

Is climate change action present in obesity prevention policy?

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Obesity and climate change are two of the most significant global contemporary public health issues. The impacts of obesity and climate change on health, the natural environment and the economy have been widely documented. Obesity, which is characterised by excessive storage of adipose tissue, increases risk of cardiovascular disease, diabetes and some cancers in adults.¹ Climate change results in the long-term disruption of weather patterns, which adversely affect ecological biodiversity and the prevalence of natural disasters. This disrupts food supply, secure housing and is rapidly depleting natural resources.^{2,3} Both have significant economic impacts. It is estimated obesity represents 2.8% of global Gross Domestic Product (GDP). Comparatively the impact of climate change is significantly higher, estimated to account for 5-10% of global GDP.²

The outcome measures, community perceptions and conversations around these two issues can be remarkably different, however, their drivers and the actions to address both issues can overlap substantially.² For example, the production, packaging and consumption of energy-dense, nutrient-poor foods, including sugar-sweetened beverages, contributes to obesity through excess consumption and climate change through production emissions, transportation and landfill.⁴ Changes to transport behaviors, favoring walking and cycling over driving, is another action that has dual benefits for both health and the environment. Given the urgent need to act on both challenges, there is a clear opportunity for synergistic policies on obesity and climate change that provide strategic directions on double duty actions. This may strengthen actions and accountabilities from policies and consequently improve health and environmental outcomes.²

To understand whether policies intended to address obesity also included climate change action, we investigated whether double duty actions to address both obesity and climate change were evident in published childhood obesity prevention policies. An obesity policy was broadly defined as a document developed to convey the authors' position on obesity intervention and include practicable actions to reduce obesity at a community level. Policies directed to children were selected as a study parameter, as early prevention is critical in reducing the burden of obesity.¹ It was also speculated that young people's greater interest in climate change may produce stronger policy links. Double duty actions were defined as actions that have the potential to

simultaneously impact obesity and climate change through a single action or intervention. An action did not have to explicitly address climate change to be included. A grey literature search (23/5/22) was undertaken using the search terms "Obesity policy" AND "Children" in Google. Google was selected as the database as it was deemed to be the most suitable and comprehensive to find contemporary policies. The search was limited to English-language policies published during the past 10 years. The first ten pages of Google results were examined ($n=97$). Results from academic journals, media releases, health promotion materials, book chapters, medical advice, academic presentations, Google advertisements, social commentary, documents referring only to taxation or pharmacological interventions and duplicate results were excluded ($n=67$).

Thirty documents met the inclusion criteria and were screened for presence of double duty actions. Eight of the 30 documents (27%) contained double duty actions (Table 1). In seven of the eight results, the relationship between obesity prevention actions and climate change was not explicit. In these policies the suggested actions were intended to impact solely on obesity but inadvertently extended to climate change action. Only one policy explicitly linked obesity and climate change. This was from 'Healthy Voice' - the youth action platform of the World Obesity Federation.⁵ This policy focused on children and adolescents and described the link between obesity and climate change, listing multiple targeted double duty actions.

In these remaining seven policies, the most common double duty action items identified were reducing processed foods ($n=6$); reducing sugar sweetened beverages ($n=6$) and increasing active travel ($n=5$) (Table 1). Australia's recently released National Obesity Strategy 2022-2032 contained the highest number of double duty actions ($n=8$), yet there was no inclusion of climate change as an objective.

Obesity and climate change are global health priorities requiring immediate, coordinated and substantial action. This review has demonstrated that some climate change action already exists in childhood obesity policy. To address this serious challenge arising from both issues policies should make the relationship between obesity prevention and climate change action explicit and support the implementation of multi-strategy interventions that simultaneously address both issues. Through robust policies incorporating double duty actions, the impacts of obesity and climate change may be reduced. Explicitly developing and implementing

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Table 1: Summary of childhood obesity policy documents containing double-duty actions for obesity and climate change.

Title	Year	Country	Type	Double Duty Actions
1. <i>Diet and Food Systems for Health, Climate and Planet: Listening to and supporting Youth Voices</i> ⁵ World Obesity Federation	2022	United Kingdom	Brief	Direct link to climate change and obesity ↓ Processed foods ↑ Education
2. <i>Population based approaches to Childhood obesity prevention</i> ⁶ World Health Organization (WHO)	2012	Switzerland	Priority document	↑ Active travel ↓ Sugar sweetened beverages ↑ Fruit and vegetables ↓ Screen time ↑ Water
3. <i>Overweight and obesity: Balancing the scales for vulnerable children</i> ⁷ NSW Council of Social Service	2016	Australia	Report	↑ Active travel ↓ Sugar sweetened beverages ↑ Fruit and vegetables
4. <i>Report of the commission on Ending Childhood Obesity</i> ⁷ World Health Organisation (WHO)	2016	Switzerland	Report	↑ Active travel ↓ Sugar sweetened beverages ↑ Fruit and vegetables ↑ Water ↓ Processed foods
5. <i>Paying the price: New evidence on the link between price promotions, purchasing of less healthy food and drink, and overweight and obesity in Great Britain</i> ⁸ Cancer Research UK	2019	United Kingdom	Report	↓ Processed foods
6. <i>A Childhood obesity manifesto</i> ⁹ Irish Heart Foundation	2019	Republic of Ireland	Report	↑ Active travel ↓ Sugar sweetened beverages ↑ Fruit and vegetables ↓ Processed food
7. <i>Brands off our kids</i> ¹⁰ Obesity Policy Coalition	2021	Australia	Report	↓ Sugar sweetened beverages ↓ Processed foods
8. <i>National Obesity Strategy 2022-2032</i> ¹¹ Commonwealth of Australia	2022	Australia	Strategy	↑ Active travel ↓ Sugar sweetened beverages ↑ Fruit and vegetables ↓ Screen time ↓ Processed foods ↑ Sustainable food systems ↑ Green recreation ↑ Education

double duty policies may increase policy effectiveness and have the greatest impact on obesity and climate change.

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Conflict of interest

The authors declare no conflict of interest.

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