

# ChildObesity180 Nutrition and Physical Activity Goals

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*ChildObesity180 is a national leader in childhood obesity prevention, blending scientific evidence and rigor with innovation and experience from the private sector to develop, implement, evaluate, and scale high-impact initiatives that will reach 80% of children ages 5-12 in the US, being intentional and strategic to reach those children disproportionately affected by obesity.*

*ChildObesity180 is committed to using the best available scientific evidence and recommendations to inform our work. Summarized below are the broad goals of each initiative, followed by the evidence and recommendations that guide and inform the organization and initiatives. Relevant highlights from each source are included.*

## Initiative Goals

### Active Schools Acceleration Project (ASAP)

Contribute additional physical activity during the school day to help all children achieve the recommended 30 minutes or more of daily moderate-to-vigorous physical activity at school.

### Healthy Kids Out of School (HKOS)

HKOS primarily works with short-duration, volunteer-led out-of-school-time programs.

#### **Physical Activity**

- Sports-related programs: Engage in moderate-vigorous physical activity for at least 50% of practice time
- Non-sport programs: Dedicate at least 20% of program time to physical activity at each meeting, with at least 50% of the physical activity being moderate-vigorous

These targets can be achieved over time through gradual increases in minutes of physical activity, when full achievement at the outset is not practical.

#### **Beverages**

Make water available and promote water as the beverage of choice instead of sugar-sweetened beverages.

#### **Snacks**

Serve fruits and vegetables. Due to the short duration of many out-of-school-time programs, snacks may not be necessary.

### Restaurant Initiative

Reduce children's excess calorie consumption when eating in restaurants, especially among families who frequently eat at quick-service restaurants.

- When ordering meals for their children in restaurants, motivate parents to (1) choose meals with no more than 600 calories and (2) select foods and beverages that are naturally nutrient-dense in place of foods and beverages that contain fewer nutrients
- Influence restaurants to include more nutritious items on kids' menus, i.e. items that contain fewer calories and more naturally-occurring nutrients

### Breakfast Initiative, concluded in 2014

Promote healthy school breakfast and evaluated its impact.

- Support school breakfast programs that follow the USDA Nutrition Standards
- Communicate the evidence on the benefits of breakfast consumption as well as the research gaps, and encourage school breakfast participation
- Evaluate the impact of Breakfast in the Classroom as an innovative school breakfast delivery model

## General Nutrition and Physical Activity Recommendations for Children

**U.S. Department of Agriculture and U.S. Department of Health and Human Services:**  
*Dietary Guidelines for Americans (2015-2020)*<sup>1</sup>.

For children ages 5-12 (unless otherwise noted):

- Fruits and Vegetables: 2.5 to 5 cup-equivalents of fruits/vegetables per day. (Serving size is dependent on whether fresh, frozen, canned, or dried, and varies by activity level and gender; this range is for sedentary male/female to active male.)
  - Young children (1 to 6 years<sup>21</sup>) should consume no more than 4-6 fluid ounces of 100% fruit juice per day.
  - Sweetened juice products with minimal juice content, such as juice drinks, are considered to be sugar-sweetened beverages rather than fruit juice.
- Calories:
  - Ages 4-8: 1200-2000 per day (varies by activity level and gender; this range is for sedentary male/female to active male)
  - Ages 9-13: 1400-2600 per day (varies by activity level and gender; this range is for sedentary female to active male)
- Total fat: 25-35% of total calories
- Saturated fat: Less than 10% of total calories
- Sodium:
  - Ages 4-8: Less than 1,900 mg per day
  - Ages 9-13: Less than 2,200 mg per day
- Sugar: Consume less than 10% of calories per day from added sugar.
- Grains: At least half of the grains children consume should be whole grain.
- Dairy:
  - Ages 4-8: 2.5 cup-equivalents per day of fat-free or low fat milk and milk products or fortified soy beverages
  - Ages 9-18: 3 cup-equivalents per day of fat-free or low fat milk and milk products or fortified soy beverages
- Protein:
  - 3-6.5 ounce-equivalents per day (varies by activity level and gender; this range is for sedentary male/female to active male)

**U.S. Department of Health and Human Services:** *Physical Activity Guidelines for Americans (2008)*<sup>2</sup>

- Children (ages 6-17): 60 minutes or more of physical activity per day, most of it moderate to vigorous.
- As part of their 60 or more minutes of daily physical activity, children and adolescents should include bone-strengthening physical activity on at least 3 days per week, muscle-strengthening physical activity on at least 3 days per week, and vigorous-intensity physical activity on at least 3 days a week.

***Institute of Medicine Committee on Accelerating Progress in Obesity Prevention:***

*Accelerating Progress in Obesity Prevention: Solving the Weight of the Nation (2012)*<sup>3</sup>

- All students in grades K-12 should have adequate opportunities to engage in 60 minutes of physical activity every day.
- Foods and beverages provided to children and adolescents should promote health and learning.
- Ensure nutrition standards based on the Dietary Guidelines are adopted by schools.

***American Heart Association Scientific Statement: Added Sugar and Cardiovascular Disease Risk in Children (2016)***<sup>22</sup>

- For children (ages 2 and older) and adolescents:
  - Limit intake of sugar-sweetened beverages to 1 or fewer 8-ounce beverage per week.
  - Consume less than 25 grams (100 calories or ~6 teaspoons) of added sugars per day.

## Recommendations that Inform Each Initiative

### Active Schools Acceleration Project

***Physical Activity Guidelines for Americans Midcourse Report Subcommittee of the President's Council on Fitness, Sports & Nutrition: Physical Activity Guidelines for Americans Midcourse Report (2012)***<sup>6</sup>

- School-based physical activity can contribute to students' daily physical activity and can provide students with opportunities to enhance their motor skill development, fitness, decision making, cooperation, and conflict resolution skills.
- Schools play a critical role in promoting physical activity.

***Institute of Medicine: Educating the Student Body. Taking Physical Activity and Physical Education to School (2013)***<sup>7</sup>

- School districts should provide high-quality physical education (PE) during which students should spend at least half of the class-time in vigorous- or moderate-intensity physical activity. All elementary school students should spend an average of 30 minutes per day, and all middle and high school students an average of 45 minutes per day, in PE class.
- Students should engage in additional vigorous- or moderate-intensity physical activity throughout the school day through recess, dedicated classroom physical activity time, and other opportunities.
- Additional opportunities for physical activity before and after school hours should be made accessible to all students.

***SHAPE America: The Essential Components of Physical Education (2015)***<sup>8</sup>

- Elementary schools: 150 minutes of instructional PE per week
- Middle/high schools: 225 minutes of instructional PE per week
- Schools should employ a comprehensive school physical activity program (CSPAP) framework to support student physical activity throughout the school day.

***National Association for Sport and Physical Education: Position Statement: Before- and After-School Physical Activity and Intramural Sport Programs (2013)***<sup>9</sup>

- Schools must ensure that students receive at least 30 minutes of moderate-vigorous physical activity as part of their daily physical activity requirement.

## Healthy Kids Out of School

### Physical Activity

***Active Living Research: Policies and Standards for Promoting Physical Activity in After-School Programs (2012)***<sup>11</sup>

- After-school programs can help children accumulate up to 30 minutes of moderate-vigorous physical activity each day, which would satisfy half of the national recommendation for daily physical activity. Such a goal is a reasonable expectation based on the amount of time after-school programs typically allocate for physical activity.

***National AfterSchool Association: Healthy Eating and Physical Activity Standards (2011)***<sup>12</sup>

- Dedicate 20% or more of program time, or 30 minutes or more of morning or after-school program time (60 minutes for a full day program) to physical activity.
- Provide physical activities in which students are moderately to vigorously active for at least 50% of the physical activity time.
- Ensure that daily physical activity times include aerobic and age appropriate muscle- and bone-strengthening, and cardio-respiratory fitness activities.

### Beverages

***American Academy of Pediatrics: Sports Drinks and Energy Drinks for Children and Adolescents: Are They Appropriate? (2011)***<sup>13</sup>

- Water is the best source of fluid for hydration in all but certain specific situations, such as periods of prolonged, intense physical activity. Only in such specific situations when there is a need for rapid replenishment of carbohydrates and/or electrolytes should sports drinks be consumed.

***Healthy Eating Research: Consumption of Sports Drinks by Children and Adolescents (2012)***<sup>14</sup>

- For most children and adolescents, consuming water before, during, and after physical activity provides the necessary hydration.
- In limited quantities, sports drinks are recommended only for individuals engaged in prolonged vigorous physical activity for more than one hour.

***Healthy Eating Research: Recommendations for Healthier Beverages (2013)<sup>15</sup>***

- General beverage recommendations for children:
  - Replace sugary beverages with healthier options.
  - Water should be available and promoted in all settings where beverages are offered.
  - Milk: unflavored low-fat and non-fat milk, and soy beverages. While not endorsing flavored milk as a healthy beverage, given the wide availability of flavored milk in schools, a calorie limit for flavored milk is provided (no more than 130 calories per 8-ounce serving) to help limit calories and added sugar intake.<sup>15</sup>
  - Fruit juices: 0-6 ounce portions of 100% fruit or vegetable juice for 5-10 year olds; 0-8 ounce portions of 100% fruit or vegetable juice for 11-13 year olds
    - No added sweeteners
    - No more than 100 mg of sodium per portion

***U.S. Department of Agriculture: National School Lunch Program and School Breakfast Program: Nutrition Standards for All Foods Sold in School as Required by the Healthy, Hunger-Free Kids Act of 2010, Final Rule (2016)<sup>5</sup>***

- Elementary and middle school:
  - Plain water or plain carbonated water (no size limit)
  - Low fat milk, unflavored; non-fat milk, flavored or unflavored, including nutritionally equivalent milk alternatives as permitted by the school meal requirements (no more than 8 fluid ounces for elementary school; no more than 12 fluid ounces for middle school)
  - 100% fruit/vegetable juice, and 100% fruit/vegetable juice diluted with water (with or without carbonation), and no added sweeteners (no more than 8 fluid ounces for elementary school; no more than 12 fluid ounces for middle school)

***National AfterSchool Association: Healthy Eating and Physical Activity Standards (2011)<sup>12</sup>***

- Offer water during snack time, and have water accessible at all times.
- Emphasize healthy beverages including low- or non-fat milk; plain or naturally flavored non-carbonated water; and 100% fruit juice.

## **Snacks**

***U.S. Department of Agriculture: National School Lunch Program and School Breakfast Program: Nutrition Standards for All Foods Sold in School as Required by the Healthy, Hunger-Free Kids Act of 2010, Final Rule (2016)***<sup>5</sup>

- Calories: No more than 200 per serving of snack
- Fat: Total fat should account for no more than 35% of calories; saturated fat less than 10% of calories; 0 grams of trans fats (as listed on the nutrition label) for snack
- Sodium: No more than 200 mg for snack
- Total sugar: No more than 35% of calories, or no more than 35% of weight of snack
- AND meet one of the following criteria:
  - Be a grain product that contains 50% or more whole grains by weight or have whole grains as the first ingredient
  - Have as the first ingredient one of the non-grain main food groups: fruits, vegetables, dairy, or protein foods
  - If water is the first ingredient, the second ingredient must be one of the above.
  - Be a combination food that contains at least 0.25 cup fruit and/or vegetable.

***Centers for Disease Control and Prevention and Institute of Medicine: Nutrition Standards for Foods in Schools. Recommended Nutrition Standards for Foods Outside of School Meal Programs (2009)***<sup>16</sup>

- These recommended standards address competitive foods and beverages that are offered as à la carte items during school meals or in school snack bars, stores, vending machines, or canteens. The standards also apply to foods and beverages provided during other school activities, such as classroom parties, classroom snacks, school celebrations, fundraisers, or school meetings. The standards are intended to be applied throughout the school day at all schools and after school, during school-based events or activities.
- Fruits, vegetables, whole grains, combination products, fat-free and low-fat milk and milk products, lactose-free and soy beverages, per portion as packaged:
  - Calories: No more than 200 per serving
  - Fat: total fat should account for no more than 35% of calories; saturated fat less than 10% of calories; 0 grams of trans fats (as listed on the nutrition label)
  - Sodium: No more than 200 mg (July 2016)
  - Total sugar: No more than 35% of weight

***National AfterSchool Association: Healthy Eating and Physical Activity Standards (2011)***<sup>12</sup>

- On a daily basis, the program should:
  - Serve a fruit or vegetable (fresh, frozen, canned or dried without added sugar).
  - Only serve foods made without trans fat.
  - Serve no candy or other foods that are primarily sugar based.

***Interagency Working Group on Food Marketed to Children: Interagency Working Group on Food Marketed to Children Preliminary Proposed Nutrition Principles to Guide Industry Self-Regulatory Efforts: Request for Comments (2011)***<sup>17</sup>

- Foods marketed to children should provide a meaningful contribution to a healthful diet and minimize the content of nutrients that could have a negative impact on health or weight.
- Individual foods should contain at least 50% by weight of one or a combination of more than one of the following: fruit; vegetable; whole grain; fat-free or low-fat (1%) milk products; fish; extra lean meat or poultry; eggs; nuts and seeds; or beans.
- Main dishes should contain at least 50% by weight from a combination of at least two of these groups, and meals should contain at least 50% by weight from a combination of at least three of these groups.
- Foods marketed to children should meet the following guidelines for saturated fat, trans fat, added sugars, and sodium:
  - Saturated Fat: For individual foods, no more than 1 gram per reference amount customarily consumed and no more than 15% of calories. For main dishes and meals, no more than 1 gram per 100 grams and less than 10% of calories
  - Trans Fat: For individual foods, 0 grams (less than 0.5 grams) per reference amount customarily consumed. For main dishes and meals, 0 grams (less than 0.5 grams) per labeled serving.
  - Added Sugars: For individual foods, no more than 13 grams of added sugars per reference amount customarily consumed. For main dishes and meals, no more than 13 grams of added sugar per serving.
  - Sodium: For individual foods, no more than 210 mg per serving. For main dishes and meals, no more than 450 mg per serving.

## Restaurant Initiative

***RAND Corporation: Performance Standards for Restaurants: A New Approach to Addressing the Obesity Epidemic (2013)***<sup>18</sup>

- Children's meals (including beverages) at restaurants should meet the following Healthier Restaurant Meal Guidelines for Children:
  - Calories: No more than 600 per meal
  - Total fat: No more than 35% of calories from total fat
  - Saturated fat: No more than 10% of calories from saturated fat
  - Trans fat: Less than 0.5 grams
  - Total sugar: No more than 35% of calories from total sugars
  - Sodium: No more than 770 mg
  - No sugar-sweetened beverages
- Children's meals must include two of the following, with one being a vegetable or fruit:
  - Fruit: 0.5 cup or more
  - Vegetable: 0.5 cup (non-fried) or more

- Whole grains: More than 50% of grain ingredients
- Lean protein, as defined by USDA: More than 2 ounces meat; 1 egg; 1 ounce of nuts/seeds/dry beans/peas
- Dairy: 0.5 cup 1% or fat-free milk or lower-fat dairy
- Suggested Practices for Healthier Restaurant Children's Meals include:
  - Serve fruits and/or non-fried vegetables as the default side item with children's meals.
  - Do not offer sugar-sweetened beverages with children's meals (excludes low-fat flavored milk that is less than 150 calories per 8 ounces).
  - Serve water, low-fat or fat-free milk, or 100% juice as the default beverage with children's meals.
  - When grains are offered, serve whole-grain rich options as the default with children's meals.

***National Restaurant Association: Kids LiveWell Program (2013)<sup>19,20</sup>***

- To qualify for Kids LiveWell, full kids' meals (including entrée, side option, and beverage) must meet the following nutrition criteria:
  - Calories: 600 or less per meal
  - Total fat: No more than 35% of calories from total fat
  - Saturated fat: No more than 10% of calories from saturated fat
  - Trans fat: Less than 0.5 grams
  - Total sugar: No more than 35% of calories from total sugars
  - Sodium: No more than 770 mg
  - Deep fried items are not permitted
- Kids LiveWell full meals (including entrée, side option, and beverage) must include two of the following:
  - Fruit: More than 0.5 cup (includes 100% juice)
  - Vegetable: More than 0.5 cup
  - Whole grains
  - Lean protein, as defined by USDA: More than 2 ounces meat; 1 egg or egg equivalent; 1 ounce nuts/seeds/dry beans/peas
  - Dairy: More than 0.5 cup lower-fat dairy (1% or skim milk and dairy)
- Side Items must meet the following nutrition criteria:
  - 200 calories or less
  - No more than 35% of calories from total fat
  - No more than 10% of calories from saturated fat
  - Less than 0.5 grams artificial trans fat
  - No more than 35% of calories from total sugars (added and naturally occurring)
  - No more than 250 mg of sodium
  - 100% fruit, vegetables or juice; and low fat (1%) and skim milks are permitted

- Include one food group (see above)

## Breakfast Initiative

***U.S. Department of Agriculture: Nutrition Standards in the National School Lunch and School Breakfast Programs, Final Rule (2012)<sup>4,10</sup>***

For Breakfast:

- Fruits/Vegetables: 1 cup per day (school year [SY] 2013-2014)
- Calories: Average for a 5-day week (SY 2013-2014):
  - Kindergarden-5th grade: 350-500 calories per day
  - 6th-8th grade: 400-550 calories per day
- Fat (SY 2014-2015):
  - Saturated fat: Less than 10% of total calories
  - Trans fats: 0 grams per serving (as listed on nutrition label)
- Sodium (SY 2014-2015):
  - Kindergarden-5th grade: No more than 540 mg
  - 6th-8th grade: No more than 600 mgWith reduction to final target of (SY 2022-2023):
  - Kindergarden-5th grade: No more than 430 mg
  - 6th-8th grade: No more than 470 mg
- Grains: 7-10 ounces of grains per week for Kindergarten-5th grade; 8-10 ounces for 6th-8th grade (1 ounce per day minimum)
  - At least half of grains offered must be whole-grain-rich (must contain at least 50% whole grains)
  - By SY 2014-2015, all grains must be whole-grain-rich.
- Milk: offer 1 cup of fat-free (unflavored or flavored), low-fat (unflavored only), or fat-free/low-fat lactose-reduced or lactose-free milk per day.

## References

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