dietary intake and physical activity levels. I will review recent progress in the implementation of recommended national, state and local government policies for population obesity prevention. I will argue that to optimise population obesity prevention effectiveness requires a more explicit understanding of the different actors and policies, and how they may interact at the level of the population and the individual. I will also argue that we need a greater understanding of the equity impact of these policies. A priority moving forward should be better recording and communication of existing activities in order to more rapidly spread the uptake of the most effective and equitable policies globally and at scale.

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Invited talk: Critical windows in the early life origins of obesity and food preferences

Beverly Muhlhausler

University of Adelaide, Adelaide, SA, Australia

There is compelling evidence that exposure to an inappropriate nutritional environment before birth and/or in early infancy, whether it be a nutritional deficiency, nutritional excess or deficiencies of key macro or micronutrients, is associated with an increased risk of obesity and altered food preferences in the offspring. It is also clear that the consequences of this altered nutritional exposure is also dependent on the period of development during which this exposure occurs. Recent work from our group has highlighted the critical role of the suckling period for the programming of obesity and food preferences in the offspring, which opens up the potential for the negative effects of prenatal exposures to be mitigated by improved maternal nutrition during lactation. This presentation will focus on these findings and their potential implications, and describe the impact of maternal cafeteria diet on breast milk composition in our animal model.

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Invited talk: What is the evidence for effective obesity prevention strategies across childhood?

Kylie Hesketh

Deakin University, Burwood, VIC, Australia

The prevalence of overweight and obesity amongst children is high. Approximately one in five children commence school already above the healthy weight range, with these rates rising once children are at school. Thus there is much scope for prevention efforts.

Most childhood obesity prevention research has been conducted with school-aged children. Strategies have predominantly been delivered within the school setting. Overall these interventions show a small positive impact on child body mass index (BMI). Interventions involving both physical activity and diet strategies appear to be more effective than interventions focusing on a single behaviour.

While considerably less research has been conducted in the early childhood population, the impact of prevention strategies appear to be greater in this age group. Strategies in the early childhood population have been delivered through a range of settings including preschools, health care and family-based settings. Overall studies suggest a positive impact with some suggestion that family-based settings may hold greatest promise.

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Invited talk: Challenges of interventions in adolescents with obesity

Louise Baur

University of Sydney & Children's Hospital at Westmead, Westmead, NSW, Australia

One in four Australian adolescents is overweight or obese, and prevalence rates in this age group have continued to increase in recent years, especially in more socially disadvantaged groups. In addition, rates of severe or morbid obesity in adolescence have more than doubled in the past two decades. Obesity in adolescence is often complicated by psychosocial distress and associated with a range of other health problems.

For all these reasons, effective prevention and treatment of obesity in adolescence should be a