

Dietary Sodium Intake and Morality

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Cutting salt consumption reduces blood pressure, and lower blood pressure reduces the risk of strokes. The Salt Substitute and Stroke Study just confirmed this [1].

21,000 rural Chinese with a history of hypertension and/or stroke were divided into two groups. The intervention group was given a low-sodium/increased potassium salt substitute to cook with, the controls were left with table salt. After 5 years the intervention group

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had a 14% reduction in stroke, a 13% reduction in major cardiovascular events and a 12% reduction in death. The controls stroked, infarcted and died just as they did before the white coats arrived.

This study is grossly unethical. It is inconceivable that the scientists, who are associated with major academic and clinical institutions in 4 countries, did not know that the control group was being left at higher risk. The study, which was hailed as a landmark, merely retraced steps carved out half a century ago by pioneering Finnish scientists.

A team lead by Hekki Karppanen, Eero Mervaala and Pekka Puska worked with the Finnish government – which had, uniquely, a medically qualified Minister of Health who was interested in the health of his constituents - to organize a regional and then national campaign to cut sodium intake.

Food companies were instructed to remove table salt from their formulations and replace it with the salt substitute PanSuola, which combined magnesium and potassium chloride with the amino acid l-lysine. And not only domestic companies; even mighty McDonalds was forced to use PanSuola in the burgers and fries they sold in Helsinki, Turku and Tampere [2].

Between 1972 and 1992 the average diastolic blood pressure in Finland fell by 10 mm Hg, and deaths from stroke and heart disease in men and women aged 30 - 59 fell by 60% [2-5]. Over that same time period, and despite increasing tobacco and alcohol use and growing obesity, Finnish life expectancy increased by 5 years [5].

I was lucky enough to meet Heikki several times in Helsinki when he was an emeritus professor at the university there, and was impressed by his integrity and decency. He is a good scientist with an enviable list of publications and a genuine concern for the health of his fellow men and women.

I told him how much I admired the North Karelia Project, as it was called, and how much I hoped it would inform medical and then political praxis. Older and wiser than me, he shook his head. 'We have the science', I remember him saying, 'But that is not enough. Finland is a small country, and our work is drowned out by louder voices who do not like what we have found.'

I subsequently discovered (not from him), that the louder voices were those of the Salt Institute, a US-based trade association which fronted for salt producers and the food companies that relied on salt as a cheap flavor ingredient and preservative. Established in 1914 and a strong supporter of high salt consumption, it was only when the organization ceased operations in 2019 that industrial opposition to salt reduction finally dissolved.

The nefarious activities of the salt lobby mirror those of the sugar lobby, which paid for research designed to downplay any link between sugar and coronary heart disease and to put dietary saturated fat in the frame instead [6]. Between them the salt and the sugar industries have killed tens of millions of consumers, probably more than those who died due to tobacco, alcohol or recreational drugs.

Recreational drugs are illegal, although becoming less so now that our wastrel governments are so desperate for cash. Tobacco and alcohol are slapped with warning labels and restrictions on sale and use. Salt and sugar as the odd ones out. If anything we are consuming more of these, thanks to the progressive destruction of the middle classes and our spiraling intakes of ultra-processed food [7-9].

The multinational food companies spend billions not just marketing their products, but on marketing themselves as benign, cuddly, gemütlich - and it worked. We fucked up. We trusted them [10]. We became addicted to their ultra-processed product, to their minutely engineered bliss point and mouthfeel technology that leaves us simultaneously sick, bloated, unsatisfied, brain-damaged and craving for more [11-15].

Modern foods are very deliberately designed to be addictive, and the evidence that they are genuinely addictive is persuasive [16-19].

Cravings for these foods involve endogenous opioid peptide tone, and can be modulated by naltrexone [20-22], the same drug used to treat opiate overdose. High sugar concentrations affect dopaminergic brain chemistry in ways similar to drugs of addiction [23,24]; which explains why food addiction generally involves ultra-processed foods [25]. Tangential support for this comes from the success of food addiction programs such as Overeaters Anonymous, which uses techniques adapted from Alcoholics Anonymous [26].

NeuroFAST offers an alternative perspective [27]. This organization denies that food can be addictive and prefers to talk in terms of 'eating addiction', a scenario in which the consumer is the problem. You might think this is classic 'blame the victim' strategy, and your opinion might be influenced by the fact that NeuroFAST is heavily funded by the EU and is therefore influenced by industry, but I couldn't possibly comment.

Nor could I possibly describe NeuroFAST as the Salt Council redux. The fact that they faux-naively ask how can foods necessary to survival be addictive, when the food additives that are addictive (such as sugar) are obviously NOT necessary for survival, is just a teeny tiny mis-speak on their part. It must be mere coincidence that the food industry has added some form of sugar to three quarters of all the foods available in the USA [28], because how could they possibly know that added sugar reliably increases sales [29]?

The fact that NeuroFAST's darker twin is a weaponized brain imaging and decoding initiative brought to you by the good people of DARPA [30,31] is probably just another coincidence. Do not, under any circumstances, look at the man behind the curtain. Do not concern yourself with the fact that the vast amount of added addictive sugar in today's processed and ultra-processed foods is causing wide-spread liver damage [32-34], diabetes and obesity [35,36] and profoundly damaging our children.

Enough already. We need to talk. About the man behind the curtain, and his menu.

We cannot go on as we are, becoming fatter, sicker and more stupid as we descend into Idiocracy. We should at least consider changing course, though it won't be easy. Addiction, which is engineered by teams of applied psychologists, neurologists and IT specialists into foods, computer games, television programs and increasing numbers of consumer products, is at the core of today's business model.

In late-stage crony capitalism, wealth generation has shifted from production towards consumption and finally over-consumption. Just as alcohol companies depend on creating an endless supply of alcoholics, Big Phood now depends on creating over-eaters [37,38]. They have become very good at this.

Big Phood understands in minute and mechanistic detail why you eat a Dorito and continue to eat until the pack is empty. It is nothing to do with hunger. It is about targeting endogenous opioid peptide and dopaminergic tone, and getting the consumer hooked. The more effectively they can do this, the more successful their product and company will be.

Food techs have honed their skills to the point where the overwhelmingly negative effects of over-consuming their products are quite obviously killing us in very large numbers [39-41]. To Big Phood, mass disease and early death may be unimportant side-effects but there remains, against all odds, an ethical rump.

Although business ethics largely consist of avoiding jail and the lawcourts, bad headlines constitute another red flag. Increasing reports of ultra-processed deaths have started to trigger corporate messages hinting that their sick and dying consumers should perhaps ease up a little [42-44].

This virtue-signaling has no effect on sales or profits, and if it did would be stopped immediately. Making ultra-processed foods less habit-forming would mean losing market share to less scrupulous players, and is equally unpalatable. There is only one thing Big Phood can do at this point. They can retain addictiveness and healthy sales only if they make their products genuinely healthier.

The science to achieve this is widely available, so it is just a question of talking to the right people - but who? However many pieces of silver they earn the scientists, psychologists, lawyers, marketers and other office spacers who enable these machines are flunkies, greasing the wheels of juggernauts beyond their control. The MD's, CEO's, CFO's and CTO's aren't really in charge either.

Having worked inside a few multinationals I no longer believe there is a man behind the curtain. These huge corporate entities are distributed decision engines geared solely to profit maximization, and staff and higher executives are hired by the same algorithm. They consist of databases and spreadsheets with a veneer of brainpower, an egregore that will only change if forced to by new legislation or changing market demands.

In today's crony capitalism the legislative is bought and regulatory bodies are coopted. It comes down to us, the consumers. If enough of us vote with our wallets, if enough of us learn to cook, there will be change. Salt reduction is a small part of this. If not, pressure will build until at some point, there will be blood.

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