



Advancing grain science worldwide

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Dear Ms. Lee:

Members of the AACC International Task Force on Defining Whole Grains in Food are responding to a request for comments on labelling claims for grains. The Task Force, chaired by Julie Miller Jones from the College of St. Catherine, is comprised of academics, industry, non-profit, and government participants trying to arrive at the best possible labelling, research and communication agendas on the whole grain issue. Furthermore, the work of the Task Force is strengthened by smaller expert task forces convened to deal with issues specific to processing of traditional whole grain foods barley, bulgur, and liming of corn (nixtimalization).

AACC International (formerly the American Association of Cereal Chemists) is the premier worldwide organization for advancing grain science and technology by creating, interpreting, and disseminating cereal information and providing personal and professional development opportunities for its members. Worldwide membership in AACC International includes over 3500 scientists representing industry, academia, and government. Canada has participated in the organization since its beginnings. It is a well-represented part of the North American contingent. The president of the organization 3 years ago hailed from the Canadian Grain Commission.

First, the AACC International Task Force on Defining Whole Grains wishes to state that we are fully in support of labelling that will

- (1) Encourage increased consumption of whole grains as recommended by the latest update in Canada's Food Guide, which asks Canadians to "make at least half of your grain products whole grain each day."
- (2) Give the consumer greater clarity in the marketplace in order to select whole grain containing foods;
- (3) Support and encourage foods made with a blend of whole and enriched grains, but that contribute dietarily significant whole grain content – in addition to foods that are entirely or almost entirely manufactured with whole grains.

We are pleased that the definition of whole grain used in the guidance is the one provided by AACC International's past deliberations. We agree that cereal grains meeting these properties will always be whole grains so long as they provide bran, germ and endosperm in the same relative proportion as is found in the intact grain.

We have the following comments in response to the "Position Paper on Five US Health Claims Considered for Use in Canada" posted on the Health Canada website.

First, we would like to comment on the definition of a grain in section A.3. We would recommend that section A.3 be labeled 'Definition of a Cereal Grain'. We agree with your listing of cereals and pseudocereals and recognize your reference as being the authoritative source. We trust these may prove useful in your deliberations.

"We also would like to go on record with the following definition of cereals and pseudocereals. Cereals are generally considered to be the seed heads of grasses from the Poaceae (synonymous with Gramineous) family. Pseudocereals are seed heads of a number of different species of plants that do not belong to the grass family and do not include legumes or oilseeds. The Task Force decided that the pseudocereals should be included with the cereals because the grain heads of pseudocereals are used in the same traditional ways that cereals are used, such as in the making of bread, starch staples and side dishes. In addition, the overall macronutrient composition (proportions of carbohydrate, protein and fat) of cereals and pseudocereals is similar.

True Cereals	Scientific name
Wheat including spelt, emmer, farro, einkorn, kamut, durum	<i>Triticum spp.</i>
Rice, African rice	<i>Oryza spp.</i>
Barley	<i>Hordeum spp.</i>
Corn (Maize, Popcorn)	<i>Zea mays</i>
Rye	<i>Secale cereale spp.</i>
Oats	<i>Avena spp.</i>
Millets	<i>Brachiaria spp.; Pennisetum spp.; Panicum spp.; Setaria spp.; Paspalum spp.; Eleusine spp.; Echinochloa spp.</i>
Sorghum	<i>Sorghum spp.</i>
Teff (tef)	<i>Eragrostis spp.</i>
Triticale	<i>Triticale</i>
Canary Seed	<i>Phalaris arundinacea</i>
Job's Tears	<i>Coix lachrymal-job</i>
Fonio, Black Fonio, Asian Millet	<i>Digitaria spp.</i>
Wild rice	<i>Zizania aquatica</i>
Pseudocereals	Scientific name
Amaranth	<i>Amaranthus caudatus</i>
Buckwheat, Tartar Buckwheat	<i>Fagopyrum spp</i>
Quinoa	<i>Chenopodium quinoa Willd - is generally considered to be a single species within the Chenopodiaceae</i>

Our list was compiled using some of the same references you listed in A.3, but it contains a few unusual cereals not listed in A.3.

Second, we also agree that legumes, nuts, seeds, and roots, such as soybeans and lentils, are not cereal grains or pseudocereal grains and therefore cannot be labeled as whole grains. While we recognize their significant nutritional qualities, there are significant differences in the overall macronutrient composition between cereal grains and these other materials. For example, legumes contribute more protein. The amino acid profiles are quite different. Cereals are limited in lysine, while legumes and oilseeds provide adequate lysine but are limited in methionine and sulfur amino acids. Nuts, seeds and oilseeds also contribute more fat than cereal grains.

We would also like to comment on A.4 'Claims for Whole Grains'

We recognize that manufacturers have considerable interest in claiming the presence of whole grains in foods and that consumers have a strong need to be able to identify legitimate whole grain foods. We also share the concern that some labelling claims could either confuse or mislead the consumer, so we applaud efforts that help prevent this.

To that end we do have concern about percent labelling as being potentially misleading. Consumers generally have difficulty using percents to know how much grain they should have in a day. Some consumers may logically, but erroneously, conclude that if they eat two products touting 25% whole grain and one product with 50% whole grain that they have reached 100% and have met their daily whole grain need.

Furthermore, we think consumers would also be confused to find a bread made totally with whole grain flour labeled as "66% whole grain," as in the example on the Health Canada website. To the consumer's mind, this bread, in which all the grain is whole grain, would be 100% whole grain. The only use of percentages that we support is in stating "100% whole grain" on foods where all the grain ingredients are whole grain.

In all cases, including with the use of "100% whole grain," we support gram labelling of the total amount of whole grain in a serving of food. This should be a single statement, not broken down into separate grain components: "12g whole grain" not "7g whole wheat and 5g whole oats." Of course, the individual whole grains would be listed in the ingredient statement according to law. We think that there is good rationale for this as whole grains were considered in the aggregate in the epidemiological studies which have documented the health benefits associated with eating of whole grains.

Accompanying the gram statement we recommend wording stating a recommended amount of grain needed in a day. For example, "one slice of XYZ bread provides 8 grams of whole grain. Health Canada recommends that consumers eat xx grams per day."

Although we support the use of the term "100% whole grain" for foods in which all of the grain is whole grain, we feel strongly that this term is best used only on foods that contribute a significant amount of whole grain. (Special rules may need to be crafted for important contributors of whole grains that are light in weight and have small reference amounts, such as rye crisp bread.)

The AACC International Whole Grains Task Force looks forward to providing comments to the Agency as it moves through the stages to Gazette 1 and Gazette 2 and hopes that these comments will be useful to you and the industry and ultimately to Canadian consumers.

Best Regards,



Rob Hamer, Ph.D.
President, AACC International