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Gabriel Lopez
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Dear Gabriel Lopez,

Members of the AACC International Task Force on Defining Whole Grains in Food are responding to a notice from the Kansas City Commodity Office (KCCO), Domestic Procurement Division regarding 'Whole Grain Pasta for use in USDA's Domestic Programs.'

The Task Force is comprised of academics, industry, non-profit, and government participants trying to arrive at the best possible labeling, 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 such as 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.

First, the AACC International Task Force on Defining Whole Grains emphatically encourages the use of whole grain products in many venues and applauds the effort to put these foods into USDA domestic programs. Allowing whole grains in these food programs will enable increased consumption of whole grains for better health as indicated in the Dietary Guidelines for Americans. In previous letters to government agencies, we have consistently gone on record supporting and encouraging foods made with a blend of whole and enriched grains that contribute dietarily significant whole grain content – not just foods that are entirely or almost entirely manufactured with whole grains.

Which whole grains should be included?

We believe that the list of grains that might be used to make whole grain pasta needs to include all possible whole grains. While we are aware that whole grain durum wheat is a likely candidate for the making of pastas, other grains may be used either for specific flavor, texture and acceptability attributes.

Other grains might also be used when trying to produce pasta suitable for those with gluten intolerance or certain allergies. Gluten intolerance, or celiac disease, has world-

wide health implications for those who cannot tolerate the gluten found in wheat, barley, rye, triticale and oats, which have been grown in fields or processed in plants where the offending grains have been. Several food companies are using other whole grains, such as amaranth, brown rice, sorghum, and buckwheat, to produce gluten-free whole grain pastas to meet the demand for a healthier food product that can be enjoyed by everyone, including people suffering from this debilitating disease.

The Whole Grains Task Force has compiled a comprehensive list, included below, of cereals and pseudocereals that, when consumed in whole form (including the bran, germ and endosperm), are considered whole grains. Scientific consensus may add other grains to this list in the future.

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>

How much whole grain content should be required?

The Task Force supports allowing products bearing the FDA whole grain health claim or those where the ingredient statement on the label of the product indicates that a whole grain is the primary ingredient by weight. However, we find that allowing *only* these products may not be enough to increase whole grain consumption. We support the use of transition products where the ingredient statement shows some whole grain ingredient(s) in order to increase the available whole grain on the market.

We would recommend that there be a specification for a minimum of 8g whole grain per serving, even if this level is below 51% of the grain or weight. When this standard is applied to foods with smaller serving sizes, or to mixed meals and foods like soups, even lower minimums may be necessary.

This Task Force supports the use of 48g as a recommended minimum daily intake of whole grains. Recent studies (available upon request) consistently indicate consuming the equivalent of 3 servings (median 42.7-43.8g or mean 49.6g) of whole grain per day is nutritionally significant to reduce chronic diseases in certain populations. Consuming a minimum of 48g of whole grains per day will not only help consumers meet the Dietary Guidelines' recommendations, but will also provide important health-promoting dietary components including fiber, vitamins, minerals, and other phytonutrients. We also support incorporating this daily intake recommendation into labeling of whole grains. We recommend that, if a product label states "xx grams of whole grains" as suggested in the FDA's Draft Guidance, that the phrase "at least 48 grams are recommended daily" should be included to provide context.

Finally, we suggest that a variety of colors be allowed. Rather than specify "a medium tan to light brown color," we recommend "a color appropriate to the original ingredients."

In closing, we once again applaud USDA for recognizing the importance of increasing whole grain consumption for better health and making these changes in its specifications for pasta and other grain products. These changes will help Americans meet the recommendations of the 2005 Dietary Guidelines and Healthy People 2010 'to make half your grains whole.' Especially for those who benefit from USDA programs – many of whom are at risk – the inclusion of whole grains along with increased emphasis on fruits and vegetables and reduction in fat can be important measures for improving public health. We support your efforts and urge you to implement recommendations that enable *more* people to eat and enjoy *more* whole grains.

Best Regards,



Rob Hamer, Ph.D.
President, AACCC International