

When nanny *did* know best

A suggestion to dispense compulsory cod liver oil to everybody in England has been derided as yet another extravagant example of liberal do-goodery. Yet there is compelling evidence that the oil, distributed to children for many years from 1942, could prevent many of our most common, and chronic, diseases, reports **Oliver Gillie**

Cod liver oil could save the country billions of pounds a year and prevent many thousands of early deaths but, tragically, it has an image problem. Politicians once saw the vital oil as a pillar of the Welfare Food Programme, available for all, and a means of building a new generation of strong young people following the ravages of World War II. Sadly, such optimism about future generations seems not only to be lost today but cod liver oil has become a nursery joke in the corridors of Westminster.

Dr Jenny Tonge (MP for Richmond Park) inadvertently launched the joke when she asked the government if it had any plans to legislate for compulsory cod liver oil to prevent the increase in rickets, a devastating bone disease of children now re-appearing in immigrant families. She received an evasive answer from the junior minister, and later Tony Blair took it as an opportunity to ridicule the burgeoning Liberal Democrat spending commitments.

The prime minister appeared to suggest that compulsory cod liver oil for everybody in England was another extravagant example of liberal do-goodery. With it came the image of the nanny state forcing disgusting liquid down everyone's throat. Following up on BBC *Newsnight*, Jeremy Paxman enjoyed ribbing a Liberal spokesman by asking if compulsory cod liver oil was now official party policy?

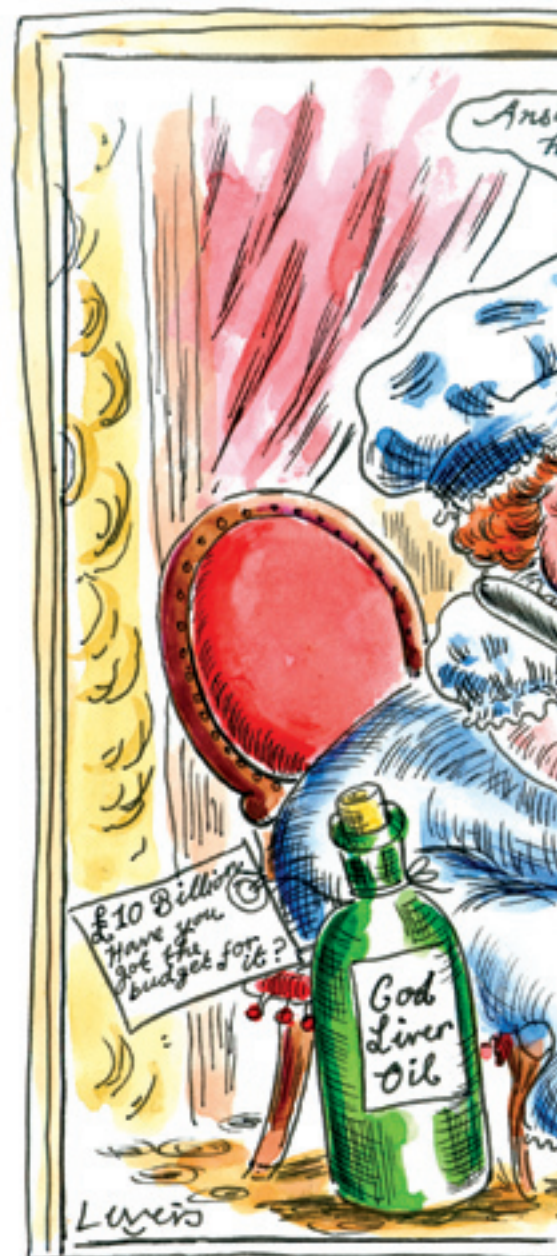
So now it has become one of those irresistible nursery jokes, like John Major tucking

his shirt into his underpants, that has a life of its own quite apart from any question of truth or reality.

In fact there is a very good case for compulsory cod liver oil, although enforcing any such measure is obviously as impractical as it is undesirable. Cod liver oil was provided for all children in the UK for many years from 1942 when it was introduced as a wartime means of improving health. At that time it was known that cod liver oil could prevent rickets and other bone diseases that were rife in cities throughout Britain. Other benefits of cod liver oil, together with the possibility of saving thousands of lives and billions of pounds a year, have only become fully evident over the last few years.

Vitamin D is the active ingredient in cod liver oil that prevents bone disease. But a diet containing oily fish, or supplements of fish oil, has other benefits in the form of vitamin A and omega 3 fatty acids – now thought to reduce the risk of arthritis and Alzheimer's disease. Nearly everyone in the UK is deficient in vitamin D because we obtain about 90 per cent of the vitamin from sunlight and most people, especially those who live in towns and cities, obtain very little exposure to the sun.

The health of children in the UK has never been so good as it was in the post war generation raised on free cod liver oil as part of the government's Welfare Foods scheme. But cod liver oil, considered by modernists to be





rather a primitive remedy, was replaced in 1975 by a mixture of purified vitamins A and D. And these "NHS vitamin drops", as they are called, were no longer given away free of charge. Only poor mothers in receipt of benefits qualified to have them free – other mothers had to pay for them. So NHS vitamins came to be regarded as necessary only for those mothers who could not afford to feed their families properly and few mothers now bother to buy them.

Generations raised without these vitamins have grown up and there has been a notable increase in many kinds of chronic disease – much of which might be prevented, at least in part, by cod liver oil or NHS vitamins. Deficiency of

vitamin D is now believed to have an important role in preventing 16 types of cancer. This includes the commonest cancers – those of the bowel, breast, ovary and prostate. There is also persuasive scientific evidence that schizophrenia, multiple sclerosis, diabetes, high blood pressure and even heart disease are caused at least in part by deficiency of vitamin D.

The research establishing the connection between vitamin D deficiency and this staggering burden of disease is new and has come from many different sources. Few public health experts are fully familiar with the facts and public health policy has a long way to go to catch up with available knowledge. But the potential

rewards are enormous for a government that has the determination to tackle these diseases and put aside any sniggering about the nanny state providing nursery food supplements.

The cost of the disease burden caused by D-deficiency to the UK has not been fully estimated but we can be certain that it is many billion pounds. The cost of these diseases in the United States has been reckoned by William Grant, an ex-NASA scientist turned biologist, to be \$30-70 billion. While the cost of supplying NHS vitamins is little more than the cost of packaging. Distribution of the vitamins through Health Service mother and baby clinics is straightforward. All that is needed is a publicity campaign advanced with the sort of energy that is currently used to promote vaccination to draw the attention of mothers to the benefits for their children.

Most seriously at risk of vitamin D deficiency are the immigrant community. Dark skin takes as much as six times longer than white skin to absorb the amount of ultra-violet light necessary to make a given quantity of vitamin D. Vitamin D occurs in foods such as eggs, liver, margarine or butter, and oily fish, but these foods supply only about 10-20 per cent of what we get. Rickets is only the most obvious problem caused by vitamin D deficiency in immigrant families. Several other chronic diseases associated with

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HOW TO GET YOUR VITAMIN D SUPPLEMENT

Children should be given one dessertspoon of cod liver oil a day rather than the recommended teaspoon in order to give them sufficient vitamin D (about 400-500iu). It is available as an orange syrup which is quite palatable especially if served cold from the fridge. For adults many US experts now recommend at least 2000iu (international units: 40iu = 1µg) of vitamin D a day which would mean an excessively large dose of cod liver oil. It is more easily taken as small 1000iu tablets available on the web from www.freedavitamins.com. Sunbathe whenever possible in strong sunlight for up to half an hour with as few clothes on as possible and without any sunblock cream, taking care not to bake or burn. After 20-30 minutes no more vitamin D is made (until you start again next day) so seek the shade if you wish.

vitamin D deficiency are unusually common – in particular schizophrenia, autism, diabetes and multiple sclerosis. Extensive research on schizophrenia in immigrants has established that the higher incidence of the disease in immigrants is not the result of faulty or prejudiced diagnosis, nor is it the result of “inherited weakness” – the disease is no more common in the general population living in the West Indies than it is here among whites.

Not just immigrants but most people in the UK are vulnerable to these diseases because we exist on such minimal amounts of vitamin D. Any small event or difference in lifestyle such as a poor summer, bad weather during the summer holidays, working on the night shift, or avoidance of the sun through an exaggerated fear of skin cancer can reduce our vitamin D level and make us more vulnerable to any of these diseases. For example, several studies have shown that women who work night shifts are at increased risk of developing breast cancer. Less sunlight around the time of a baby’s birth may increase a child’s risk of schizophrenia later in life according to an Australian study. While several other studies have shown that people who develop schizophrenia, multiple sclerosis or autism are more likely to be born in the winter or early spring months.

In the last three months of pregnancy, babies are growing at their fastest and mothers often become short of vitamin D especially if these months occur during winter or early spring. Mothers’ milk is also generally very low in vitamin D compared with artificial feeds and so a breast-fed baby may continue for several months with low vitamin D if born in winter.

In winter D-deficiency can be remedied immediately if the mother and baby takes NHS vitamins. The cost of the vitamins is insignificant compared with the savings that will accumulate quickly over a number of years from prevention of any one of the long list of chronic diseases given above.

In summer, a baby may be taken naked into bright sun (avoiding the middle of the day) for up to 10 minutes but present government policy promulgated by Cancer Research UK mistakenly discourages all exposure of babies to sun because of fears of skin cancer. In fact obsessive avoidance of the sun causes D-deficiency and so may actually boost the risk of skin cancer as well as other cancers. However sunburn probably does increase risk of skin cancer, although an ordinary tan should not be a cause for any worry.

Children who suffer from juvenile diabetes require daily injections of insulin for the rest of their lives. In the north of England and Scotland this type of diabetes has been found to be commoner in people who have winter birthdays. And evidence has come from three separate studies showing that people who were given vitamin D or cod liver oil as children are less likely to develop the disease, now known as diabetes type 1. This evidence was presented to the House of Commons when Dr Ian Gibson (MP for Norwich North) raised these issues on September 9 last year. Further evidence showing the importance of vitamin D in this disease has accumulated since then.

Now two independent double-blind trials, the most rigorous type of scientific evidence, have shown that vitamin D given at an early

stage in the development of diabetes type 1 prolongs the period before insulin is required forestalling the disease for a while at least. How effective vitamin D will prove to be as therapy is not yet known, but the result confirms existing knowledge suggesting that the disease is caused by D-deficiency early in life.

The human race emerged from tropical Africa some 80,000 years ago where we probably thrived on a diet of fish before we followed rivers and coastlines round the world and found ways of living in other habitats. In northern Europe we live in an extreme environment far from man’s natural home in tropical Africa. Cities such as Glasgow, Edinburgh, Copenhagen and Moscow, are all on much the same latitude as southern Alaska. For six months of the year the sun is not strong enough to provide any vitamin D, but people were able to adapt to this environment so long as they lived an open-air life. Now that we live more artificial lives indoors the challenge is greater. New diseases such as rickets, schizophrenia, osteoporosis and all the other D-deficiency diseases have emerged in force. But now we know what causes these diseases we have the means to fight them: by playing outdoors in the sun, by sunbathing, and by taking cod liver oil or some other vitamin D supplement we may defeat D-deficiency.

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