

**30 November 2015**

## **SWEET FA**

"The government is under serious pressure to drop its opposition to a tax on sugary drinks, following the publication of a hard-hitting report from MPs which says a 20% levy is an essential part of any national strategy to tackle child obesity" says Sarah Boseley in The Guardian. She adds: "David Cameron has consistently ruled out a sugar tax, but the cross-party health select committee, chaired by the Tory MP Dr Sarah Wollaston, strongly backs it as one of a range of tough interventions designed to reduce the availability of unhealthy foods. Writing in the Guardian, Wollaston says the stark inequalities in childhood obesity and, as a consequence, the chances of a healthy adult life, make a compelling case for action by the prime minister. A quarter of the most disadvantaged children are obese by the time they leave primary school, double the rate among the most affluent. "We do not believe that this is an attack on low income families as industry lobbyists will no doubt claim, but rather an essential part of trying to reverse the harm caused by these products," she says."

It's a BIG problem. SB reminds us that "Children consume three times more sugar than is recommended. Soft drinks are the biggest source, accounting for 29% of the sugar intake of 11- to 18-year-olds and 16% for younger children." This, needless to say, contributes to the obesity and diabetes 'epidemics.'

So - the idea is to 'nudge' parents into making healthier choices for their children. Whilst some would say this is another manifestation of 'the nanny state' others point out that this is a tax (if it materialises) that nobody needs to pay ... there are sugar free/tax free alternatives.

## **SWEETENING THE PILL**

This was the old advice. But now sugar is regarded as up there with strychnine and arsenic when it comes to dangers to health. Mixed with caffeine it's worse still. At the World Diabetes Congress, in Vancouver, a study of adolescents consuming caffeinated energy drinks was made public. It has shown that such drinks can cause blood insulin levels to spike and may lead to subsequent problems bringing blood sugar levels down to normal. Researcher Heidi Virtanen says: "Results show that consumption of a caffeine-containing energy drink results in a 20-30% increase in insulin and glucose levels in response to a glucose load. Since caffeine persists in the system for 4-6 hours after consumption, continuous insulin resistance associated with regular caffeine-containing energy drink consumption in adolescents could contribute to increased metabolic risk in susceptible individuals later in life through persistent interference with their regular glucose metabolism."

## **FOLIC ACID**

European folic acid policy is failing to prevent many neural tube defects, warn experts in The BMJ. The prevalence of neural tube defects in Europe has not declined substantially in the past 20 years, despite long-standing recommendations for women to take folic acid supplements if planning a pregnancy.

Each year, around 5,000 pregnancies in Europe are affected by neural tube defects like spina bifida and anencephaly (problems with brain and skull formation), with serious consequences for newborns and their families. Taking folic acid supplements before and during early pregnancy can greatly reduce the risk, but evidence suggests that only a small minority of women do so - and mandatory fortification programmes do not yet exist in Europe.

Voluntary guidance for women isn't working and mandatory fortification of food staples with folic acid "should be considered as an important and more effective means for prevention of neural tube defects, while weighing the evidence for its proven benefits and possible risks." They point out that mandatory fortification has been shown to work in many countries, including the United States, and no important adverse effects have been identified to date.

So – this could be yet another example of 'the nanny state' stepping in. Most of us shudder at the thought ... and yet when parents act on whim rather than on the available evidence (and by so doing put their children in harm's way) it puts those in government in a very difficult position.

## **ONE MORE WAY TO AVOID DIABETES**

People wonder what all the fuss is about when it comes to diabetes – but when it comes to seeing patients losing legs (and worse) as a result of the disease (as I do) one begins to realise the enormity of the problem. There is some good news, though, this week. New evidence on the benefits of breastfeeding in protecting against diabetes was presented at this year's World Diabetes Congress, with a new study showing breastfeeding protects Canadian women and their children from developing type 2 diabetes. (And, if it protects Canadians, it'll protect Brits too.)

The prevalence of diabetes has increased rapidly in Canada. The authors say: "Breastfeeding initiation was associated with a reduced risk of subsequently developing diabetes among women and their offspring. Breastfeeding initiation should be promoted in general population, especially for mothers who have lower rates of breastfeeding initiation."

There is a wealth of evidence now that breastfeeding is hugely beneficial to the health of both mothers and babies. When you look at the uptake figures for breast v bottle, though, it's clear that the message isn't getting through. It is a tribute to the power of marketing that both science and common sense get buried when there are profits from 'formula' to be made. The evidence is no match for the cash register!

## **TEN THINGS**

The BBC website has been publishing "10 things we didn't know last week" – a collection of snippets like the fact that Tony Blair tried his hand at stand-up. (Shame he didn't stick at it!) Here are some more examples:

Fiona Macrae for The Mail gives us the following bullet points: "Loneliness is twice as bad as obesity for killing us early: Being isolated suppresses your immune system and knocks years off your life. Isolated people 15 per cent more likely to die than those who feel wanted. Being cut off can weaken ability to fight viruses and change blood pressure. Around one million Britons are chronically lonely

and do not see people. It has also been shown that having a dog makes people feel less isolated.” In my experience having a dog makes people feel better than any number of pills!

The New Scientist reports on hats used as weapons of mass destruction. These were more dangerous than the headwear beloved of the Bond villain, Oddjob. “During the world’s longest siege, a 17th-century scientist hatched an ambitious plan – to weaponise the bubonic plague by painting it onto hats. The plot, which has just come to light, was discovered by Eleni Thalassinou at the University of Athens in Greece and her colleagues in six letters sent between 1649 and 1651. During that time, the town now known as Heraklion in Crete was under Venetian control but besieged by Ottoman troops. ... Salamon appears to have devised a method for distilling the essence of plague. “He availed himself of the presence here of the plague to distil a liquid expressed from the spleen, the buboes and carbuncles of the plague stricken,” wrote the governor of Zara. The governor proposed painting this liquid onto goods that besieging Turks were likely to buy – such as hats known as Albanian fezzes.” We don’t know if the scheme worked – but it’s on record that the expression “I’ll eat my hat” fell into disuse for a considerable time thereafter!

Ian Sample writes in The Guardian: “High-strength cannabis may damage nerve fibres that handle the flow of messages across the two halves of the brain, scientists claim. Brain scans of people who regularly smoked strong skunk-like cannabis revealed subtle differences in the white matter that connects the left and right hemispheres and carries signals from one side of the brain to the other.” The study in the journal Psychological Medicine points out that: “The changes were not seen in those who never used cannabis or smoked only the less potent forms of the drug.” Dr Paola Dazzan, a neurobiologist, is quoted as follows: “As we have suggested previously, when assessing cannabis use, it is extremely important to gather information on how often and what type of cannabis is being used. These details can help quantify the risk of mental health problems and increase awareness of the type of damage these substances can do to the brain.” Back in February, Dazzan and others at the Institute of Psychiatry reported that “the ready availability of skunk in south London might be behind a rise in the proportion of new cases of psychosis being attributed to cannabis.”

How fast your heart beats predicts if you will die early” writes Sarah Knapton in The Telegraph, adding: “Chinese researchers found that the risk of dying from any illness raises by around nine per cent for every extra 10 beats per minute.” She goes on to say: “It’s enough to make your heart beat a little faster. A new study suggests that resting heart rate can be used as a ‘death test’ to predict your chance of keeling over in the next two decades. Although doctors have known for some time that people with low resting heart rates are usually fitter and more healthy, it is the first time the risk has been quantified. People who have a resting heart rate of 80 beats per minute (bpm) are 45 per cent more likely to die of any cause in the next 20 years compared to those with the lowest measured heart rate of 45 bpm.”

At the time Borg was winning Wimbledon his resting pulse rate was in the low 40s – so if this research is right, he should live as long as Methuselah!

It’s a nice little series – Google ‘*BBC ten things*’ to find out what you’ve been missing.

**Dr John**