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Commentary

How to Set up an Effective Food Tax?

Comment on “Food Taxes: A New Holy Grail?”

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Abstract

Whereas public information campaigns have failed to reverse the rising trend in obesity, economists support food taxes as they suggest they can force individuals to change their eating behavior and make the agro-food industry think more about healthy food products. Excise taxes based on the unhealthy nutrient content would be more effective since they impact more on unhealthy food products than VAT (value-added-tax) taxes. Taxes based only on junk food products would avoid perverse effects on healthy nutrient. However, as eating behavior of consumers is complex, a modeling analysis would allow to assess unexpected effects on other unhealthy nutrients or products.

Keywords

Food Taxes, Excise, VAT, Obesity

As recognized by Devisch, the prevalence of obesity became a major public health concern in most developed countries (1). To be aware of the extent of the phenomenon, some figures are missing. The United States of America is at the forefront (70% overweight and obese people) but Canada (60%), Australia (61%), Russia Federation (58%), Europe (46% for France, 58% for Spain, 61% for United Kingdom, 54% for Germany for examples) are concerned as well. Obesity largely results from consumption of too many calories relative to an individual's physical activity. For most individuals this health problem is avoidable through changing food consumption behavior, and/or increasing physical activity. Governments have tried to use public information campaigns which aim to get people to change their habit, by eating more healthy foods and engaging in more regular exercise. These information campaigns may have positive impacts or may depend on sociodemographic factors (2–4). However, they seem to have not been sufficiently effective at changing behavior (5), and have failed to reverse the rising trend in obesity. Fiscal measures as food taxes are now proposed or recently implemented to fight against the obesity prevalence in the US, Norway, Australia, Finland, Hungary, France and Denmark mainly on sugar and soft drinks but sometimes on fat and salt products as well.

The existing literature has shown conclusively that increased caloric intake is one of the main determinants of obesity.

Medical and nutritional analyses (6,7) and empirical economic studies (8–10) have focused on the relationship between food consumption and obesity. One of the important determinants of increased caloric intakes has been the reduced cost of food (11,12) and the economists suggest that policies that increase the price of calories may provide useful tools to reduce caloric intake and therefore the prevalence of obesity. Due to recent concern over food taxes, analyses of natural experiments are scarce. Fletcher *et al.* found that the US soft drink taxation leads to a slight decrease in the children and adolescents consumption (13). Modeling analyses are more used to assess how much food consumption changes in response to a price variation through economic tools as price elasticities. Unlike Devisch suggests, recent contributions to the literature which have estimated the impact of taxes on food purchases strengthen that food taxes could be an effective tool on dairy products (14), “junk food” products (15), soft drinks (16,17), and fat products (18) as examples. On the other hand, economists support these measures for two reasons. First, individuals do not really appreciate the true relationship between diet and disease and prefer short term pleasures to the detriment of long term welfare and second, they do not bear the full health care cost of diseases related to diet (19,20).

In other areas, legislation and taxation have been proved effective. For example, in the markets for cigarettes and alcohol, legislation restricts sales to young people and restricts advertising, and taxation increases the relative price of these goods. These policy tools have allowed to reduce consumption. As Devisch stresses, alcohol or tobacco cannot be compared to food. Indeed, whereas eating and drinking are essential, alcohol and tobacco are not. However, some food products considered as junk food (for instance soft drinks, sweets, savory and sweet biscuits) bring few healthy nutrients and could be compared to alcohol and tobacco. On the contrary, fat or sugar taxes could have some perverse effects on some healthy nutrients like calcium or unsaturated fat, such that omega-3 or omega-6 fatty acids when dairy products are aimed or could increase the consumption of other unhealthy nutrients. For examples, Mytton *et al.* showed that taxing only the principal sources of dietary saturated fat leads to a reduction in saturated fat but this

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decrease is offset by a rise in salt consumption (21). Smed *et al.* found that while a tax might decrease fat consumption, it would be likely to increase sugar consumption—and a tax on sugar would likely lead to an increase in fat consumption (22).

The effectiveness of food taxes as stated by Devisch, depends on the design of the tax. Indeed, taxes based on VAT (value-added-tax) further allow to increase fiscal revenues as they tax more the products with higher prices. On the contrary, excise taxes based on the unhealthy nutrient contents are more effective as they tax more unhealthy products. Furthermore, as theoretical (23,24) and empirical (17,25) economic works show, the agro food industry passes through more excise taxes than VAT taxes. Hence, the price of unhealthy products will be higher when excise taxes are implemented and the impact on consumption is expected to be larger. However, the price transmission of a food tax by the industry could vary across countries or according to the market under investigation (26,27). Another important argument in favor of food taxes is the incentive for the agro food industry to change the composition of their products. For example, if sweetened products are taxed according to their sugar content, this might provide incentives to producers to lower the sugar content of their product in order to avoid or limit the impact of taxes.

To sum up, food taxes could allow to force consumers to change their eating behavior and make the agro-food industry think more about healthy food products. They can be effective when the design of the tax is adapted and its consequences on other food products or nutrients have been well assessed. They can allow to finance public information campaign in favor of children and adolescents on healthy diet or they can be associated with food subventions to promote healthy food that could also lower the regressive nature of food taxes (28). Governments might stress physical activity as well to reduce the imbalance between calories in and calories out.

Ethical issues

Not applicable.

Competing interests

The author declares that she has no competing interests.

Author's contribution

CB is the single author of the manuscript.

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