

Gluten and its Presence in GNLD Products

What is Gluten?

Gluten is a protein found in grains (related to the grass family) such as wheat, rye and barley. It is a composite of proteins *gliadin* and *glutenin*, which comprise about 80% of the protein contained in wheat.

Who should not consume gluten containing products?

People who have been clinically diagnosed with celiac disease, also known as gluten sensitive enteropathy and celiac sprue cannot tolerate gluten, and are hence advised to eat gluten-free diets over life.

What is Celiac Disease?

Less than 1% of the population (1 in 133 people)¹ of the United States has celiac disease, an autoimmune condition which results from an inappropriate immune system response to gluten. The manifestations of celiac disease range from no symptoms to malabsorption of nutrients due to damage to the villi in the small intestine. These individuals cannot tolerate gluten, and have to consume gluten-free diets.

Screening for celiac disease can be done by blood testing for the presence certain antibodies, and small bowel biopsy. Celiac disease is a genetic disease and sometimes it is triggered or becomes active for the first time after some type of stress to the body (e.g. surgery, pregnancy, child birth, an infection or severe emotional stress).

How is 'gluten-free' defined?

Various regulatory agencies around the world define/endorse the levels of gluten in products a little differently.

¹ U.S. Department of Health and Human services. Celiac Disease Fact Sheet. National Institutes of Health. NIH Publication No. 06-4269. October 2005. Available at www.digestive.niddk.nih.gov

Currently, the FDA in the US has proposed to define 'gluten-free' for voluntary use in labeling of foods as those containing less that 20 ppm (parts per million)² of gluten.

The Australian Coeliac Society endorses products with under 20 ppm gluten.

In Europe, products containing less than 30 ppm of gluten have been considered gluten-free.

The UK Coeliac Society endorses those under 200 ppm.

Finland and Sweden have set a gluten-free limit at 100 ppm.

In July 2008 the Codex Alimentarius lowered its standards for gluten-free to 20 ppm. There are 174 countries³ represented on the Commission and these countries are expected to comply with the new limit.

Are GNLD products gluten free?

The following GNLD products have been recently tested for gluten content and by analysis we have determined that they contain less than 20 ppm and hence 'gluten free'.

It is important to note that the 'gluten free' definition has been created with foods in mind where people may be consuming larger portions (several grams), and in the case of supplements where the supplement may contain more than 20 ppm, due to their much smaller consumption amounts, people may be able to safely consume them

Gluten-free (less than 20 parts per million):

- GR2eat Lemon Bar
- GR2eat Caramel Bar
- Vegetarian Protein Powder
- Omega-III Salmon Oil Capsules (US as well as European versions)
- Carotenoid Complex (US as well as European versions)
- Salmon Oil Plus
- Formula IV capsules (US as well as European versions)
- Enzyme Tablets (Australia)

At this point, the only product that we have analyzed that does contain more than 20 ppm of gluten is Tre-en-en capsules and can no longer be considered gluten free per the current definition.

Recently (within the last couple of years) testing standards have become more demanding and upper limits of detection have become a lot lower in many countries. For example, in Europe the upper limits for a 'gluten free' claim used to be 300 ppm, but has now been lowered to 30 ppm.

The traces of gluten in Tre-en-en come from the wheat germ powder that is part of the whole grain extracts and concentrates that make up Tre-en-en.

² US FDA/CFSAN www.cfsan.fda.gov/~dms/glutqa.html

³ List of countries represented on the Codex Alimentarius Commission www.codexalimentarius.net/web/members.jsp?lang=EN

Why is Tre-en-en no longer gluten free? Has the product changed?

No, Tre-en-en has not changed. If you have been able to safely consume Tre-en-en and enjoy its benefit, there is no reason to believe that you cannot continue to do that, since the product has not changed. It is the same great product that has been proven to support the healthy cellular uptake of nutrients and removal of waste from the cells by optimizing the function of the cell membrane and improving nutrient utilization.

The product does not qualify as gluten free any more based on the new guidelines and more precise analytical testing methods. Although the ppm of gluten in Tre-en-en tested to be higher than 20, the actual amount of gluten from each daily serving of three capsules (less than 0.32mg per capsule) is still less than $1/10^{th}$ to $1/50^{th}$ of the 10mg and 50mg amounts stated in a research article from the USFDA as well-tolerated⁴. The gluten free guidelines have been created for foods taking into account much larger consumption amounts than the amount that you would consume in a supplement such as Tre-en-en, hence although higher than 20 from a ppm perspective, the amount of gluten that is contained is insignificant.

What about the other nutrition products and skin care and home care products?

GNLD has only tested the products listed above recently against the new/proposed regulations. Skin care and home care products have not been tested for gluten content since gluten sensitivity occurs for ingested products and guidelines do not exist for deeming them gluten free.

http://www.Amazing-Health-Products.com

⁴ USFDA June 2005 research article. "Preliminary unpublished results suggest that minimal mucosal abnormalities occur with a strict gluten-free diet, that both 10mg and 50mg daily gluten are well tolerated,...." www.cfsan.fda.gov/~dms/alrgn.html#table-i-1