

Conclusions: The removal of unhealthy beverages from display can result in consumers making healthier purchases, while not significantly affecting retailer sales.

References

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Import duty of palm oil: A case study of policy making in Fiji



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Background: Non-communicable diseases (NCD) impose a significant burden on Fiji. Food-related policies designed to curb NCDs have been implemented in Fiji, including a 32% increase in palm oil import duty (2012). Studying the development and implementation of such policies should provide valuable insights on policy making process and its effectiveness.

Aim: To analyse the development and implementation of the palm oil import duty policy in Fiji. More specifically, to document the policy process, identify barriers and facilitators during implementation and to examine the impact of the new import duty.

Methods: Based on a case study approach, data were collected through key informant interviews with private stakeholders, government officials and

supermarket managers. Transcripts were analysed thematically. National import data and prices were analysed for the 2010–2014 period.

Results: Facilitators to policy implementation included awareness, preparation of a comprehensive policy briefing paper, and inter-sectorial support and leadership. Barriers included counter lobbying from retailers and the political environment. Import volume abruptly declined after the policy was implemented in 2012. The decrease in availability of palm oil as a result of the price rise was encouraging. However this was counteracted to some extent by industry moves to mislabel the product as vegetable oil.

Discussion: Potential unintended side-effects of policy changes need to be considered and addressed during policy formulation. Whilst the decline in imports probably decreased consumption, further research is needed to determine if this translated to a population wide reduction in NCD risk.

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Invited talk: Impact of sugar – Brain, gut and beyond



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There is much public debate around the detrimental impact of sugar, particularly in the form of sweetened beverages, to overall health. We investigated the impact of chronic sucrose post-weaning on hippocampal genes related to plasticity, neurogenesis, stress responses and mitochondrial biogenesis. Female rats were provided with chow and 30% sucrose (in addition to water) to drink from weaning, and hippocampus was collected at 13 weeks. Control rats drank water. Sucrose intake was associated with marked reductions in expression of genes related to neurogenesis (*Reln*, *Neurod1*, *Gsk3a*) and mitochondrial biogenesis (*Pgc-1 α* , *Nrf-1*). Expression of markers related to the stress response (*GR*, *Homer 1*) was also downregulated. Thus chronic sucrose consumption impacted an array of genes that govern development, and emotional and other brain functions.

We have shown in rats that both high fat, and high sugar, diets can impair hippocampal dependent behaviours, even after short-term exposure. Similar deficits are seen in young men exposed to poor diet for less than one week. Potential mechanisms underlying the cognitive deficits include neuroinflammation, changes in brain neurotrophic factors,