

## Unplug and Play

It is estimated that children spend, on average, 5.5 hours per day using some form of media (Kaiser Family Foundation). Not only is this "screen time" drawing children away from active and creative play, but the lifestyle promoted by media is shown to have a negative influence on children's health and health literacy. This problem can be accounted for by the advertisements children are exposed to when interacting with media. Children consume upwards of 40,000 television advertisements each year (KFF). Of the advertisements specifically targeting children, 32% are for candy, 31% for cereal and 9% for fast food (KFF). Studies have shown that the way such products are portrayed in children's advertisements lead children to believe that the products are healthy.



Screen time has a direct and significant effect on a child's health. One study found that with every additional hour of television watched, a child's risk of obesity increased by 2%. Other studies have found that children consuming more than two hours of television per day have more body fat and greater BMIs.

For a variety of childhood development issues, the **American Pediatric Association** is clear about screen time. Their recommendations are no screen time under the age of two, and **no more than 1-2 hours of quality time for children older than two and no screen media in children's bedrooms.**

## Missoula's Response

Missoula has successfully tackled scores of community concerns over the years. Our County prides itself on how we have pulled together to create long-lasting changes that make Missoula County a better place to live, work and raise our families. Community leaders have come together and pledged support for addressing childhood obesity with the *Let's Move! Missoula* Initiative. This is a public/private partnership of leaders whose mission is to reduce and prevent childhood obesity in Missoula County while enhancing the health of all residents. Through policy, communication, partnerships and community engagement, *Let's Move! Missoula* is exploring avenues to support current efforts and initiate new approaches. The founding members of *Let's Move! Missoula* are: Community Medical Center, City of Missoula, Missoula Area Chamber of Commerce, Missoula City-County Health Department, Missoula Board of County Commissioners, Missoula County Public School, Missoula County Superintendent of Schools, Missoula Family YMCA, Missoula Parks & Recreation, St. Patrick Hospital & Health Sciences Center, The University Of Montana, and United Way of Missoula County.



## A Report on Body Mass Index Missoula County Third Graders School Year 2010-2011



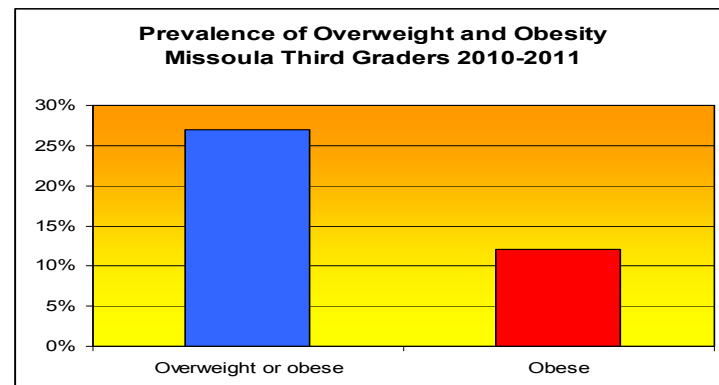
- Why BMI?
- What are the Missoula results for 2010-11
- Consequences of childhood obesity
- Missoula's response: *Let's Move! Missoula*
- *Unplug & Play*: the role screen-time contributes to obesity

## Why BMI, Why Now?

Both the Centers for Disease Control and Prevention (CDC) and the American Academy of Pediatrics (AAP) consider Body Mass Index (BMI) as a reliable indicator of body fat for most children and teens. A child's weight status is determined using an age and sex specific percentile for BMI rather than the BMI categories used for adults because children's body composition varies as they age and varies between boys and girls. CDC Growth Charts are used to determine the corresponding BMI-for-age and sex percentile. For children and adolescents aged 2-19 years:

- **Overweight** is defined as a BMI at or above the 85th percentile and lower than the 95th percentile for children of the same age and sex.
- **Obesity** is defined as a BMI at or above the 95th percentile for children of the same age and sex.

It is the belief of the Missoula City-County Health Department that the national epidemic of childhood obesity has most likely affected the youth of Missoula County as it has other areas of the county. With no data to support that belief and no base-line data to use as an indicator for programming, the Body Mass Index Surveillance Project began in school year 2008-2009. It was determined for various reasons to calculate the BMI of Missoula County third graders. As you can see from the current data, Missoula County has cause for concern.



2010-2011	Total
Number measured	801
Underweight	1%
Normal BMI	74%
Overweight or obese	27%
<i>Obese</i>	<i>12%</i>

## THANK YOU!

In order for this surveillance study to happen for the past three years, the Missoula City-County has been fortunate to have a partnership with the Montana State University College of Nursing and local elementary schools. Each semester a team of two trained senior nursing students accompanied a Missoula City-County Health Department staff member to the schools for the measurements. This allowed for smooth and confidential measurements. Thank you to them and their supervisors. Thank you to principals, front office employees, school nurses and teachers and especially all 801 third graders who welcomed us into their schools to complete our project. Participating schools: Bonner, Chief Charlo, Clinton, Cold Springs, DeSmet, Franklin, Frenchtown, Hawthorne, Hellgate Elementary, Lewis & Clark, Lolo, Lowell, Paxson, Seeley Lake, Rattlesnake, Russell, and Target Range.

## CONSEQUENCES OF CHILDHOOD OBESITY

There are a variety of obvious and less than obvious consequences of being overweight or obese as a child. The physical consequences are most often known to parents and the general public, but the emotional and social health of obese children are unknown or overlooked. Some problems of obesity are:

Physical Health	Emotional Health	Social Health
<ul style="list-style-type: none"> <li>• Type 2 Diabetes</li> <li>• High blood pressure</li> <li>• High cholesterol</li> <li>• Fatty liver disease</li> <li>• Sleep apnea</li> <li>• Asthma</li> <li>• Skin conditions</li> <li>• Menstrual abnormalities</li> <li>• Orthopedic problems</li> </ul>	<ul style="list-style-type: none"> <li>• Low self esteem</li> <li>• Negative body image</li> <li>• Depression</li> </ul>	<ul style="list-style-type: none"> <li>• Stigma</li> <li>• Teasing and bullying</li> <li>• Negative stereotyping</li> <li>• Discrimination</li> <li>• Social marginalization</li> </ul>

Childhood obesity can have a significant effect on opportunities and life chances. Individuals who experience childhood obesity have a higher drop-out rate and a higher likelihood of teen pregnancy. Furthermore, obesity does not magically disappear as children age. An obese child has a 50% greater chance of being obese as an adult.

## Additional Information

The following links provide additional information about childhood obesity, its consequences and innovative approaches communities are trying:

<http://www.cdc.gov/healthyyouth/obesity/facts.htm>

<http://www.aap.org/obesity>

<http://www.letsmove.gov/>

If you have questions about this report contact Mary McCourt at 258-3895 or [mmccourt@co.missoula.mt.us](mailto:mmccourt@co.missoula.mt.us)

