



# CLOSING NUTRITION DISPARITIES: BOOSTING WHOLE GRAIN INTAKE TO STRENGTHEN HEALTH EQUITY

## NWA RECOMMENDS:

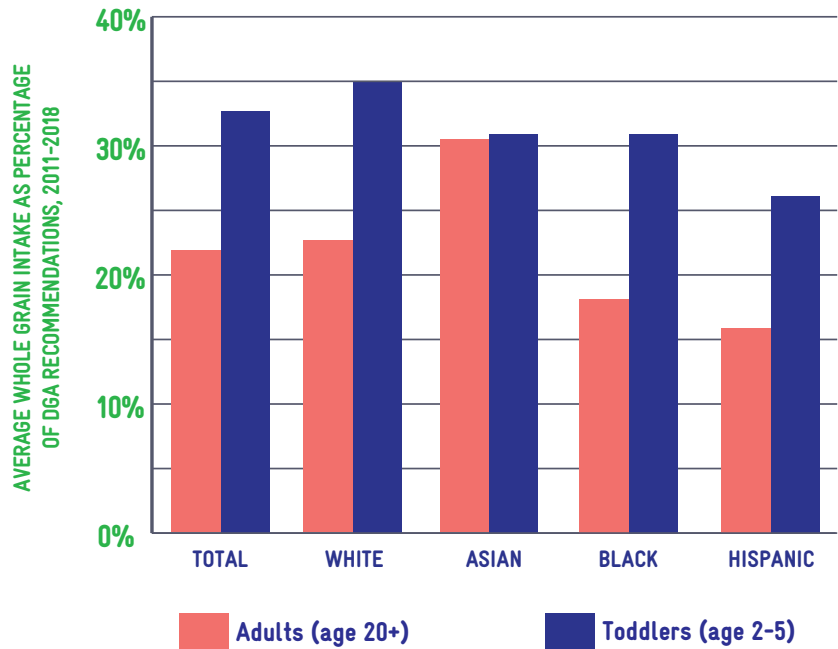
USDA should advance science-based recommendations to improve whole grain intake by requiring all WIC-approved breakfast cereals meet the whole grain-rich standard.

In July 2022, the U.S. Department of Agriculture (USDA) took action to review the food packages issued by the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). As USDA advances the rulemaking process, comprehensive science-based recommendations can serve as the blueprint for leveraging WIC's targeted healthy food benefit to deliver priority nutrients to over 6 million nutritionally at-risk pregnant and postpartum women, infants, and young children.

In 2017, the National Academies of Sciences, Engineering, and Medicine (NASEM) issued a 1,000 page report that reviewed the WIC food packages and promoted further alignment with the Dietary Guidelines for Americans (DGAs).<sup>2</sup> As part of its overarching strategy to promote priority nutrient intake, NASEM urged USDA to adopt the whole grain-rich standard for breakfast cereals and require that all WIC-approved cereals meet this standard, which is also used in school meals programs and the Child and Adult Care Food Program (CACFP).<sup>3</sup>

The National WIC Association urges USDA and all stakeholders to adhere to science-based recommendations from the NASEM report - including the cereal recommendation - to best strengthen the nutrient intake for WIC's target population.

## WHOLE GRAIN INTAKE IS BELOW DGA-RECOMMENDED LEVELS ACROSS ALL RACIAL/ETHNIC GROUPS<sup>1</sup>



## CLOSING INTAKE DISPARITIES

Changes to the WIC food package in 2009 strengthened whole grain standards and introduced other whole grains.<sup>4</sup> Increased whole grain options doubled the associated effect of WIC participation on whole grain product purchases<sup>5</sup> and resulted in a 17 percent increase in whole grain consumption among WIC families.<sup>6</sup> Despite these gains, 100 percent of adults and 93 percent of children in the United States continue to fall short of DGA-recommended intake of whole grains,<sup>7</sup> with children instead exceeding recommended refined grain intake.<sup>8</sup> Hispanic families face the greatest intake disparities, with the average Hispanic toddler consuming only 26 percent of recommended whole grain intake.<sup>9</sup>

The DGAs and NASEM review of WIC food packages both prioritized whole grain consumption as a key strategy to address chronic conditions like obesity, diabetes, and hypertension that drive federal healthcare costs.<sup>10</sup> NASEM, recognizing the finite funding available for the WIC benefit, sought to enhance nutrient delivery by adopting whole grain-rich, which requires 50 percent of grains in a cereal to be whole grain.<sup>11</sup> This standard packs key nutrients in the same product, such as iron, folate, and other nutrients in whole grains - delivering a better investment.<sup>12</sup> By shifting to the whole grain-rich standard, which is already employed in school meals and CACFP, NASEM sought to encourage continuity between child nutrition programs and build on industry innovations in the school meals programs by bringing newer, healthier products to retail grocery shelves.<sup>13</sup>

## STATE WIC EFFORTS TO BOOST WHOLE GRAIN INTAKE

As part of implementing the 2009 food package revisions, Oklahoma and nine Indian Tribal Organizations adopted a standard analogous to the whole grain-rich standard. These agencies provide diverse food packages, including corn, rice, wheat, oat, and multigrain cereals that all comply with whole grain-rich.<sup>14</sup>

The National WIC Association compiled redemption data from 2019 through mid-2022 from a sample of ten geographic State WIC Agencies that represents 21.9 percent of WIC's total caseload. Over this time period, Oklahoma registered slightly lower redemption rates for cereal - 43.7 percent, compared to an average of 50.9 percent across the ten-state sample. However, Oklahoma also registered lower rates in other, more popular food categories, including a 5 percent lower rate for eggs (64.6 percent, compared to 69.9 percent) and a 7 percent lower rate for fruits and vegetables (66.1 percent, compared to 73.5 percent).

As Hispanic families face the largest intake disparities for whole grains, it is a substantial public health success that Oklahoma records higher-than-average Hispanic cereal redemption rates. In a 14-month sample within Jan. 2019 and March 2022, Oklahoma recorded a 20.8 percent higher redemption rate for Hispanic participants (60.7 percent) compared to non-Hispanic participants (39.9 percent). This is a higher overall rate and more pronounced difference than in Arizona, a Hispanic-majority state that offers non-whole grain-rich options. Arizona only recorded an 8.8 percent gap between Hispanic (57.0 percent) and non-Hispanic participants (48.2 percent).

This data contributes to the growing evidence that families - including Hispanic families - welcome whole grain options for their children. Within a few years of implementing this standard, the Oklahoma State Department of Health recorded toddler intake of whole grains at rates well above the national average.<sup>15</sup> Adopting whole grain-rich would build on this state success to improve health outcomes for all young children in the United States.

## SETTING THE STAGE FOR A HEALTHIER FUTURE

Prioritizing healthy foods and closing intake disparities through WIC is especially critical as children form lifelong taste preferences.<sup>16</sup> With increased availability of whole grain-rich compliant cereals (including gluten-free options),<sup>17</sup> the shift in WIC's cereal standard will encourage all stakeholders to focus on healthier options for young children and complement the overall investments in WIC's food package revision - including boosted vegetables and fruits - to improve dietary quality and set the stage for healthier outcomes in America's next generation.

<sup>1</sup> See U.S. Department of Agriculture, Agricultural Research Service. Food Patterns Equivalents Database, 2011-2018 (last modified Jan. 6, 2021), <https://www.ars.usda.gov/northeast-area/beltsville-md-bhnrc/beltsville-human-nutrition-research-center/food-surveys-research-group/docs/fped-data-tables/>.

<sup>2</sup> National Academies of Sciences, Engineering, and Medicine (2017) Review of the WIC Food Packages: Improving Balance and Choice: Final Report. <https://s3.amazonaws.com/aws.upl/nwica.org/2017-nasem-report.pdf> ["2017 NASEM Report"].

<sup>3</sup> *Id.* at 305-307.

<sup>4</sup> See 7 C.F.R. §246.10(e).

<sup>5</sup> Oh M, Jensen HH, Rahkovsky I (2016) Did Revisions to the WIC Program Affect Household Expenditures on Whole Grains? Applied Economic Perspectives and Policy 38(4), <https://doi.org/10.1093/aep/ppw020>.

<sup>6</sup> Whaley SE, Ritchie LD, Spector P, Gomez J (2012) Revised WIC food package improves diets of WIC families. Journal of Nutrition Education and Behavior 44(3):204-209, <https://doi.org/10.1016/j.jneb.2011.09.011>.

<sup>7</sup> 2017 NASEM Report at 189, 193.

<sup>8</sup> See Agriculture Research Service, *supra* n.1.

<sup>9</sup> *Id.*

<sup>10</sup> See Aune D, et al (2016) Whole grain consumption and risk of cardiovascular disease, cancer, and all cause and cause specific mortality: systematic review and dose-response met-analysis of prospective studies. BMJ 353, <https://doi.org/10.1136/bmj.i2716>.

<sup>11</sup> 2017 NASEM Report at 305-307.

<sup>12</sup> See *id.*

<sup>13</sup> See *id.*

<sup>14</sup> See Oklahoma Department of Health, Fiscal Year 2022 Oklahoma WIC Food List (last updated Oct. 2021), <https://oklahoma.gov/content/dam/ok/en/health/health2/aem-documents/family-health/wic/foods/wic-approved-food-list-english.pdf>.

<sup>15</sup> Oklahoma State Department of Health (2018) Tots Brief: The Oklahoma Toddler Survey; Oklahoma Toddlers: Nutrition and Physical Activity 10(1), <https://oklahoma.gov/content/dam/ok/en/health/health2/documents/toddler-nutrition-and-physical-activity-march-2018-tots-brief.pdf>.

<sup>16</sup> See Birch LL (1999) Development of food preferences. Annual Review of Nutrition 19:41-62.

<sup>17</sup> 2017 NASEM Report at 307.

## HISPANIC WIC PARTICIPANTS WELCOME WHOLE GRAIN-RICH CEREAL OPTIONS

