

SHAPE Briefing

Diet and nutrition among Hennepin County children



1998
2002
2006

Number 7

Trends and insights from SHAPE, the Survey of the Health of All the Population and the Environment

Highlights

- Among Hennepin County children aged five and under, 84.2 percent were reported to have ever been breastfed.
- Among Hennepin County children aged 2 to 12, 72.0 percent were found to have eaten two or more servings of fruit yesterday, i.e., the day prior to being surveyed.
- Although most children aged 2 to 12 were reported to have eaten some vegetables yesterday, only 12.6 met the guideline for the recommended *servings* of vegetables.
- Half (50.7 percent) of all children aged 2 to 17 consumed at least one sugar-sweetened beverage yesterday.

Upcoming Issues

- ◆ Physical Activity and Exercise
- ◆ Health Care Access
- ◆ Family connectedness and health

Introduction

This briefing provides key findings on breastfeeding and nutrition among children in Hennepin County. Where possible, it also provides comparisons to state- and national-level data and examines whether there are statistically significant differences for various subgroups. **SHAPE 2006** is the third in a series of surveys collecting information on the health of Hennepin County residents and factors that affect their health. More than 10,000 households in Hennepin County participated in **SHAPE 2006**, providing information on more than 8,000 adults and 4,000 children. An overview of the questionnaire and data collection strategy for the **SHAPE 2006 - Child Survey** is available in *SHAPE Briefing, Number 3*.

Childhood health starts with good nutrition

The **SHAPE 2006 - Child Survey** asked adults to report on several aspects of their child's daily nutrition. The survey included questions on breastfeeding and healthy eating habits (fruits and vegetables, avoiding sugar-sweetened drinks). These particular topics were selected because they are the subjects of several recommendations found in *Healthy People 2010*, they are commonly asked by other national health surveys, for example, the National Survey of Children's Health (NSCH), and because there are potential public health prevention or intervention strategies associated with the findings. The overall percentages for Hennepin County children for various indicators of diet and nutrition are presented in Figure 1, and the findings are further examined in the remainder of this *Briefing*.

Figure 1. Various indicators of diet and nutrition among Hennepin County children, 2006

SHAPE 2006 - Child Survey	
Breastfeeding	84.2 % of children aged 0 to 5 were ever given breast milk or breastfed
Fruit	72.0 % of all children aged 2 to 12 ate two or more servings of fruit yesterday
Vegetables	12.6 % of all children aged 2 to 12 ate three or more servings of vegetables yesterday
Sugar-sweetened drinks	50.7 % of all children aged 2 to 17 drank a sugar-sweetened beverage yesterday

Breastfeeding: A healthy way to start

Parents with children aged five and under were asked about their breastfeeding practices. These items appear in Figure 2, where they are displayed with parallel findings drawn from the National Survey of Children's Health (NSCH, 2003).¹

Among Hennepin County children aged five and under, 84.2 percent were reported to have ever been breastfed (for any period of time). The rates found among Hennepin County children, and those in Minnesota overall, were statistically higher² than the overall findings for the US.

Healthy People 2010 established several benchmarks for breastfeeding practices:

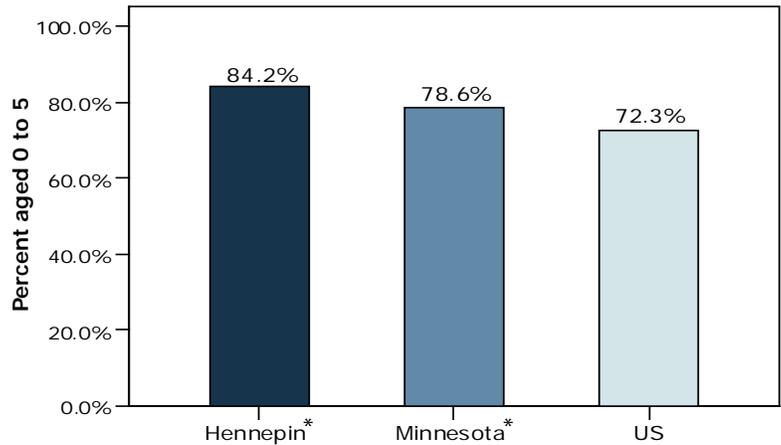
- At least 75 percent of all infants will be breastfed in the early postpartum period.
- At least 50 percent of all infants will be breastfed for at least 6 months.
- At least 25 percent of infants will be breastfed for one year.³

Findings from the **SHAPE 2006 - Child Survey** indicate that mothers in Hennepin County appear to be exceeding the first objective: 84.2 percent of the parents of children aged 0 to 5 reported that their child was breastfed for at least some period of time.

Among children aged 0 to 5 who have stopped breastfeeding, 51.1 percent were breastfed for six months or more. This figure meets the second *Healthy People 2010* objective that at least 50 percent will be breastfed for at least six months.

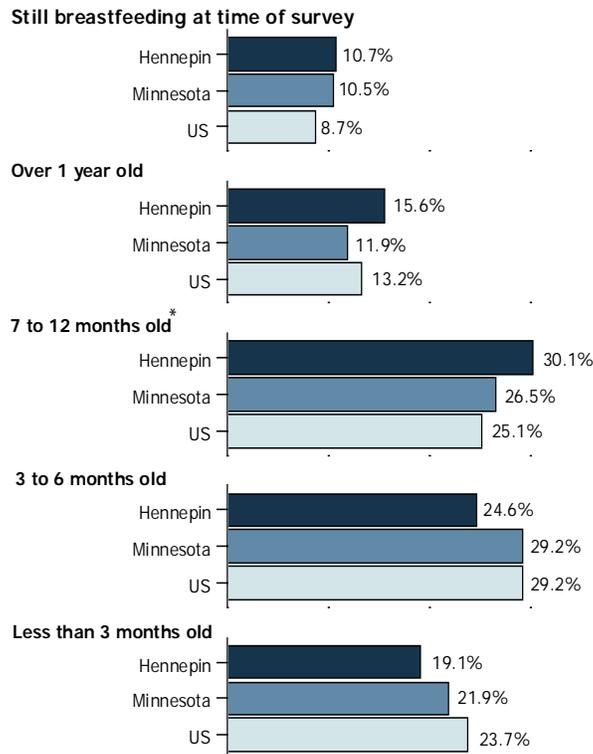
The results presented in Figure 3 indicate that Hennepin County infants as well as those in Minnesota are significantly more likely to be breastfed beyond the first six months than children nationally. However, only 15.6 percent reported that their child was more than one year old when they stopped breastfeeding.

Figure 2. Percent of Hennepin County children aged 0 to 5 who were ever breastfed, Hennepin County 2006; MN and US, 2003



* Hennepin County and Minnesota rates are significantly higher than the rate for the US at $p < 0.05$.
SOURCE: SHAPE 2006, NSCH 2003

Figure 3. Percent of children aged 0 to 5 who were ever breastfed by age of child when he or she completely stopped breastfeeding, Hennepin County, 2006; MN and US, 2003



* Hennepin County and Minnesota rates are significantly higher than the rate for the US for infants who stopped breastfeeding between 7 to 12 months at $p < 0.05$.
SOURCE: SHAPE 2006

Most children meet the current recommendation for eating fruit daily, but some groups fare far better than others

The national guidelines for eating a healthy and nutritious diet recommend that children consume two or more servings of fruit per day.⁴ To determine whether Hennepin County children are meeting the dietary recommendation, the **SHAPE 2006 - Child Survey** asked parents of children aged 2 to 12 the following question: *Yesterday, how many servings of fruit such as an apple or banana, or 100% fruit juice did your child have?*

Among Hennepin County children aged 2 to 12, most (72.0 percent) were found to be meeting the dietary recommendation, while 21.9 percent consumed only one serving of fruit and the remaining children (6.1 percent) did not eat any fruit. However, these results were found to differ significantly on the basis of race and ethnicity. As shown in Figure 4, White children aged 2 to 12 were significantly more likely to consume the recommended daily servings of fruit than children from other race or ethnic groups.

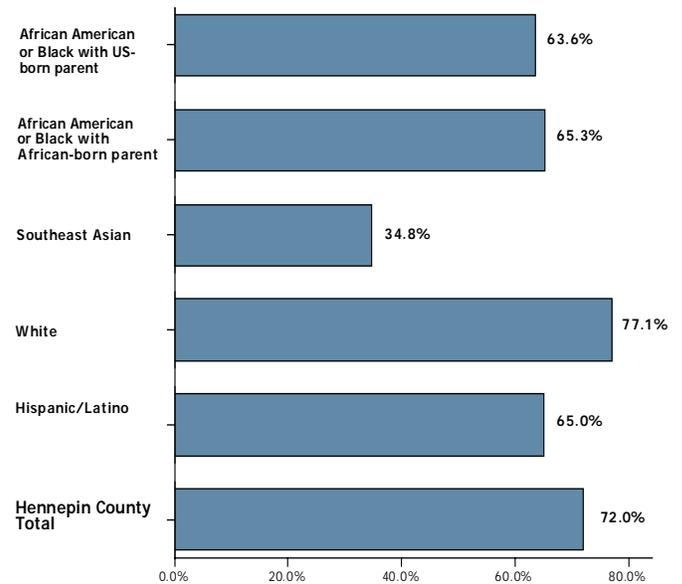
Adequate vegetable consumption relatively low among all groups of children within Hennepin County

The dietary guidelines recommend that children eat at least three servings of vegetables on a daily basis. This standard is higher than the daily recommendations for fruit consumption. The **SHAPE 2006 - Child Survey** asked adults with a child aged 2 to 12 the following question: *Yesterday, how many servings of vegetables such as corn, green beans, green salad or other vegetables did your child have?*

Although most children aged 2 to 12 were reported to have eaten some vegetables yesterday, more than one out of six (17.4 percent) were reported to have had *no servings* of vegetables. This percentage is much higher than the proportion who reported having had *no servings* of fruit (6.1 percent compared to 17.4 percent).

As shown in Figure 5, a relatively small proportion of the children in each racial/ethnic group (from 4.4 to 22.5 percent) are currently meeting the recommended guideline of three or more servings of vegetables. Though not shown here, both the number of servings of fruits and vegetables are significantly related to the family's income level.

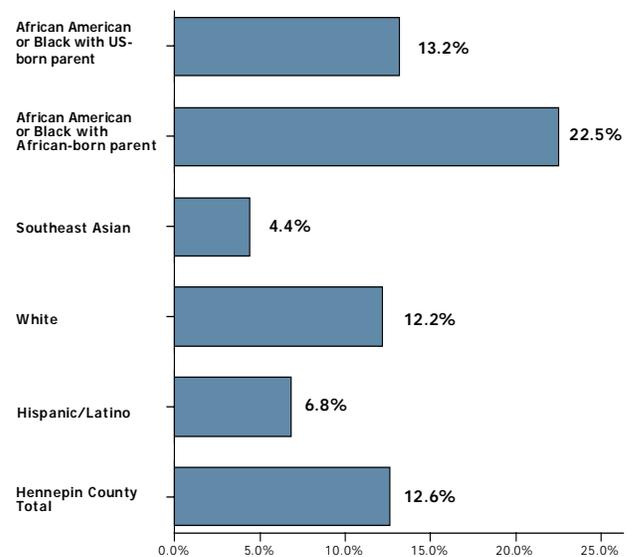
Figure 4. Percent of children aged 2 to 12 by race/ethnicity who had two or more servings of fruit yesterday, Hennepin County, 2006



* White children's rates are significantly different from all other race/ethnicities at $p < 0.05$.

SOURCE: SHAPE 2006

Figure 5. Percent of children aged 2 to 12 by race/ethnicity who had three or more servings of vegetables yesterday, Hennepin County, 2006



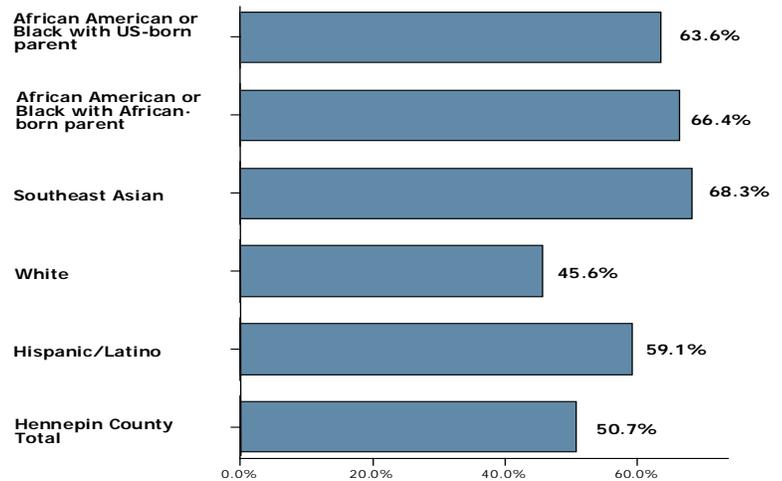
SOURCE: SHAPE 2006

Sugar-sweetened drinks: differences among racial/ethnic groups detected

Parents have become increasingly aware of the impact of sugar in their children's diets as a significant health concern. One of the key sources of daily sugar intake is in the form of sugar-sweetened beverages. The **SHAPE 2006 - Child Survey** asked parents to estimate the number of sugar-sweetened drinks their children consumed by first asking: *Yesterday, did your child drink any beverages sweetened with sugar such as pop, soda, soft drinks, fruit punch, Kool-aid, lemonade or fruit-flavored?* If yes, parents were asked: *Yesterday, how many glasses, bottles, cans or cartons did he or she drink?*

The findings indicate that more than half of all children aged 2 to 17 consumed at least one sugar-sweetened drink yesterday (50.7 percent). The analysis detected significant differences among racial/ethnic groups. White children were significantly more likely than other children not to have consumed any sugar-sweetened beverages (54.4 percent had zero servings yesterday). Although Black/African American children of both US-born and African-born parents show similar rates of avoiding sugar-sweetened drinks (36.4 percent and 33.6 percent had zero servings, yesterday, respectively), at the high-end of consumption, Black/African American children of African-born parents were significantly more likely than any other group of children to consume 4 or more sugar-sweetened drinks (24.0 percent). Only 6.0 percent of Black/African American children of US-born parents and less than 1.5 percent of each of the other groups of children consumed 4 or more sugar-sweetened drinks, yesterday.

Figure 6. Percent of children aged 2 to 17 by race/ethnicity who consumed sugar-sweetened drinks yesterday, Hennepin County, 2006



* Black of African American children's rates ate significantly different from all other race/ethnicities at $p < 0.05$.
SOURCE: SHAPE 2006

Acknowledgments

The **SHAPE** project would like to thank the many individuals, community organizations, and subject-area experts who provided advice and support for the development of **SHAPE 2006**. A partial list of those who provided assistance to the **SHAPE 2006** project can be found on the **SHAPE** Web site listed below. The **SHAPE** project would especially like to thank the more than 10,000 residents of Hennepin County who generously took the time to complete the **SHAPE** survey.

For More Information

SHAPE 2006 is a collaborative project between the Hennepin County Human Services and Public Health Department and the University of Minnesota School of Public Health.

For more information on this *Briefing* or other topics related to the **SHAPE** project, or to receive this information in an alternate format, please contact SHAPE@co.hennepin.mn.us or 612-348-6150.

www.co.hennepin.mn.us
Search keyword: **SHAPE2006**

Notes:

1. The state and national statistics reported here and throughout are from the 2003 National Survey of Children's Health - Public Use File (NSCH-PUF). The data were downloaded and analyzed by the SHAPE team. Some of these findings were previously reported in: *The Health and Well-being of Children: A Portrait of States and the Nation*, US Department of Health and Human Services, Health Resources & Services Administration, 2005. Minnesota statistics appear on page 71. (Available at: www.cdc.gov/nchs/slaits.htm.)
2. Here and throughout, statistically significant differences were identified at $p < 0.05$.
3. Please see the *Healthy People 2010* objectives for breastfeeding #16-19a, #16-19b, and #16-19. (available at: www.healthypeople.gov.)
4. Please see the *Healthy People 2010* objectives for daily fruit consumption #19-5 and for daily vegetable consumption #19-6 (available at www.healthypeople.gov.)



Human Services and
Public Health Department