CHILDMHOOD
OBESITY: A
GROWING
PROBLEM

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OBJECTIVES
 Identify risk factors for childhood obesity
 Compare interventions that target childhood obesity
 Have an overview of initiatives and resources for families
 Understand the role of the nurse practitioner in prevention of childhood obesity

DEFINITION
 Childhood overweight and obesity are based on body mass index (BMI)
 BMI is ratio of weight in Kg. divided by square of height in meters
 Normal: 10th to 84th %
 Overweight: 85th % to 94th%
 Obese: > 95th %
 Used for children 2 to 19 years
 Considered another vital sign
PREVALENCE

- Prevalence of obesity in children aged 2-19 years is 17% or 1 in 6 children.
- Obesity in 2-5 year olds decreased from 13.9% in 2003-2004 to 8.4% in 2011-2012.
- In 2011-2012, in 6-11 year olds obesity was 17.7% and 20.5% in 12-19 year olds.
- No socioeconomic group, geographic region or ethnic group is not affected by obesity.

CHILDREN UNDER 2 YEARS OF AGE

- No recommended definition of obesity < 2 years of age.
- In children < 2, data from 2011-2012 compared recumbent length with weight > 95th percentile.
- 8.1% of the children had increased weight for length.

Ogden, CL, Carroll, MD, Kit, BK & Flegal, KM, 2014.

DIFFERENCES EXIST AMONG RACIAL AND SOCIO-ECONOMIC GROUPS

- 2011-2012 Obesity was higher among Hispanics (22.4%), Non-Hispanic Blacks (20.2%) and non-Hispanic whites (14.1%).
- Rates were lower among non-Hispanic Asians (8.6%).
- Higher obesity prevalence at or below poverty threshold in 2-4 year olds.
- These rates have decreased recently.
- Rates vary by states.
Goal is to reduce childhood obesity from 20% to 5% by 2030


“LET'S MOVE”
**OBESITY CONTINUES INTO ADULTHOOD**
- Four year olds who are obese have a 20% chance of being obese adults.
- Overweight adolescents have a 70% chance of becoming overweight or obese adults.
- Risk increases to 80% if one or more parent is overweight or obese.

“Children today, because of increased obesity trends, may for the first time in the history of the United States have a shorter lifespan than that of their parents.”


**PARENTAL OBSERVATION**
- Parents of children 4-15 years were asked to judge if their child was too heavy.
- 23% of the parents who had a child who was overweight or obese by BMI measurement thought their child was the right weight.

Lepkowska, D., (2014)
**PROFESSIONAL OBSERVATION**

- Photos of 3 preschool children were shown to medical students, residents and physicians.
- Participants were asked to identify by observation which child was overweight.
- 15% correctly identified the child with an obese BMI
- 21% correctly identified the child with an overweight BMI
- 86% correctly identified the child with a normal BMI


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**MYTHS**

- Obesity is genetic.
- A child’s obesity is all the parents’ fault.
- Obesity only happens to poor children from certain ethnic or racial groups.
- It’s a hormone problem.
- Feeding infants solids before 6 months of age leads to obesity.

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**FACTS**

- Risk factors do exist.
- Genetics does cause some obesity.
- Parental obesity is associated with childhood obesity.
- Some ethnic groups are considered high risk for childhood obesity. But obesity crosses all lines.
- Hypothyroidism can cause weight gain, but most children have normal thyroid studies.
- No difference in obesity rates at 6 years of age in children fed solids at 4 mos. Vs. 6 mos.
SCREENING

- BMI
- Fasting glucose every 2 years in obese children 10 and older with at least 2 risk factors (ethnicity, family history, signs of insulin resistance)
- Fasting lipid profile between 9-11 years
- TSH and Free Thyroxine if positive family history of thyroid disease
- Puberty assessment

IS BMI PERFECT?

- Families are offended by terms
- What about body composition?
- "My other children were just like him."
- Aren’t observation skills good enough?

RISK FACTORS

- Absence of family meals
- Decreased activities (Prentice-Dunn & Prentice-Dunn, 2012)
- Screen time
- Portion size
- Availability of high energy drinks, dense foods and sugars.
CO-MORBIDITIES
- Cardiac
- Endocrine
- Pulmonary
- GI
- Skin
- Musculoskeletal
- Psychological
- Dental

WHAT WORKS?

Questions
are
guaranteed in
life; Answers
aren’t.

STRATEGIES WE KNOW
- Start early
- Breastfeed (Yan, Liu, Zhu, Huang & Wang, 2014)
- Healthy dietary intake
- Exercise (60 minutes/day)
- Limit screen time to 2 hours a day
- Family interventions are more effective
STRATEGIES TO CONSIDER
- Strategies need to be culturally sensitive and mindful of socio-economic limitations.
- Recognize children’s cues of fullness (McBride & Dev, 2014)
- Frequent follow-up
- Do not blame; find a modifiable risk factor
- Use of electronic medical records improves screening (Savinon, Taylor, Caanty-Mitchell & Blood-Siegfried, 2012)
- Establish a healthy eating relationships in families

PARENTING STYLE
- Efficacy
- BMI is a family issue
- Parent modeling behavior
- Moderate control parenting

COMMUNITY INITIATIVES
- Dr. Epstein - University of Buffalo
- “Fit Families” D’Youville College
- “Healthy Tots”
- Dr. Quattrin & UB Behavioral Medicine Project
ROLE OF THE NURSE PRACTITIONER

- Promote breastfeeding
- Follow obesity screening recommendations
- Educate ourselves first, then our families
- Advocate for community opportunities for physical activity
- Families need affordable sources of nutritious foods
- Lobby for media that promotes healthy nutrition
- Research

QUESTIONS
Childhood Obesity: A Growing Problem
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REFERENCES


Deurenberg, P, Deurenberg-Yap, M & Guricci, S. (2002). Asians are difference from Caucasions and from each other in their body mass index/body fat percent relationship. *Obesity Review, 3*(3), 141-146.


