Whole Grains: The New Norm Conference

January 31 - February 2, 2011 • Portland, OR

WHOLE GRAINS AROUND THE WORLD

In country after country around the world, whole grains are on the agenda. Researchers are documenting their health benefits; policymakers are recommending increased consumption; manufacturers are shifting their production lines; and consumers are discovering new tastes and enjoying better health.

A decade ago, whole grains were almost unknown in many countries. And yet today, brown rice is gaining a foothold in China and Japan; whole grain pasta is becoming commonplace in Italian supermarkets; and a Mexican company is one of the driving forces bringing whole grain breads to Latin America.

The whole grains revolution is indeed worldwide. This section of the program book documents the extent of this global movement, starting with a handy reference to dietary guidelines recommendations and definitions of whole grains worldwide. We'll also document the role that Oldways and the Whole Grains Council have played in promoting whole grains internationally, through partnerships in other countries.

Dietary Guidelines Worldwide

Whole Grain Definitions Worldwide

- · Definitions of whole grain ingredients
- · What qualifies as a whole grain serving?
- What qualifies as a whole grain food?

The Whole Grain Stamp - An International Standard

Whole Grain Forum in China, April 2011

Whole Grains: the New Norm – Jan. 31-Feb. 2, 2011

Whole Grains Worldwide p. 6-1

DIETARY GUIDELINES WORLDWIDE

In less than a decade, government guidelines in countries around the world have come to include a recommendation to consume whole grains.

Australia – The Australian Guide to Healthy Eating

"Eat plenty of cereals (including breads, rice, pasta and noodles), preferably wholegrain. Wholegrain refers to cereal foods that incorporate all the components of the natural grain, including the bran and germ. The recommended number of daily cereal servings for adults aged 19 to 60 years is four to nine for women and six to 12 for men. A serving equates to two slices of bread; one cup of cooked rice, pasta or noodles; one cup of porridge; one cup cereal flakes; or half a cup of muesli." (2003)

Canada - Canada's Food Guide

"Make at least half of your grain products whole grain each day. Eat a variety of whole grains such as barley, brown rice, oats, quinoa and wild rice. Enjoy whole grain breads, oatmeal or whole wheat pasta." At least three servings of whole grains are recommended for all Canadians age 9 and up. (2007)

China - Dietary Guide for Chinese Residents

In 2008, the Chinese Ministry of Health and the Chinese Nutrition Society (CNS) recommended that adults consume 50 grams of "coarse grain and whole grain food" daily, and that the elderly consume 100g.

Denmark - Report of the National Food Institute

In May 2008, the DTU (National Food Institute) issued a detailed report on the health benefits of whole grains that recommended, overall, that Danes consume a minimum of 75g of whole grains daily (Based on a 2400 calorie diet; proportionately less for children and for smaller women. For a 2000 calorie diet this would be about 63 g daily.)

France – La Santé Vient en Mangeant (Health Comes from Eating)

In 2002 the French were advised to "Eat bread and starchy foods at every meal... Whole grains are ... rich in fiber. Bread [should be] preferably whole grain or semi-whole grain.

Germany – 10 Guidelines of the German Nutrition Society (DGE)

"Plenty of cereal products - and potatoes. Bread, pasta, rice, grain flakes preferably made of whole grain, and potatoes contain nearly no fat, but plenty of vitamins, minerals, trace elements as well as dietary fibre and phytochemicals."

Mexico – Norm for Nutrition Guidance

The Mexican Health Ministry, in 2004, released its NOM-043 guidelines stating that, "Consumption of cereals should be recommended, preferably whole grains or their derivates and starchy roots. Their fiber and energy content should be highlighted."

Netherlands - Netherlands Nutrition Centre

National guidelines recommend everyone age 9 and up eat 4-7 slices of whole grain bread (4-5 for those 9-13 or 70+; 5-6 slices for age 51-70; and 6-7 slices for 14-50 year olds), resulting in a typical intake of 115g of whole grain per day.

Singapore - Dietary Guidelines

In 2003, Singapore advised adults to "Eat sufficient amount of grains, especially whole grains. At least one serving of rice and alternatives should come from wholegrain food... Examples of wholegrain food include oats, brown rice and wholemeal/whole wheat versions of noodles, bread and breakfast cereals." The 2007 Guidelines for Children include 9 recommendations, one of which is "Encourage eating of wholegrain foods... Include at least one daily serving of wholegrain products such as brown rice or wholemeal bread."

Sweden – Report of Livsmedelsverket (National Food Administration)

In January 2010, Sweden's Livsmedelsverket updated its nutrition advice to focus not just on whole grain bread, but on all varieties of whole grains. Overall, it recommends that Swedes, like the Danes, consume 75g of whole grain per 2400 calories, a level they generalize to be about 70g for most women and about 90g for most men.

Switzerland - Swiss Society for Nutrition Food Pyramid

In 2009 Switzerland decreed that "Each meal should be served with 1 starch-rich side dish (i.e. 3 portions a day) including at least two portions of whole grain products."

UK – Guidelines for a Healthy Diet

The UK's Food Standards Agency uses the Eatwell Plate as its food guidance image, and advises that, "Starchy foods such as bread, cereals, rice, pasta and potatoes are a really important part of a healthy diet. Try to choose wholegrain varieties whenever you can. ... We should all be trying to eat a variety of starchy foods and choosing wholegrain, brown or high-fibre varieties whenever we can."

Sources:

Australia - http://www.healthyactive.gov.au/internet/healthyactive/publishing.nsf/Content/eating

Canada – http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/index-eng.php

Denmark – http://wholegrainscouncil.org/files/WholeGrainsinDenmark.pdf

France - http://www.mangerbouger.fr/

Germany – http://www.dge.de/modules.php?name=Content&pa=showpage&pid=16

Mexico - http://wholegrainscouncil.org/files/MexicoNOM043.pdf

Netherlands - http://www.voedingscentrum.nl/nl/eten-gezondheid/gezond-eten.aspx

Singapore – Adults: http://www.hpb.gov.sg/foodforhealth/article.aspx?id=2758

Singapore - Children: http://www.hpb.gov.sg/hpb/default.asp?pg_id=3306

Sweden – http://www.slv.se/sv/grupp3/Nyheter-och-press/Nyheter1/Nytt-rad-om-fullkorn-ersatter-brodrad/ Switzerland – http://www.sge-ssn.ch/fileadmin/pdf/100-ernaehrungsthemen/10-gesundes_essen_trinken/ Food Pyramid.pdf

UK – http://www.eatwell.gov.uk/healthydiet/nutritionessentials/starchfoods/

USA - http://www.health.gov/dietaryguidelines/

DEFINITIONS OF WHOLE GRAIN INGREDIENTS

Where, When, Who, What	What qualifies as a whole grain?	Which grains are included?
Germany, 1961 DIN #10355 Mahlerzeugnisse (considered a standard definition but not a law)	Wholemeal flour and wholemeal break flour must include all components of the cleaned kernels, including the germ. The pericarp of the grain kernels can be removed before the processing.	
USA, 1999 AACC International Whole Grain Definition	Whole grains shall consist of the intact, ground, cracked or flaked caryopsis, whose principal anatomical components - the starchy endosperm, germ and bran - are present in the same relative proportions as they exist in the intact caryopsis.	All plants from the Poaceae (Gramineae) family plus the pseudocereals amaranth, buckwheat, and quinoa.
USA, 2004 Whole Grains Council Whole Grain Definition	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, and/or cooked), the food product should deliver approximately the same rich balance of nutrients that are found in the original grain seed.	All plants from the Poaceae (Gramineae) family plus the pseudocereals amaranth, buckwheat, and quinoa.
USA, 2006 FDA Whole Grain Label Statements draft guidance	[Whole grains are] cereal grains that consist of the intact, ground, cracked or flaked caryopsis, whose principal anatomical components – the starchy endosperm, germ and bran – are present in the same relative proportions as they exist in the intact caryopsis	Cereal grains may include amaranth, barley, buckwheat, bulgur, corn (including popcorn), millet, quinoa, rice, rye, oats, sorghum, teff, triticale, wheat, and wild rice.
UK, 2007 IGD UK Whole Grain Guidance Report	[Whole grain] refers to the edible entire grain after removal of inedible parts such as the hull and glume. It must include the entire germ, endosperm and bran. Temporary separation of whole grain constituents during processing for later re-combination is acceptable provided the proportions of the germ, endosperm and bran are the same or virtually the same as in the original grain. Simply adding together these three whole grain constituents as separate ingredients does not constitute a whole grain and making a claim that it does could be misleading to consumers.	Amaranth, barley, buckwheat, maize, millet, oats, quinoa, rye, sorghum, teff, triticale, brown rice, wheat, wild rice

Where, When, Who, What	What qualifies as a whole grain?	Which grains are included?
Denmark, 2007 DTU Danish National Food Institute Fuldkorn (Whole grain) report	Wholegrain is defined as intact and processed (dehulled, ground, cracked, flaked or the like) grains, where the components endosperm, bran and germ are present in the same proportions as in the intact grain.	Includes grain seeds from the following genera of the grass family Gramineae: barley (Hordeum), oat (Avena), wheat (Triticum), rye (Secale), rice (Oryza), millet (Panicum), maize (Zea; only as dried maize) and sorghum (Sorgum). (no wild rice and no pseudocereals)
Scandinavia Scandinavian keyhole	A whole grain is defined as intact and processed (dehulled, ground, cracked, flaked, or the like) products where endosperm, germ, and bran are present in the same proportions as in the intact grain. If these fractions are separated under processing, they should be added back so that the final product has approximately the same relative proportions of the three parts as in the intact grain.	The whole grain definition includes the following whole grain cereals: wheat, rye, oats, barley, maize (dry seeds), rice, millet, and sorghum. Wild rice, quinoa, amaranth, and buckwheat are not included.
EU, 2010 Healthgrain Whole Grain Definition	Whole grains shall consist of the intact, ground, cracked or flaked kernel after the removal of inedible parts such as the hull and husk. The principal anatomical components - the starchy endosperm, germ and bran - are present in the same relative proportions as they exist in the intact kernel. Small losses of components - i.e. less than 2% of the grain/ 10% of the bran - that occur through processing methods consistent with safety and quality are allowed.	The Healthgrain definition addresses other useful issues included recombining, etc. Reading the definition in its entirely is recommended.
Netherlands From the Dutch Bakery Centre (NBC)	Wholegrain hereby is defined as the intact grain kernel in its natural composition. The kernel can be processed to flour as long as all its natural components are there in the flour in their natural amounts/ composition. The NBC also advises bakers to follow the Healthgrain definition (above).	
Australia Australia New Zealand Food Standards Code	Wholegrain means the intact grain or the dehulled, ground, milled, cracked or flaked grain where the constituents – endosperm, germ and bran – are present in such proportions that represent the typical ratio of those fractions occurring in the whole cereal, and includes wholemeal. Wholemeal means the product containing all the milled constituents of the grain in such proportions that it represents the typical ratio of those fractions occurring in the whole cereal.	

WHAT QUALIFIES AS A WHOLE GRAIN SERVING?

Where, When, Who, What	What qualifies as a whole grain serving	Other restrictions or notes
USDA, 2002 CNPP Healthy Eating Index (scroll to page #15 which is the 25th page of the PDF)	For grain foods not described in MyPyramid, CNPP bases a serving on the grain content of the food. "Because 1 slice of commercial white bread contains 16 grams of flour, one standard grain serving was defined as the grams of a grain product containing 16 grams of flour."	
USA, January 2005 USDA/HHS 2005 Dietary Guidelines (gram amounts provided to AACCI WGWG by CNPP)	100% whole grain foods (cooked or prepared to eat) and their grams of whole grain content. Bread (1 slice, 28g serving) 16g RTE cereal (1 cup, 28g) 28g Hot cereal (1/2 cup, 112g) 27g Brown rice (1/2 cup, 98g) 29g Pasta (1/2 cup, 70g) 25g Popcorn (3 cups, 24g) 24g	All foods in ready to eat form. Cereal assumes no sugar or other ingredients; popcorn assumes air-popped.
UK Food Standards Agency	No official serving size, but the WHOLEHeart study funded by the UK FSA defined a portion as equivalent to the wholegrain content of one slice of wholemeal bread or a portion of instant porridge oats (both ~ 20g). "Typically, food manufacturers use 16g." [HGCA]	
Australia Australian Guide for Healthy Eating	A grain food "serve" is defined as any of: 2 slices of bread 1 medium bread roll 1 cup cooked pasta, noodles, rice, porridge 1 1/3 cups of breakfast cereal flakes 2 wheat-flake or oat-flake breakfast biscuits ½ cup of meusli	

WHAT QUALIFIES AS A WHOLE GRAIN FOOD?

Where, When, Who, What	What qualifies as a whole grain food	Other restrictions or notes
USA / 1999 + 2003 FDA WG health claim	At least 51% of the total weight must be WG	Limits on fats and cholesterol
USA + International January 2005 WG Council Whole Grain Stamp US version International version	At least 8g WG per serving (Basic Stamp) At least 16g WG per serving, and all the grain is whole grain (100% Stamp)	None
international version		
USA, October 2005 USDA / FSIS Interim Policy Guidance	At least 8g WG per serving At least 51% of the grain is whole grain	None
USA, August 2006 WG Council Whole Grain Stamp FSIS version	At least 8g WG per serving and at least 51% of the grain is whole grain (Basic Stamp) At least 16g WG per serving, and all the grain is whole grain (100% Stamp)	None
USA, April 2007 IOM Nutrition Standards for Foods in Schools (report on competitive foods)	Requires foods to be (or contain a serving of) fruits, vegetables or whole grains but does not clearly define "serving."	Limits on fat, sugar, calories and sodium.
UK, November 2007 IGD UK Whole Grain Guidance Report	For packaged foods wishing to communicate the presence of whole grain, for example, by stating 'contains whole grains' or 'with whole grains' on pack and in brand communications, the IGD Working Group recommend that foods should contain a minimum level of 8g whole grain per serving (based on final batch load proportions).	Foods calling attention to their whole grain content will need to make a Quantitative Ingredient Declaration (QUID).
Canada, December 2007 WG Council Whole Grain Stamp Canadian version	At least 8g WG per serving (Basic Stamp) At least 16g WG per serving, and all the ingredients are whole grain (100% Stamp in Canada)	None
USA, December 2007 (final rule expected February 2011) USDA / FNS WIC interim rules	In general, WG must be the first ingredient and the food must qualify for the FDA Whole Grain Health Claim (i.e., 51% of weight is whole grain)	Only certain grain products qualify; no added sugar, salt, or oil allowed in rice, barley, bulgur or oatmeal; sugar restriction and iron requirement for breakfast cereals.

Where, When, Who, What	What qualifies as a whole grain food	Other restrictions or notes
Denmark, 2007 DTU Danish National Food Institute Fuldkorn (Whole grain) report	Calculated on dry matter, the whole grains shall be the specified percent or more of the total grains, for each category: 100% for flour, grains, rice 50% for bread (AND 30% of total weight) 60% for crispbread, RTE cereal, pasta	Only the foods listed here can be called whole grain – so no whole grain cookies, cakes, waffles, etc.!
USA, 2008 update USDA / FNS Healthier US School Challenge	For the majority of whole grain foods, WG must be the first ingredient – or the weight of all whole grains totaled together must be more than the weight of any other ingredient. Some products qualify if the weight of all whole grains, totalled, is more than the weight of any other <i>grain</i> ingredient.	Must qualify as a Grain/ Bread serving in the Food Buying Guide for Child Nutrition Programs (minimum of 14.75g of grain, in most cases)
Sweden – 1989 Denmark – 2009 Norway – 2009 Livsmedelsverket Natl. Food Admin. Keyhole Symbol	Calculated on dry matter, the whole grains shall be the specified percent or more of the total grains, for each category: 100% for flour, meal, grains 50% for crispbread, porridge, pasta 25% for bread, sandwiches, wraps 15% for pizzas, pierogis, other savory pies	Only the categories listed here are eligible. Limits on fats, sugars and sodium; minimum of fiber in some categories. See details.
USA, October 2009 IOM School Meals: Building Blocks for Healthy Children report	Calls for schools to serve "whole grain-rich" foods; to qualify, a food must meet ONE of the following: a. contain at least 8 grams of whole grain content per serving OR b. qualify for the FDA whole grain health claim (51% whole grain by weight) OR c. have a whole grain as the first ingredient by weight for non-mixed dishes (e.g., breads, cereals) or as the first grain ingredient by weight for mixed dishes (e.g., pizza, corn dogs)	Must qualify as a Grain/ Bread serving in the Food Buying Guide for Child Nutrition Programs (minimum of 14.75g of grain, in most cases) Note: The report recommends raising the standard to more than 8g as time goes on.
Germany	Foods must have a certain baker's percent of whole grain to use the name whole grain: 90% whole grain for wheat and rye bread 100% whole grain for pasta	
Netherlands From the Dutch Bakery Centre (NBC)	Breads can only legally be called whole grain if 100% of the grain is whole grain. There's no law for other foods, but common practice is to "use the 50% rule" and call products whole grain if at least half of the grain in a product is whole grain.	Terms such as 20%, 30%, 50% or 80% wholegrain on packaging are not used (and for bread legally not allowed).
Australia, August 2009 Go Grains	There is no official government regulation on the definition of a wholegrain food, but Go Grains encourages manufacturers to make whole grain claims only if the food has at least 10% wholegrain content or 4.8g wholegrains "per serve."	

Where, When, Who, What	What qualifies as a whole grain food	Other restrictions or notes
USA, 2011 USDA / Food Nutrition Service Proposed rules for School Meals	Schools must serve "whole grain rich" foods, which are defined as foods where at least 51% of the grain is whole grain. On adoption of the rules (expected to be about August 2012), half or more of grain foods must be whole grain rich; two years later, all grain foods must be whole grain rich.	Foods must also contain at least 14.75g of grain – and therefore at least 8g of whole grain – to qualify as allowable grain foods in school meals.

THE WHOLE GRAIN STAMP AN INTERNATIONAL STANDARD

Since its introduction in January 2005, the Whole Grain Stamp has spread from country to country and is now an accepted international standard. About 10% of the Whole Grains Council's 260 members are based outside the U.S.A., and about 15% of products using the Stamp are on products being sold outside the United States.

2005 (January) U.S. standard Whole Grain Stamp is introduced.2006 (June) Phase II (gram specific) Stamps are launched.

2006 (August) U.S. "FSIS" Stamps approved for foods containing meat & poultry

(and therefore regulated by USDA rather than FDA).

2007 (December) Canadian Whole Grain Stamp (in French and English) clears

regulatory hurdles, and soon begins appearing on products in

Canada.

2008 (April) First appearance of the WG Stamp in UK. An International English

version of the Stamp is introduced, and is soon in use in the UK,

Ireland, and New Zealand.

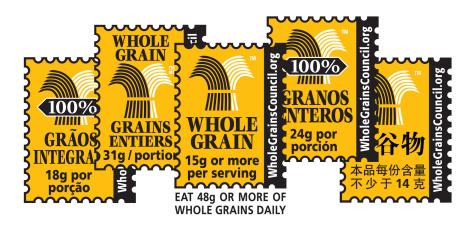
2008 (May) Spanish version of the WG Stamp is created for Mexico and the

Dominican Republic. Within two years, it has spread to Argentina, Chile, Colombia, Costa Rica, El Salvador, Guatemala, Honduras,

Nicaragua, Panama, Peru, Venezuela, and Uruguay.

2009 (June) Portuguese version of the WG Stamp is created for use in Brazil.

2010 (March) Chinese version of the WG Stamp is created for use in China.



WHOLE GRAINS IN CHINA

Chinese nutritionists are making a big push to promote whole grains to China's 1.3 billion citizens – a major change in a country long associated with white rice and noodles.

A dramatic rise in chronic disease provides some of the impetus behind Chinese policy efforts. The International Diabetes Federation estimates there are about 92.4 million diabetics in China, and the World Health Organization projects that China will lose \$557.7 billion of national income to diabetes and cardiovascular disease between 2005 and 2015. In mid-2010, the Chinese Nutrition Society organized a major national conference on whole grain nutrition and health, convening 300 health professionals and consumer advocates from across the country to spread the word about how whole grains can help reverse China's growing rates of obesity and diabetes.

According to *Industry Sourcing* magazine, a Kraft Foods survey carried out in late 2009 in Beijing, Shanghai and Guangzhou indicated that less than 10% of Chinese are in the habit of consuming whole grain foods regularly, although 85% of respondents understand whole grains are healthier. The major reasons stated for *not* buying whole grains include mistrust of market products (61%) and poor taste (34%). The survey also highlighted consumer confusion on how to identify whole grain products – a situation the Whole Grains Council hopes to help address, with the recent introduction of a Chinese version of the Whole Grain Stamp.

As in virtually all other countries around the world, white rice and other refined grains were once available only to the very richest citizens, while everyone else ate "coarse grains" – unprocessed barley, rice, millet, oats and wheat – like those now recommended in the Chinese Dietary Guidelines. Oldways, with its two decades of experience promoting traditional diets for better health, looks forward to partnering with Chinese health experts and policymakers as the country brings back some of the best of the ancient grains eaten for centuries in China.

Whole Grain Forum in Beijing, April 20-21, 2011

Oldways and the Whole Grains Council are partnering with the PNDC (Center for Public Nutrition and Development of China) and the Grains for Health Foundation to plan a Whole Grain Forum in Beijing during the 3rd International Nutrition and Health Industry Expo.

American companies that are interested in exporting whole grain ingredients to China to help meet demand created by China's new policies are invited to exhibit at the Expo and attend the Whole Grain Forum.

For full information, visit the Grains for Health Foundation website at: http://www.grainsforhealth.org/main/Community/Events/April2011WholeGrainForuminBeijingChina/tabid/142/Default.aspx