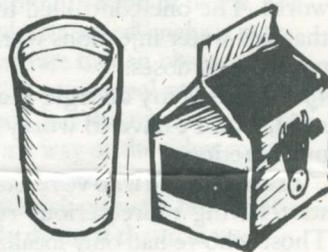
**3 Myth: MSG in food often provokes reactions.**

**Truth:** The flavor enhancer monosodium glutamate, frequently used in Chinese food, has been accused of causing a wide range of symptoms, including headache, nausea, diarrhea, sweating, tingling, tightness or burning in the chest, and asthma. But research suggests that only 1 to 2 percent of Americans react to a typical dose of MSG, and those individuals develop only three of the mildest symptoms: tingling skin as well as the tightness or burning sensation in the chest. More people may react similarly to large doses of MSG, but such doses aren't likely to be found in the foods consumed in restaurants or bought off grocery shelves. In 1995, after reviewing the available evidence, the Food and Drug Administration reaffirmed that MSG belongs in the same category as salt and pepper—"generally recognized as safe."

**4 Myth: Skin and blood tests can accurately determine whether you have a food allergy.**

**Truth:** A negative response to standard skin tests of a suspect food almost always rules out typical allergies. But more than half of people who have a positive response—a small red bump—do not experience symptoms when they actually eat the food. (Specialized antibody tests can indicate the likelihood of celiac disease, but only an intestinal biopsy can diagnose it definitively.)

Some physicians perform an extensive battery of skin tests—sometimes 100 or more—in patients who have vague symptoms that supposedly suggest possible food allergy. Since false-positive results are so common, such a battery will almost surely turn up some supposed allergies in patients with no real allergy. Skin tests should be done only to evaluate specific foods that you already suspect are causing some kind of allergic reaction. A positive result should be confirmed by a controlled oral "challenge" with the suspect food—provided the possible reaction won't be life threatening—under a doctor's supervision.



The radioallergosorbent test (RAST), a blood test for allergy, is slightly less sensitive than the standard skin tests. Two other blood tests, the food-immune-complex and IgG tests, assess aspects of the immune response to food, which lends them an aura of scientific plausibility. But just about everyone generates those response to foods, whether or not they're actually allergic—so just about everyone is likely to receive a positive diagnosis from those tests.

Another unproven test that appears to indicate food allergies in most if not all patients, whether or not they're actually sensitive to the suspect food, is symptom-provocation testing (sometimes called sublingual or subcutaneous provocation testing). The doctor places an extract of the food beneath the tongue or injects it under the skin, then watches for vague symptoms such as fatigue or chills, rather than merely placing the extract on the skin, pricking that spot, and looking for a skin reaction. Symptom-provocation tests are not only inaccurate but also far more likely than standard skin tests to provoke a dangerous reaction in someone who truly is allergic to a food.



**5 Myth: Allergy shots are safe and effective for food allergies.**

**Truth:** While allergy, or "desensitization," shots work for allergies to inhaled substances such as pollen, no well-controlled study has ever validated that approach for foods. And the shots can provoke serious reactions, particularly in people with peanut allergies. The Food and Drug Administration has not approved such shots.

But some doctors use another treatment, called "neutralization" therapy, that's designed to let the

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person eat the provoking food, supposedly by preventing the reaction. The practitioner administers progressively smaller amounts of a food extract, until the patient no longer reacts. The patient then takes that "neutralizing" dose, usually by mouth, before or after eating the suspected food. But again, there's no reliable evidence that this implausible approach works. The one controlled trial done so far found that salt-water injections worked just as well as the neutralizing doses.

◆ **Myth: If my allergic reactions to a food are mild, I don't have to worry about having a serious reaction.**

**Truth:** People who've reacted mildly to a food can start having more serious reactions at any time. Those who've had only localized reactions confined to the site of contact with the food—such as swollen lips, diarrhea, or upset stomach—can develop systemic responses, such as hives or wheezing. And those who've had a systemic response are at risk for fatal reactions in the future.

So if you've had *any* allergic reaction to a food, even a mild one, you need to avoid the food entirely. That means you have to read all food labels scrupulously, know the many obscure ingredients made or derived from the food, and speak directly with the cook before ordering a meal. If you've ever had a systemic allergic reaction, you should carry a self-injecting device (*EpiPen*, *Ana-Guard*) loaded with the drug epinephrine, which can halt a dangerous allergic reaction.

If you know that you've inadvertently eaten a forbidden food, watch for the warning signs of a serious allergic reaction, including tingling or tightness in the throat, a voice change, increased pulse rate, sweating, wheezing, difficulty breathing, or feeling weak or faint. If you experience any of those symptoms, inject the epinephrine and get to a hospital immediately. In one study, most people killed by food-allergy reactions had either downplayed their symptoms or tried to treat them with antihistamines or asthma drugs alone.

### Summing up

Both allergy and intolerance to food, including milk and MSG, are much less common than most people think. To determine whether you do react to suspect foods, consult an allergist. Avoid the food-immune-complex and IgG blood tests as well as symptom-provocation testing. Avoid dubious treatments, too, including food-allergy shots—which are not only unproven but also dangerous—and neutralization therapy.

If you are lactose intolerant, you can probably still tolerate modest amounts of milk as well as yogurt and certain cheeses. If you're truly allergic, avoid the food entirely, and if you've ever had a systemic reaction, carry an epinephrine injector. ■

## Supplement update

### ◆ More vitamin D required?

Last year, a widely reported study published in *The New England Journal of Medicine* suggested that many Americans aren't getting enough vitamin D to protect their bones. The study's authors called for widespread supplementation. Should you take a vitamin D pill?

In that study, led by Harvard researchers, blood tests revealed vitamin D deficiency in nearly 60 percent of some 300 patients recently admitted to a Boston hospital. Not surprisingly, most of the deficient patients got little vitamin D in their diet. But fully one-third of those who did consume the recommended daily amount were deficient as well.

Besides getting vitamin D from dietary sources (mainly from fatty fish and fortified milk, bread, and cereal), the body synthesizes its own supply of the vitamin in response to exposure to sunlight. Part of the reason for the high level of deficiency found in the Boston study was undoubtedly the limited sunlight in those Northern climes. But other analyses of healthy people over age 50 living in sunny Southern regions have also found a higher incidence of vitamin D deficiency than expected.

Michael F. Holick, Ph.D., M.D., director of Boston University's Vitamin D, Skin, and Bone Research Laboratory, has also conducted studies showing that just popping a vitamin D pill won't necessarily bring a low blood level up to the normal range in many people. That may require an initial megadose, he says, delivered under a doctor's supervision.

The science of vitamin D deficiency and sufficiency is still evolving, but here's where things stand:

■ **People under age 50** generally don't need to worry about an adequate vitamin D intake, unless they never go outside. (All it generally takes to get an ample annual supply from the sun is about 10 minutes of exposure to the face, hands, and arms—without wearing sunscreen—two or three times a week during the summer.)

■ **People age 50 and older** who are at risk for osteoporosis—such as postmenopausal women and older men, especially those who get little or no sun exposure—should talk to their doctor about possibly being tested for a low blood level of vitamin D. Those who aren't at special risk, who consume plenty of vitamin D, and who get sufficient sun exposure may not need supplements.

If blood testing or an accounting of diet and sunlight points toward the need for a vitamin D supplement, the usual daily dose would be in the range of 400 IU to 1,000 IU, depending on age and the estimated amount being supplied by those other sources. (More than 2,000 IU per day—from diet and supplements—can have toxic effects.)