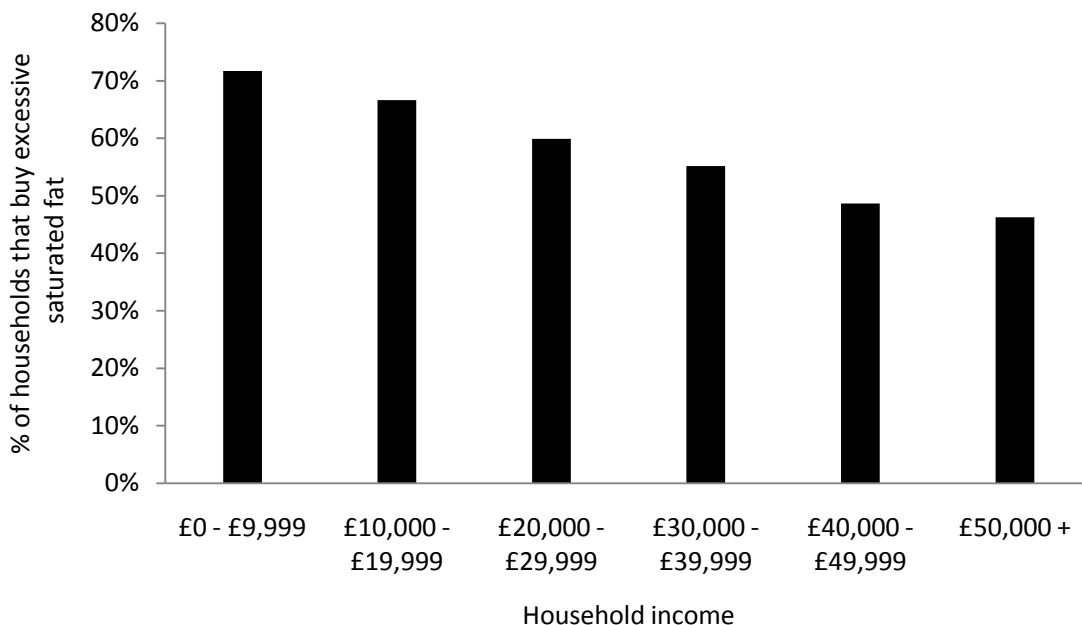


Tackling the British love for fat

Martin O’Connell, of the Institute for Fiscal Studies, discusses the Government’s policy options for reducing how much fat we consume.

The Government is concerned that we are eating too much saturated fat. Excessive consumption of saturated fat poses a risk to our health, since it is associated with cardiovascular disease, the number one cause of premature death in the UK, as well as some cancers and diabetes. The Food Standards Agency (FSA), the Government department responsible for protecting the public’s health in relation to food, estimates that the average Briton consumes 20% more saturated fat than the official Government recommended amount. In addition, using market research data on the foods people buy, researchers at the Institute for Fiscal Studies (IFS) point out that it is households with lower incomes that are the most likely to buy excessive quantities of saturated fat (see Figure).

Low income households are most likely to buy too much saturated fat



Source: IFS Briefing Note

Should the Government intervene to try to reduce the amount of saturated fat we consume? The answer is not obvious. As economists we tend to believe that it is consumers themselves who are best suited for making decisions over their own consumption – they are in the best position to spend their budget on the goods that provide them with the most utility. Why should government, or any other external body, know better? However, sometimes *market failures* arise. A market failure is a situation where free exchange (which involves firms and consumers making choices without government interference) leads to an inefficient outcome (one where some people can be made better off without harming others). One particular form of market failure arises when consumers have imperfect information. In such circumstances they may make consumption choices that differ from the choices they would make if they were fully informed. So, for example, people may consume excessive amounts of saturated fat since keeping up with the latest nutrition research is costly and they therefore fail to realise the negative health implications, or because they may not know which products are high in saturated fat. In cases where market failure arises welfare may be improved by government intervention.

If consumers do indeed suffer from imperfect information then one policy response is to provide them with the information they lack. This is exactly what the FSA is aiming to do through an advertising campaign launched in early 2009 which vividly shows how consuming too much saturated fat leads to clogged arteries. The idea is to convey to consumers the long term consequences of their current food consumption, helping them make fully informed, rational decisions. Whether or not this policy is successful depends on, among other things, whether consumers are exposed to the campaign and whether they know how to act on the new information. Indeed one reason for the high levels of saturated fat consumption may be an inability or unwillingness to process nutritional information, rather than a lack of its availability, in which case the campaign may have limited success. Young children, for example, cannot be expected to decide on whether the momentary pleasure of consuming a Mars Bar outweighs the costs of consuming it (including both its price and the long term health consequences), perhaps explaining why the Government has also tried to directly reduce the availability of fatty foods and other junk foods in schools.

Another policy option is to impose a tax on saturated fat. Under such a system the more saturated fat a product contains the more it would be taxed, while fat-free products would escape taxation altogether. So, for example, full fat butter products would be taxed more heavily than low fat butter, which in turn would be taxed more heavily than margarine

products, while fat-free spreads would avoid the tax. The idea is that by increasing the relative price of fatty foods, the tax will encourage people to switch to healthier alternatives.

Would a fat tax succeed in reducing our excessive saturated fat consumption? This depends on how consumers respond to any price changes and on how firms adjust both their prices and the saturated fat content of their products in response to the tax. If most consumers have a stubbornly strong preference for foods high in saturated fat, even quite a large increase in their relative price may fail to encourage people to stop consuming them. Economists typically measure consumers' responsiveness to a change in price using the *price elasticity of demand* - a product's price elasticity of demand tells us the percentage change in the quantity of the product demanded by consumers if its price increases, while the prices of all other products remain constant. Most products have a negative elasticity; higher prices cause at least some consumers to switch to buying an alternative product. Just how many consumers switch depends on the (absolute) magnitude of the elasticity; the larger it is the more consumers will be willing to buy another good instead. So the fat tax is likely to be more successful if fatty products have (in absolute terms) high elasticities, or to put it another way, if consumers see healthier products as being reasonably close substitutes for unhealthy ones.

How firms respond to the tax is also an important determinant of the tax's effectiveness. The food market is typified by a relatively small number of firms selling products that are similar but differentiated in some dimensions (for example, most chocolate bars are not identical due to different packaging and ingredients). This means that firms enjoy some *market power*, meaning they have some scope to choose how to change their prices in response to the tax. If firms increase their prices one-for-one with the tax (or in economists' jargon, if *pass through* is complete), then the price of fatty foods will increase relative to lower fat alternatives. However, firms may instead increase their prices by less than the tax, absorbing some of the tax as reduced profits. In this case the relative price of fatty foods may increase by less than under complete pass through (in fact, in the unlikely event that producers of more unhealthy foods pass through much less of the tax than the producers of lower fat foods, the relative price of fatty foods could actually decrease). Under these circumstances, consumers will face little or no incentive to start eating healthier foods. However, since producers of fatty foods will suffer from lower profits when pass through is incomplete and/or when demand falls, they may be encouraged to reformulate existing products to make them healthier, or to introduce new healthier products to avoid the tax. So even if the tax fails to change the prices

faced by consumers, it may still succeed in reducing the number of unhealthy products they can choose between.

Researchers at the IFS have used data on past purchases of food products to simulate the impact of introducing a fat tax. By using information on the products consumers opted to purchase and the prices they paid, the researchers are able to estimate the price elasticities of demand for a range of different food products. They also use data on the saturated fat content of the products and the firms that produce them to estimate how the tax would affect final prices. The researchers find that a tax on saturated fat would succeed in reducing the amount of fatty food that some consumers purchase, but chime two notes of caution. Firstly, unlike information campaigns, introducing a tax has distributional consequences. Since low income households devote a larger fraction of their income to food purchases, and since they are most likely to purchase high levels of saturated fat, they may well end up paying more tax, as a proportion of their income, than higher income households, meaning a fat tax would be *regressive*. On the other hand, low income households are likely to be the most price sensitive, meaning that they will be more willing than other households to substitute towards lower fat products to avoid paying higher prices. Just how willing they are to switch to lower fat alternatives will determine whether the tax is indeed regressive, although experience of other sin taxes – like those on tobacco and alcohol – suggests it may well be. Secondly, the tax may discourage consumers from consuming as much fatty food, but encourage them to eat more salty or sugary alternatives, which would conflict with other Government objectives to reduce the amount of salt and sugar we eat. This is because, for some food groups, low fat products tend to be particularly high in sugar (e.g. snacks) or salt (e.g. spreads). So if the Government wants to cure Britons of one of their vices, it must be aware of compromising its poverty targets and be careful to avoid exacerbating another excess.