

INVESTIGATION

# SUGAR: WHAT CAN WE LEARN FROM THE ANTI-SMOKING CAMPAIGN?

**E**xtra! Extra! Read all about it! ‘*Sugar is as dangerous as tobacco*’; ‘*Sugar is the new tobacco*’. These recent headlines are old news as far as dental professionals are concerned. Unfortunately, as we so often see, people take more notice when the message concerns how long they might live.

Like smoking, sugar certainly does have an instant effect on teeth. Research is also showing us that excessive sugar consumption is having a major impact on obesity levels which lead to heart problems and premature death. But how accurate is the claim that sugar is the new tobacco? And what can be learnt from the anti-smoking lobby to help us to change the public’s perception of sugar?

We don’t need tobacco; do we need sugar? Sugar was once a luxury reserved for the rich. Our consumption of sugar may have increased by 31% in the last few decades but we don’t actually need it. Scientists agree that it is an entirely unnecessary food.

Is sugar addictive like nicotine? Though there is no current evidence to indicate that this is the case, Chief Medical Officer, Dame Sally Davies, said recently that she thinks that researchers will find that it is. Studies

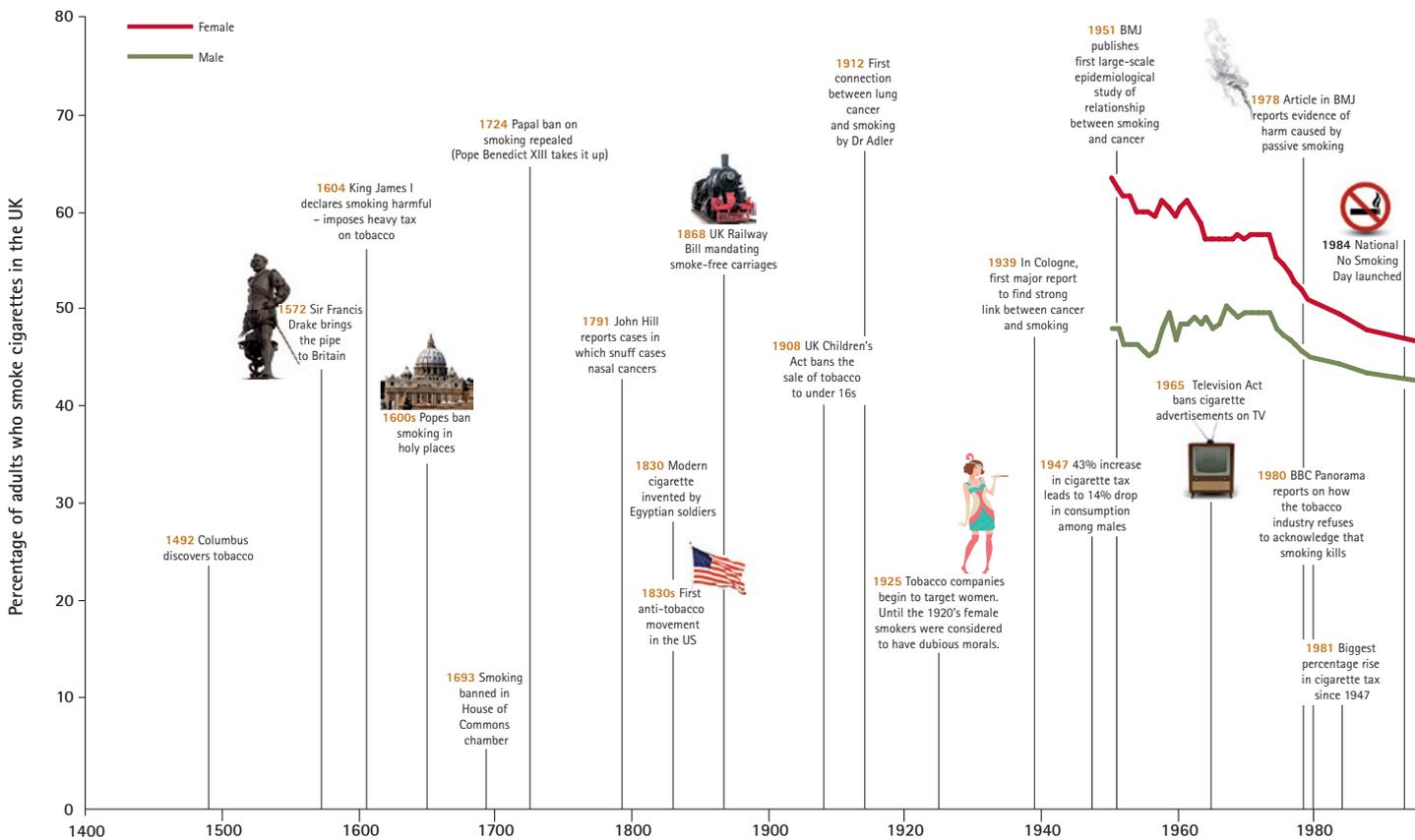
have shown that foods high in fat and sugar can boost dopamine levels to trigger our reward systems just as addictive drugs do. However, officially there is no current conclusive evidence that sugar is addictive.

One of the key differences between sugar and tobacco is that sugar does not have a passive effect as smoking does. However, on the whole we dictate what our children eat so in that sense sugar is generally imposed on children. If sugar is proven to be addictive then a *laissez faire* attitude towards sugar from adults could be condemning children to a lifetime of dental caries, health problems due to obesity and even premature death.

Many factors contributed to the public change in attitude towards smoking and it is clear that it takes time not only to change the public perception but also government

policies, particularly considering the lobbying power of big business. Laws, scientific evidence, advertising regulation, health education and the media have all contributed to the reduction in smoking prevalence in the UK since the 1950s. So far we have only seen the beginning of what could ultimately be a revolution in sugar consumption. The media have listened but will the food industry make the necessary changes? Or will we have to resort to regulation, tax and legislation to drastically alter people’s perception of sugar?

The story of salt reduction will likely serve as a better comparison for sugar than tobacco. The people behind ‘Action on Sugar’ launched earlier this year are the same as those behind the successful Consensus Action on Salt and Health (CASH) campaign in the 1990s. CASH was set up in 1996 in response to a Committee on Medical Aspects of Food and Nutrition Policy (COMA) report advising that to salt levels in foods should be reduced. At the time, the Chief Medical Officer refused



Tobacco timeline information selected from *Key dates in the history of anti-tobacco campaigning* produced by ash (action on smoking and health). A much more comprehensive list can be found in the original document on the ash website: <http://www.ash.org.uk/>  
Smoking prevalence statistics from Cancer Research UK [www.cancerresearchuk.org/cancer-info/cancerstats/types/lung/smoking/lung-cancer-and-smoking-statistics](http://www.cancerresearchuk.org/cancer-info/cancerstats/types/lung/smoking/lung-cancer-and-smoking-statistics)

to endorse the COMA recommendations. CASH pointed out that this was contrary to the medical and scientific consensus and started their own campaign. By campaigning directed at both the food industry and at the public, via the media, to spread the message about salt, they achieved a 10%

my afternoon biscuit with disgust? Taking a leaf from the tobacco book, perhaps biscuit packets will be printed with graphic images of fatty hearts, decayed teeth and coffins? To be honest if each cake I ate had a picture of a run route on the top along with my own red sweaty face

### 'Taking a leaf from the tobacco book, perhaps biscuit packets will be printed with graphic images of fatty hearts, decayed teeth and coffins?'

reduction in the UK salt intake over two decades. The salt in supermarket products has been gradually reduced by between 25-40%. 'Action on Sugar' maintain that a similar effect could be achieved with sugar and that provided reductions in food products are carried out slowly, people won't even notice the changes.

I am lucky that I have never taken up smoking. I wonder if I will ever look at a piece of cake, a chocolate bar or even a bowl of cereal with as much disdain as I view a cigarette. In the future will my children look at

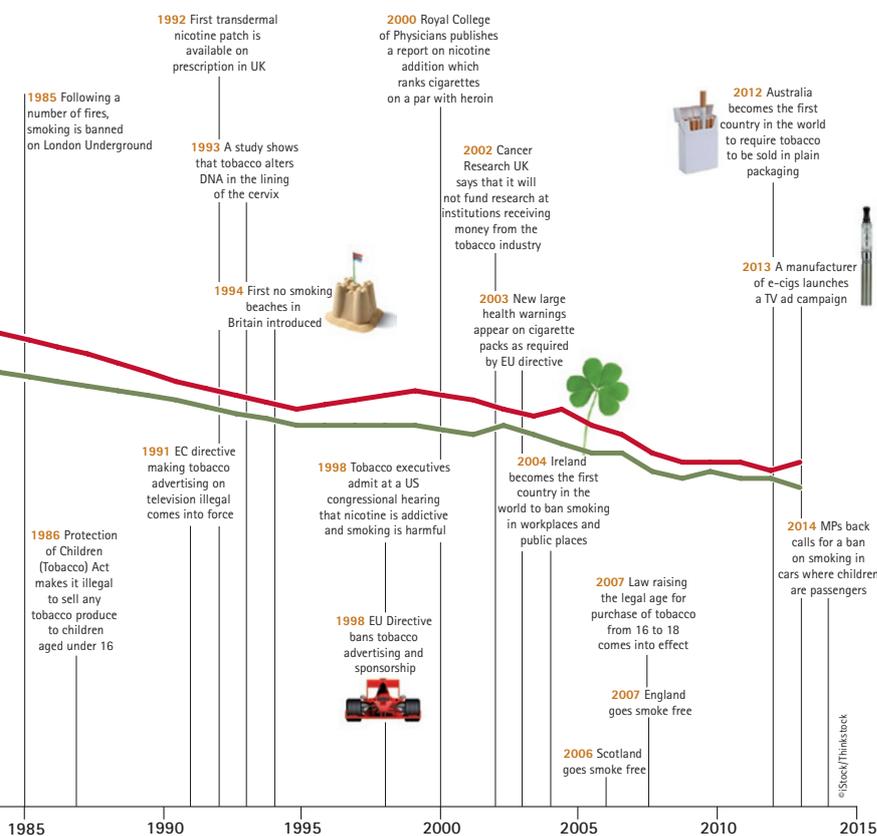
or a photo of that dress I need to fit into for this summer's weddings, I might think twice!

Time will tell whether the sugar story will need to follow the tobacco route. It is clear that something needs to happen and dentists would be delighted if the food industry finally listened.

Join the BDA's Make a meal of it campaign: [www.bda.org/dentists/policy-campaigns/campaigns/makeameal.aspx](http://www.bda.org/dentists/policy-campaigns/campaigns/makeameal.aspx).

[www.actiononsugar.org](http://www.actiononsugar.org)

BY RUTH DOHERTY



#### THE SUGAR STORY SO FAR.....

- 8000 BC** Sugar cane is first domesticated as a crop in New Guinea. Cultivation spreads to Asia.
- 1100s** 'Sweet salt' brought back to Europe from Middle East by crusaders.
- 1300s** More general use of sugar in Britain but still considered a luxury and only enjoyed by richer families.
- 1500s** Sugar plantations in the 'New World' supply sugar to Europe.
- 1600s** As fermentable carbohydrates become more constituent in Western diets people begin to develop caries more widely.
- 1700s** Price of refined sugar drops as English, Dutch and French colonies are established in the Caribbean.
- 1890s** Miller proposes chemoparasitic caries theory linking dental caries to fermentable carbs.
- 1914-18** UK turns to sugar beet grown at home as overseas sugar cane supply is reduced in WWI. This continues to be the predominant source of sugar in the UK.
- 1920s** Coca-Cola first appears in Selfridges, London.
- 1940s** Professor James Shaw of Harvard University conducts first investigations into animals, sugar and teeth.
- 1957** High fructose corn syrup (HFCS) invented in the USA. HFCS is a solution of fructose and glucose made from corn.
- 1970s** US introduces a system of sugar tariffs and quotas which results in an increase in the cost of imported sugar. This coupled with the low price of corn makes HFCS an attractive substitute for sugar from cane sugar. EU quotas on HFCS production means that HFCS does not replace table sugar in European food industry.
- 1979** Government appoint Prof Philip James as chair of a committee to draw up Britain's first dietary guidelines which recommended a cut in the amount of sugar we consume.
- 1983** A paper on sugar consumption and dental caries entitled *Sugars and dental decay* by Aubrey Sheiham is published in *The Lancet*. Advises that sugar-free snacks and drinks should be developed and that the public should be told more about the effects of sugars on their oral health.
- 1992** International Conference on Nutrition produced plan of action for nutrition which did not mention sugar.
- 1999** Report of the British Nutrition Foundation's Task Force, published concluding that a two-pronged attack is necessary to reduce UK caries rates: fluoride use and reduced frequency of consumption of sugar.
- 2002** WHO recommendation: sugars should make up less than 10% of total energy a day (approx. 12 tsp sugar).
- 2007-09** Ofcom introduces total ban on high fat, sugar and salt adverts on children's channels, in programmes aimed at 4-15-year-olds during children's airtime.
- January 2013** *BMJ* systematic review of research relating to dietary sugars and body weight is published. Shows that evidence points towards sugar leading to an increase in overweight.
- February 2013** Academy of Medical Royal Colleges call for action on obesity - inc. soft drinks tax and ban on junk food ads.
- June 2013** BDA launches its 'Make a Meal of it' campaign to reduce the damage that is being done to the oral health of children across the UK by sugary and acidic food and drink.
- December 2013** *Journal of Dental Research* publishes systematic review to update evidence on the association between sugar intake and dental caries. A reduction in sugar consumption to less than 5% total calories significantly reduced incidence of caries.
- January 2014** *Action on Sugar* formed - a group of health experts worldwide calling for a reduction in sugar intake in the UK. UCL Professor of Dental Public Health Aubrey Sheiham is a global advisor.
- March 2014** WHO announces draft measure to change sugar guidelines to 5% of total daily calorie intake (approx. 6 tsp sugar).
- March 2014** UK Chief Medical Officer, Dame Sally Davies, tells MPs that a sugar tax might be necessary if food manufacturers do not reduce added sugar significantly.
- 1980s -2010s** UK sugar consumption increases by 31% (to 1.25 lbs per person per week which equates to about 85g a day). However, household purchases of bags of sugar halves in the same period.