

# Health & Nutrition Sciences

## Uncovering the Cost Barriers to Better Nutrition

A staggering percentage of Americans fall short of the Dietary Guidelines for Americans<sup>6</sup>:

 **~80%** do not meet fruit recommendations

 **~90%** do not meet vegetable recommendations

 **~80%** do not meet dairy recommendations




 **~98%** do not meet whole grain recommendations

The cost of healthy eating is a significant barrier for many Americans.<sup>3</sup> Research results indicated for each under-consumed food group that **the following three foods were the most cost-effective\* options per dollar<sup>1</sup>**:


### FRUITS

-  1. 100% apple & citrus juices
-  2. Bananas
-  3. Apples

### VEGETABLES

-  1. White potatoes
-  2. Lettuce
-  3. Carrots

### WHOLE GRAINS

-  1. Oatmeal
-  2. Popcorn
-  3. Brown rice

### DAIRY

-  1. Reduced & low-fat milks
-  2. Low-fat flavored milk
-  3. Reduced-fat flavored milk

\* Food prices observed prior to COVID-19.

## Low intake of fruits and vegetables results in suboptimal nutrient intake for Americans.

An analysis<sup>2</sup> of National Health and Nutrition Examination Survey data showed:

- Vitamin C intake ↓22.6% over the past 20 years
- Decrease primarily driven by ↓ intake of 100% juice
- Small increases in whole fruit consumption did not close this gap
- Combining 100% juice and whole fruit may help close gaps in fruit and vitamin C intake<sup>1,5</sup>



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## Nutrition contributions of 100% juice and oatmeal

### 8 ounces of 100% orange juice provides:

- 450 mg potassium (10% DV)
- 90 mg vitamin C (100% DV)
- 1 fruit serving



### ½-cup dry serving of oatmeal provides:

- 4 g dietary fiber (13% DV)
- 40 mg magnesium (10% DV)
- 1.5 whole grain servings

## Reminders for patients and clients: 100% juice is budget-friendly and nutritious



### Not all nutrient-dense foods are expensive

100% fruit juice and oats are cost-effective ways to meet fruit and whole grain recommendations<sup>1</sup>



### Every bit of the sugar in 100% juices comes straight from the fruit used to make it

When you see “100% juice” on the package, that means no sugar is added — sugar in 100% fruit juice is naturally occurring



### Healthy lifestyles vary; there are many ways 100% fruit juice can be convenient options for busy families

On-the-go fruit serving when headed to work, school, or physical activities, and an easy option for breakfast, lunch, or a snack



### The vitamin C in 100% fruit juice is well known for supporting the immune system<sup>2</sup>

Whole fruits, whole vegetables, and 100% juices all help to increase vitamin C intake<sup>2,6</sup>



### 100% fruit juice is a delicious option to increase fruit and vegetable servings in a healthy diet

Contains most of the same vitamins, minerals, and antioxidants as the fruits and veggies it's made from



### Consume 100% fruit juice in pediatrician-recommended age-appropriate portions

For children ages 1-3 years, up to 4 ounces of 100% fruit juice per day<sup>4</sup>

For children ages 4-6 years, up to 6 ounces of 100% fruit juice per day<sup>4</sup>

For children ages 7 and over, and adults, between 6 and 10 ounces of 100% fruit juice per day, depending on the person's calorie level<sup>4,6</sup>

### References (click to view online):

1. Brauchla M, Fulgoni VL. Cost-effective options for increasing consumption of under-consumed food groups and nutrients in the USA. *Public Health Nutr* 2021;1:1-7. doi: 10.1017/S1368980021000537.
2. Brauchla M, Dekker MJ, Rehm CD. Trends in Vitamin C Consumption in the United States: 1999-2018. *Nutrients* 2021;13(2). doi: 10.3390/nu13020420.
3. Darmon N, Drewnowski A. Contribution of food prices and diet cost to socioeconomic disparities in diet quality and health: a systematic review and analysis. *Nutr Rev* 2015;73(10):643-60. doi: 10.1093/nutrit/nuv027.
4. Heyman MB, Abrams SA, AAP SECTION ON GASTROENTEROLOGY, HEPATOLOGY, AND NUTRITION, AAP COMMITTEE ON NUTRITION. Fruit Juice in Infants, Children, and Adolescents: Current Recommendations. *Pediatrics*. 2017;139(6):e20170967
5. Rehm CD, Drewnowski A. Dietary and economic effects of eliminating shortfall in fruit intake on nutrient intakes and diet cost. *BMC Pediatr* 2016;16:83. doi: 10.1186/s12887-016-0620-z.
6. U.S. Department of Health and Human Services and U.S. Department of Agriculture. 2020-2025 Dietary Guidelines for Americans. 9th Edition. December 2020.