Michigan Quality Improvement Consortium Guideline

**Prevention and Identification of Childhood Overweight and Obesity**

The following guideline recommends specific interventions for prevention and identification of childhood overweight and obesity.

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<th>Eligible Population</th>
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| All children and their parents | Education, parental modeling of healthy behaviors, and prevention of risk | **At each periodic health exam**<br>**General advice for all ages:**<br> - Promote a healthy diet and lifestyle with focus on 5-2-1-0: 5 or more fruits and vegetables, 2 hours or less recreational screen time, 1 hour or more physical activity, 0 sugary drinks daily<br> - Educate parents about importance of parental role modeling for a healthy lifestyle (diet and exercise) and parental controls.<br> - Limit eating out; avoid fast food.<br> - Avoid food as a reward.<br>**Infant/Toddler (age 0-2):**<br> - Encourage breastfeeding for at least 12 months; discourage overfeeding of bottle fed infants [A]. Avoid bottle feeding as a sleep aid.<br> - Avoid premature introduction of solids and base timing for introduction of solids on child’s development, usually between 4 and 6 months of age.<br> - Preserve natural satiety by respecting a child’s appetite.<br> - Avoid high-calorie, nutrient-poor beverages (e.g., soda, fruit punch, sports drinks, or any juice drink less than 100% juice).<br> - Discourage any juice prior to 6 months. If using juice after 6 months, limit to 4-6 oz./day in a cup.<br> - No television or other screen time under age 2 [D].<br>**Preschool (ages 3-5):**<br> - Limit television and other screen time to at most 1-2 hours per day. No access to television and other screens in primary sleeping area.<br> - Replace whole milk with skim or 2%; avoid high-calorie, nutrient-poor beverages (soda, fruit punch, sports drinks, juice drinks); limit intake of 100% juice to < 6 ounces per day.<br> - Respect the child's appetite and allow him or her to self-regulate food intake.<br> - Provide structure and boundaries around healthy eating with adult supervision.<br> - Promote physical activity including unstructured play at home, during child care and in the community.<br> - Promote age-appropriate sleep durations (11-13 hours/night)<br>**School-aged (ages 5-12), the above plus:**<br> - Accumulate at least 60 minutes, and up to several hours, of age-appropriate physical activity on all or most days of the week (emphasize lifestyle exercise, i.e., outdoor play, yard work, and household chores).<br> - Consider barriers (e.g., social support, unsafe neighborhoods or lack of school-based physical education) and explore individualized solutions.<br> - Reinforce making healthy food and physical activity choices at home and outside of parental influence.<br> - Promote age-appropriate sleep durations (10-11 hours/night)<br>**Assessment of body mass index, risk factors for overweight and excessive weight gain relative to linear growth**<br>**General assessment:**<br> - History (including focused family history) and physical exam<br> - Beginning at age 6 [2], measure and record weight and height on CDC BMI-for-age growth chart, calculate and plot patients’ BMI percentile [weight (kg)/height squared (m²) or (pounds x 703)/inches²]²<br> - Dietary patterns (e.g. frequency of eating outside the home, consumption of breakfast, adequate fruits and vegetables, excessive portion sizes, consumption of sugar-sweetened beverages, etc.)<br> - Physical activity level<br> - Risk factors for overweight [3] including pattern of weight change [C]. Watch for increases of 3-4 BMI units/year.<br> - Sleep patterns

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1. AAP recommends screening at age 2; USPSTF age 6+; NCQA HEDIS age 3+
2. CDC growth charts
3. Low or high birth weight, low income, minority, television or computer screen time > 2 hrs, low physical activity, poor eating, depression

**Levels of evidence for the most significant recommendations:**
- A = randomized controlled trials
- B = controlled trials, no randomization
- C = observational studies
- D = opinion of expert panel

This guideline lists core management steps. It is based on Screening for Obesity in Children and Adolescents: US Preventive Services Task Force Recommendation Statement, Pediatrics 2010; 125:351-367; and the Institute for Clinical Systems Improvement. Prevention and Management of Obesity for Children and Adolescents. Published July 2013; and the American Medical Association 2007 Expert Committee Recommendations on the Treatment of Pediatric Obesity. Individual patient consideration and advancement in medical science may supersede or modify these recommendations.


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