

## Quinoa Questionable as a Gluten Free Grain

By: Anita Khalek, *Natural News*

Cultivated in the Andes for over 5,000 years, quinoa is a grain-like seed that has long been used by the gluten-free community for its high nutritional offering and protein content (roughly 18 percent). A super grain thought to be reliable for the celiac community, recent studies have now linked certain quinoa varieties to have sufficient toxicity for celiac patients.

Quinoa is a complete protein providing all the essential amino acids for human nutrition, and for which a rapidly expanding community of gluten-sensitive consumers is fueling very high demand. A recent report in the *American Journal of Clinical Nutrition* (July 2012) outlines a study examining 15 varieties of quinoa, including some crossbred varieties. Out of the cultivars, two varieties (Ayacuchana and Pasankalla) triggered immune responses in the samples similar to that of gliadin (a glycoprotein in gluten), while four other cultivars had quantifiable concentrations just below the acceptable threshold for gluten-free labeling.

This study highlights the need for more rigorous testing for celiac-safe grains to account for differences in varieties and measurements, as well as for cross-contamination in breeding and processing. In fact, previous testing for quinoa had not specified the varieties used, which leads to more speculation about the safety of the grain for stricter celiac patients. And although the majority (9 out of 15) of the cultivars used in the study were safe, it is still cause for alarm for those with severe restrictions due to the sheer number of allegedly gluten-free products using quinoa in some form. This study consequently places quinoa in a precarious position, similar to oat where the debate on its gluten-free status continued for over 20 years until we now have only some oat varieties labeled gluten-free.

Gluten-free consumers are advised to use their discernment when buying gluten-free products, especially those with more severe reactions to contaminants. Listening to the body for clear signs of discomfort is an important part of maintaining health. In most cases, the reactions are delayed and will manifest in some way in a few hours after digestion. Other ways to determine the personal safety of a food product is to specifically test it with a reputable health practitioner using applied kinesiology. This scientific method allows the body to react energetically to the food item and respond accordingly, providing the patient with immediate answers.

For those with no gluten issues: keep on eating! Quinoa is a delicious and nutrient dense meal option. It is versatile in use from a substitution for cooked rice to a pudding, and it allows for a world of

possibilities for creative culinary applications.

**Sources for this article include:**

<http://www.ajcn.org/content/early/2012/06/28/ajcn.111.030684.abstract>

<http://ultimateglutenfree.com>