

Baking Delights: Empowering Gluten-Free Treats with the Magic of Dietary Fibre



Gluten

A crucial component of baking technology is “Gluten”, a protein fraction derived from wheat, rye, barley, oats, and their hybrids and derivatives⁶. As gluten sensitivity rises worldwide, the demand for gluten-free foods is also increasing. Bread and bakery items play a vital role in people’s diets. Consequently, there is a growing search for new gluten-free baking ingredients and innovative approaches to working with existing components⁶.

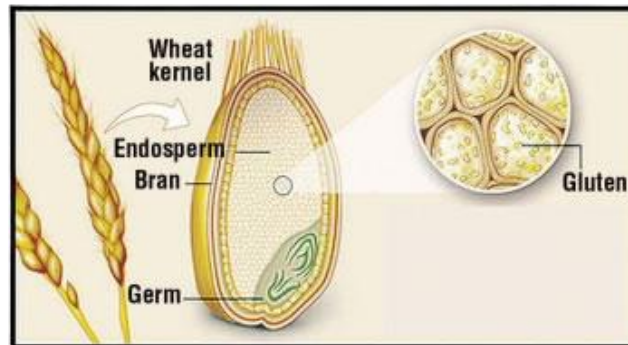
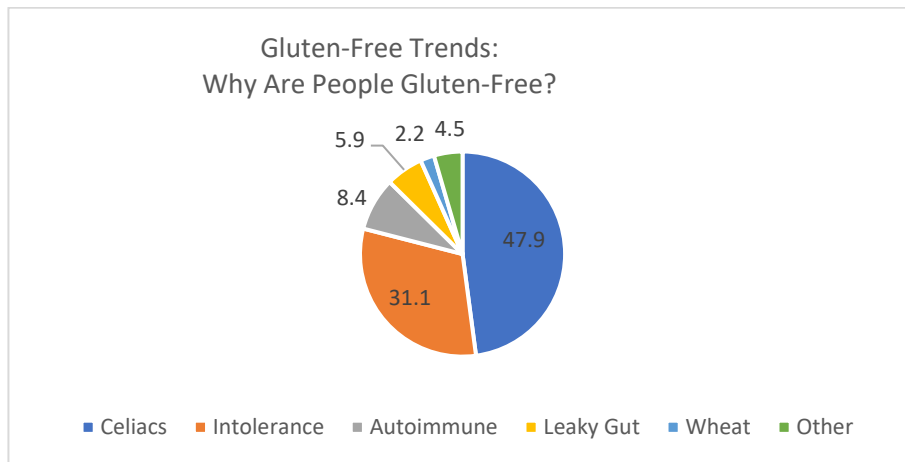


Figure 1: The Structure of Gluten¹

Health Symptoms that lead people to become Gluten Free

According to a study by researchers at the Leibniz-Institute for Food Systems Biology at the Technical University of Munich and the Leibniz Institute of Plant Genetics and Crop Plant Research, 47.9% of people who are gluten free were diagnosed with Celiacs. 31.1% considered themselves to have a gluten intolerance. 8.4% were to manage an autoimmune condition, and 5.9% were to heal a leaky gut. People have various reasons for consuming gluten-free products, including weight loss, increased energy, healthier eating, wheat allergies, and other health conditions. Those with celiac disease, a gluten intolerance, need to avoid gluten entirely. Gluten, found in wheat flour, damages the small intestine's villi, preventing nutrient absorption. To provide safe alternatives for gluten-intolerant individuals, gluten-free breads and other baked goods use different flours and additives. Grocery stores offer a range of gluten-free options like breads, bagels, muffins, tortillas, cereals, and cookies to cater to those with gluten intolerance⁷.



Enrichment of Dietary Fibre into Gluten Free Bakery

Dietary fibre, which is found mostly in fruits, vegetables, whole grains, and legumes, is known for its role in regulating bowel movements. It's an undigested carbohydrate that helps balance sugar utilization, keeps you feeling full for longer, and promotes a healthy weight³. Adding fibre to gluten-free products is a common way to boost nutritional value and enhance texture and mouthfeel. The primary effect of fibre is its tendency to expand when it absorbs water, both in terms of physiology and product development⁴.

Finding The Right Fibre

Dietary fibres are classified as either soluble or insoluble. Soluble fibre absorbs water, adding bulk to your stool and preventing diarrhea. Insoluble fibre, on the other hand, helps food move through the digestive system more efficiently while also increasing stool bulk².

Foods High In Gluten Free Fibre⁸:

1. Gluten Free Flours

Coconut Flour, Almond Flour, Whole Grain Sorghum Flour, Chickpea Flour

2. Legumes, Nuts, and Seeds

Flax Seeds, Sunflower Seeds, Almond, Peanuts

3. Grains

Quinoa, Gluten Free Oats or Oatmeal, Amaranth, Wild Rice

4. Fruits and Vegetables

Raspberry, Pear, Apple, Banana, Orange, Peas, Broccoli, Potato

The future of Fibre Rich Gluten Free Baked Goods

With the increasing interest in gluten-free products, it has been discovered that individuals with celiac disease tend to consume insufficient dietary fibre. To address this, incorporating fibre sources from gluten-free cereals, pseudo-cereals, fruits, vegetables, legumes, and pulses can serve as an excellent alternative to supplement this essential ingredient in a gluten-free diet. At **DPO International**, we offer a diverse selection of fibre-rich components to help you create exceptional gluten-free products.

References

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