



# Michigan Quality Improvement Consortium Guideline

## Treatment of Childhood Overweight and Obesity

The following guideline recommends specific treatment interventions for childhood overweight and obesity.

Eligible Population	Key Components	Recommendation and Level of Evidence	Frequency
Children 2 years or older with a BMI $\geq$ 85th percentile	Identify presence of weight related risk factors and complications	<p><b>Reinforce Prevention Recommendations</b> (See also MQIC Prevention and Identification of Childhood Overweight Guideline)</p> <p>History and physical exam [D]:</p> <ul style="list-style-type: none"> <li>◆ Family history, evaluate general comorbidities, including but not limited to cardiovascular disease and diabetes</li> <li>◆ History of medication use including nutritional supplements</li> <li>◆ Symptoms of gallbladder disease, Type 2 diabetes, obstructive sleep disorders, hypothyroidism</li> <li>◆ Presence of acanthosis nigricans</li> <li>◆ Weight-related orthopedic problems</li> <li>◆ Pulse and blood pressure, using appropriate technique and cuff size for age</li> <li>◆ Be alert to secondary causes of obesity. If aberrant findings are noted (short stature, hypotonia, hirsutism, etc.) then consider genetic and other endogenous causes of obesity.</li> <li>◆ Patient or parental concern about weight</li> <li>◆ Testing: Annual lipid profile and fasting glucose</li> </ul>	Each periodic health exam, more frequently as case requires
Children 2 years or older with a BMI $\geq$ 85th-94th percentile (overweight) without risk factors or complications	Lifestyle intervention to reach weight maintenance	<p><b>Consider all of the above, plus:</b></p> <p><b>Intervention to promote weight management/treatment [D]:</b></p> <ul style="list-style-type: none"> <li>◆ Reinforce lifestyle intervention and behavior modification. Focus is appropriate weight maintenance.</li> <li>◆ Family must be involved; small gradual changes are recommended towards the stated goal</li> <li>◆ Monitor for increasing BMI percentile</li> <li>◆ Monitor for the development of risk factors or complications</li> </ul>	Consider management of childhood obesity as a medium- to long-term intervention
Children 2 years or older with a BMI $\geq$ 85th-94th percentile with risk factors or complications	Lifestyle intervention with treatment of risk factors and complications as needed	<p><b>All of the above, plus:</b></p> <ul style="list-style-type: none"> <li>◆ Primary goal of childhood weight interventions is regulation of body weight and fat with adequate nutrition for growth and development.</li> <li>◆ Treat risk factors and complications as needed.</li> <li>◆ Substantial slowing of weight gain may be achieved by relatively small but consistent changes in energy (200-500 kcal/day) intake, expenditure or both. If weight loss is desired, an appropriate starting goal is about 1 lb of weight loss per month.</li> <li>◆ Consider referral to multidisciplinary pediatric obesity treatment center, pediatric endocrinologist or registered dietitian.</li> </ul>	
Children 2 years or older with BMI $\geq$ 95th percentile (obese) with or without risk factors or complications	Weight loss with concomitant treatment of risk factors and complications as needed	<p><b>All of the above, plus:</b></p> <ul style="list-style-type: none"> <li>◆ Long-term goal should be a body mass index below 85th percentile for age and sex.</li> <li>◆ Consider aggressive approach to weight loss and treatment for patients after conservative approaches have failed.</li> <li>◆ Consider AST, ALT, BUN and creatinine.</li> </ul>	

**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 several sources, including: the American Medical Association 2007 Expert Committee Recommendations on the Treatment of Pediatric Obesity ([www.ama-assn.org](http://www.ama-assn.org)). Individual patient considerations and advances in medical science may supersede or modify these recommendations.