

# Nutrition for the Prevention and Treatment of Childhood Obesity



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# Part 1: Little-Known Contributors to Childhood Obesity

- Nutrition in early life
  - Prenatal nutrition
  - Breastfeeding
- Food insecurity
- Parental feeding practices
  - Encouragement to eat
  - Food restriction
  - Family meals



# Nutrition in Early Life: Prenatal Nutrition

- The risk of childhood obesity is affected by the mother's nutrition status before and during pregnancy.
- Recent studies show that a woman's diet and body weight during pregnancy can actually alter the child's DNA in a way that increases risk of obesity, heart disease and diabetes.
- To reduce the prevalence of childhood obesity, it is essential that pregnant women and women of childbearing age maintain a healthy weight and eat a well-balanced diet.

# Nutrition in Early Life: Breastfeeding

- Breastfed babies have a significantly reduced risk for overweight and obesity throughout childhood and into adulthood.
- The longer a mother breastfeeds her baby, the less likely the child is to become overweight or obese.
- Exclusive breastfeeding (no other food or drinks except breastmilk until 6 months) protects against obesity better than combining formula and breastmilk.

# Food Insecurity

- **Food security is:** Access by all people at all times to sufficient food for an active and healthy life. This includes at a minimum:
  - Readily available safe and nutritious foods.
  - Guaranteed access to foods in socially acceptable ways.
- In 2009, 26.5% of children in Ohio experienced food insecurity.

Gundersen, C., E. Waxman, E. Engelhard and J. Brown.

Feeding America. *Map the Meal Gap: Child Food Insecurity 2011.*

# Food Insecurity

- Youth from low-income and food-insecure families are at higher risk of obesity due to:
  - Lack of access to healthy, affordable foods
  - Cycles of food deprivation and overeating
  - Limited access to healthcare
  - Fewer opportunities for safe physical activity
  - Higher levels of stress
  - Greater exposure to marketing for obesity-promoting products

# Parental Feeding Practices

- Both encouragement to eat and food restriction are associated with obesity in children.
- Old thinking:
  - Clean plate club
  - Dessert is only allowed if the child eats all of his/her vegetables
- New thinking:
  - Parents model healthy eating behaviors
  - Parent provides, child decides



# Parental Feeding Practices: Family Meals

- Shared family meals protect against obesity and eating disorders while promoting healthy eating habits.



## Part 2: Resources to Address Childhood Obesity at Dayton Children's

- The Boonshoft Museum of Discovery's Exhibits-To-Go
- The Family Resource Center
- [Childrensdayton.org](http://Childrensdayton.org)
- The Body Shop
- Outpatient Clinics
  - Nutrition
  - Lipid
  - Endocrinology



# Outreach for Healthy Lifestyles

## The Boonshoft Museum of Discovery's Exhibits-To-Go

- Food, Fitness, and Fun (grades 2–8)
  - Through direction from The Children's Medical Center of Dayton, students will see how to brighten their day with colorful foods and experience fun new aspects of eating, exercise and a healthy lifestyle.

To register, call (937) 275-7431, ext. 301

# The Family Resource Center

- Located at Dayton Children's main campus, The Family Resource Center provides information on child health, behavior and safety to parents, teachers, and other community educators.
- The Family Resource Center is donor funded and free of charge to anyone in the community.



- Fitness and Nutrition Kits
  - Books, games, hand-held exercise equipment, and nutrition lesson plans for the 5-2-1-0 campaign.

To reserve materials, call (937) 641-3700

# Additional Resources

Visit our website at [www.childrensdayton.org](http://www.childrensdayton.org) for easy to download handouts, tips, and recipes. “Search Our Site” for your topic of interest.



The screenshot shows the Dayton Children's website homepage. At the top right, a red arrow points to the search bar labeled "SEARCH OUR SITE". The main navigation menu includes "PATIENT & VISITOR INFO", "OUR SERVICES", "HEALTH & SAFETY", "LOCATIONS/CONTACT INFO", and "ABOUT US". On the left sidebar, there are links for "FIND A DOCTOR", "PAY YOUR BILL", "DONATE NOW", "IMPORTANT NUMBERS", and "VIEW ALL TOOLS". Below these is a "Find a Location" section with a Google Maps widget showing the Dayton Children's Medical Center. The main content area features an article titled "When the unexpected happens" with the sub-heading "Ryleigh's story". The article text reads: "Kelly Watts had a completely normal pregnancy. She never expected that two weeks after giving birth that her precious newborn would be in the Regional Level III Newborn Intensive Care Unit at Dayton Children's." Below the text is a link "WATCH RYLEIGH'S STORY". At the bottom of the article, there are five numbered tabs (1-5) and a "VIEW ALL STORIES" link. On the right side of the article, there is a photograph of a smiling woman holding a baby.

# Family-Based Program



- The Body Shop is a nutrition, exercise, and lifestyle coaching program for overweight and obese children ages 7-12 years old.
- Children and their parents meet once weekly during the 8-week program to learn about weight control with a registered dietitian, physical activities leader, and counselor. Parents also work with a clinical psychologist to assist their children in meeting their weight-control goals.
- Currently sessions held at DCMC main campus. Partnerships available to aid community organizations in producing a Body Shop session.

For more information or to register for a session, call (937) 641-3504

# Outpatient Clinics

- **Nutrition Clinic**

- Children and their families work with a registered dietitian to identify nutrition problems and develop healthy eating behaviors.
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- Children with no specific medical condition may also be referred to Nutrition Clinic to learn more about nutrition and living a healthy lifestyle.
- Appointments by PMD referral.
- Appointments are grant funded for children with Medicaid, Medicaid HMOs, and BCMH.

# Outpatient Clinics

- **Lipid Clinic**

- Children and their families work with pediatricians, nurses, and dietitians specializing in lipid disorders and obesity.
- Children with familial hypercholesterolemia and children with comorbidities secondary to obesity may be referred by PMD.



# Outpatient Clinics

- **Endocrinology Clinics**
  - Hyperinsulinemia Clinic
  - Type 2 Diabetes Clinic



Clinics located at Dayton Children's  
Main Campus

# Questions?

