# GRAINS - challenging press perceptions

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In spite of the thousands of research studies showing grain foods are key in a nutritious diet, they are still demonised in some parts of the world



isparagement of carbohydrates dates back to the 1800's and is periodically revived by charlatans who want to sell books or products. Unfortunately, primarily in developed countries, many citizens are looking for "magic bullets" to lose weight. Low-carbohydrate diets have been shown to reduce

weight faster than high-carb diets, but the weight comes back just as quickly when the diet is ended. The good news is that few people can stay on a low-carb diet long enough to do any permanent damage to their bodies.

Grain foods are also accused of causing numerous diseases and conditions, but a recent article from CIMMYT (International Maize and Wheat Improvement Center) puts those accusations in proper perspective:

"If it were correct that cereals were the cause of Alzheimer's, arteriosclerosis, Parkinson's, autism and loss of cognitive capacity and neurodevelopmental disorders, civilization would have been incapacitated and come to a halt many years ago." (Anti-Wheat Fad Diets Undermine Global Food Security Efforts: Wheat consumption healthy despite claims in self-help publications. Roberto J. Peña, Hans J. Braun and Julie Mollins. 2014.)

## Gluten-free products. What's the future?

Gluten-free, which is the therapeutic diet for those with celiac disease (CD), has become a fad around the world in countries where citizens are affluent enough to pick and choose what they want to eat. In reality it is just another low-carbohydrate diet. While we know the incidence of celiac disease (CD) has increased, it still averages about 1 percent of the population worldwide. However, Scandinavian countries as well as Ireland and Italy have much higher percentages as do some Middle Eastern and North African countries.

Dr. David Sheluga, Director of Consumer Insights for Ardent Mills in the U.S., has done extensive research on the gluten-free market. His 2012 research found that many companies tracking gluten-free purchases included products that are naturally glutenfree such as meats, dairy foods, fruits and vegetables, therefore inaccurately exaggerating sales far beyond what was actual.

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However, it is still a huge number. According to Nielsen, the gluten free specialty products category has doubled in size in just the past three years growing from nearly US\$600 million in 2012, to nearly US\$1.3 billion in 2015 (Nielsen Scantrack, Total US, XAOC). When Sheluga added outlet sales such as Whole Foods, Trader Joe's, Costco, Aldi's, health food stores and internet sales, the number jumped to US\$1.49 billion. Sales growth is projected by Ardent Mills to continue to soften through 2018 when growth could be about 2 percent.

The good news for wheat, barley and rye millers is that growth has slowed compared to 2013, the peak growth year at 44 percent increase in sales. 2014 showed a 29 percent growth in sales and a 14 percent increase in 2015. According to Dr. Sheluga, this decline is indicative of a maturing category even with US\$50.5 million in new products last year. Existing products grew about US\$108 million in 2015, well below the pace of earlier years.

Dr. Sheluga's research showed that the fastest growing category (50 percent growth) last year was frozen meals – a convenience item. When I remember the labor intensive cooking my mother, a full-time school teacher, did in the 1950's for my brother who has CD, I appreciate the need for convenience foods for this market.

The number two category was crackers and then breads, bagels, rolls, etc. Interestingly, many of the snack products have moved "Gluten-free" from the top to the bottom of the package and can now be found in the mainstream snack aisle. Even the websites for many of the granola/protein bars and snack chips no longer emphasise that the product is gluten-free. Therefore, many of these were eliminated from Ardent Mills' 2015 analysis making the size of the category smaller.

There are few gluten-free products in wide distribution in the U.S. A general rule to be a "national brand" is 80 percent or more distribution. Sheluga's research showed of the 1,632 products in 2014 which have a clear gluten-free claim, were developed especially for the gluten-free consumer and made by companies committed to the gluten-free marketplace, only 23 (1 percent) had over 40 percent distribution. Only one had 60 percent distribution – Betty Crocker's Bisquick gluten-free mix. Eighty-one percent of the manufacturers have less than US\$1 million in sales.

In 2013, four brands, Udi's, Glutino, Vans and Rudi's Organic, were the major manufacturers accounting for about 20 percent of

Images courtesy of the Wheat Foods Council

the total gluten-free sales. Their growth was 52 percent compared to the overall category growth of 44 percent. In 2015 their growth slowed to 1 percent and two of the brands, Glutino and Rudi's, actually declined in 2015.

Another clue that gluten-free is slowing down is the number of internet searches for "gluten-free." While still frequent, the searches have decreased 18 percent since 2013.

## Enhance the value of your product through grain fortification.

According to the Flour Fortification Initiative (FFI), 85 countries around the world fortify grains with one or more nutrients. Sixtyseven countries just fortify wheat; 12 fortify both wheat and maize; 3 do wheat and rice; 2 countries fortify wheat, maize and rice and 1 country just fortifies rice for a total of only 6 countries that fortify rice.

Fortification nutrients include iron, folic acid and three other B vitamins (riboflavin, niacin and thiamin), vitamins A and D, calcium and zinc. Each country decides which nutrients to use. It may take up to 3 years before seeing the health improvements from iron fortification but only 3-4 months from folic acid.

The benefits of fortifications far outweigh the cost of fortifying. The

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decreased mental capacity of children with insufficient iron has life-long consequences of decreased productivity and quality of life. In 2015 there was progress in increased fortification of iron around the world.

Blindness can occur with an insufficient amount of vitamin A which also has lifetime costs and reduced quality of life. Babies born with neural tube defects (NTDs), such as spina bifida, undergo a lifetime of surgeries in addition to lost productivity. Women must have adequate folic acid in their blood before they are pregnant to reduce the risk of NTDs. Since so many pregnancies are unplanned, numerous women do not take pre-prenatal vitamins with folic acid. Fortified grains are the most convenient and effective way to ensure healthy babies.

Less than 1/3 of total wheat flour production worldwide is fortified, only a little over 50 percent of all maize is and only 8 percent of rice is. Unfortunately, Egypt stopped fortifying folic acid in wheat in 2015 which was a major set-back. According to FFI, 62 percent of all the world's rice is now industrially milled, therefore opening new opportunities for rice fortification.

Governments and industry need to share the cost of fortifying. This includes the actual ingredients, necessary start-up machinery, quality control, staff training, etc. In some countries,

• milling associations have decreased their nutrient costs by ordering pre-mix in large quantities, having it shipped to a central location and then distributing it to their members.

Some governments have eliminated import taxes on pre-mix and/or fortified flour and provided tax incentives for buying the necessary machinery. Governments have even subsidised start-up costs and some NGO's offer grants for start-up costs. Because the cost is spread among millions of consumers, they pay very little for these essential nutrients in their food purchases.

For more information on fortification regarding costs, imports/exports issues or set up costs, go to http://ffinetwork.org/about/faq/faq\_finance.html or contact FFI through the website.

#### Keep your labels clean without bleaching

Keeping labels clean is popular in much of the

world today - as long as it doesn't hurt the flavor or functionality of the product. The term "bleached" is not necessarily a good thing on the label, but I understand that some of your customers may require bleaching.

We know that bleaching white flour is not detrimental to the nutritional value of the flour as the bleaching agents do not remain in the final product, but many consumers and numerous web postings do not know that. Bleaching is done primarily for two reasons: a beautiful white color and for improved baking qualities in "green" (fresh) flour. However, considering that white flour is transported, may sit in a warehouse and then finally on grocery store shelves, could it still be considered "green?" Even some large international mills are no longer bleaching flour. Could eliminating this one process not only decrease milling costs but keep labels cleaner?

### Most countries recommend grains as the base of a healthful diet.

Looking at food recommendations throughout the world, grain foods are usually the largest portion of any government food guide graphic. Many promote whole grains – or at least making half of the servings whole. In spite of the thousands of research studies showing grain foods are key in a nutritious diet, they are still demonised in some parts of the world.

While we know that many citizens may not respect government recommendations, we are assured that governments want healthful citizens for a prosperous economy and to keep medical costs in check.

Our industry's responsibility is to change the opinions of those who believe that carbohydrates are evil. We can do that by enhancing and promoting the nutritional benefits of grain foods and by keeping our labels as clean as possible.