

Food Allergies, Intolerances & Sensitivities: What's the Difference?

Are you confused by the words allergy, intolerance, and sensitivity? Almost no one uses them with any consistency. Even doctors use these words with far more authority than they can logically explain, if you can ever pin them down to give you an explanation.

Inconsistency and a lack of standards are the only constants when it comes to how and when these words are used to describe a reaction to a food. If you assume that the use of the word allergy, intolerance, or sensitivity implies some type of underlying mechanism that is at work during a reaction to a food, then you'd be wrong. And if you assume that these words imply something about the type of symptom that you get, or the severity of the reaction, then you'd also be wrong.

Understanding the reason for the confusion is important. Because only then can we develop a common language that will help us build a foundation for further conversation and research on how and why people react to foods. Fortunately for all of us, that language has already been developed by two panels of experts. Unfortunately, that language hasn't yet been implemented or even acknowledged. This article will explain the confusion and introduce you to the standard definitions that will help us all raise the bar on the much needed conversation about food reactions.

Allergy

Let's start with the word allergy. When people hear the phrase food allergy, some people think that they have a pretty good idea about what that means. The first thought is often of anaphylaxis, which is swelling of the tongue or throat that could be life threatening. This is typically the assumption when we are discussing, for example, a peanut allergy.

Of course, there are other foods that can trigger an anaphylactic reaction, such as other nuts, shellfish, strawberries, milk, and eggs. And just about any other food has the potential to trigger an anaphylactic reaction. But thankfully, anaphylactic reactions to most foods are relatively rare, so you don't often hear about them. Based on this information, you might assume that food allergies are always severe or life-threatening. But then you might remember that sometimes a food allergy merely causes hives. Hives are irritating, itchy, and unsightly, but they aren't life threatening. Lots of different foods can cause hives, including peanuts. So a food allergy doesn't have to be life threatening, nor does an allergy to one particular food, such as peanuts, lead to the same symptoms in everyone.

Confused yet? If not, we're just getting started.

Other people believe that food allergies are defined by the mechanism underlying the reaction. Different parts of the immune system can cause inflammation and therefore symptoms. With most food allergies, it is assumed that an IgE antibody reaction is involved. IgE antibodies are produced by the immune system and can lead to histamine release, which causes inflammation.

However, just because you have elevated IgE antibodies to a food does not mean that you will automatically have an obvious allergic reaction. Also, elevated IgE antibodies do not represent the only pathway that causes anaphylaxis or hives.

So what is an allergy? It depends on who's doing the talking and on the context of the story. Take, for example, your typical newspaper or magazine article. When they use the word allergy, they are defining it by symptoms. This is the same thing that your traditional allergist does. Allergists define food allergies by a very limited set of symptoms that they can see with their own eyes. These symptoms are: anaphylaxis, hives, asthma, and eczema. That's it. If you don't have one of those four symptoms, then you don't have a food allergy. Period. End of story. At least according to people who've defined allergy by only four symptoms.

Allergists don't define allergies by some complex scientific method. They don't diagnose food allergies based on the presence of IgE antibodies, unless they also go hand in hand with one or more of those symptoms. If you have IgE antibodies to a food, but the allergist doesn't see you suffering from anaphylaxis, hives, asthma, or eczema, then they won't diagnose a food allergy.

When you read a story that states that “only approximately 2% of the population has a food allergy,” they are referring only to people who have one or more of those four symptoms. Unfortunately, the story usually neglects to tell you that. Then the article may go on to state that all of this talk by the public about lots of people having allergies is nonsense and that food allergies are being over diagnosed.

Is that true? Well, only if you are working with a traditional allergist or reading an article in a popular newspaper or magazine. Once we open our eyes to all of the hundreds of other symptoms that you can get from a food allergy, then you start to see the bigger picture.

Intolerance

Intolerance is much easier to define. I'll bet that is what you're thinking. Or maybe by now you're starting to wonder?

There are two very good examples of food intolerance, one of which everyone has heard about, and the other most are familiar with as well. Let's first consider lactose intolerance.

Lactose intolerance is well understood to be a deficiency in the enzyme needed to digest lactose. Lactose is a sugar in milk. If you don't produce enough of the enzyme called lactase, then you can't digest lactose and you end up with gas, bloating, and abdominal discomfort when you ingest milk products. It's about as simple as that. You can buy lactose-free milk or the enzyme to take with your food to help digest milk products, and you'll be fine.

Note, however, that lactose intolerance has nothing to do with the immune system. It doesn't produce inflammation. It doesn't cause any real damage. It's definitely not life threatening. It's just very uncomfortable and perhaps embarrassing.

Now let's turn to the second example, gluten intolerance. Gluten intolerance does not involve an enzyme deficiency. Gluten intolerance is an immune reaction, and in the case of celiac disease, it results in an autoimmune reaction. Antibody production is also involved, but these are not the IgE antibodies we noted when discussing the traditional view of allergy. These are IgA and IgG antibodies. Gluten intolerance also involves other parts of the immune system beyond these antibodies. As you may already know, gluten intolerance is connected to hundreds of different symptoms. You can have digestive problems, skin problems, neurological problems, psychological problems, weight problems—this list goes on and on.

As you can now see, the use of the word “intolerance” in lactose intolerance is something completely different than the use of “intolerance” in gluten intolerance. You have probably already guessed it, but there is no scientific definition for the word intolerance. It means the same thing in this context as it does anywhere else in the English language. It's just a very broad word that means that things aren't working out well.

This is a big problem. And I am very sensitive to this. (Or make that intolerant of this?) If the word doesn't really mean anything, or the medical system uses it in two very different ways, then people will get confused. That is part of the reason that many people, including many doctors, don't appreciate the significance of gluten intolerance—because they equate it to lactose intolerance.

Sensitivity

Now with the word sensitivity, things are starting to look up. It's not being misused as much as the other words. However, it has even less scientific meaning than intolerance, if that's possible.

Sensitivity is often used by the average Jane to indicate that she knows that she just doesn't do well with a particular food, but she doesn't quite know what to call it. The medical community has picked up on this and run with it in the form of gluten sensitivity. They don't know what to call non-celiac gluten reactions, so now we are starting to hear them called gluten sensitivities.

Fortunately, in this context, the proper word is being used. However, that is only because the word sensitivity is so broad that it covers absolutely everything. In fact, it also covers celiac disease, which is logically a type of sensitivity to gluten. There's nothing wrong with that, but we need to be clear about what the word sensitivity means. This leads us to...

Making Sense of It All

At this point, you have a much better idea about the confusion behind the words allergy, intolerance, and sensitivity. That's helpful, but if we're going to educate the world about our reactions to food then we need a consistent, scientific, and meaningful language with which to converse about it. We need a foundation on which we can build. Otherwise these topics are going to continue to dwell in the cellar of our medical system.

Finally, someone has taken care of this problem. And no, it wasn't me. Although I'd love to take credit for it, I'm just the town crier. Two panels of experts, one in Europe and one in the US, each came out with position papers on exactly this subject in 2001.(1, 2)

Their conclusions were nearly identical. First, they started with the word sensitivity. Sensitivity is an umbrella term. It encompasses all food reactions. Food sensitivities are then broken down into two major categories: immune reactions and non-immune reactions.

All immune reactions are essentially a type of allergy. These are then further subdivided by the mechanism underlying the immune reaction (allergy). This is where it gets a little technical because some knowledge of the immune system is required. However, it helps us to categorize different types of allergies. For example, we have IgE reactions, IgA reactions, IgG reactions, etc. It is important to note celiac disease has clearly been categorized as an allergy, which is logical.

On the other side, we have non-immune reactions. These include issues such as lactose intolerance, sulfite reactions, MSG sensitivity, etc. It's a broad category with a lot of poorly understood reactions. Some are enzyme deficiencies, but others are simply reactions for which the mechanism is unknown. This breakdown of food reactions was published over 10 years ago. Unfortunately, it seems that not many people have been paying attention to the standards that were developed. The time has come for us to do just that. Without a clear language we will continue to talk circles around the issue of food sensitivities, the public will continue to be confused, and doctors will continue to work under the false assumption that they know what it is they are talking about.

Please take the time to use these words properly and to help educate others on how to use them properly. A lot more than semantics is at stake. The health of half the population is tied to these issues. Together we can help educate the public and the medical profession, making the world a much better place in which to eat.

Written by [Dr. Stephen Wengen](#), the author of two popular books, "The Irritable Bowel Syndrome Solution" and the award winning "Healthier Without Wheat: A New Understanding of Wheat Allergies, Celiac Disease, and Non-Celiac Gluten Intolerance."

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He is an internationally recognized speaker on food allergies, intolerances, and sensitivities. His talks range from postgraduate level training lectures to public talks that help the average person gain a better understanding of these complex issues. This is his true passion.

Dr. Wangen understands exactly what many of his patients are experiencing. He not only cured his IBS, but does not eat gluten or dairy. He has been gluten free since 1995, and has avoided dairy since 2000. He truly practices what he preaches.

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