Dear Ms. Daniels:

The AACC International's Task Force on Defining Whole Grains in Food is writing in response to and in support of the proposal of USDA/FNS Docket ID 0584-AD77, WIC Food Packages Rule to add Whole Grains to WIC Foods. 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 Intl. includes over 3500 scientists representing industry, academia, and government.

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 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 barley, bulgur, and liming corn (nixtamalization).

Our Task Force supports the USDA/FNS proposal to increase fruit and vegetable consumption and to provide whole grains through the WIC program. While we are pleased about both efforts, we at AACC International feel well-positioned to comment on the portion of the proposal dealing with grains and grain-based foods. Many researchers including a number who are members of AACC Intl. have done key research identifying the benefits of whole grains, working to understand the mechanisms and promoting greater consumption of these products. We are excited about these many benefits and their potential to make an important contribution to the diet. We are pleased that USDA also finds the data compelling and deserving of consideration in dietary guidance and in important government feeding programs such as WIC.

We would like to take this opportunity to comment on various specific aspects of the proposal.

1. **What foods should meet the requirements of the whole grain recommendations?**

   We would like a broader definition of qualifying foods than the one proposed in the WIC Food Package Rule. The WIC proposal defines whole grain foods as those qualifying for the whole grains health claim and containing at least 51% whole grain by total weight and 1.7g of dietary fiber per 30g serving. The AACC Intl. Task Force on Whole Grains feels that this may be too restrictive and may not help consumers and WIC clients reach the goal of increased whole grain consumption. We propose that the rule read "included foods must contain a minimum 8g of whole grain per labeled serving" for the following reasons:
A. We believe that 8g of whole grain per labeled serving constitutes a dietarily significant amount of whole grain and therefore the members of the Task Force suggest it as the minimum level. Further reasons for supporting this level include:

- USDA/FSIS has established an 8g minimum, and consistency between government agencies is important.

Recent British research supports the fact that consumers often get the bulk of their whole grains from partially-whole-grain foods and that the summative approach should not be discounted. There is a need for consumers who never choose whole grain products to move to whole grain products in a gradual way, not unlike the transition that has occurred from whole milk to skim milk. Transitional whole grain foods help consumers move towards accepting more whole grain products, a strategy suggested in the Dietary Guidelines Advisory Report. The same strategy is reflected in the WIC proposal.

B. There are two main reasons why we do not support restricting whole grain foods only to those that contain at least 51% whole grain by weight and that provide at least 1.7g of dietary fiber per each 30g:

- Basing the percent of whole grain on total weight penalizes higher moisture grain-based foods such as bread. Bread has 38% of its weight as water, leaving only 11% for yeast, salt or ingredients that might improve the acceptability of a whole-grain bread, such as vital wheat gluten, raisins or nuts etc.

- Using the 1.7 g/ serving fiber standard is problematic for grains that naturally have a fiber content substantially lower than wheat such as brown rice. Under the current regulations, 100% brown rice fails to meet the fiber level for the FDA Health Claim. This needs to be rectified in FDA regulations and should not be followed in USDA regulations. The chart below illustrates this problem.

### Dietary Fiber in Various Grains

<table>
<thead>
<tr>
<th>Amount</th>
<th>Brown Rice</th>
<th>Whole Grain Corn Meal</th>
<th>Whole Oats</th>
<th>Whole Grain Wheat</th>
<th>Hulless Barley</th>
</tr>
</thead>
<tbody>
<tr>
<td>100g</td>
<td>1.8g</td>
<td>7.3g</td>
<td>10.3g</td>
<td>12.2g</td>
<td>17.3</td>
</tr>
<tr>
<td>55g</td>
<td>0.99g</td>
<td>3.65g</td>
<td>5.67g</td>
<td>6.71g</td>
<td>9.52</td>
</tr>
<tr>
<td>30g</td>
<td>0.54g</td>
<td>2.19g</td>
<td>3.09g</td>
<td>3.66g</td>
<td>5.19</td>
</tr>
</tbody>
</table>

Thus it would take only 9.8 grams of barley per serving to reach 1.7 grams of dietary fiber, but it would take 48.6 grams of brown rice.

In addition it is important to point out that fiber is just one of many components of a whole grain, and it is important to understand that the benefit of consuming whole grains goes beyond dietary fiber.

2. **Which foods should be allowed?**

The WIC proposal provides allowances for cereal (hot or cold) plus bread or bread alternatives. Bread alternatives cited in the proposal are brown rice, barley, bulgur and soft corn or wheat tortillas. Our Task Force agrees that more choices should be included, to appeal to all ethnic types and to address gluten intolerance. Therefore we suggest the following also be included as acceptable sources of whole grain:

A. **Include whole grain pasta**, as pasta is widely enjoyed and whole grain pasta is increasingly available.
B. **Include whole forms of all grains, alone or in combination**, which meet the minimum amounts. Allowed grains would include all cereal grains, members of the *Poaceae* (or Gramineous) family as listed in the comments we filed to FDA earlier this year. To iterate, these include wheat and bulgur wheat, including spelt, emmer, faro, einkorn, kamut and durum; rice; barley; corn (including popcorn); rye; oats; millet; sorghum; teff; triticale; and wild rice. We also think that whole forms of pseudocereals which have similar uses and nutritional benefits as whole cereal grains also be allowed. These include buckwheat, amaranth, and quinoa. The inclusion of all these grains is important, as some cultures favor some of the lesser-known grains. For example, some from Asia use buckwheat (or soba) noodles, some from east Africa use teff to make traditional bread, and some Native Americans might choose wild rice.

C. **Include all soft (not fried) "whole grain" tortillas** instead of just whole wheat and corn. We are concerned that WIC proposes allowing tortillas only if they are made with no added fats. While corn has sufficient inherent oil to meet this standard, wheat tortillas and multigrain tortillas need added fats to make a product that is edible. Fat is important both in processing (dough flow/mobility) and for storage stability (helps with rollability and minimizes cracking). We are not advocating the use of excess fats especially saturated and trans fats, but recognize the importance and need for some fats in these products. The net result will be a wider choice of tortillas for the WIC population and potentially more WIC clients choosing more whole grain products.

3. **What amounts should be included in the WIC food packages? Are amounts specified available in supermarkets?**
   Amounts specified should be logical and should be consistent with size units normally sold in supermarkets.
   A. We concur with the recommendation of 36 oz. of cereal for both women and children. This amount supports the Dietary Guidelines, and can be easily achieved given the wide variety of net weights in cereals eligible for the WIC program.
   B. We do, however, advocate that the WIC proposal allow the same amounts of bread for women as for children, rather than offer less bread to adults, as proposed. Bread was virtually the only food to be listed at a lower amount for women than for children – although women need more servings of everything, especially when they are pregnant or nursing. We further recommend that this amount be two loaves, not to exceed 24 oz. each. Almost all bread is now sold in 24-oz packages, so specifying this food in 16-oz units will not create a viable option.

In closing, we once again applaud USDA / FNS for recognizing the importance of increasing whole grain consumption for better health and making these changes in the WIC proposal. These changes will help Americans meet the recommendations of the 2005 Dietary Guidelines and Healthy People 2010 ‘to make half your grains whole.’ For the WIC population especially, the inclusion of whole grains along with increased emphasis on fruits and vegetables and reduction in fat can be are important measures for improving public health. We support your efforts. In closing, we urge you to implement recommendations that enable more people to include healthy whole grains in the diet with the result that more people eat and enjoy more whole grains.

Best Regards,

Rob Hamer, Ph.D.
President, AACC International