

Communication and Regulatory Issues

An overview for Whole Grain Summit participants

Can we agree on global definitions for whole grain ingredients and foods – and on harmonization of global and local definitions?

Definitions exist for whole grain (WG) as raw material (RM) and for WG products.

Definitions for WG as a raw material generally agree on the basic principle:

“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 endo-sperm, germ and bran, are present in the same relative proportions as they exist in the intact kernel”

A debated issue is recombination of endosperm, bran and germ (being separated in current milling processes): by flour millers only? or also by producers of end products, as allowed in many countries?

Definitions of WG foods vary widely between countries; e.g. in the UK all the flour in WG bread should be whole and in Northern Europe only > 50%. > 50% was chosen to gain higher acceptability of WG products and to raise total WG intake. Due to the widening range of WG products a need was felt for a generic definition, setting a minimum WG level for calling a product a WG product. It also was felt that possibly 2 levels – “a WG product” and a lower one “product with some whole grain” – or 3 levels may be better for indicating the WG amount or proportion. The table below shows some recent proposals.

	Definition of a whole grain food	Remarks
AACC International(2013)	A food providing ≥ 8g WG per 30g (27g/100g) (AACCI: this is a characterization, not a definition)	Higher moisture foods ‘discriminated’ Includes foods with more refined grains than WG
Healthgrain Forum (2017)	Product: ≥ 30% WG ingredients on dry-weight basis , and more WG than refined-grain ingredients.	(local) criteria for ‘healthy foods are included Labelling of % WG strongly recommended
Whole Grains Council (2017)	Three levels: 1: 100% WG Foods (all grain:whole) 2: More WG than Refined Grain 3: Foods with significant amount of WG (but < nr.2)	Applied in practice by using the WG Stamp logo

For linking local and global definitions one may consider the two approaches applied in Europe: EU-wide Regulations have to be adopted without modification by all member states, whereas EU Directives define the minimum requirements, with options for member states to apply stricter conditions. For more information on WG definition issues, visit https://www.healthgrain.org/activities/whole_grain

What are the best practices and tools for whole grain promotion Can we adapt these to work in different countries?

Characteristics of successful interventions include multiple stake-holder involvement, specified target intakes in dietary guidelines, manufacturer codes of practice, product reformulation, evidence-based educational resources, social media and community events with tasting and preparation opportunities. Empowerment of food service providers was also linked to success.

How can we share best practices and learn from each other, to get the best possible results of new actions? Do we need a best practices and/or scientific database? And what about a toolbox?

In the whole grains area, (almost) all actions and interventions are executed at the national level.

For the **International Year of Pulses** (2016) a successful global campaign was launched in 2015, with a **Public Website** www.pulses.org in English - with a consistent message to the public around the globe, with links to websites in other languages and a **Resource website** www.2016iyp.org for professionals.

Strategies for Getting Whole Grains on the Plate out of Home

Eating out-of-home is increasing, both in institutional settings (schools, hospitals, etc.) and in restaurants. Successful strategies for getting whole grains on the plate include:

- Mandating whole grains in school meals (as done in US, Bolivia, Korea, Japan, etc.)
- Connecting with local and regional WG traditions
- Leveraging ‘taste and quality’ trends (ancient grains; locally grown; gourmet toast,..)
- Cooperating with suppliers for creating WG product (in Singapore the Health Promotion Board worked with a noodle producer for supplying (partly) WG noodles to stalls, canteens etc.)

Strategies can focus on “Loud and Proud” (good for health-conscious consumers) or on “Stealth Health” that may work in institutional settings where customers don’t always have a choice. An important issue is how suppliers can be encouraged to make it easier for caterers and chefs to include whole grain items. For more information – see <https://wholegrainscouncil.org/presentations-2016-whole-grains-away-home-conference>

How can industry, government, and health groups work together to create win-win partnerships, locally and globally?

To realize growth in whole grain consumption, experience over the past decade shows that cooperation of as many stakeholders as possible is essential as well, by forming partnerships that continue for many years. Two types of partnerships have shown potential to increase whole grain momentum:

- **Public Private Partnerships (PPPs)**, supported by government, industry and other stakeholders, are the broadest collaborations (Examples: Danish WG Partnership; Healthier Hawker Programme, Singapore).
- **Non-Profit Private Partnerships (NPPs)**, these can also be effective, especially when indirect government support exists, such as quantitative whole grain dietary recommendations and whole grain health claims. (Examples: Oldways Whole Grains Council, USA based), Grains & Legumes Nutrition Council, Australia).

Creating and continuing successful win-win partnerships requires active, ‘positive’ involvement of all stakeholders, taking into account their own needs and those of the other partners. As recently shown for pulses, the global initiative triggered and stimulated national and local initiatives – a key question is whether and how this can work in the WG area.

Facts vs. Emotion: What works for counteracting fake news and negative messages?

Social media are a major source of negative messages about grains “Grains are not only nutritionally unnecessary, but even harmful, packed with toxic antinutrients and inflammatory proteins like gluten. They’re also problematic for their high carbohydrate content,... Three antinutrients – lectins, saponins, and protease inhibitors –will stop you from eating seeds.” <https://paleoleap.com/pseudograins-non-gluten-grains/>

Publications in peer-reviewed journals may also contribute, for instance with

- Poorly designed studies heavily covered in media channels. Example: the recent (20 persons, 1 wk) study, Korem et al. [http://www.cell.com/cell-metabolism/fulltext/S1550-4131\(17\)30288-7](http://www.cell.com/cell-metabolism/fulltext/S1550-4131(17)30288-7). covered in the media as “white bread as healthy as wholegrain bread”
- Prestigious public health experts seeing (ultra-)processed foods as key factor for obesity, including all products (including breads and grain based) with > 5 ingredients and neglecting nutrient composition. Example: Monteiro CA et al. Public Health Nutr. 2017 Jul 17:1-9.

Headlines that sensationalize/exaggerate effects of even well-designed studies may contribute to distrust in nutrition science. Example: a small positive effect of WG vs. refined grains (Karl JP et al, <https://www.ncbi.nlm.nih.gov/pubmed/28179223> was reported (Daily Mail Feb. 9, ‘17) as “Swapping white rice for its brown alternative (....) is the equivalent of a 30 minute brisk walk”

When and how do we respond to this wide array of fake news and other incorrect messages?

- Should the personal, emotional approach used for spreading fake news in social media also be used for counteracting false messages – and how to combine this with scientific correctness? As example, see at [http://www.cell.com/cell-metabolism/comments/S1550-4131\(17\)30288-7](http://www.cell.com/cell-metabolism/comments/S1550-4131(17)30288-7) how scientific and more personal critical remarks were provided to the article of Korem et al.
- How can we assess and measure the effectiveness of responses, and can we learn from experiences?

And: **How do we create emotional stories about the benefits of eating the right balance of whole grains?** Moving from the facts to things that emotionally matter to consumers and target audiences?

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