From January to April 2014, 4,269 first, third, and fifth grade students from 69 randomly selected public elementary schools throughout the state were weighed and measured to assess the extent of childhood overweight and obesity in Utah. The data were collected to be representative of all public elementary schools in Utah. This ongoing study has been conducted since 2006 by the Utah Department of Health, local health departments, local school districts, and school nurses. Findings from the study are as follows:

- More boys than girls were overweight or obese in every grade.
- The percentage of boys at an obese or unhealthy weight (overweight or obese) increased significantly from 1st to 5th grade. The highest rates of overweight and obesity seen since this study began are for fifth grade boys, with 25.5% at an unhealthy weight in 2014.
- In 2014, 20.9% of elementary school students were at an unhealthy weight. The rate in 2012 was similar at 20.8%.
- In 2014, 8.9% of elementary school students were obese, similar to 2012 when 9.4% were obese.
- In 1994, 16.9% of 3rd graders were at an unhealthy weight. By 2014, the rate had increased to 22.4%.
- There was no evidence that the overall rates of overweight or obesity among elementary school students increased between 2012 and 2014.

**Body Weight Terminology:**

Body Mass Index (BMI) is a standardized measurement based on height and weight that is used to estimate the amount of body fat for an individual.

**Classification of Unhealthy Weight (Barlow 2007)**

<table>
<thead>
<tr>
<th>Category</th>
<th>BMI Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>‡Overweight</td>
<td>BMI ≥ 85th and &lt; 95th percentile for age and gender</td>
</tr>
<tr>
<td>†Obese</td>
<td>BMI ≥ 95th percentile for age and gender</td>
</tr>
</tbody>
</table>

Reports prior to 2008 classified children as “at risk for overweight” with a BMI ≥ 85th and < 95th percentile, and “overweight” with a BMI ≥ 95th. Based on the CDC 2000 Growth Charts.
The Effects of Childhood Overweight and Obesity

Childhood overweight predicts obesity later in life.\textsuperscript{1,2}
- Overweight and obese children are more likely to become obese adults.

Adult diseases now observed in obese children.\textsuperscript{3,4}
- Hardening of arteries, high blood pressure, and high cholesterol, which can lead to heart disease.
- Insulin Resistance, Glucose Intolerance, and Diabetes.
- Sleep-associated breathing disorders.
- Non-alcoholic Fatty Liver Disease.

Social and psychological impact of childhood obesity.\textsuperscript{5-9}
- Social isolation.
- Increased rate of suicidal thoughts and attempts associated with weight-based teasing.
- Low self-esteem due to poor body image.
- Increased rate of anxiety disorders and depression in overweight children.
- Increased likelihood to report difficulties in school.
- Reduced quality of life.
- Increased likelihood of being bullied.

Academic consequences of childhood obesity.\textsuperscript{10}
- Increased school absenteeism.

Childhood Obesity Prevention Strategies

Children should get at least 60 minutes of physical activity daily.
- Provide safe, accessible environments in communities, schools, and child care facilities that encourage regular physical activity.

Children should eat at least 1½ to 2 cups of fruit and 1½ to 3 cups of vegetables daily.
- Ensure access to affordable, quality fruits and vegetables in communities, schools, and child care facilities.

Children should rarely have sugar-sweetened drinks and should eat few high-calorie foods with little or no nutritional value.
- Increase the availability of and access to healthy foods and drinks (including water) in neighborhoods, schools, child care facilities, and other places where children go.
- Establish nutrition standards for vending machines in schools and other places where children go.

Limit screen time (television, computer, and video games) to no more than 2 hours per day.
- Provide opportunities for schools, communities, faith-based organizations, and health care providers to support alternatives to screen time at home and school.
Recommendations:

- Implement the School Health Guidelines to Promote Healthy Eating and Physical Activity. These guidelines can be used as a foundation for developing, implementing, and evaluating school-based healthy eating and physical activity policies and practices for students. For more information visit [www.cdc.gov/healthyschools/npao/strategies.htm](http://www.cdc.gov/healthyschools/npao/strategies.htm).

- The health of students is linked to their academic success. Create environments that support the recommended 60 minutes or more of physical activity each day for children and adolescents aged 6-17, and offer healthy eating options wherever food is sold. Find resources and tools to help your school meet nutrition standards at [www.fns.usda.gov/healthierschoolday/tools-schools-focusingsmart-snacks](http://www.fns.usda.gov/healthierschoolday/tools-schools-focusingsmart-snacks).

- Use the School Health Index (SHI): Self-Assessment and Planning Guide to identify strengths and weaknesses of school health policies and programs, create an action plan, and encourage the community in promoting better health [www.cdc.gov/healthyschools/shi/introduction.htm](http://www.cdc.gov/healthyschools/shi/introduction.htm).


- The Alliance for a Healthier Generation’s Healthy Schools Program is an evidence-based initiative that will help create and sustain healthy environments. See how your school can adopt this framework by visiting [https://schools.healthiergeneration.org/](https://schools.healthiergeneration.org/).

- Ensure that the district has a comprehensive wellness policy. For policy requirements, resources, and help, please visit [www.fns.usda.gov/tn/local-school-wellness-policy-requirements](http://www.fns.usda.gov/tn/local-school-wellness-policy-requirements), or contact Utah Action for Healthy Kids at utafhk@gmail.com

How can we impact children’s lives to change this trend?

By focusing on:

- More Physical Activity
- More fruits and vegetables
- Less screen time
- Fewer high-calorie foods
- Fewer sugar-sweetened drinks
References


Resources

The Healthy Living Through Environment, Policy and Improved Clinical Care (EPICC) Program in the Utah Department of Health (UDOH) and Utah’s local health departments work with partners, including the Utah State Office of Education and local school districts throughout Utah, to provide resources and assistance to improve nutrition and physical activity policies, practices, and environments. Additional resources available at http://www.choosehealth.utah.gov/preK-12.php.

Utah Action for Healthy Kids brings partners together to improve nutrition and physical activity environments in schools by implementing school-based strategies, working with the Board of Education and local school boards to improve or develop policies including local district wellness policies. You can contact Utah Action for Healthy Kids at utahhk@gmail.com.

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Contact Information

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Bureau of Health Promotion
Utah Department of Health
(801) 538-6229 or www.choosehealth.utah.gov