

Introduction to proceedings of healthy futures: engaging the oral health community in childhood obesity prevention national conference

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Abstract

Objectives: The Robert Wood Johnson Foundation (RWJF) has worked to ensure that all children have healthy weights. To promote this goal, the RWJF has supported the Healthy Futures: Engaging the Oral Health Community in Childhood Obesity Prevention National Conference, held on November 3-4, 2016, and the proceeding of this conference. The goals of the conference were to increase understanding of the science focusing on oral health and childhood obesity, increase understanding of how to prevent childhood obesity, and provide opportunities to network and plan activities to prevent childhood obesity.

Methods: The papers prepared for the conference identified through systematic reviews or scoping reviews the state of the science related to preventing childhood obesity and reducing children's consumption of sugar-sweetened beverages and strategies that oral health professionals and organizations can employ prevent childhood obesity.

Results: Causes of childhood obesity are multifactorial and include genetic components, environmental and lifestyle variables, and nutritional factors. Dental caries also is caused by a combination of factors, including cariogenic diet, inadequate fluoride exposure, a susceptible host, and the presence of caries-causing bacteria in the oral cavity. One key risk factors for both obesity and caries is excessive sugar consumption.

Conclusions: To reduce the risk of obesity and dental caries in children, health professionals and parents need to be aware of the sugar content of processed foods and beverages as well as of current daily sugar-consumption recommendations. Additionally, oral health professionals must become more engaged in identifying children who are at risk for obesity and dental caries; and provide education, screening and referral to reduce these risks.

For more than a decade, the Robert Wood Johnson Foundation (RWJF) has worked to advance public policy and industry practices and improve community environments to ensure that all children have healthy weights, which contributes to enhanced quality of life. The efforts of RWJF have resulted in several notable developments, including the replacement of sugar-sweetened beverages (SSBs) and sugar-sweetened foods with healthier options in school cafeterias and vending machines. RWJF has also advocated for requiring food and beverage companies to

clearly indicate the amount of added sugars on the labels of packaged items.

Another manifestation of RWJF's efforts to promote healthy weight in children was its support of the Healthy Futures: Engaging the Oral Health Community in Childhood Obesity Prevention National Conference, held on November 3-4, 2016, at Georgetown University in Washington, DC. The aim of the conference was to increase awareness of evidence-based recommendations; identify strategies; and promote collaboration efforts that oral

health professionals, oral-health-related organizations, and others can employ to prevent obesity in children under age 12. Partners in the conference included the National Maternal and Child Oral Health Resource Center, the American Academy of Pediatric Dentistry, the American Dental Association, the American Dental Hygienists' Association, and the Santa Fe Group. The papers that comprise this special issue began as presentations at that conference.

The causes of childhood obesity are multifactorial and include genetic components, environmental and lifestyle variables, and nutritional factors. Between the 1970s and 2012, obesity prevalence rose from 5 to 8.4 percent in children ages 2-5 and from 6.5 to 17.7 percent in children ages 6-11 in the United States (1). Children who are obese are likely to be obese as adults and are therefore at higher risk for adult health problems such as heart disease, type 2 diabetes, stroke, several types of cancer, and osteoarthritis (2). Dental caries is also caused by a combination of factors, including cariogenic diet, inadequate fluoride exposure, a susceptible host, and the presence of caries-causing bacteria in the oral cavity that interact with a variety of social, cultural, and behavioral factors (3). The prevalence of dental caries is 23 percent in children ages 2-5 in the United States (4).

One key risk factor for both obesity and dental caries is excessive sugar consumption. The high prevalence of obesity and dental caries, both common chronic diseases in the United States, is associated with consumption of SSBs and sugar-containing beverages (SCBs). RWJF defines SSBs as regular soft drinks (soda or pop), fruit drinks, sports drinks, energy drinks, and other beverages that contain caloric sweeteners, such as sweetened teas and pre-mixed sweetened coffees (5). SCBs includes SSBs as well as beverages in which sugar, generally glucose or fructose, is naturally present, such as in 100 percent fruit juice. Currently, in the United States, children's consumption of SSBs is high, with the majority of children consuming over 271 calories or 68 g of sugar from SSBs per day (6). In most cases, one 8-oz SCB contains or exceeds the total recommended daily maximum sugar intake (25 g) for children (7). To reduce the risk of obesity and dental caries in children, health professionals and parents need to be aware of the sugar content of processed foods and beverages as well as of current daily sugar-consumption recommendations. Additionally, oral health professionals must become more engaged in identifying children who consume large quantities of sugar and provide education to parents about the effects of sugar consumption in children and how to reduce it.

The papers prepared for the conference identified through systematic reviews or scoping reviews: a) the state of the science related to preventing childhood obesity, b) the state of the science related to reducing children's consumption of SSBs, and c) strategies that could be

employed by oral health professionals and organizations and others to prevent childhood obesity. Systematic reviews are intensive reviews of a research question, identifying level of evidence, quantitatively combining the data, and scoring the level of evidence and potential data bias. Scoping reviews are similar to systematic reviews but may include non-research articles to provide a broader array of information on the research question.

Additional contributions to the conference were derived from oral health professionals and other health professionals, representatives from oral-health-related organizations, and experts in childhood-obesity prevention who attended the conference. Speakers and participants put forward a series of strategies for childhood-obesity awareness and prevention that included increasing the oral health community's understanding of the effects of children's consumption of SSBs; implementing obesity and dietary screening; referring children, when necessary, for dietary counseling; and engaging oral health professionals and organizations in advocating for policies and practices that reduce children's consumption of SSBs.

The comprehensive literature reviews and conference discussions that are part of these proceedings provide readers with an understanding of the state of the science and strategies that can be employed by oral health professionals and organizations to reduce children's consumption of SSBs and thereby reduce the prevalence of childhood obesity and dental caries.

Thanks to the support of RWJF and the participation of key leaders and organizations, this national conference was an important first step in engaging the oral health community in contributing to the prevention of childhood obesity. Still to be done is creating obesity-prevention guidelines for oral health professionals; establishing healthy eating policies that oral health professionals can promote; and improving opportunities for oral health professionals, parents, and children to learn about healthy eating practices that promote healthy weight and good oral health. The ultimate goal is to help ensure that all children in our country have healthy weights, good oral health, and, in turn, the opportunity to lead healthy, happy, and productive lives.

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