

Caring for Children and Adolescents with Obesity



Background

Obesity is a multifactorial disease driven by **obesogenic environments**, psycho-social factors, and genetic variants. As a result, the treatment for obesity must also be multifactorial, involving dietary counseling, exercise, and medications, all of which play a crucial role in managing this condition. An **obesogenic environment** is one that promotes weight gain and discourages weight loss. It refers to the various factors in a person's surroundings, including the built environment, food environment, and social environment, that contribute to obesity by encouraging unhealthy eating habits and physical inactivity.

What type of care do children and adolescents with obesity require?

At Connecticut Children's Obesity and Weight Management Services Division, our young patients are often facing significant comorbidities, including hypertension, severe sleep apnea, type 2 diabetes, idiopathic intracranial hypertension (headaches and vision problems), severe liver disease, and more. The physical health risks are concerning, but the psychological impact is equally profound. The children and their families face immense challenges as they navigate not only the health complications but also the emotional toll that comes with these conditions.

Childhood Obesity Facts

- Approximately 1 in 5 U.S. children and adolescents have obesity.
- Obesity affects some groups more than others, including adolescents, Hispanic and non-Hispanic Black children, and children in families with lower incomes.
- Health care for obesity is expensive for patients and the health care system.

Source: [Childhood Obesity Facts](#), Centers for Disease Control and Prevention, April 2, 2024.

Why is early treatment and intervention critical for these young patients?

If left untreated, childhood obesity often persists into adulthood, bringing along a host of comorbidities such as diabetes, hypertension, heart disease, and even cancer. The financial burden of treating obesity-related conditions, including the costs of cancer care, dialysis, and long-term pharmacotherapy, runs into the billions of dollars. Early treatment and intervention are essential to mitigate the long-term health and financial consequences of obesity.

The American Academy of Pediatrics (AAP) treatment guidelines for pediatric obesity emphasize that the cornerstone of treatment is *Intensive Health Behavior and Lifestyle Treatment*. This approach focuses on making changes in nutrition, physical activity, and behavior to improve weight status and overall health. Furthermore, the AAP recommends offering medications for adolescents aged 12 years and older with obesity, in addition to health behavior and lifestyle treatment.

It is critically important for children and adolescents to be able to access weight loss medications whether or not they experience comorbidities such as diabetes and high blood pressure. Generally, we understand that a minimum of 5% weight loss is needed for clinically meaningful weight loss and 10% or more for severe fatty liver and significant sleep apnea improvement. If patients have to wait until

they are already much sicker to access these medications, their outcomes will be worse, and the cost of care will increase.

How is obesity treatment different for children?

Children are not little adults and their developing bodies mean that the appropriate standards of care must take their unique needs into account. In 2023, Connecticut law expanded Medicaid coverage for weight loss treatment and in so doing, defined individuals with obesity to mean those with a body mass index, or BMI, of at least 35, and defined individuals with severe obesity to mean those with a BMI of 35 or more with another condition or a BMI of 40 or above. These definitions are correct when applied to adult patients, but the appropriate definitions for pediatric patients are different. In children, BMI percentiles are used because they can account for age and sex, while in adults, a fixed BMI threshold (e.g., 30, 35, or 40) is used to classify obesity. In children, we define obesity as being 20% higher than the 95th percentile (the equivalent of a BMI of 35 in adults), while severe obesity is defined as 40% higher than the 95th percentile (the equivalent of a BMI of 40 in adults).

This distinction is crucial because it underscores the need for differentiating treatment modalities. Children's obesity treatments must take into account not just weight but also growth and development, making early and tailored interventions essential for long-term success.

Obesity is defined differently in pediatrics vs. adult medicine		
	Children and Adolescents	Adults
Obesity	20% higher than the 95th percentile for BMI by age and sex	BMI > 35
Severe Obesity	40% higher than the 95th percentile for BMI by age and sex	BMI > 40

Why are GLP-1 medications an important tool in the treatment of childhood obesity?

According to the AAP, obesity is an increasing concern for children in the United States who face the “burden of obesity-related diseases. One recent advancement is the approval of glucagon-like peptide-1 receptor agonists (GLP-1s) for use in adolescents. GLP-1s can be an important part of a comprehensive treatment plan for pediatric patients seeking obesity care¹.” In a 2022 clinical trial, semaglutide, a GLP-1 medication, led to a significant reduction in BMI in adolescents with obesity as compared with lifestyle intervention alone. Semaglutide showed an average reduction in BMI in teens of 16.1%, and 75% of teens saw at least 5% reduction in BMI².

While non-GLP-1 medications like Phentermine and Orlistat can support weight loss in adolescents, they are usually less potent and may not cause weight loss to the necessary degree to improve comorbid health conditions. A retrospective chart review to assess the impact of weight loss medications added to lifestyle intervention therapy showed that teens taking Phentermine saw an average of about 4% reduction in BMI and only 25% of teens taking Orlistat saw 5% BMI reduction³.

Sources:

1. “GLP-1 Receptor Agonists in Pediatric and Adolescent Obesity,” *Pediatrics*, Volume 155, Issue 4, April 2025.
2. “Once-Weekly Semaglutide in Adolescents with Obesity”, *New England Journal of Medicine*, Volume 387, Number 24, November 2022.
3. “Effect of Phentermine on Weight Reduction in a Pediatric Weight Management Clinic,” *International Journal of Obesity*, 2016 Oct 24;41(1):90–93.

What public policy changes would improve access to treatment and outcomes?

- Utilize pediatric definitions for obesity and severe obesity that rely on BMI percentiles rather than fixed numbers that are used in adult medicine.
- Permit access to obesity medications including GLP-1s for patients who do not yet experience comorbidities like Type 2 Diabetes, hypertension and sleep apnea.

