
Removing the GST exemption for fresh fruits and vegetables could cost lives

TO THE EDITOR: There have been rumours that the current exemption from the goods and services tax (GST) for fresh foods, such as fruits and vegetables, might be removed.¹ Changes in government are often accompanied by a review of policies, and broadening the tax base is appealing because it would increase efficiency and raise revenue. But what implications would a rise in the price of fruits and vegetables have for the Australian diet and health?

From estimates of the price elasticity of demand for fruits and vegetables in the United States, we estimate that fruit consumption would decline by 4.9% (95% CI, 2.6%–8.1%) and vegetable consumption by 4.8% (95% CI, 2.6%–7.2%) with removal of the

Results of model estimating the lifetime health effects of adding the goods and services tax to fruits and vegetables

	Mean (95% CI)
Healthy life-years*	- 101 379 (- 60 294 to - 145 690)
Health care costs (2003 A\$ billion)	1.04 (0.55 to 1.77)
Ischaemic heart disease incident cases	64 495 (23 814 to 108 385)
Stroke incident cases	13 572 (4485 to 24 695)
Cancer incident cases	12 077 (5368 to 20 333)

* Over the lifetime of the 2003 Australian adult population. ◆

current 10% GST exemption.² To model lifetime health effects, we used methods we developed for the Assessing Cost-Effectiveness in Prevention (ACE Prevention) project.³ The model mimics the 2003 Australian population in terms of the health-adjusted life-years lived and compares current practice with a scenario in which fruit and vegetable consumption is reduced. Based on available evidence, the model assumes a reduction in fruit and vegetable consumption is associated with an increase in the incidence of ischaemic heart disease (IHD), ischaemic stroke, and cancer of the lung, oesophagus, stomach and colon, leading to increased prevalence and mortality in later years. In the model, health care costs are associated with prevalence for IHD and stroke and with incidence for cancer. Future costs and health loss are discounted at 3% per year.

Using the model, we calculate that adding GST to fruits and vegetables could cost about 100 000 healthy life-years over the lifetime of the 2003 Australian adult population, due to an additional 90 000 cases of IHD, stroke and cancer (Box). This extra disease burden could add a billion dollars in health care costs over the same period.

This suggests that abolishing the GST exemption for fruits and vegetables could have a large detrimental impact on health and health care budgets. Of course, reality is more complex than we have modelled here. For example, other food categories would also be affected by a removal of the GST exemption for fresh foods, leading to complex shifts in diet. But it is very clear that governments should

explicitly consider the potential health consequences before making changes to Australia's tax system.

J Lennert Veerman Senior Research Fellow

Linda J Cobiac Research Fellow

School of Population Health, University of Queensland, Brisbane, QLD.

l.veerman@uq.edu.au

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- 1 Davidson S. Increase the GST to 20%? Yes, but I wouldn't recommend it. *The Conversation* 2013; 12 Aug. <https://theconversation.com/increase-the-gst-to-20-yes-but-i-wouldnt-recommend-it-16953> (accessed Sep 2013).
- 2 Powell LM, Chiqui JF, Khan T, et al. Assessing the potential effectiveness of food and beverage taxes and subsidies for improving public health: a systematic review of prices, demand and body weight outcomes. *Obes Rev* 2013; 14: 110-128.
- 3 Cobiac LJ, Vos T, Veerman JL. Cost-effectiveness of interventions to promote fruit and vegetable consumption. *PLoS One* 2010; 5: e14148. □