

Children of Overweight Moms Are Obesity Prone

BY DOUG BRUNK
San Diego Bureau

By the time children of overweight mothers reach 6 years of age, they are 15 times more likely to be obese, compared with children of lean mothers, results from a novel study suggest.

"These are kids at extraordinary risk for developing obesity," the study's lead author, Robert Berkowitz, M.D., said in an interview. "These are not kids who are going to get thin later."

The finding suggests that children of overweight mothers could become a target group for obesity prevention efforts, said Dr. Berkowitz, chair of adolescent psychiatry and executive director of the behavioral health center at the Children's Hospital of Philadelphia.

"Common sense prevention approaches [for children] include regular activity that's healthy and safe, cutting down on TV watching and computer game usage, and eating a healthy, low-fat diet with fruits and vegetables and portion control," he told this newspaper.

"But we don't know that for sure because we haven't done the obesity pre-

vention treatment at such a young age."

For the study, which is the largest of its kind, he and his associates followed 33 children at high risk of obesity and 37 children at low risk of obesity based on the mother's prepregnancy body mass index (Am. J. Clin. Nutr. 2005;81:140-6). Mothers of high-risk children had a mean prepregnancy BMI of 30.3 kg/m² while mothers of low-risk children had a mean BMI of 19.5 kg/m². The study was confined to white children because they have different growth patterns compared with nonwhite children.

Investigators examined the children from 3 months of age to 6 years, including measurements of height, weight, skin fold thickness, and fat mass and lean mass by dual-energy x-ray absorptiometry (DXA).

They defined childhood overweight as a BMI at or above the 85th percentile for age and gender according to the National Center for Health Statistics/Centers for

Disease Control and Prevention growth charts.

By age 2, no clinical differences were observed between the high- and low-risk groups, but by age 4 years, weight, BMI, lean body mass, and waist circumference were significantly greater among high-risk children, compared with their low-risk counterparts. Dr. Berkowitz said these factors translated into an 11-fold risk of obesity developing in high-risk children.

By age 6 years, the weight, BMI, lean body mass, and waist circumference had increased even more among high-risk children compared with their low-risk counterparts. Skin fold thickness also increased. In addition, for the first time, fat mass was greater in high-risk children compared with their low-risk counterparts (6.7 kg vs. 3.8 kg, respectively). So was percentage of body fat (24.7% vs. 18.8%, respectively). Dr. Berkowitz said these factors translated into a 15-fold risk

of obesity developing in high-risk children.

Harsohena Kaur, M.D., a pediatrician at the University of Kansas, Kansas City, called the study "another piece of the puzzle" in gaining a better understanding of the epidemic of childhood obesity.

"We have been seeing bigger and bigger babies who are becoming bigger and bigger toddlers," said Dr. Kaur, whose research interests include childhood obesity. "They seem to be bigger across the board. I have no idea how that's going to impact everything 20 years from now. This study is scary in that sense."

Dr. Berkowitz said he was surprised there were no clinical differences between the high- and low-risk groups of children in the first 2 years of life.

"The kids at 1 and 2 years were identical in measures of height and weight and skin fold and body composition," he said. "Maybe one of the things that's happening is that certain genes are beginning to turn on, or environmental influences are strong at this age." A limitation of the study, he said, was its relatively small sample size. The National Institutes of Health supported the study. ■

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Non-BMI Assessments Miss Many Overweight Children

BY JEFF EVANS
Senior Writer

Assessments of overweight that use methods not based on body mass index may grossly underdiagnose that condition in children, according to findings from a retrospective study.

During well-child visits, only 29% of overweight children were diagnosed as overweight and 1% of children at risk for overweight were classified as such using clinical impression as well as weight-for-age and weight-for-height percentiles.

Howard Taras, M.D., a member of the American Academy of Pediatrics Task Force on Obesity, said body mass index for age is recommended for determining overweight and risk for overweight in children, but most practices probably do not use it.

In most practices, a nurse or a nurse's aide records the height and weight at well-child visits into the patient's chart and may then plot them on a graph. Calculating the BMI for age just adds another step beyond that, he said in an interview.

In a 2-week period, 93 (20%) of 473 patients aged 2-18 years were categorized as overweight, and another 82 (17%) patients were categorized as at risk for overweight, reported Miriam V. Louthan, M.D., and her colleagues at the University of Louisville (Ky.).

They defined "at risk to be overweight" as BMI for age between the 85th and 95th percentile and overweight as BMI for age at the 95th percentile or greater (Clin. Pediatr. [Phila.] 2005;44:57-61).

"Severely overweight children are unlikely to be missed by any method of detection of overweight," the investigators wrote, but "children who are younger and mildly overweight and who have more potential to have their disease process successfully interrupted are the ones who were typically missed by the non-BMI-based methods of identification."

Most of the children who were overweight were younger than 12 years (68 patients), yet the physicians diagnosed significantly fewer of them than children older than 12 years (22% vs. 48%).

"I think we have to make sure that doctors feel that this is worthwhile, that it's going to change their management or change the instructions they give," because it may take more money and staffing to direct additional clinical time to obesity, said Dr. Taras, professor of community pediatrics at the University of California, San Diego.

Physicians will have a better chance of reversing obesity in childhood and adolescence if they can refer patients to resources in the community on nutrition and physical activity that insurance will pay for, he added.

The physicians in the study gave 85% of the children diagnosed as overweight some sort of treatment plan, most of which consisted of recommendations for increased exercise, improved nutrition, and changes in eating patterns. ■

BMI-for-age percentiles for ages 2-20 years can be found at www.cdc.gov/nchs/about/major/nhanes/growthcharts/clinical_charts.htm.

Several Strategies Prove Effective at Reducing Television Watching Time

BY ROBERT FINN
San Francisco Bureau

SAN FRANCISCO — The epidemic of obesity among children is tightly correlated with the increasing time children spend watching television, but there are a number of effective strategies for reducing television time, William H. Dietz, M.D., said at the annual meeting of the American Academy of Pediatrics.

The strategies derive from 180 interviews with parent/child pairs, said Dr. Dietz, director of the division of nutrition and physical activity at the Centers for Disease Control and Prevention, Atlanta.

Here are some messages to get across to parents, or strategies to use with parents:

► **Start early.** Efforts to reduce television time must start early. It's much easier to avoid placing a television into a child's bedroom than to remove one once it's there.

► **Pay attention to time as well as content.** Most parents are more concerned about what children watch than about how much they watch, but they need to pay more attention to television time, Dr. Dietz said. While parents tend to monitor their children's television habits to make sure they're not exposed to sexuality, violence, or drug use, studies have repeatedly shown that it's total viewing time that predicts overweight most closely. There's a similar relationship between total viewing time and attention-deficit hyperactivity disorder.

► **Offer children alternatives to TV.** According to the CDC interviews, children don't really regard television watching as "fun." Instead, they regard television watching as a default behavior. "That

means that if we ask children what they could do that would be more fun than watching television, we may be able to engage them around behavior change," Dr. Dietz said. Also, you may have to persuade the parents to work on changing their children's behavior. Parents are likely to control television time if they see it as interfering with important family values such as family time and schoolwork. Parents tend to be amenable to suggestions that mealtimes should be reserved for family discussions and that televisions should be turned off, for example. And they're more amenable to controlling television time during the school week than on weekends.

Television executives themselves have worked to change television watching behavior. Nickelodeon, a popular children's cable channel, voluntarily went dark for 3 hours on Saturday, Oct. 2, 2004, the "Worldwide Day of Play," and the channel actively encouraged children to become more physically active.

The CDC itself is conducting an expensive advertising campaign called "VERB: It's what you do," that's aimed at "tweens" (children aged 9-13). In the first year of this campaign, which was launched in October 2002, the CDC spent \$125 million to get its message out.

The campaign has been quite successful. In its first year it reached 92% of all tweens, and 74% say they're aware of the campaign. And the CDC is able to document significant increases in weekly free-time physical activity among children reached by the campaign.

Various VERB materials are available at www.cdc.gov (search for verb). ■