



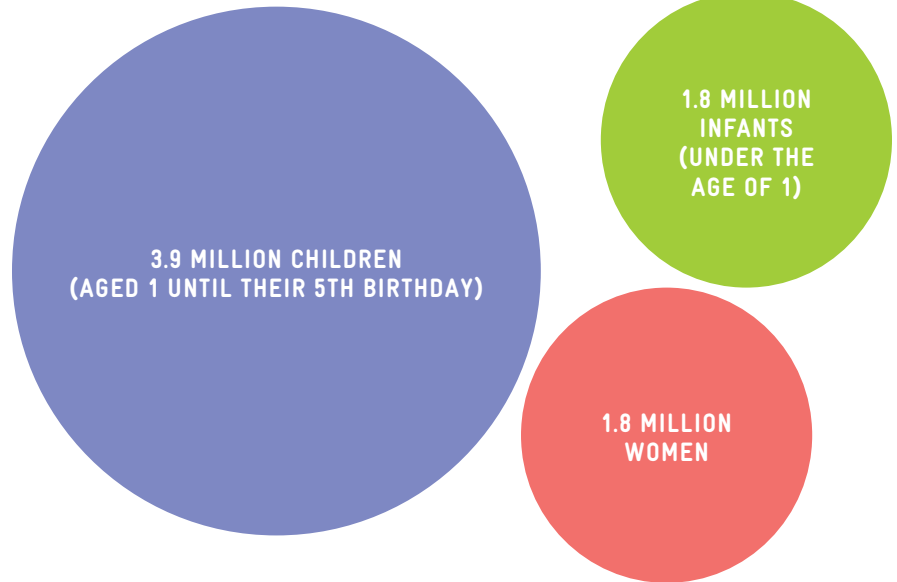
# CHILDREN IN WIC: OPPORTUNITIES FOR SUCCESS IN A CRITICAL TIME OF GROWTH AND DEVELOPMENT

## WHY THE 'C' IN WIC IS IMPORTANT:

THE GOALS OF CHILD PARTICIPATION IN THE SPECIAL SUPPLEMENTAL NUTRITION PROGRAM FOR WOMEN, INFANTS AND CHILDREN (WIC) ARE TO GUIDE CHILDREN ALONG A PATH TOWARD POSITIVE HEALTH OUTCOMES AND TO ENSURE THAT THEY ARE READY FOR KINDERGARTEN.

Children between the ages of one and five make up over 50% of all WIC participants.<sup>1</sup> WIC provides vital nutrition assistance and access to healthcare services to nearly 4 million children per month.<sup>2</sup> Children between the ages of one and five years old experience numerous developmental milestones, including: language skills, communications skills, physical growth and strength.<sup>3</sup> To ensure children reach these milestones, good nutrition is essential.

There is strong evidence that children born into poverty are less likely to eat a diet that will provide the necessary nutrition to support physical and cognitive development.<sup>4</sup> Additionally, children who experience poverty in their pre-school years are more likely to experience the long term impact of poverty throughout their life.<sup>5,6</sup> Decades of research demonstrates that WIC improves the nutrient intake of low-income children.<sup>7</sup> In doing so, WIC helps children buck the poor health trends often associated with growing-up in poverty. Essentially, WIC provides low-income children with support to live a healthful life.



## THE WIC FOOD PACKAGE SUPPORTS CHILD GROWTH AND DEVELOPMENT

The WIC Food Package for Children is based on scientific evidence of the nutrient needs of growing children<sup>8</sup> and helps prepare children for learning by providing essential nutrition at critical times of growth and development. Following recommendations from NWA and the National Academies of Sciences, Engineering and Medicine (NASEM), formerly the Institute of Medicine (IOM), the food package was revised in 2009 to include fresh fruits and vegetables and whole grains, among other healthy options. The WIC Food Package helps children consume more fruits and vegetables;<sup>9</sup> helps reduce iron deficiency anemia rates<sup>10,11</sup> and helps increase intakes of potassium

and fiber.<sup>12</sup> In addition, the WIC Food Package significantly increases the Healthy Eating Index scores for low-income households.<sup>13</sup>

A recent study that considered diet quality of children participating in WIC found that children living in households that received WIC benefits had higher quality diets than WIC eligible children whose households did not receive WIC benefits.<sup>14</sup>

The WIC food packages are reviewed every ten years. The last review concluded in January 2017. If implemented, the recommendations from the most recent review would further enhance the nutritional value of the food package for children by increasing the value of the fruit and vegetable Cash Value Voucher (CVV) for children and reducing the amount of juice.



## SAMPLE OF CURRENT FOOD PACKAGE FOR A CHILD FOR ONE MONTH:

3 gallons of milk

1 pound of cheese

1 dozen eggs

18 ounce jar of peanut butter,  
16 ounce dry beans/peas or  
cans beans/peas

2 bottles 64 ounce juice

2 pounds whole grains (breads,  
tortillas, brown rice or oat-  
meal)

\$8.00 fresh fruits and  
vegetables

From: [http://www.michigan.gov/mdch/0,4612,7-132-2942\\_4910\\_6329-12667-,00.html](http://www.michigan.gov/mdch/0,4612,7-132-2942_4910_6329-12667-,00.html).

## STARTING HEALTHY HABITS BEFORE STARTING SCHOOL

WIC nutrition education can put children on track for good future health. A 2004 study that examined the impact of WIC nutrition counseling to change the behavior of parents of preschool children demonstrated the feasibility of multidimensional WIC nutrition education as a powerful resource to promote positive behavior change.<sup>15</sup> WIC nutrition education has also been shown to increase consumption of fiber, lower-fat milk and fruit among WIC families.<sup>16</sup> WIC nutrition education provides an excellent opportunity to promote healthy behaviors that children engage with before they start kindergarten.

## OVERWEIGHT AND OBESITY AMONG CHILDREN

Research shows that children who are overweight or obese are more likely to be overweight or obese as teenagers and adults. A 2014 study published in the *New England Journal of Medicine* concluded that if a child starts kindergarten overweight, they are "four times as likely as normal-weight children to become obese."<sup>17</sup> People who are overweight or obese are at risk of developing a number of life-threatening diseases such as coronary heart disease, some types of cancers, type II diabetes and hypertension.<sup>18</sup>

The healthcare costs of obesity are significant. The Medicaid costs of a child being treated for obesity are estimated at \$6,730 annually, while the average healthcare costs for children covered by Medicaid is \$2,446.<sup>19</sup> It is, imperative that the importance of interventions for preschool-aged children is recognized and supported.

Overweight and obesity also have societal impacts. New research studies suggest that the obesity epidemic may pose a threat to both national security and our economy. A 2015 article which reviewed overweight and obesity trends among soldiers entering the US army between 1989 and 2012 warns that "the US Army is not immune to the US obesity epidemic."<sup>20</sup> This suggests a growing concern for the future fitness of our military. There is also growing evidence that obesity is affecting our economy. It is estimated that obesity-related absenteeism from the workplace costs \$4.3 billion annually.<sup>21</sup> And, there is an association between obesity and lower productivity in the work place.<sup>22</sup>

In light of the long-term negative effects of obesity, it is clear that

WIC services for children are more crucial than ever. A 2010 study in California, which looked at the impact of WIC on food and beverage intake, physical exercise and television watching, concluded that "the WIC setting is appropriate for improving healthful behaviors that are linked to reducing the rates of early childhood overweight."<sup>23</sup> According to another study, WIC may have contributed to the decline in obesity rates among preschool children in recent years.<sup>24</sup>

A recent study from the U.S. Centers for Disease Control and Prevention, found declines in severe obesity among children enrolled in WIC. Severe obesity is defined as a BMI-for-age 120% or more of the 95th percentile. The number of severely obese two to four year-olds enrolled in WIC increased to slightly more than two percent of all kids from 2000 to 2004, but then decreased over the next decade to slightly less than two percent.<sup>25</sup> The authors of this research paper suggest that the modest decrease in severe obesity may have been influenced by a number of factors, including differences in behavioral, genetic and environmental causes over the years, as well as the positive changes to the WIC food packages in 2009. Although obesity remains a pressing public health issue, this research highlights a positive trend that we hope continues for children participating in WIC.

## PREVENTIVE HEALTHCARE TO PROTECT CHILDREN

WIC helps low-income children access important healthcare services. WIC has been described as a "gateway" to primary and preventive health care, connecting families to resources such as pediatric care, dental care, and social services. The success of WIC as a "gateway" to other health services

is reflected in a study of children who participate in both WIC and Medicaid which found that the healthcare needs of these children are better met than low-income children not participating in WIC.<sup>26</sup>

## WIC AND PEDIATRIC DENTAL CARE

One highly important preventive health measure for children is dental care. Tooth decay is one of the most chronic childhood conditions.<sup>27</sup> While low family income is associated with fewer visits to the dentist,<sup>28</sup> fortunately, WIC can help fill this gap through its referral services. One study found that children who participated in WIC were more likely to have a dental visit and use preventive dental services and less likely to use emergency services for dental problems.<sup>29</sup> Results from the same study also indicated that children who participated in WIC for a full year were about 1.7 times more likely to have two or more dental visits per year than those children who never participated in WIC.<sup>30</sup> WIC children between ages one and two have lower dental-related Medicaid costs compared to children who do not participate in WIC.<sup>31</sup>

## WIC AND WELL-CHILD CARE

Another vital service provided by WIC is well-child visit referrals. A 2004 paper indicated that a mother's participation in WIC was associated with an increased probability of having at least four well-child visits since the birth of their child.<sup>32</sup> Well-child visits track growth and development and are an opportunity for parents and pediatricians to discuss the child's general wellness and health. One notable aspect of well-child visits is the administration of vaccines for common, preventable conditions. It is, therefore,

unsurprising that a recent study found that children participating in WIC have immunization rates similar to more affluent children and significantly higher than low-income children who never participated in WIC.<sup>33</sup> By creating a link to healthcare and social services, WIC is an essential program for low-income children in the United States.

It is important to note that, although outside the scope of their work, WIC staff often recognize signs of developmental or behavioral issues and are able to help families identify appropriate support. A recent study of Oregon WIC staff, for example, found that developmental and behavioral concerns are often raised and addressed in their work.<sup>34</sup>

## WIC: EMPOWERING FAMILIES, STRENGTHENING COMMUNITIES

Please direct all questions to NWA at 202-232-5492.

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<sup>4</sup> Brooks-Gunn J, Duncan G (1997). The effects of poverty on children. *The Future of Children*. Vol.7 Issue.2).

<sup>5</sup> Brooks-Gunn J, Duncan G (1997). The effects of poverty on children. *The Future of Children*. Vol.7 Issue.2).

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<sup>9</sup> Chiasson M, Findley S, Sekhobo J, Scheinmann R, Edmunds L, Faly A, McLeod N, and Gregg D (2013) 'Changing WIC Changes What Children Eat.' *Obesity* vol. 21 no.7:1423-9. doi: 10.1002/oby.20295.

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