

# **Translating the Science of Whole Grains to Consumer Messages**

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# The Whole Grains Council



An international program from non-profit educational organization Oldways that:

- Helps consumers find whole grain products and understand their benefits.
- Helps manufacturers and restaurants make more, and better, whole grain products.
- Helps the media create accurate and compelling stories about whole grains.

# Today's Presentation

- **What are the Rumors?**
- **What is the Reality?**
- **Who is the Audience?**
- **What works, in our experience**



# Our Whole Grains Hotline



Is whole durum wheat flour 100% whole grain?

Does anyone sell whole white wheat bread flour?

I have heard whole grain is not good for those with blood group B. Am I risking my health?

Which has more bran, hulled or hullless barley?

# Website Analytics

10-12k visitors/day;  
2.2 million/year

Google Analytics tells us  
trending keywords, top  
active pages at any time.

## Top Keywords:

	Keyword	Active Users ↓
1.	Why are cereal grains not true seeds?	1
2.	Is bulgur gluten free	1
3.	Is barley good for you	1
4.	benefits of whole wheat bread	1
5.	best way to store grains	1
6.	Difference between quinoa flakes and grain	1

## Top Active Pages:

	Active Page	Active Users ↓	
1.	/whole-grains-101/gluten-free-whole-grains	7	22.58%
2.	/whole-grains-101/health-benefits-of-rye	3	9.68%
3.	/whole-grains-101/whole-grains-a-to-z	3	9.68%

# What are the Rumors?

1. “Gluten causes health problems for everyone.”
2. “Gluten free means you can’t eat any grains.”
3. “Modern wheat is GMO and vastly different from wheat of 100 years ago.”
4. “Whole grains cause inflammation / Alzheimers (“Grain Brain”)”
5. “The way we process grains may be contributing to health problems.”
6. “Don’t eat anything not eaten 50,000 years ago.”



# What is the Reality?

## 1. “Gluten causes health problems for everyone.”

- Top gluten experts say 93-98% of us can eat gluten without a problem. Celiac ~1%, NCGS 1-6% (FODMAPs? placebo?)
- Fasano: “Absolutely not! ... There is a tremendous fad component to the gluten free diet... people who write books like *Grain Brain* and *Wheat Belly* are not speaking on scientific grounds. There is no rationale to support their ‘scientific’ statements.”



# What is the Reality?

## 2. “Gluten free means you can’t eat any grains.”

- Most grains are gluten free. For those with a medical reason to go GF, there are many choices.

Amaranth

Millet

Rice

Buckwheat

Oats \*

Sorghum

Corn

Quinoa

Teff

Wild Rice

*\* Oats are inherently GF but frequently contaminated.  
Look for oats tested as GF.*





# What is the Reality?

## 3. “Modern wheat is GMO and vastly different from wheat of 100 years ago.”

- No GMO wheat is commercially traded in the U.S.; in fact it's the farmers who have fought this hardest, to preserve their export markets.
- Today's wheat is very similar in protein (and therefore gluten) levels to that of 100 years ago.
- The gene for dwarf size is unrelated to genes for glutenin and gliadin, so dwarf wheat couldn't be linked to problems with gluten.



# What is the Reality?

## 4. “Whole grains cause inflammation / Alzheimers (“Grain Brain”)”

- Whole grains are part of the solution, not the problem, when it comes to inflammation.

Recent clinical trials show increases in good gut bacteria that fight inflammation, and decreases in inflammation markers, with wg consumption.





# What is the Reality?

## 5. “The way we process grains may be contributing to health problems.”

- This issue may have a “grain of truth” in it. Bread produced in more traditional ways (slow fermentation with “good” bacteria) is a very different product than today’s typical commercial bakery breads, quick rising with extra vital wheat gluten.
- Italian research shows fermentation with specific bacteria can lower gluten from 75,000 ppm to 12 ppm – technically GF.





# What is the Reality?

## 6. “Don’t eat anything not eaten 50,000 years ago.”

- Nothing in our food supply is the same as it was 50,000 years ago.
- There’s no clear evidence of what Paleo man actually ate (insects and grubs were likely part of it!)
- While Paleo diets can benefit health by encouraging eating less processed food, there is no need to cut out whole grains, legumes, dairy.



# Who's the Audience?

1. Those who already eat whole grains.
2. Those eating mostly refined grains, who will switch if whole grains are delicious and affordable.
3. Those who believe we're all gonna die if we eat wheat/grains.
4. Kids: the next generation.

# What do they need?

1. Those who already eat whole grains.

- We need to help them find more whole grains outside the home.
- We need to help their favorite foods sell through so stores will continue to stock them.





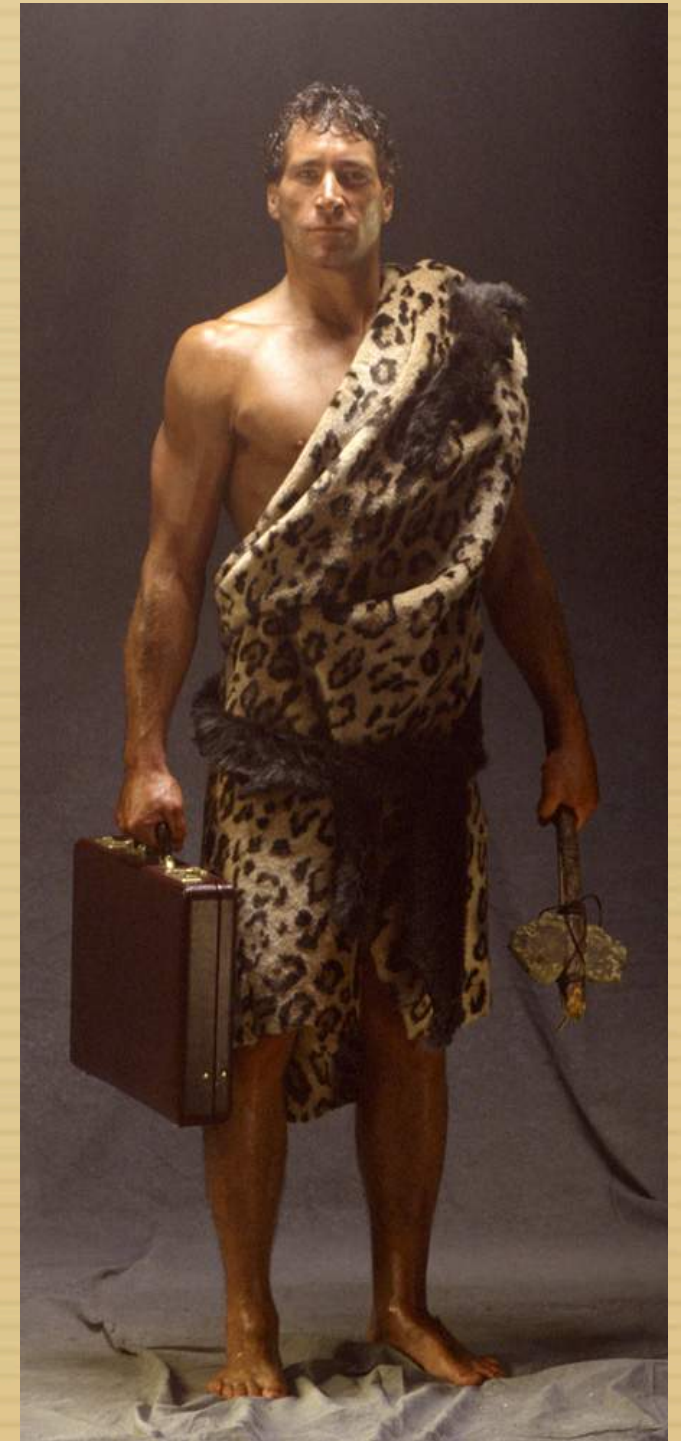
# What do they need?

2. Those eating mostly refined grains, who will switch if whole grains are delicious and affordable.
- We need to make trying whole grains as risk free and barrier free as possible.
  - We need to work with industry to produce more delicious whole grains.
  - We need to work with industry to erase the price gap.



# What do they need?

3. Those who believe we're all gonna die if we eat wheat/grains.
- While reason may not make much headway with those already in this camp, it may help keep additional people from falling into this group.
  - We need engaging, accurate, non-academic rebuttals (journal articles like J. Jones' and F. Brouns' translated into consumer terms.)





# What do they need?

## 4. Kids: the next generation

- We need to educate parents who can in turn model healthy eating.
- We need to support school food efforts.
- We need to believe in kids. Too often we assume they won't eat healthy foods.





# WGC: Health Studies DB

- 239 studies (June 1)
- Updated monthly by RD
- Search by grain (20 choices) and/or by disease/condition (27 choices) – including inflammation, weight control, gut health, sprouted grains, diabetes, cognition and so many more

## Health Studies on Whole Grains

Every day, more and more studies show the benefits of whole grains. We regularly post new studies here, where you can browse through them at random. Or, you can use our filters to hone in on a specific question, such as "Does barley reduce the risk of diabetes?" or "What's the research about whole grains and hypertension?"

Filter the studies below by selecting a grain and/or a disease/condition, then click apply.

Choose a grain:

Whole Grains

Choose a disease/condition:

Inflammation

Apply



### LOW INTAKE OF WHOLE GRAINS RELATED TO INCREASED INFLAMMATION

What you eat today may potentially affect your health years later. As part of a prospective study in Germany, researchers analyzed the relationship between the quality of carbohydrates eaten in adolescence and inflammatory markers in young adulthood. The analysis was based on 205 participants (113 girls and 92 boys) with at least two 3-day weighed dietary records during puberty, and blood samples in younger adulthood (18–36 y). Researchers found that eating fewer whole grains and more high Glycemic Index carbohydrates during puberty is predictive of higher interleukin 6 concentrations (a marker of inflammation) in adulthood.

*The Journal of Nutrition*. 2014 July 30. [epub ahead of print] (Goletzke et al.)

### RCT SHOWS WHOLE GRAINS REDUCE INFLAMMATION MARKERS

Scientists in Iran conducted a randomized controlled crossover trial with 44 overweight or obese adolescent girls, to gauge the impact of whole grain consumption on markers of systemic inflammation. After a two-week run-in period, half the girls ate a diet where at least half their grains were whole grains, while the others avoided whole grains entirely in favor of refined grains. After six weeks, both groups observed a four-week washout period, then the groups switched. When the girls ate whole grains, C-reactive protein (an important inflammation marker) reduced by an average of 21.8%; when they ate refined grains, CRP went up about 12.1%. Other inflammation markers were also significantly reduced during the whole grain period.

*Molecular Nutrition and Food Research*. 2014 Jan 20, Epub ahead of print. [Hajishemi et al.]

### WHOLE GRAINS REDUCE INFLAMMATION THROUGH GUT CHANGES

Intake of whole grains has long been linked to decreases in the systemic inflammation that may be at the root of many chronic diseases. Researchers at the University of Nebraska recently completed a human trial that explored the mechanisms behind whole grains' anti-inflammatory effects. They found that eating whole grains (barley, brown rice, or especially a mix of the two) even for a short period altered the gut microbiota in ways that coincided with improvements in systemic inflammation.

*Gut Microbes*, July 1, 2013; 4(4):340–6. (Walter et al.)



# WGC: Media Outreach



OLDWAYS WHOLE GRAINS: BREAKING BARRIERS

**5 myths about wheat and whole grains dispelled**

Phil Lempert  
**SUPERMARKETGURU®**

Whole Grains Reduce Inflammation  
and 4 More Things You Need to Know  
Why should you consider adding whole grains to your diet today?

THE MEDICAL POST | NEWS

**Gluten-free diets: Fact & fiction**

*Nutrition experts sift through the information glut for grains of truth*

**HUFFPOST**

David Katz, M.D.

**Whole Grains and Half-Witted Notions**

**RGJ** Reno Gazette-Journal  
A GANNETT COMPANY

**Grains are not evil. Here's why.**

- WGC contributes to ~ 200 stories per year
- Trade press and consumer press and blogs

# WGC: Conferences

- Whole Grain Trends & Attitudes
- Celiac Disease & Gluten Sensitivity
- Fact vs Fiction: Today's Wheat
- The Pitfalls of Pseudoscience
- What did Paleo Man Really Eat?
- Glycemic Impact: Eat the Right Carbs
- Health, Whole Grains & Intact Grains
- Making Wheat Technically Gluten-Free
- Sprouted Grain Flour
- Schools: Making Whole Grain Rich Work





# Objective, Nonprofit Advice



70% of consumers trust healthcare professionals but only **7% trust a food company or manufacturer.**

*Source:*

*International Food Information Council Foundation  
Food and Health Survey 2015*

# We'll keep the answers coming!







Thank You!

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