



Childhood Obesity in Alabama: A Call to Action

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Today's reality: the U.S.

- ◆ A national composite index developed by the Foundation for Childhood Development indicates that the overall health and well-being of children is 37% lower today than it was during the mid-1970s. One of the largest contributors to children's declining health is obesity.¹
- ◆ The U.S. now has the highest percentage of overweight youth in our nation's history.²

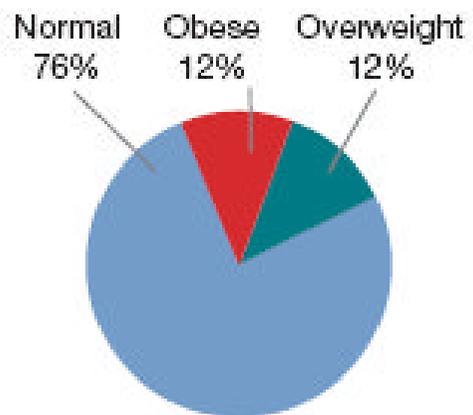


Today's reality: the U.S.

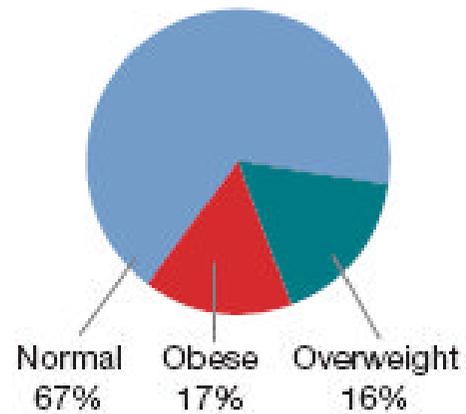
- ◆ Over the past 30 years, the prevalence of childhood obesity has nearly tripled.³
- ◆ Today, nearly 15% of American children and adolescents aged 2 to 19 years are considered overweight and an additional 16% are considered obese.²
- ◆ This amounts to approximately 24 million children and adolescents who are struggling with unhealthy amounts of excess weight.⁴

Childhood obesity by age

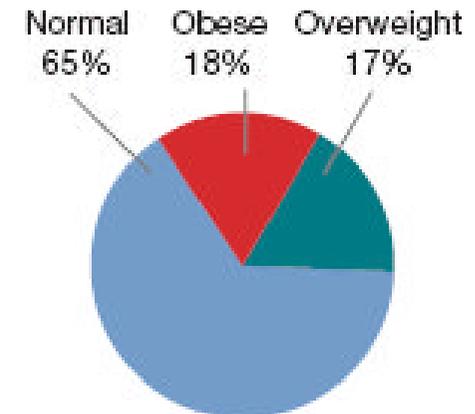
Figure 2: Childhood Obesity by Age²



2-5 Year Olds



6-11 Year Olds



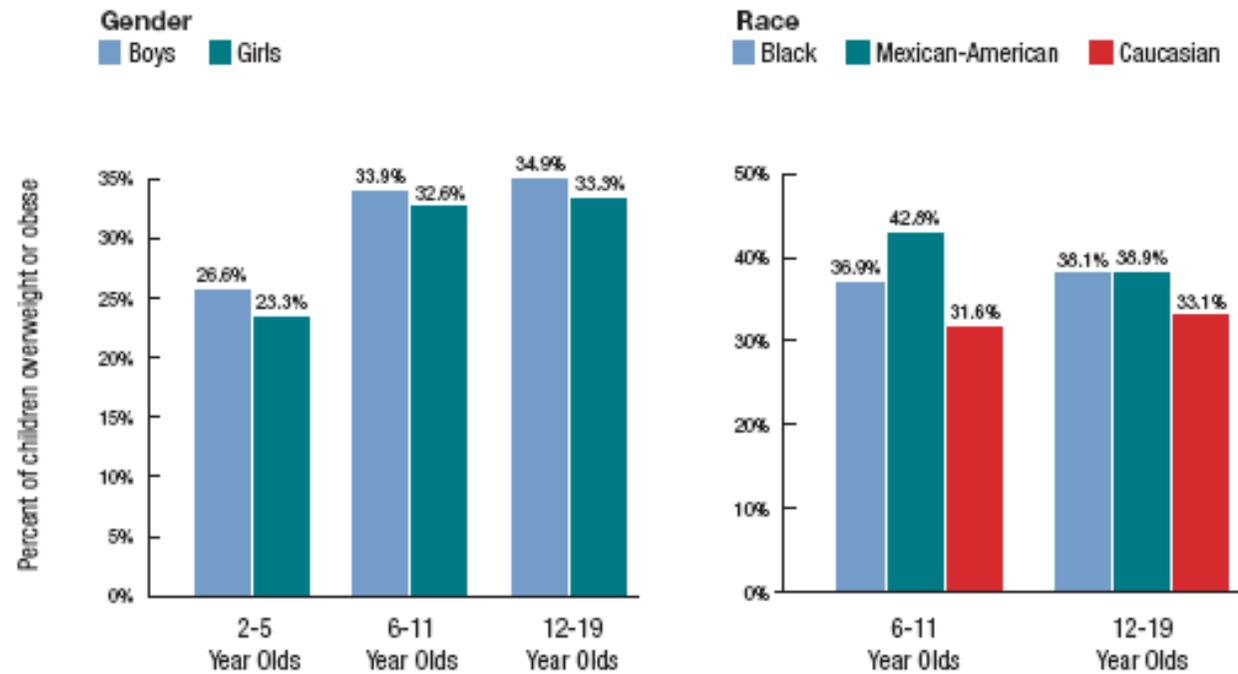
12-19 Year Olds



Childhood Obesity by Race and Gender



Figure 3: Childhood Obesity by Race and Gender²



Trends in Child and Adolescent Overweight



Note: Overweight is defined as BMI \geq gender- and weight-specific 95th percentile from the 2000 CDC Growth Charts.
Source: National Health Examination Surveys II (ages 6-11) and III (ages 12-17), National Health and Nutrition Examination Surveys I, II, III and 1999-2004, NCHS, CDC.



FICTION: Obesity rates are the same everywhere

According to a 2009 report, “F as in Fat,” prepared by the Robert Wood Johnson Foundation, “childhood obesity varies by state for a variety of reasons, including differences in the local environment and state and federal policies. For example, Mississippi has the highest rate of obese and overweight children (44.4%). Other southern states, including Georgia, Alabama, Tennessee and Kentucky, also have high rates of obese and overweight children compared to the rest of the country...”⁹



Today's *harsh* reality: Alabama

- ◆ F as in Fat Report ranks Alabama 2nd for obesity
- ◆ F as in Fat Report ranks Alabama 6th for childhood obesity in children ages 10 to 17
- ◆ 36.1% overweight and obese

Childhood obesity-related illnesses occur in the short-term

- ◆ Many health conditions once considered adult problems are now being diagnosed among children.
- ◆ Today 8%-46% of new pediatric diabetes cases (Type I and Type II) are Type II.¹⁰
- ◆ In one study, 70% of obese children 5 to 17 years old were already diagnosed with at least one cardiovascular risk factor (e.g., high blood pressure, high cholesterol) and 39% had two or more risk factors.¹¹





... and long-term.

◆ overweight /obese children and adolescents are at increased risk for the following:

- high blood pressure;
- Type II diabetes;
- elevated cholesterol;
- asthma;
- sleep apnea;
- menstrual irregularities;
- polycystic ovarian syndrome; and
- muscle and joint conditions.



Childhood obesity associated with mental health, quality of life issues

- ◆ Overweight and obesity have been shown to increase depression, anxiety and low self-esteem among children and adolescents.¹²
- ◆ Furthermore, obesity has been found to greatly impact the quality of life (QOL) among children. In one study, physical, emotional, social and school functioning were assessed among obese children, healthy children and children with cancer. As suspected, obese children had a lower QOL in all areas compared to healthy children. The QOL for obese children was found equivalent to that of children undergoing chemotherapy.¹³

Childhood, adult obesity connected

- ◆ Overweight and obese children are more likely to become obese adults.
- ◆ Among overweight and obese children 3 to 5 years old, there is a 40% chance of becoming an obese adult; overweight and obese adolescents
- ◆ 10 to 17 years old have a 74% chance of becoming an overweight adult.
- ◆ Adult obesity can also increase the likelihood for child obesity. A child under the age of 5 is at least 3 times more likely to become an obese adult if one parent is obese; if both parents are obese, the likelihood increases to 13 to 15 times. Among older children, parental obesity can increase the likelihood of becoming an obese adult by 2 to 5 times.¹⁴



What is Alabama Doing Now?

- ◆ State Obesity Task Force (multi-stakeholder)
- ◆ Action for Healthy Kids (school-based)
- ◆ Healthy Weigh Initiative (afterschool program)
- ◆ Scale-back Alabama (worksites program)
- ◆ Joint Obesity Youth Project (one-time afterschool)
- ◆ Community-Based Interventions
 - Jefferson Co., Millbrook, Greensboro, others
- ◆ Grant Opportunities-AL-AAP, ADPH
- ◆ BCBS Pediatric Weight Management Toolkit
- ◆ Weight-management programs, such as Children's Hospital's LESTER





These are all worthwhile, effective interventions, but they do not provide the complete answer.



Among the key recommendations for health care reform in the 2009 RWJ “F as in Fat” Report:

- ◆ Ensuring every adult and child has access to coverage for preventive medical services, including nutrition and obesity counseling and screening for obesity-related diseases, such as Type 2 diabetes.



One-on-one, office-based time provides the rest of the answer

- ◆ Pediatricians have a unique opportunity to impact obesity rates through evaluation, prevention and treatment of obesity. They are consultants to the family at the time the child is born, they follow the growth of the child and can detect early signs of obesity.
- ◆ The best way to find out if a child (between the ages of 2 and 20 years old) is overweight is to have a pediatrician measure body mass index-for age (BMI-for-age). A child's BMI is a relative measure of body weight based upon his or her gender, age and height.
- ◆ When the BMI reaches the 85th percentile, the child is diagnosed as **overweight**. Over the 95 percentile identifies **obesity**. These situations require an office visit for further diagnosis and treatment.



AMA/CDC Expert Recommendations for Treatment of Child/Adolescent Overweight/Obesity - AAP Endorsed

- ◆ In 2007, an expert panel of 15 organizations convened by the American Medical Association (AMA), the Department of Health and Human Services' Health Resources and Services Administration (DHHS HRSA) and the Centers for Disease Control and Prevention (CDC) released new *clinical practice guidelines* to inform and standardize health care providers' role in preventing, identifying and treating childhood obesity. The new guidelines recommend that physicians assess a child's height, weight and BMI annually, as well as any medical and behavioral risk factors for obesity. Physicians also are encouraged to counsel patients on healthy behaviors necessary to maintain an ideal weight.¹⁹



Recommended Preventive Visits

- ◆ Plot BMI percentiles yearly, assess
- ◆ Reinforce healthy behaviors
- ◆ 5-2-1-0 plan
- ◆ Revisit yearly



Four recommended interventions

- ◆ When a child is identified as overweight or obese, four interventions of increasing intensity are recommended based upon a individual's weight status and response to earlier interventions:¹⁹

Prevention Plus

#1 Prevention Plus is the initial intervention recommended for overweight children (*BMI from 85th to 94th percentile*). Pediatricians should provide patient counseling to encourage a healthy diet and physical activity. Follow-up visits with the provider can be utilized based upon need.

- ◆ Explore knowledge base, look for risks of low self-esteem, negative body image
- ◆ Counsel on 5-2-1-0 message, self-monitoring logs
- ◆ Engage whole family in activities
- ◆ Weight goal: maintenance to grow into weight at 85th percentile BMI
- ◆ Revisit w/ family every 1-3 months, if no improvement in 3-6 months proceed to Phase 2



Structured Weight Management

#2 **Structured Weight Management** is recommended for obese children (BMI from 95th to 98th percentile) or those for whom earlier intervention efforts (Prevention Plus) have not been effective. This approach combines more frequent physician follow-up — several times/month to weekly monitoring visits — with written diet and exercise plans to achieve gradual weight loss (1 pound/month) if clinically indicated.

- ◆ Develop plan for balanced macronutrient intake with emphasis on portion size of high energy dense foods
- ◆ Increase frequency of structured family meals, planning with an RD
- ◆ Re-emphasize importance of monitoring logs (age-appropriate)
- ◆ Supervised active play 60 minutes /day, community support
- ◆ Weight goal: maintenance or loss of 1#/month (age 2-11) up to 1-2 #/week for obese teens) to achieve 85th percentile BMI
- ◆ Revisit at least monthly with MD, RD, office staff. Reassess in 3-6 months proceed to Phase 3 as needed



Comprehensive Multidisciplinary Intervention

#3 Comprehensive Multidisciplinary Intervention is utilized for obese children or for those who participated in 3 to 6 months of structured weight management and failed to achieve targets. This level of intervention combines more frequent visits (weekly) with a physician and a dietitian and could also include visits to exercise physiologists and behavioral specialists to achieve gradual weight loss of 1 to 4 pounds/month.

- ◆ Eating and physical activity plans as in Phase 2
- ◆ Behavioral support with structured behavior modification program
- ◆ Motivational interviewing
- ◆ Revisit weekly, reassess in 6-12 months, if no progress consider Phase 4



Tertiary Care Intervention

#4 **Tertiary Care Intervention** is the most intensive strategy recommended for morbidly obese adolescents (BMI 99th percentile or greater) with associated co-morbidities or for individuals for whom earlier efforts were not effective. This approach consists of all that is contained in the previously described interventions, and may include more aggressive therapies, including meal replacements, pharmacotherapy and, in rare cases, bariatric surgery.

- ◆ BMI > 95th with significant co-morbidities, unsuccessful in stages 1-3 and children with BMI > 99th unsuccessful in Phase 3
- ◆ Experienced multi-disciplinary team with designated protocol
- ◆ Eating and physical activity plans as in Phase 2 with consideration of additions of meal replacement, VLCD, medication, and surgery





A Summary of Recommended Treatment Guidelines for Childhood Obesity

Health Service	BMI & Risk Factor Assessment	Counseling on Healthy Diet	Physician Follow-up Visits	Counseling Provided by Dietitians, Exercise or Behavioral Specialists	Meal Replacements, Medications or Bariatric Surgery
Prevention	X	X			
Prevention Plus		X	(as needed)		
Structured Weight Management [†]		X	X (monthly to weekly)		
Comprehensive Multidisciplinary Intervention ^{††}		X	X	X	
Tertiary Care Intervention ^{††}		X	X	X	X



Examples of health plans that have added obesity coverage

- ◆ In 2005, Blue Cross Blue Shield of North Carolina (BCBSNC) added obesity-related services as a standard benefit for beneficiaries. BCBSNC provides four physician office visits per year for weight assessment and treatment services, as well as visits to allied health professionals and nutritionists. For all services, physicians can code obesity as the diagnosis and reason for services.



Examples of health plans that have added obesity coverage

- ◆ In 2006, Highmark began offering obesity-related services in their health plans to combat the high level of childhood obesity. Highmark offers overweight beneficiaries (BMI between 85th and 95th percentile) the following:²
 - two additional preventive service visits specifically for obesity and blood pressure management; and
 - two annual nutrition counseling visits.

For obese beneficiaries (BMI greater than 95th percentile), Highmark offers the same services as well as one set of laboratory tests.² Like BCBSNC, physicians can code obesity as a sole diagnosis when offering these services.



Conclusion

“...let us seize the opportunities that patient visits afford us and lead the way to stemming the pandemics of obesity and physical inactivity.”

<http://archinte.ama-ssn.org/content/vol164/issue3/index.dtl>

The pediatric Medical Home is the one place—*the only place*—that parents and their children can receive careful, one-on-one counseling in order to prevent obesity before it becomes a problem for them, for their children and for their children’s children.”

- J. Wiley, MD, FAAP



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Discussion