



Which Patients Need the Lectin Zoomer?

Symptoms & Risk Factors Associated with Lectin Sensitivity include:

- Frequent use of antibiotics
- Following a vegan/vegetarian diet high in grains and/or legumes
- Those with known intestinal permeability, such as detected on the Vibrant Wheat Zoomer
- History of rheumatoid arthritis (painful and swollen joints)
- Experiencing fatigue and tiredness
- Psychological symptoms or disorders (e.g., depression)
- Neurological autoimmunity or degenerative symptoms of undefined origin
- Presence of skin rashes
- Nausea (especially during or after meals)



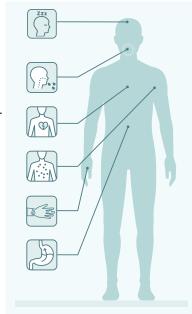














Clinical Connections and Facts About Lectins

Lectins are a large class of sugar-binding proteins that can be found in all forms of life. In plants, lectins are part of the natural defense against microorganisms, pests, and insects. Many members of the lectin protein family can agglutinate (clump together) and become problematic for human health.

Lectins have been thought to contribute to the development of diseases such as celiac disease, autoimmune diseases, rheumatoid arthritis, obesity, cardiovascular disease, and type 2 diabetes through mechanisms involving translocation across the intestinal barrier and activation of the adaptive immune system.

The most common high-lectin foods include: grains, legumes, nightshades.

Reference:

- [1] Banwell JG, Howard R, Cooper D, Costerton JW. Intestinal microbial flora after feeding phytohemagglutinin lectins (Phaseolus vulgaris) to rats. Applied and Environmental Microbiology. 1985;50(1):68-80.
- [2] Vasconcelos IM, Oliveira JA. Antinutritional properties of plant lectins. Toxicon. 2004;44(4):385-403.
- [3] Cordain L, Toohey L, Smith M, Hickey M. Modulation of immune function by dietary lectins in rheumatoid arthritis. British Journal of Nutrition. 2000;83(3):207-217



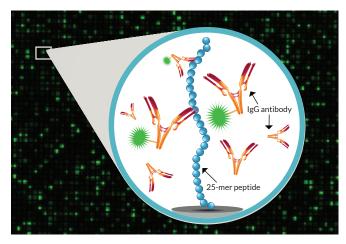


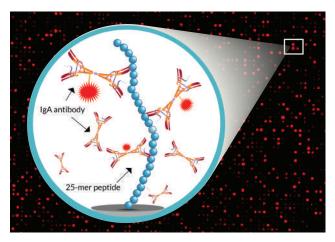




What Does the Lectin Zoomer Include?

The Lectin Zoomer is a unique test which detects IgA and IgG antibodies to lectins and aquaporins in the most comprehensive panel of foods available on the market:





*Microarray Chip Image (Green: IgG & Red: IgA)

LECTINS



Barley Cucumber Peanut Tomato

Bell pepper Lentil Potato

Chickpea Lima bean Rice

Corn Mung bean Rye

Kidney bean Pea Soybean

AQUAPORINS



Bell pepper Potato Spinach Tomato

Corn Soybean Tobacco

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How do Aquaporins Differ from Lectins?

- Also known as "water channels", aquaporins form pores in the membrane of biological cells to facilitate water transport between cells. Aquaporins are found in all cells and help move water through the cells in an organized manner. Aquaporin 4 (AQR-4) is the most prevalent aquaporin channel in the central nervous system. Aquaporins from food sources (e.g., spinach, soy, corn, tomato, etc.) show similarity to the brain AQR-4.
- Because aquaporins from food are highly stable during food preparation and may enter the human body as intact proteins, they become antigenic and trigger the production of antibodies. The antibodies against food aquaporins might be cross-reactive to human AQR-4 and may induce neuroautoimmune disorders.
- Patients with antibodies to food aquaporins may benefit from a Vibrant Neural Zoomer test if neurological autoimmunity or cognitive decline are suspected.
- In either case, antibodies to a food lectin or a food aquaporin are indicative of an immunological reaction and the food should be omitted from the patient's diet.

Regulatory Statement

