Whole Grains in School Meals: Health vs. Stealth

Whole Grains for Kids
Health vs. Stealth in School Foods

Cynthia Harriman
Director of Food & Nutrition Strategies
Oldways & the Whole Grains Council

July 22, 2008
School Nutrition Association conference

Overview
• Health benefits of whole grains
• What is a whole grain?
• Buying whole grains – tricks & traps
• Easy whole grain choices for kids
• Free resources for schools

Oldways and the Whole Grains Council

Kids Who Eat Whole Grains...
• Have a lower risk of obesity & diabetes
• Have lower cholesterol levels
• Reduce their risk of asthma
• Feel fuller and more satisfied
• Benefit from essential antioxidants and nutrients not found in other foods

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**Good Diet: Kids Benefit Quickly**

- Overweight kids aged 9-15
- All you can eat diet
- Whole grains, fruits, veggies, lean protein
- Daily exercise

In 2 weeks…
- Cholesterol down 21%
- Insulin levels down 30%
- Leptin (appetite hormone) down 57%


**Whole Grains Cut Asthma Risk in Half**

Children who ate whole grains were
- 54% less likely to develop asthma
- 45% less likely to develop wheezing

than children who did not eat whole grains


**Feel Fuller and More Satisfied**

<table>
<thead>
<tr>
<th>Processed cereal</th>
<th>Oatmeal, All-Bran</th>
</tr>
</thead>
<tbody>
<tr>
<td>White bread toast</td>
<td>Whole wheat toast</td>
</tr>
</tbody>
</table>

The children with the refined grain breakfasts were hungrier, and ate 150 more calories when offered an all-you-can-eat lunch buffet than those given the whole grain breakfasts.

Source: Oxford Brookes University, www.brookes.ac.uk/news/2003/november/nr_113_03

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People who eat Whole Grains reduce serious health risks

- risk of heart disease drops 25-36%
- risk of Type 2 Diabetes drops 21-27%
- risk of digestive cancers drops 21-43%
- risk of stroke drops 37%

Reasons for Health Benefits

- **Nutrients**
  3-5 times the vitamins and minerals found in refined grains.

- **Antioxidants**
  Corn has almost twice the antioxidant activity of apples, while wheat and oats almost equal broccoli and spinach in antioxidant activity.

- **Fiber**
  Whole grain products offer 1g to 4g of fiber per serving. Fiber varies from 3.5% in brown rice to around 17% in barley.

- **Satiety**
  Whole grains are a “slow food” offering steady fuel to the body.

What is a Whole Grain?

Whole grains or foods made from them contain all the essential parts and naturally-occurring nutrients of the entire grain seed.

If the grain has been processed (e.g., cracked, crushed, rolled, extruded, lightly pearled and/or cooked), the food product should deliver the same rich balance of nutrients that are found in the original grain seed and should contain the same proportions of bran, germ, and endosperm.
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Whole Grain Myths

FALSE Bran is a whole grain
FALSE Wheat germ is a whole grain
FALSE Grains have to be cooked and eaten whole to count as whole grains
FALSE Enriched grain has nutrients put back in that make it just as healthy as whole grain

Wheat Flour: Whole vs Refined, Enriched

List of Whole Grains

• Amaranth
• Buckwheat
• Millet
• Quinoa
• Rye
• Teff
• Wild rice
• Wheat, including varieties such as spelt, emmer, farro, einkorn, Kamut, durum, and forms such as bulgur, cracked wheat and wheatberries

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How Many Servings?

<table>
<thead>
<tr>
<th>age</th>
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<th>boys/men</th>
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<td>1.5 - 3</td>
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<td>3.5 - 7</td>
</tr>
<tr>
<td>51+</td>
<td>3 - 5</td>
<td>3 - 6</td>
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</table>

Source: 2005 Dietary Guidelines
Oldways and the Whole Grains Council

What’s a Serving?

- 1/2 cup cooked rice, bulgur, pasta, or cooked cereal
- 1 ounce dry pasta, rice or other dry grain
- 1 slice bread 1 small muffin (weighing one ounce)
- 1 cup ready-to-eat cereal flakes

Source: 2005 Dietary Guidelines
Oldways and the Whole Grains Council

Buying Whole Grains: Go Ahead!

Packaging Words
- whole grain [grain name]
- whole wheat
- whole [other grain]
- brown rice, wild rice
- [grain name] berries
- [grain name] groats
- oatmeal, oats
- cracked wheat, crushed wheat
- graham flour
- hulled or hull-less barley

What they mean
Contains all parts of the grain, so you’re getting all the nutrients of the whole grain.

Source: Oldways and the Whole Grains Council
**Buying Whole Grains: Look Closer**

**Packaging Words**
- enriched flour
- unbleached flour
- wheat flour
- semolina
- durum wheat
- organic unbleached flour
- degerminated (on corn meal)
- bran
- multigrain
- grits, hominy, farina
- pearled, Scotch or pot barley

**What they mean**

These words are accurate descriptions of the package contents, but because some parts of the grain may be missing, you are likely missing the benefits of "whole grains."

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**Buying Whole Grains: The Stamp Helps!**

- All "Stamped" products offer at least 8g (1/2 serving) or more of whole grains.
- Products with the 100% Stamp offer at least 16g (1 full serving) of whole grains and ALL the grain is whole grain.

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**Want more? Look for Higher Numbers**

Each product has a different number on its Whole Grain Stamp. Some foods contain more whole grain than others. Try for 48g or more per day.
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![Graph: Kids May Surprise You! Gradual Introduction of Whole Grains to Kids]

- Kids need to try new foods 6-15 times before they’ll accept them.

Delicious Choices Kids Love

- Whole grain pizza crusts, buns, cookies, corn chips, bread (made with whole white wheat, traditional whole wheat, or other whole grains...)

Easy Whole Grains for Kids

**Breakfast**
- Whole grain cereal (cold)
- Oatmeal
- Whole grain waffles or pancakes
- Whole grain toast, muffins or bagels
Easy Whole Grains for Kids

Lunch

- Sandwich on WG bread or pita
- Whole grain pasta with veggies
- Soup with whole grain crackers
- Lean burger on WG bun
- Beans and veggies in whole corn or whole wheat tortilla
- Pizza with whole great crust

Easy Whole Grains for Kids

Snacks

- Popcorn (no trans fats)
- Whole grain crackers
- Pretzels made with whole grain
- Whole grain chips and snacks
- Whole grain cookies

Free Resources from the WGC

- Handouts, lesson plans
- Posters
- Stickers and pins
- Foodservice WG recipes
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The Whole Grains Council

www.wholegrainscouncil.org

A consortium of scientists, chefs, manufacturers, restaurants and schools working together with Oldways to:
• help consumers find whole grain foods and understand their many health benefits
• help manufacturers create delicious whole grain products and
• help the media write accurate, compelling stories about whole grains.

Oldways and the Whole Grains Council

Miami-Dade County Public Schools
Carol Chong, MA, RD, LD/N

“Stealth” Approach

Miami-Dade County Public Schools

“Let food be your medicine, and your medicine be your food.” Hippocrates

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2005 US Dietary Guidelines

- Call for action – increase whole grains to increase fiber intake
- ? Federal requirements
- ? SMI
- ? Wellness Policy

Healthy Foods

- Common perception – if a food is good for you, it does not taste good! (“Diet Mentality”)
- Ethnic and Socio-economic considerations

Healthy Foods

“EEUUU” is not a term of endearment!
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Cost Considerations

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<th>Item</th>
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<tr>
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<td>$1.86</td>
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<tr>
<td>Breaded Chicken Nuggets</td>
<td>$21.20</td>
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Stealth Approach

• If I don’t see it I do not know
  it’s there – manufacturers challenged

• Pre-conceived notions are prevented – marketing/branding

• Taste may actually be improved

“Stealthy Foods”

• Breading on nuggets, tenders, patties
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“Stealthy Foods”
• Breads and grain products – pastas, muffins, rolls, snack items, cereals

“Stealthy Foods”
• Whole Wheat Spaghetti

“Stealthy Foods”
• Whole Wheat /White Bread Combo “Club”
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“Stealthy Foods”
- Chocolate chip cookies – ‘a la carte’
- Blend of white, whole wheat flours & oatmeal

“Stealthy Foods”
- Snack Foods

“Stealthy Foods”
- Pizza crust – whole grains in crust
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“Stealthy Foods”

Miami-Dade County Public Schools

We Feed the Future

Miami-Dade County Public Schools
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HEALTHY APPROACH

Cindy Hormel, MM, RD, LD, SNS
Director, Food & Nutrition Services

Fuel For Performance

Liberty Missouri Public Schools

Our story………..

• Creating a nutrition culture
  – Menu calendar
  – Classroom
  – Infomercial
  – Cafeteria

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District culture? Promote or not?

Being creative........

Educating.......
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More than a meal.......

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<table>
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<tr>
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Liberty Missouri                  Public Schools

<table>
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Liberty Missouri                  Public Schools

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It's Right for Kids........

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