



Nutrition fortification in gluten-free pre-blends helps gluten-free baked goods deliver nutrients that otherwise would be missing from these products.

Despite their oxymoronic existence, gluten-free foods persist. Sales in this segment grew 17.8% from 2013 to 2016 according to research done by Mintel, though that growth has slowed down from year to year. From 2015 to 2016, these products saw 17.9% growth, which is still worth noticing. Not only are numbers up, but the percentage of people choosing gluten-free also continues to go up. Consumption increased 32% in 2016 as compared with 24% in 2013 Mintel.

The trend for gluten-free products is one we've seen grow over the past decade. What started out as an industry targeting those with celiac disease and other gluten intolerances has now grown to become a popular lifestyle choice for consumers who don't necessarily have those types of dietary restrictions, but perceive gluten-free foods to be healthier and more premium than traditional applications.

In the quest to make products that mimic their conventional counterparts, formulators have come a long way. According to Mintel's "Gluten-Free Foods, U.S." report, 69% of survey respondents stated gluten-free products are higher quality than they used to be. 68% stated they are satisfied with the variety of gluten-free foods available.

Removing gluten from foods whose very strength comes from the structure of gluten network leaves little for bakers to work with. The challenges hit on every front: taste, texture and shelf life. The gluten-free alternatives bakers produced in the past have struggled to match the nutritional value of traditional baked goods.

### **Delivering quality**

In most baked goods, gluten is critical to developing the structure of the finished product. This contributes to mouthfeel, texture, volume and even taste. When formulating gluten-free baked goods, one of the challenges manufacturers face is making products with similar eating qualities as their gluten counterparts. Wheat gluten provides viscoelastic properties to baked goods and helps to retain gas bubbles in the dough. It provides a crumb structure that consumers expect. Without gluten, there is a challenge to meet consumer expectations of texture and mouthfeel. These come from the lack of even structure gluten delivers. This also contributes to reduced volume and results in dry, crumbly textures and grainy flavors.

Though there are not any one-size-fits-all solutions for replacing gluten's functionality in wheat-based baked goods, by working with suppliers, Senza Glutine has excelled in this area. To make products that mimic their conventional counterparts, suppliers are developing new ingredients to serve the gluten-free segment.

## **Packing in nutrition**

Although gluten-free baked goods have improved in eating quality, the ingredient systems used to mimic the taste and texture of gluten-containing products aren't always the most nutritious. Fortifying gluten-free foods to make them more nutritious was the second frontier. This is especially important for people whose bodies could have issues absorbing nutrients, such as those who may have celiac disease. In an effort to produce gluten-free that also could be clean label friendly, Senza Glutine focused on nutrient-rich flours made from grains other than wheat. We turned to ancient grains to fulfill this goal: millet, sorghum, rice, amaranth, quinoa, and teff. These products offer the nutritional benefits of whole grain and seed and improved flavor characteristics. Seeds used to add visual appeal and texture can also add nutrition. Senza Glutine now offers every pizza crust using an Ancient Grain Blend as an option.

## **Formulating for freshness**

Shelf life for Senza Glutine is not an issue that continues to hound other producers of gluten free products. We are all natural and do not use any preservatives. The biggest challenge for us is managing the high raw material costs versus wheat-based breads.

Modified Atmospheric Packaging also has been a solution bakers have turned to keep their products fresher for longer. This packaging eliminates the need to freeze gluten-free foods, but it is a more expensive and complex packaging solution. We are currently investigating this in an effort to enter into the retail segment.

While gluten-free as a trend may be slowing down, it's not going away, and even though consumers seem pleased with the quality of gluten-free baked goods today, competition in the marketplace is keeping us on our toes. We continue to work with food scientists to strive for ever-improved gluten-free baked goods that can deliver on taste, texture, nutrition and shelf life.