Nutrition & Health Coaching Year 1

Health and Disease: Food Allergy & Intolerance

Food Allergies, Intolerances & Sensitivities

Very many people – including infants and older children – suffer from various chronic complaints (treated or untreated), often unaware they may be connected to food(s) being eaten on a daily basis. Reactions to foods can cause a wide variety of unpleasant and persistent symptoms: short-term or long-lasting, minor or severe.

Confusion

There is confusion in the media, but also among doctors, therapists and people in general, about different types of sensitivity to foods, mechanisms involved, problems they can cause, how to test for them, and how strict suffers should be in avoiding problem foods.

Fortunately, there is a cheap and effective procedure that people can use to identify a food intolerance. It is explained later on in these notes.

Classical Food Allergy



Classical, or 'true' food allergy (IgE antibody-mediated) is an inappropriate reaction of the body's immune system to a normally safe substance. Symptoms and signs result from the rapid release of powerful pro-inflammatory substances by white blood cells, causing inflammation, swelling, pain, etc. Common food allergens include fish, peanuts, tree nuts, eggs.

In Brightspace under Resources: The 14 ingredients that must be declared as allergens on EU food labels





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Health and Disease: Food Allergy & Intolerance

A true food allergy reaction can be very powerful and usually starts almost at once, or at least within 1–2 hours of exposure. Skin, airways or gut are usually affected. Symptoms can be dramatic and even life-threatening.

An allergy can strike at any age, but is then usually a lifelong problem. Fortunately, true food allergy is relatively uncommon, with only about 2% of the adult population affected.



People with a true food allergy nearly always know it – as well as what foods or ingredients they need to avoid

Food Sensitivity and Intolerance

Far more common than IgE-based allergies are reactions mediated in other ways. Collectively, these forms of sensitivity or intolerance are much more common than food allergies – and becoming more so! While not life threatening, they can make – and keep – people genuinely unwell.



Symptoms can sometimes be delayed by as long as 3 days after eating the culprit food or ingredient and they tend to be 'dose dependent'. Many food intolerance tests use ELISA technology to measure IgG antibody reactions to foods (more on testing later).

Food Intolerance/sensitivity can start at any time in life. It may worsen, fluctuate or fade away. People may suffer for years with unexplained symptoms and be unable to enjoy optimal health.

Hidden Harm

Often, this kind of sensitivity remains 'hidden' from sufferers, because they eat the offending food(s) day after day and so their symptoms are more or less ongoing. Also, a delayed reaction can make it hard to connect symptoms with the culprit food. Moreover, sufferers may have more than one trigger food.



Note: There is a problem with terminology here. Medicine tends to label all types of food sensitivity, except classical IgE allergy, as 'intolerance'. Most doctors don't recognise IgG based food intolerance tests. Conventional 'wisdom' is that intolerances don't involve the immune system. While this is true of lactose intolerance, for example, in NT and Coaching we often find IgG food test results helpful in identifying problem foods or ingredients.



Food Intolerance/Sensitivity vs Food Allergy

Food Intolerance / sensitivity	Food Allergy
Reaction can be delayed up to 72 hours after eating	Swift reaction (2 hours or less)
May be sensitivity to several foods	Rarely more than 1 or 2 foods
Any organ, gland, tissue or system can be affected	Mainly skin, airways and gut
Increasingly common (30-40% of population?) Reaction worsens with amount eaten (dose- dependent)	Much less common (about 2%) Only trace amounts needed to trigger a reaction (not dose-dependent)
Can be hard to self-diagnose (due to delayed reaction)	Usually easy to diagnose (immediate)
Often detected (& mediated?) by raised IgG level	Mediated by raised IgE antibodies
Regular skin-prick tests not useful for detecting	Detected with skin-prick test
May clear after avoidance (3-6 months). Over time, symptoms may change, affecting a different tissue	Usually lifelong sensitivity

Food intolerance and autoimmune disease

When foods are properly digested their proteins are broken down into smaller fragments (ideally single amino acids) for easy absorption into the body. However, if larger fragments (peptides) escape into the blood stream without breaking down fully, they may end up binding to a certain body tissue (e.g. joint cartilage, skin, airways).





The immune system may then mistakenly 'see' the now altered tissue as a foreign invader to be attacked and cleared away, probably using IgG antibodies. This type of autoimmune reaction can occur in any body tissue and may eventually result in an autoimmune diagnosis, depending on the tissue or organ affected. An example would be Hashimoto's thyroiditis, the most common cause of hypothyroidism.

Autoimmune diseases sometimes (but not always!) result from reaction to a food(s). This possibility is still ignored in conventional medicine. In Coaching/NT, however, we often find that chronic autoimmune conditions respond well after problem foods have been identified and removed from the diet.

https://youtu.be/3iKFaXIKUrM - watch this excellent explanation of IgG intolerance by an experienced clinician



Symptoms or disorders often (but not always!) caused or worsened by food intolerance:

Abdominal pains	M.S.
Aches and pains	M.E.
Arthritis, specially RA	Migraine
Asthma	Nausea
Bloating	Rashes
Chronic Fatigue Syndrome	Restless Leg Syndrome
Constipation &/or Diarrhoea	Rhinitis
Endometriosis	Sinusitis
Eczema	Skin problems
Fatigue, Lethargy	Stomach cramps
Fibromyalgia	Tension
Fluid retention	Urticaria
Headaches	Weight loss
IBS	Wheezing

Resources

https://www.youtube.com/watch?v=KLjgBLwH3Wc Dr Terry Wahls - recovery from MS

Book: The Wahls Protocol Dr Terry Wahls

https://www.youtube.com/watch?v=Rjj5tStuiT4 Dr Axe - steps for healing leaky gut

Book: The Digestive Health Solution Ben Brown, 2017 Good for leaky gut, SIBO, etc

Book: The Paleo Approach (to autoimmune disease) by Sarah Ballantyne PhD – excellent! <u>https://www.youtube.com/watch?v=uC4oh1MOXoM</u> – introduces the book

Book: The Autoimmune Fix Dr Tom O'Bryan, 2016.

Tests for Food Intolerance

Skin-prick tests

These are the standard IgE-based tests used in hospitals etc. and are good for detecting some non-food allergens, e.g. hay fever due to pollen, animal dander. They are unreliable (false negative) for detecting food intolerances.





IgG bloodspot tests



These are practical DIY home test kits to identify sensitivities to foods/ingredients. They often help people 'unmask' hidden food intolerances. Most IgG bloodspot tests (e.g. Fitzwilliam test, Yorktest, Lorisan) use ELISA (enzyme-linked immunosorbent assay) technology to detect IgG antibodies raised against the food or ingredient.

A 2012 study found that eliminating trigger foods based on IgG food intolerance test results led to reductions in weight, body mass index, waist and hip circumference, and improvements in all indicators of quality of life that were measured: physical and emotional wellbeing, mental health, social life, pain levels and vitality.

*Lewis J et al, 2012: Eliminating Immunologically-Reactive Foods from the Diet and its Effect on Body Composition and Quality of Life in Overweight Persons. Journal of Obesity & Weight loss Therapy 2:1

Kinesiology, hair analysis and Vega (bioenergy) tests.

Again, results can vary (false positives and negatives), but the experience of the practitioner is important. There is no real scientific evidence that they work – but when used by an experienced practitioner they can be useful for clues to point people in the right direction.

Are test results reliable?

Important note: if a problem food has not been consumed recently, all antibodies may have disappeared, leading to a false negative result!

IgG blood tests

These are useful, but none of the different brands gives completely repeatable or reliable results (false positives and negatives are not uncommon).

More comprehensive tests

Tests to measure other types of immune response are constantly evolving. They use or combine different detection approaches and may cover a wider range of sensitivities to foods. Examples: Cyrex – joincyrex.com/arrays-for-patient Alcat – alcat-europe.de/en/

Details on testing problems and newer tests: The Autoimmune Fix, Tom O'Bryan <u>https://www.amazon.com/Autoimmune-Fix-Hidden-</u> <u>DamageDisease/dp/162336700X/ref=sr_1_3?</u> <u>dchild=1&qid=1611579622&refinements=p_27%3ATom+O%27Bryan&s=boo ks&sr=1-</u> <u>3&text=Tom+O%27Bryan</u>



Other problems in detecting food intolerance:



Delayed reaction

Symptoms/signs can appear up to 2-3 days or more after the offending food is eaten, so it can be difficult to pinpoint the culprit food or ingredient. [A food diary can be very helpful]



Hidden in broad daylight!

When the offending food is eaten every day, symptoms may be more or less ongoing, and so hard to connect to a particular food, or even to the diet at all.



Dose dependent

People may assume intolerance is an all-or-nothing reaction, as with true allergy. But the severity of an intolerance reaction is usually dose dependent.



Intolerance/toleration may vary with time, stress, health status, etc.

A common confounding factor is that your ability to tolerate a certain food can fluctuate because of your current condition (stress burden, pre-period, tiredness, nutritional status, time of month, etc). You might feel bad after eating a certain food when tired, stressed, before your period, but a week later when you are feeling better you might have no reaction to the same food.

Some people find certain foods (e.g. gluten, dairy) hard to digest at the best of times, but are OK with modest amounts when their health is good. However, when stress weakens their digestion, symptoms appear. The person then assumes a food intolerance and may ask the doctor for tests. When the standard skin prick test fails to detect a problem the doctor naturally says: 'no food intolerance'. The patient remains confused and might look elsewhere for help.

Other Types of Food Sensitivity

These include **lactose intolerance** (deficiency of lactase enzyme), **histamine intolerance** (sensitivity to foods naturally high in histamine), **nightshade sensitivity** (to the 'nightshade' family – potatoes, tomatoes, aubergines, bell peppers), **lectin sensitivity** (to small, indigestible proteins in beans, grains, seeds etc), and problems with certain **food additives.**



