



**Current Requirement:** Under the current USDA meal pattern, whole grains are encouraged but are not required to be a part of meals or snacks in CACFP.

**USDA’s Proposed Rule:** USDA proposes that regardless of the number of meals and snacks served, only one daily serving of grains must be whole grain or whole grain-rich (at least 50% whole grain by weight). A best practice is to provide at least 2 whole grain or whole grain-rich servings per day.<sup>1</sup>

**Our Recommendation:** As recommended by the IOM Committee on CACFP<sup>2</sup>, considering all the meals and snacks served in a day, at least half of all grains should be whole grain or whole grain-rich.<sup>3</sup> Providers are encouraged to gradually increase the proportion of grains that are whole to well above half of grains and to include 100% whole grain foods often at meals and snack-times.

**Rationale:** Grains can be made from enriched or fortified or whole grain. When grains are processed or refined, most of the bran and some of the germ are removed, eliminating most of the beneficial parts of the grain. Although most refined grains are enriched with selected vitamins and minerals, most manufacturers do not add back in the bran components that make a whole grain product. Consuming a diet rich in whole grains can increase intake of dietary fiber and nutrients,<sup>4,5</sup> possibly help with weight maintenance,<sup>6,7,8,9</sup> help manage cholesterol levels,<sup>10</sup> and reduce the risk of several chronic diseases.<sup>11,12</sup> In young children 2-5 years old, a higher whole grain intake has been associated with improved dietary quality overall, including lower intakes of fat and added sugar.<sup>3</sup>

The 2010 Dietary Guidelines for Americans recommends that children consume at least half of their daily grain intake as whole grains,<sup>13</sup> yet most children eat less than one serving of whole grain products daily.<sup>3</sup> Lower-income individuals consume fewer whole-grain foods than higher-income individuals.<sup>14</sup> On average, Americans consume <10% of their grains as whole grains.<sup>5</sup>

Consumers don’t eat enough whole grains for a variety of reasons: they don’t know the health benefits of whole grains, they have difficulty identifying whole-grain products, some whole-grain products are more expensive, preparation of whole-grain foods may take more time, people may not know how to prepare whole grains, and whole-grain products may seem less palatable.<sup>7,15,16</sup> To overcome these barriers, it is recommended that sponsors and providers receive training on the health benefits of whole grains, how to identify whole grains, where to find relatively low-cost whole grains, how to include whole grains in meals and snacks, and how to prepare whole grains in ways that are appealing to children.

<sup>1</sup> USDA FNS Proposed Rules. Child and Adults Care Food Program: Meal pattern Revisions Related to the Healthy, Hunger-Free Kids Act of 2010. January 15, 2015. <http://www.gpo.gov/fdsys/pkg/FR-2015-01-15/pdf/2015-00446.pdf>. Accessed 1/16/15.

<sup>2</sup> Murphy SP, Yaktine AL, Sutor CW, Moats S, Editors; Committee to Review Child and Adult Care Food Program Meal Requirements; Institute of Medicine. Child and Adult Care Food Program: Aligning dietary guidance for all. Washington, DC: The National Academies Press. 2011.

<sup>3</sup> A serving of a whole grain-rich food must meet at least one of the following two specifications: 1) The product includes FDA-approved whole grain health claim on its packaging; 2) product ingredient listing lists whole grain first. (Refer to ref 1 for additional details).

<sup>4</sup> O’Neil CE, Nicklas TA, Zhanovec M, et al. Consumption of whole grains is associated with improved diet quality and nutrient intake in children and adolescents: the National Health and Nutrition Examination Survey 1999-2004. *Public Health Nutr.* 2011;14:347-55.

<sup>5</sup> Reicks M, Jonnalagadda S, Albertson AM, Joshi N. Total dietary fiber intakes in the US population are related to whole grain consumption: results from the National Health and Nutrition Examination Survey 2009-2010. *Nutr Res.* 2014;34:226-34.

<sup>6</sup> Harland JI, Garton LE. Whole-grain intake as a marker of healthy body weight and adiposity. *Public Health Nutr.* 2008;11:554-63.

<sup>7</sup> Harrold J, Breslin L, Walsh J, et al. Satiety effects of a whole-grain fibre composite ingredient: reduced food intake and appetite ratings. *Food Funct.* 2014;5:2574-81.

<sup>8</sup> Choumenkovitch SF, McKeown NM, Tovar A, et al. Whole grain consumption is inversely associated with BMI Z-score in rural school-aged children. *Public Health Nutr.* 2013;16:212-8.

<sup>9</sup> Thielecke F, Jonnalagadda SS. Can whole grain help in weight management? *J Clin Gastroenterol.* 2014;48(Suppl1):S70-7.

<sup>10</sup> Wang H, Lichtenstein AH, Lamon-Fava S, Jacques PF. Association between statin use and serum cholesterol concentrations is modified by whole-grain consumption: NHANES 2003-2006. *Am J Clin Nutr.* 2014;100:1149-57.

<sup>11</sup> Slavin JL, Jacobs D, Marquart L, et al. The role of whole grains in disease prevention. *J Am Diet Assoc.* 2001;101:780-5.

<sup>12</sup> Williams PG. The benefits of breakfast cereal consumption: a systematic review of the evidence base. *Adv Nutr.* 2014;5:636S-73S.

<sup>13</sup> Report of the Dietary Guidelines Advisory Committee on the Dietary Guidelines for Americans. USDA. 2010.

<sup>14</sup> Kantor L, Variyam J, Allshouse J, et al. Choose a variety of grains daily, especially whole grains: a challenge for consumers. *J Nutr.* 2001;131:473S-86S.

<sup>15</sup> Adams J, Engstrom A. Helping consumers achieve recommended intakes of whole grain foods. *J Am Coll Nutr.* 2000;19:339S-44S.

<sup>16</sup> Nicklas TA, Jahns L, Bogle ML, et al. Barriers and facilitators for consumer adherence to the dietary guidelines for Americans: the HEALTH study. *J Acad Nutr Diet.* 2013;113:1317-31.