

T8:S38.19

Health inequalities in energy balance-related behaviours among schoolchildren across Europe: baseline results of the EU “EPODE for the promotion of health equity” (EPHE) project

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Background: The reduction of health inequalities is a top priority of the public health agendas in Europe. The EPHE project, funded by the European Commission, aims to analyse the added value of an adopted EPODE methodology for the reduction of socioeconomic inequalities in health. This project focuses on four energy balance-related behaviours (EBRB): fruit and vegetable consumption, fluid intake, sedentary behaviour, sleep duration and their determinants.

Aim: This study aims to identify socioeconomic differences related to EBRB among children in seven European countries (Belgium, Bulgaria, France, Greece, Portugal, Romania, The Netherlands).

Key Methods: A total of 1098 children aged 6–8 years and their parents, from different SES backgrounds, were recruited through schools. To measure the EBRB of the children and their determinants, a questionnaire was completed by the parents.

Results: Low fruit and vegetable consumption, high screen exposure and intake of sugar sweetened beverages were particularly problematic behaviours in children with relatively low SES. Alongside, parental practices and physical factors alleged to determine such behaviours, were significantly more favourable in families with high SES.

Conclusions: Our findings confirm the existence of health inequalities related to the four EPHE themes in the participant countries as well as their respective determinants. These results will guide the EPHE interventions, aimed at reducing health inequalities and will also serve as the baseline measurements to evaluate the effectiveness of these interventions. Finally, interventions aiming at promoting health equity should prioritize support in parenting practices given that, they were found to be different across socioeconomic categories.

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Community empowerment models making a difference in reducing childhood obesity in the United States of America

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Overview: Childhood obesity rates in the USA are among the highest in the world, and within the United States, Black and Latino children suffer worst outcomes than other populations. Across the USA more than 35% of Black children and nearly 40% of Latino children are overweight, compared to 29% of white children. Globally, in 2006, America's childhood obesity rates were second highest among 30 countries surveyed. Significant changes are being made to address this epidemic. While access to quality, affordable and accessible health care is an important part of obesity management, far more important are changes that must

be made in communities where children live, play and attend school. There are innovative national models that are making a difference and we are beginning to see rates slightly decline in a few places. We will explore these community centered interventions.

Goals: Through the following intervention model: Advocacy, Access and Action, we will demonstrate effective changes in practice and policy that is impacting childhood obesity. The CA Endowment's Healthy Eating Active Communities program, Kaiser's Farmer's Market initiative, and a public private partnership, CA Freshworks Fund will be highlighted.

Interventions: The need for community focused models is critical because conditions in many communities of color are not health promoting, in fact, they place residents at additional risks. Progressive American funders are actively seeking the involvement of these community members as vital partners in solving the obesity problem.

Results: new supermarkets are now being developed in low-income areas that were without access to healthy foods; more farmer's markets are now available, and small stores receive funds for refrigeration to keep foods fresh. These efforts all assist in reducing obesity.

T8:S38.21

The potential impact on obesity of taxing sugar-sweetened drinks in South Africa

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South Africa is in the process of rapid societal change. The prevalence of obesity has risen sharply, as has the consumption of sugar-sweetened beverages (SSBs). SSB consumption is known to increase body mass (BMI). We estimated the effect of a 20% tax on SSBs on mean BMI and the prevalence of obesity among adults in South Africa. We used consumption data from the 2012 National Health and Nutrition Examination Survey and meta-analysis of studies on own- and cross-price elasticities of SSBs to estimate the shift in daily energy consumption expected of increased prices of SSBs, and energy balance equations to estimate shifts in BMI. The population distribution of BMI by age and sex, and trends in BMI were modeled by fitting measured data from the SA National Income Dynamics Surveys 2008–2012 to lognormal distributions. Uncertainty was assessed with Monte Carlo simulation. A 20% SSB tax is likely to reduce energy consumption from non-alcoholic drinks about 3.2%, resulting in a reduction in body mass by 0.39 kg (0.144 kg/m²), on average. For men, the obesity prevalence would go down from 13.6% to 13.0% and for women from 35.6% to 34.7%. The number of obese would be reduced by 103,000 (95%UI: –21,000, –196,000; –4.8%) among men and 150,000 (–30,000, –288,000; –2.4%) among women. Adults aged 20–39 yr would lose twice as much weight as those aged 60+. SSB taxes can reduce the burden of excess body mass in South Africa, as part of a broader effort to encourage healthier diets.