

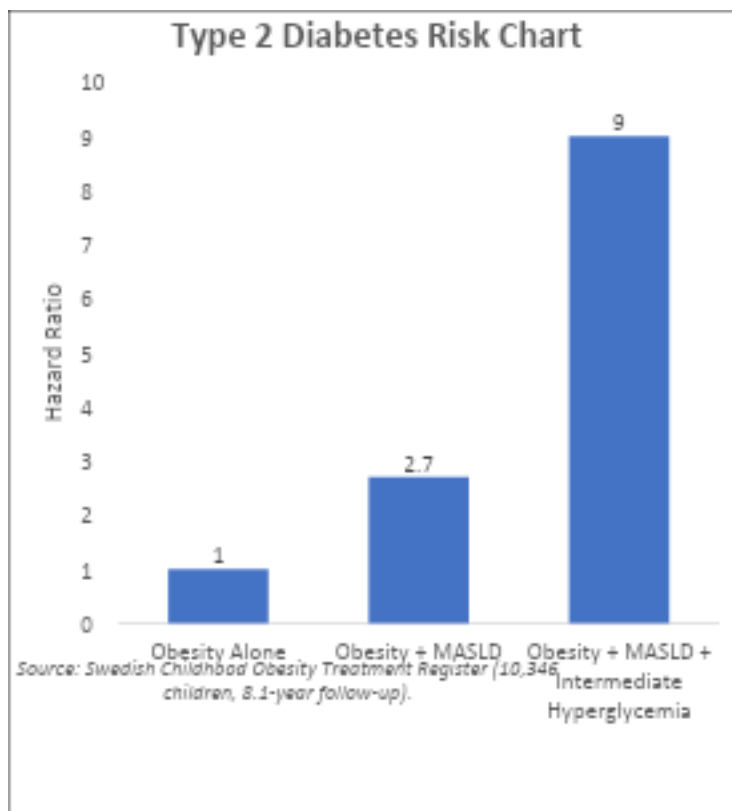
The Hidden Crisis: When Pediatric Obesity Meets MASLD

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Primary care pediatricians are at the forefront of preventing a growing public health challenge. The intersection of childhood obesity and metabolic dysfunction-associated steatotic liver disease (MASLD) creates a perfect storm for youth-onset type 2 diabetes—and we have the tools to stop it.

Today, 1 in 5 U.S. children and adolescents live with obesity. But beneath these numbers lies an even more alarming reality: MASLD affects 30–50% of children with obesity, turning a weight issue into a complex metabolic disease with long-term consequences. ([Stroes et al., 2024](#))

Diabetes at the Crossroads



An extensive Swedish registry study revealed the true scope of this crisis. Children with both obesity and MASLD had a 2.7-fold higher risk of developing type 2 diabetes, which climbed to nearly 4-fold during adolescence. The most concerning finding: when MASLD is combined with intermediate hyperglycemia, diabetes risk soared 9-fold. (ADDIN ZOTERO_ITEM CSL_CITATION {"citationID": "TrRi8rQz", "properties": {"formattedCitation": "(Putri et al., 2024)", "plainCitation": "(Putri et al., 2024)", "noteIndex": 0}, "citationItems": [{"id": 1011, "uris": ["http://zotero.org/users/17233147/items/U5TP9JWU"], "itemData": {"id": 1011, "type": "article-journal", "abstract": "To assess 1) the association between metabolic dysfunction-associated steatotic liver disease (MASLD) in pediatric obesity and youth-onset type 2 diabetes, 2) the joint effect of MASLD and intermediate hyperglycemia on type 2 diabetes risk, and 3) the effect of obesity treatment on type 2 diabetes risk. A cohort study using the Swedish Childhood Obesity Treatment Register (Barnobesitas Registret i

The Severity Surge

MASLD Prevalence Statistics

Key Numbers for Clinical Practice

- 1 in 5 U.S. children have obesity
- 30-50% of children with obesity develop MASLD
- 84.6% MASLD prevalence in extremely severe obesity
- 43% diabetes risk reduction with optimal obesity treatment

The prevalence of extremely severe obesity (BMI ≥160% of the 95th percentile) has risen by 253% since 2008, particularly among older teens. In this group, MASLD prevalence reaches 84.6%, compared to 44.5% in moderate obesity and only 2.8% in children without obesity. ADDIN ZOTERO_ITEM CSL_CITATION {"citationID":"ep8Lv89v","properties":{"formattedCitation":"(Miyu et al., 2025)","plainCitation":"(Miyu et al., 2025)","noteIndex":0},"citationItems":[{"id":864,"uris":["http://obesitymedicine.org/users/17233147/items/2665-QB5H"],"itemData":{"id":864,"type":"article-journal"},"abstract":"Pediatric obesity is associated with complications such as metabolic dysfunction-associated steatotic liver disease (MASLD), type 2 diabetes, dyslipidemia, and hypertension. However, data on the prevalence of extremely severe obesity in childhood and adolescence and its associated complications are lacking. To assess trends in pediatric obesity over time and to investigate the association between obesity degree and comorbidities, this cross-sectional study included data from nationally representative samples of pediatric participants aged 2 to 18 years from the National Health and Nutrition Examination Survey (NHANES) from 2008

Hope through Action

Despite these sobering statistics, treatment makes a measurable difference. The Swedish study found that children who responded to obesity treatment had a 43% reduction in diabetes risk. Even small improvements mattered: every 0.1-unit decrease in BMI SDS lowered diabetes risk by 9%. These findings underscore that progress—even if modest—can dramatically alter outcomes.

Your Role as the Frontline Leader

As pediatricians, we are in a pivotal position to:

- Screen for both liver health and glucose regulation in all children with obesity.
- Leverage the new AAP Clinical Practice Guidelines to identify high-risk patients earlier.
- Act during the window of reversibility, before metabolic damage becomes permanent.

The time for action is now. As members of AAP California Chapter 1, we can lead the way in integrating MASLD and glucose screening into routine obesity care, changing the metabolic futures of children across California.

Further Reading

- [Metabolic dysfunction-associated steatotic liver disease \(MASLD\) in children with obesity: An Obesity Medicine Association \(OMA\) and expert joint perspective 2025.](#)

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