All-of-government approach needed to tackle obesity

More and more people are becoming overweight and obese all over the world. Philip James tells Fiona Fleck how the epidemic started and what should be done to reverse it.

Q: What attracted you to the study of obesity?

A: After five years working on childhood malnutrition in Jamaica, I came back to the United Kingdom to take over a teaching programme on nutrition and public health at the London School of Hygiene & Tropical Medicine. In 1972, I put in a research proposal to look at why some women increased in weight and got very plump. In response, the Ministry of Health and the Medical Research Council (MRC) asked our department to do a complete analysis of the obesity research literature and this was published as a Department of Health/MRC report in 1976. The MRC thought this was intriguing, as they had never considered funding this area and this led to my being funded to establish the Dunn Clinical Nutrition Centre in Cambridge.

Q: Why was that report so important?

A: We considered body mass index (BMI) as a standard measurement of overweight and showed that if this went up, your risk of death increased. The Department of Health was concerned because the report suggested that this could become a major public health problem.

Q: Where did you find strong enough evidence in this unstudied field?

A: We used data that life insurance companies had started gathering before the Second World War in the USA. They had come up with a system of putting extra premiums on people if they were heavy for their sex and height on the basis of the observed life expectancy of the group. They had millions of men and women taking out insurance and provided decades of follow-ups on these individuals.

Q: Why did the 1976 report take a BMI of 25 and above for overweight and BMI of 30 and above for obesity?

A: We saw from that data that blood pressure went up as the body weight went up from a BMI of about 20 and that at about a BMI of 25 - whatever your height or sex - premature mortal-



Philip James

Professor Philip James has devoted the last four decades to the study of obesity and raising awareness of the problem. He trained in physiology and medicine at University College London, and did postgraduate training in Jamaica, the United Kingdom and the United States of America. From 1971 to 1974 he worked on the first national study of obesity in the United Kingdom and in 1976 established the Dunn Clinical Nutrition Centre in Cambridge to research obesity and the dietary aspects of adult chronic diseases. In 1982 he

was appointed Director of the Rowett Research Institute in Aberdeen and in 1996 returned to the London School of Hygiene with his newly established International Obesity Task Force (IOTF). Working as an adviser to WHO, he helped to establish strategies for tackling the current global epidemic of obesity and adult chronic diseases.

ity started to increase. In the insurance world, the convention was to take obesity to be 20% above "normal" weight. So, 20% above a BMI of 25 is 30, and so we took a BMI of 30 as the obesity cut-off point. We knew that the BMI was a crude measure and, for example, rugby players might be "obese" but were stacked with muscle. Nevertheless, we were able to specify the degree of overweight at each level of BMI in the average man and woman.

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Q: What were the limitations of that study?

A: We thought that a BMI of 25 was only useful for estimating the risk of premature death and this has become the criterion for specifying its cut-off point, but now we know that the risk of type 2 diabetes increases rapidly between a BMI of 20 and 25, also the risk of high blood pressure, ischaemic heart disease and some cancers relating to weight gain increase before one's BMI increases above 25.

Q: When was obesity classified as a disease?

A: It was already classified as a disease when WHO took over the International Classification of Disease in 1948. Subsequently, though, when studying heart disease and high blood pressure, epidemiologists started to classify obesity as a risk factor. They did us a great disservice, as this suggests that risk factors are an individual's responsibility, in this case, for not eating the right foods. That epidemiological approach played a huge role in downplaying the importance of obesity as a public health problem.

Q: When did those perceptions change?

A: In the mid-1980s, I saw high rates of obesity among women even in poor households in Egypt, Kenya and Mexico, yet these populations were receiving food aid because their babies were stunted. No one was interested in the obesity problem. In 1995, I established the International Obesity Task Force and we contributed to the work of the first WHO expert consultation on obesity. It showed that obesity was not just the problem of "self-indulgent" American and British adults but of people living in low- and middle-income countries and that this was the biggest unrecognized public health problem in the world with epidemic qualities. Today there is voluminous evidence to

show that weight gain and obesity have disastrous consequences in countries where malnutrition has been common in the last 50 or 60 years.

Q: What statistics best characterize the fattening of populations?

A: The most illuminating data come from three sources. One, an Australian analysis of data on children's height and weight shows that the BMIs of children were almost stable for the first 80 years of the 20th century before suddenly rocketing. Second, sequential measures of adult obesity or overweight show small increases over the years but that the problem took off in the 1980s and was soon affecting developing countries. Third, some of the fattest children and adults are in Mediterranean countries in Europe. That blew out of the water the idea that people in this region were still eating a traditional Mediterranean diet. The fattest people in the world today, apart from the Pacific Islanders, are women in the Middle East with Mexican women coming close.

Q: What changed in the 1980s?

A: In the 1980s, marketing techniques for foodstuffs and soft drinks with a high fat, sugar or salt content to children became highly sophisticated. With the help of child psychologists, companies began to understand the factors that unconsciously influenced sales. They found out, for example, how to influence children and get them to manipulate their parents to take them to fast-food restaurants or to attract them to confectionary through packaging and placing it at a child's eye level in supermarkets. With more women entering the workforce with less time for homecooking, the marketing of processed foods also got under way.

Q: What is the significance of these

A: The epidemic that took off is a new global phenomenon. It's different from high blood pressure, which you can reduce if you lower your fat and salt intake. It's different from heart disease, where, if you remove the saturated fat from the food-chain, heart disease goes down. Why is obesity different? Because, since the 1970s and early 1980s, the computerization and mechanization of our work and leisure time have transformed our physical activity. Now a huge global industry persuades us to buy a car, that we don't need to go out to the cinema because we can watch films at home on television or on the computer; kids now have endless choice of attractive video games. This means that our activity has collapsed and we need better food than perhaps we have ever eaten before to prevent "passive" weight gain.

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Q: Is this true of middle- and low-income countries?

A: With the globalization of the food industry, multinational companies are targeting for their next decades' profits what they call the "Third World" and these countries are being overwhelmed. In some of these countries, the rubbish that people eat is atrocious and the manipulation of poor people is unspeakable. The agricultural production of excess fats and sugars has also been subsidized by governments for half a century to the tune of trillions of dollars. The common agricultural policy in the European Union and US agricultural policies have distorted the relative price of fruit and vegetables, sugar and fats, so that if you are poor you cannot afford many kinds of fruit and vegetables. And, as inequality increases, your primary drive is to get the cheapest calories possible and, currently, these are the foodstuffs with a high sugar and fat content with salt added to trigger our primitive taste systems.

Q: What is the solution?

A: We need an all-of-government approach in which many sectors are involved. There is no help or hope unless

governments accept that they have to intervene and set new criteria. The idea of persuading a population to change their behaviour in the face of this industrial marketing onslaught is contrary to everything we know about brain behaviour. Publicly funded social and traditional media campaigns are useless when faced with the one of the biggest, most powerful industries globally.

Q: How effective are taxes to promote more healthy diets, such as the salt tax introduced in Hungary this year?

A: Fiscal measures have a marked effect, provided you make the price increase overt, explicit and appreciable. Last month, at a WHO European Ministerial Conference on Nutrition and Noncommunicable Diseases, scientists showed that the 15-month-long tax on saturated fat in Denmark had also led to a reduction in saturated fat intake. Banning trans fats has also been shown to be one of the most costeffective methods of ridding the food-chain of these industrially produced hazards.

Q: What should governments do?

A: They should start by banning the sales of food and soft drinks that can lead to disability and early death, on all public premises such as hospitals and schools. And they should protect young people. Adolescents are the prime target of tobacco, alcohol and fast food companies because - and the latest research shows this - the human brain is only able to make decisions that control primeval emotional responses by the early 20s. For example, France launched a drive to ensure children have healthy food at school in 2001 and, in 2005, banned vending machines in schools. It also increased the price of soft drinks by 7-cents a litre. Government policies on food in government-supported establishments should be linked to local agriculture that can provide appropriate high quality food in an environment where you have multiple, healthy choices. ■