WheatFoods.org

U.S. Domestic Market for Wheat.
Issues, Obstacles and Opportunities

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U.S. farmers produce approximately two billion bushels of wheat annually, depending on the weather and competition for higher profits from other crops such as corn and soybeans. The domestic market consumes fifty percent of those bushels, mostly as food. (Feed and residual are only about 12 percent of the domestic usage) (1).

Issues: Several issues are currently affecting wheat in the U.S.:

- Anti-wheat rhetoric in the media is at an all-time high affecting consumer sentiment about the "Staff of Life."
- Wheat plantings have decreased as farmers turn to more lucrative crops such as corn and soybeans.
- Weather has decimated wheat crops in CA, CO, KS, OK and TX in the past few years.

The last two issues have affected the Wheat Foods Council's (WFC) financial ability to combat the first issue. Reduced crops mean reduced income for the Council since the wheat commissions, the single largest contributors, usually receive their income from bushels produced and in turn, pay WFC dues.

The anti-wheat rhetoric, the majority of which is false, is backed by big companies and publishers with which the WFC cannot compete. Instead, the Wheat Foods Council's strategic plan is to deliver pro-wheat, science-based information to influencers and on occasion, the consumer.

Obstacles: The domestic market has come under assault periodically for the past 50 years including the Stillman Diet, the Drinking Man's Diet, and the one that caught fire in 1972, Dr. Atkins' Diet Revolution. Since then we have seen a second Atkins Diet, South Beach Diet, Paleolithic Diet, Scarsdale Diet, the Zone, the "Wheat Belly" book/diet and, most recently the "Grain Brain" book which purports wheat (and all grains), in addition to **all** carbohydrates, cause many neurological diseases such as dementia, Alzheimer's, Parkinson's, etc.

All of these books and diets are based on the premise that carbohydrates will make you fat and negatively impact health, none of which are substantiated by research or clinical trials.

If wheat flour consumption was associated with obesity, Americans should have been at their highest weight around the 1880s when wheat consumption was at an all-time high (chart 1), but we know that was not the case. In addition, with all the popularity of low-carbohydrate diets and a decrease in wheat flour consumption during the first decade of this century, BMI (Body Mass Index) should have decreased instead of increasing (chart 2).

Chart 1

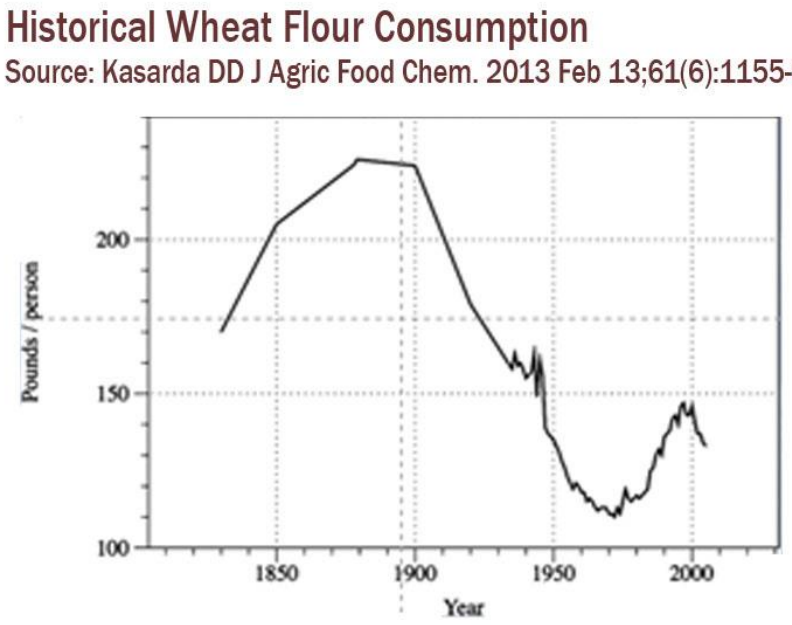
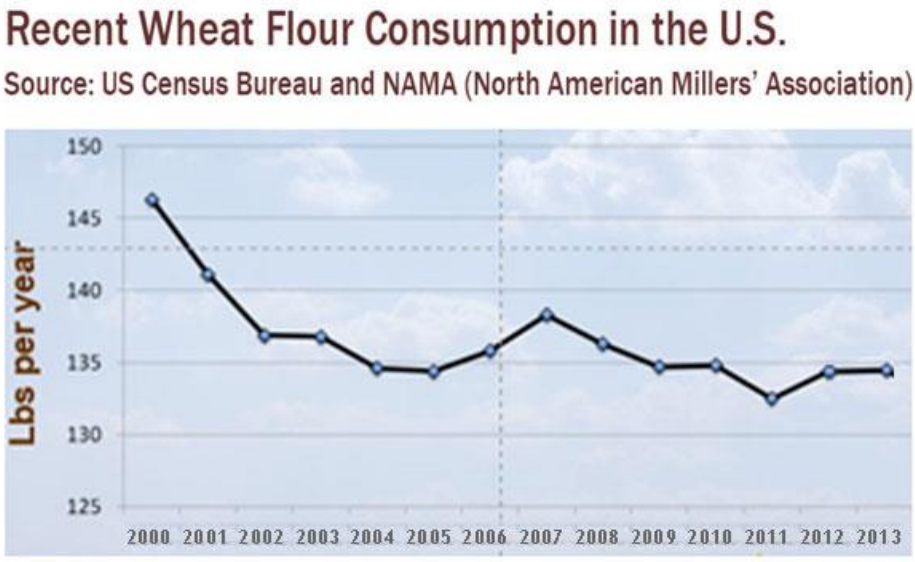
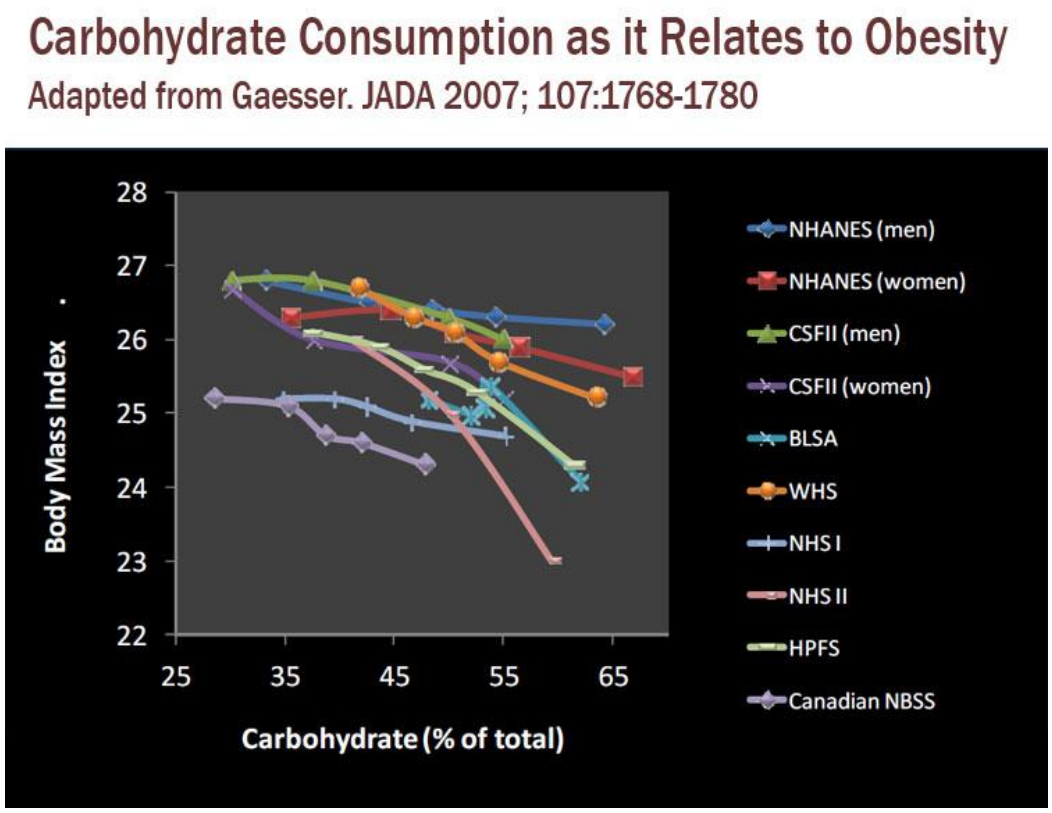


Chart 2



Major on-going studies throughout Canada and the U.S. show that as carbohydrate consumption goes up as high as 65 percent of total calories, BMI goes down – not the other way around as the diet authors and internet claims would like one to think.

Chart 3



For those not familiar with the acronyms:
NHANES- National Health and Nutrition Examination Survey on-going studies by the Centers for Disease Control and Prevention (CDC)
CSFII- Continuing Survey of Food Intake in Individuals (another U.S. survey that has been rolled into NHANES)
BLSA - The National Institute on Aging's **Baltimore Longitudinal Study of Aging** is America's longest-running scientific study of human aging. Started in 1958, BLSA answers critical questions about what happens as people get older
WHS – Women's Health Survey – Began in 1993 at Harvard and questionnaires are still being returned annually
NHS1 and NHS2 - Harvard's Nurses Health Studies funded by the National Institute of Health
HPFS - The Health Professionals Follow-Up study at Harvard
NBSS – Canadian National Breast Screening Survey

Other non-scientific claims about wheat (and grain) consumption continue in the popular press and media.

1. **Wheat is genetically modified and its increased gluten content is the cause of the increase in celiac disease and other sensitivities, intolerances and allergies to wheat.**
    a. There is no commercial GMO wheat sold in the entire world. Research is currently being conducted in several countries, including the U.S., but we are several years

away from a retail product. Traditional breeding practices are used which means new varieties take from 10-12 years to develop and test before release.

b. In studies done in the U.S. and Canada by USDA researcher Don Kasarda and University of Saskatchewan professor Ravindar Chibbar, gluten content in wheat has not changed in the U.S. since 1924 or in Canada (2) as far back as 1860. Any small variability was weather related.

c. No food can cause celiac disease. You must have a gene, be exposed to gluten, have a "leaky gut" (which allows large proteins such as gluten to pass undigested into the small intestine) and have a stressful event in your life i.e. illness, pregnancy, divorce or death of a loved one, etc. that can trigger the onset of celiac disease.

d. All autoimmune diseases, such as MS, autism, type 1 diabetes, etc. are increasing. The current evidence points to changes in our gut microbiome as the cause.

2. Grains are not needed for good nutrition.

a. All major scientific organizations throughout the world include grains as a component of a healthful diet in their dietary guidance.

b. In the U.S., grains provide 44 percent of the fiber consumed (3). Ninety-seven percent of Americans are not eating enough fiber, so if they cut grains from their diet, they will be consuming even less (4). Grain fiber performs different functions in the body than does fruit and vegetable fiber, so both are needed for good nutrition. For instance, based on a nine year study, high cereal (insoluble) fiber intake - but not fruit or vegetable fiber - appears to improve survival after a heart attack (5). Intake of cereal fiber is inversely associated with BMI, body fat, and trunk fat mass in older adults (6). A systematic review and meta-analysis showed that cardiovascular disease (CVD) and coronary heart disease (CHD) were decreased by all fibers, but CVD was further reduced by cereal and vegetable fiber (but not fruit fiber) (7).

c. Enriched grains (which are 95% of the white flour produced in the U.S.) and fortified cereals provide over two-thirds of the folic acid/folate consumed in the U.S. (8) Folic acid and naturally-occurring folate can help prevent neural tube birth defects such as spina bifida and anencephaly. Since fortification of folic acid to enriched grains became mandatory in 1998, the incidence of spina bifida in the US has decreased by 1/3, assuring more than 1,000 healthy babies were born annually. In 2011, the Centers for Disease Control and Prevention (CDC) proclaimed this health initiative as one of the top ten achievements in the first decade of this century (9).

d. Grains also provide approximately 50% the iron consumed in the U.S. and 25% of the zinc (8).

e. Whole grains and fiber are also associated with the reduced risk of heart disease, diabetes and some cancers (10, 11, 12).

3. **Humans should only eat what the original humans ate. Our bodies have not evolved to eat grains, dairy and most fruits and vegetables.**

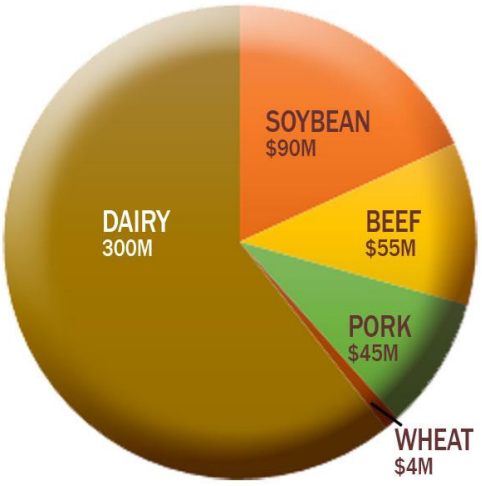
    a. No one knows for certain what the first hominoids ate. We do know they ate what was available including nuts, seeds, wild grasses (the early ancestors of today's cultivated grains), insects and small animals. They did not eat meat on a daily basis.

    b. Depending on what part of the world they evolved, they ate different foods. Some ate more fish if they were near the coast. Basically, they were hunters and gatherers and ate what they could find. Their life expectancy was less than half of modern man – not something most of us would desire to emulate.

    c. As they found seeds they could cultivate and assure food throughout the year, early humans started to settle down and communities and towns evolved so grains like wheat played an important role in civilization.

Opportunities: All of these obstacles provide challenges and opportunities for the wheat industry. Unfortunately dollars are short and time is of the essence to defeat the anti-wheat rhetoric in the media and on the internet.

The U.S. wheat industry is a major source of revenue for farmers, grain elevators, mills and manufacturers of wheat-based companies. In 2013, wheat production value, based on the average farm gate price was $14.4 billion (13) and in 2012 it was $18 billion (14). The baking industry alone generates more than $102 billion in economic activity annually and employs more than 706,000 people (15).



When promotion, research and education dollars are compared to other industries, wheat falls short. For instance, the dairy industry spends over $300 million to promote their products; the United Soybean Board brings in an average of $90 million/year; beef producers spend approximately $55 million; the National Pork Council's budget is around $45 million and even the Mushroom Council spends almost $5 million. The two national wheat education and promotion organizations, the Wheat Foods Council and Grain Foods Foundation, together have less than $4 million dollars to combat negative press about wheat and grains in general.

We often hear that many of these organizations do not have members who promote their own brands so they conduct generic promotions, whereas many companies in the wheat industry (bread, cereal, crackers, tortillas, etc.) put marketing dollars toward their own brand advertising. That argument falls flat in light of reality. There are numerous branded dairy products: Sargenta, Kraft, Meadow Gold, Dyers, Borden, etc., as well as pork and beef branded products: Hillshire Farms, Certified Angus, John Morrill, Hormel, Cloverdale, Smithfield and on and on.

With a larger budget, the wheat industry could have conducted research on the gluten content and quality of "modern wheat" as soon as we learned the premise of the Wheat Belly book. This kind of research would not have taken long to do if the funding had been available. Armed with this countering information, and the ability to reach the consumer, the book might have failed in the beginning rather than still being on the New York Times' Best Seller list three years later. Because of our limited budget, we cannot afford to take these books head-on when they are supported by huge publishing conglomerates such as Rodale and Little, Brown and Company.

With the small budget available to the Wheat Foods Council, we cannot afford to advertise to the consumer, but instead, conduct positive public relations campaigns through influencer groups (dietitians, retail and media dietitians, food and health bloggers, Extension Food and Consumer Sciences professionals, etc.) with the premise that these groups will act as message multipliers, carrying our messages to consumers about why they enjoy eating the "Staff of Life" and the nutritional benefits it provides.

With a $10 million budget, the Wheat Foods Council could reach more of these influencers:

1. Provide accurate information to nurses, nurse practitioners, physician's assistants, fitness trainers and chiropractors who often espouse inaccurate diet information as well as randomly recommend gluten-free diets
2. Contract with more media dietitians who regularly conduct food and nutrition segments on television and radio and write columns for magazines and newspapers
3. Distribute more "Family Features" pages such as our 2014 "The Truth about Gluten"
4. Exhibit at public health professionals' annual conferences and the major state dietetic associations and provide expert speakers
5. Contract for research to answer specific questions plaguing our industry or to identify exciting new facts about wheat to publicize with influencers and/or consumers
6. Partner with food service companies such as ARAMARK for promotions in their dining facilities, i.e. colleges, companies, etc.
7. Provide educational materials to schools about wheat from farm to fork
8. Provide Spanish materials to any and all of the above outlets
9. Enlarge the advisory board to include more specialists who can respond to negative news about wheat as well as provide positive Op-Ed articles and journal publications
10. Develop relationships with food/nutrition editors of consumer publications and provide materials which could form the basis of articles, features, etc.
11. Develop relationships with broadcast outlet producers and use them as a source of early intelligence on anti-wheat messaging as well as leverage opportunities to provide on-camera experts to address/refute misinformation
12. Conduct market research and based on research findings, target specific marketing campaigns to key population groups where there are opportunities to influence their grain consumption behavior. This could include paid advertising as well as public relations outreach, video news releases, satellite media tours, etc.
13. Significantly expand our web-based presence including website resources and social media outreach enabling us to reach more influencers as well as consumers
14. Significantly expand our recipe database to include new recipes and professional photography. Recipes are consistently the number one visited place on the WFC website

15. Conduct webinars that are heavily promoted through the Society for Nutrition Education and Behavior (SNEB), the Academy for Nutrition and Dietetics (AND) and other influencer groups. Include Continuing Education Units (CEUs) for dietitians, physician assistants, nurses and other health professionals

With a $10-$20 million budget we could include a consumer campaign with two target audiences: moms with school age children and active adults who exercise regularly -health club members, runners, bikers, weekend warriors, etc. By creating focused campaigns for these two groups, we could counteract much of the false information that they hear from the Dr. Oz's of the world. By pointing out the goodness of wheat foods and the benefits for the children and the active adults on a consistent and creative basis, these efforts may be able to increase wheat food consumption.

Possibilities include:

1. A national print campaign in selected media like Parents magazine or Runners World would allow us to specifically talk to these target groups individually about the issues they care about and how wheat foods help –whether by feeding the brains of their kids in the classroom or the athletes muscles during an event
2. An infographic styled poster campaign aimed at health clubs touting the nutritional benefits and energy needs of people likely to be at these facilities. Again, would be focused on the specific needs of this group
3. Sponsor a world class athlete who could promote the value of wheat foods. While we can't afford to compete in the big sports where the mega-corporations live, there are many sports where a few thousand dollars could have an impact
4. Sponsor athletic events –a 10k or youth soccer, volleyball or lacrosse tournaments- and have a team to hand out post event food (bagels and energy bars are big after 10ks and ½ marathons) as well as informational brochures. We could team with WFC members to provide coupons as well
5. A video series sponsored by Wheat foods Council and has links to downloadable information. These videos could focus on cooking/baking; team up with an active Media RD for a nutrition series; or perhaps team with an athlete for fitness and nutrition tips

In these times of inaccurate nutrition information being spread through consumer-advice books and social media, the wheat industry must be pro-active to educate consumers about the need for wheat in the diet. While some of the wheat misinformation appears to be abating, we think wheat will continue to be a target moving forward. To ultimately be successful, we need to be constantly looking ahead to identify potential crises, develop strategies and take steps to address them well in advance of their becoming reality. With additional funding, the Wheat Foods Council staff and board stand ready to move forward with a full-range of actions as outlined above. The Council has more than 40 years of development of "brand" equity as a source of sound, science-based information on wheat, grains, and nutrition – a strong platform for the wheat industry moving forward.

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