



***Children, obesity and health:
Recent trends***

The Social Issues Research Centre 2012

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1 Introduction

Nearly seven years ago we published an analysis of the Health Survey for England (HSE) data demonstrating that fears of an obesity ‘epidemic’ among children were not founded on evidence and that proposed policies based on exaggeration of the scale of the problem were not only likely to be unsuccessful but also damaging.¹ We concluded:

“We do no service to the people at risk of obesity-related morbidities in our society by ‘hyping’ their plight, exaggerating their numbers or diverting limited educational, medical and financial resources away from where the problems really lie. Banning advertising of ‘junk food’ to children and similar measures may be popular in some quarters, but they are unlikely to impact much on the generation of people in their 50s and 60s – those with vastly higher rates of overweight and obesity than children and young people.”

Since the publication of our original report, *Obesity and the facts*, further data have been produced yearly by the HSE – the latest being the 2010 survey. The HSE has also produced very useful trends tables covering the period 1995-2010.² We have made extensive use of these tables and the yearly raw data files available from the Data-UK Archive in compiling this updated report.

Our focus is particularly on the period 2004-2010 and the changes that have occurred since the original report.

¹ SIRC (2005) *Obesity and the facts*, available on the SIRC website at

http://www.sirc.org/obesity/obesity_and_the_facts.shtml

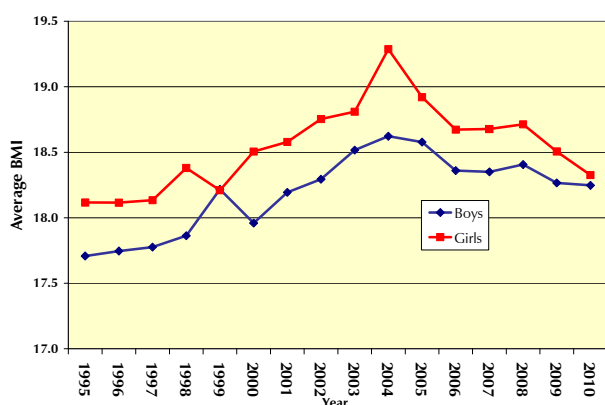
² The Trends Tables can be downloaded in Excel format from <http://www.ic.nhs.uk/statistics-and-data-collections/health-and-lifestyles-related-surveys/health-survey-for-england/health-survey-for-england--2010-trend-tables>

2 Body Mass Index (BMI) and children

Body Mass Index (BMI) is a proxy measure for fatness and is calculated by dividing a person's weight in kilograms by height in metres squared. BMIs in adults of 18.5-25 are considered to be 'normal' while 25-30 constitutes 'overweight' and 30+, 'obese'. Because children have various growth 'spurts', however, different cut off points have to be established for each age group when defining overweight/obese. Outside of the UK the World Health Organisation (WHO) Child Growth Standard is commonly used while here reference curves are based on studies of the UK population alone. Rather controversially, the use of these UK reference points inflates the levels of overweight and obesity compared with other systems.³ They are used by the HSE, however, to provide consistency over the years and to allow comparisons to be made.

Since 2004 there has been a consistent decline in BMI for both girls and boys, as shown in Figure 1.

Figure 1. Average BMI of children aged 2-15 years

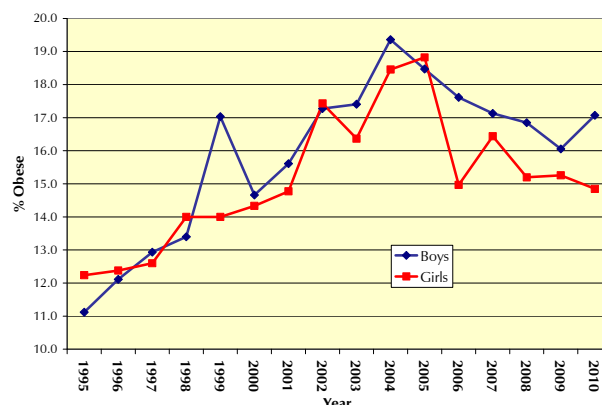


In 2004 the average BMI of girls was 19.3 while that of boys was 18.6. By 2010 these has fallen to 18.3 and 18.2 respectively. There is, then, no evidence that children, in general, have been getting fatter in recent years. The opposite, in fact, seems to be the case. Nor is there any evidence to support the oft-repeated view that a particular group of children is becoming fatter, leading to rising numbers defined as obese.

We can see from Figure 2 that levels of obesity have fallen between 2004 and 2010, from 19.4% in

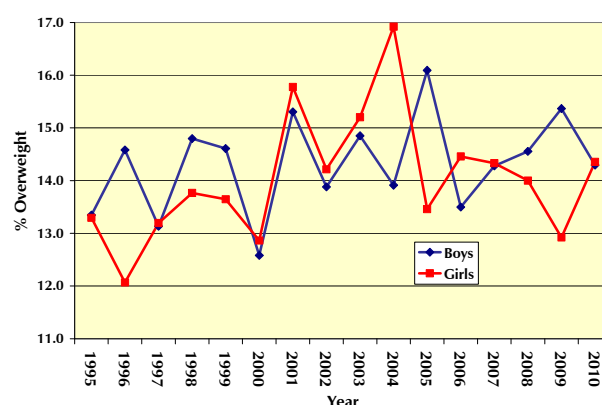
boys and 18.5% in girls to 17.1% and 14.8% respectively.

Figure 2. Percentage of children defined as obese



The picture of the number of children defined as 'overweight' is less clear, as shown in Figure 3, although there has been relatively little overall change over the past 16 years.

Figure 3. Percentage of children defined as overweight

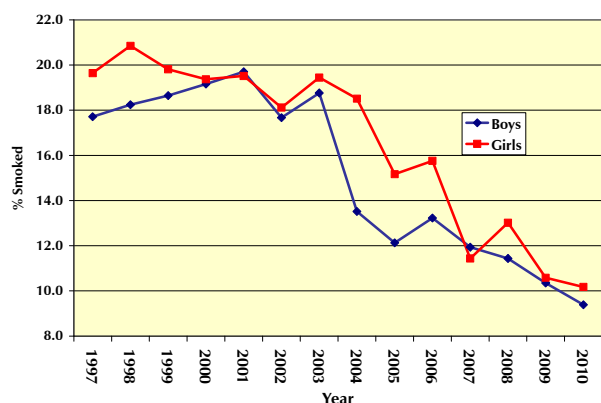


3 Smoking

While children have become less fat over the past six years, and fewer are now classed as obese, the HSE also reveals further evidence for increasingly healthy lifestyles among children. Fewer, for example, have ever smoked cigarettes than before. As can be seen in Figure 4 the rates have fallen from 19.6% in girls and 17.7% in boys in 1997 to 10.2% and 9.4% respectively in 2010 – decreases of roughly 50%.

³ See, for example, Cole T.J., Freeman J.V. & Preece, M.A. (1995) Body mass index reference curves for the UK 1990. *Archives of Disease in Childhood*, 73: 25-9 and section 7 of this report.

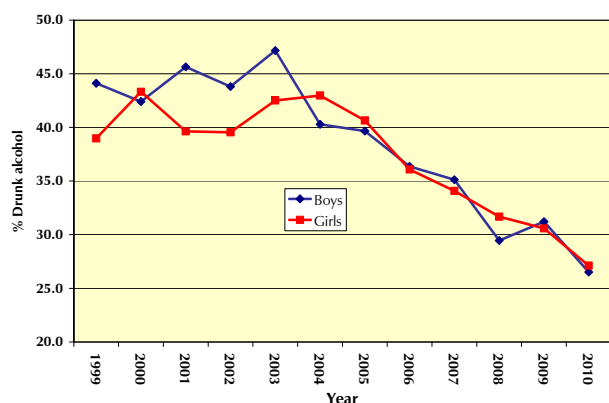
Figure 4. Percentage of all children who have ever smoked cigarettes



4 Alcohol consumption

A similar pattern is evident for alcohol consumption among children, as shown in Figure 5. In 1995, 44.1% of boys and 39.0% of girls said that they had drunk alcohol. By 2010 these figures had fallen to 26.5% and 27.1% respectively.

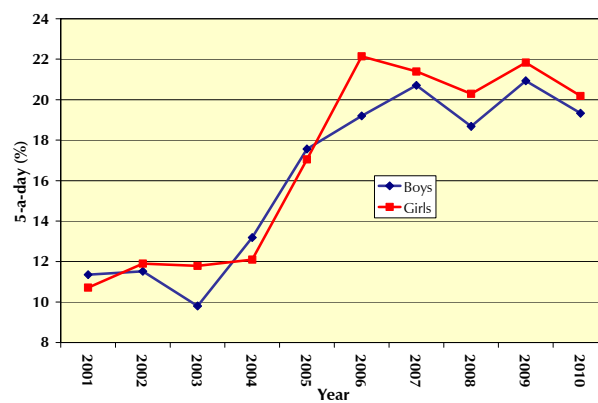
Figure 5. Percentage of all children who have ever drunk alcohol



5 Consumption of fruit and vegetables

Further encouraging news from the HSE is that children are now increasingly consuming five or more portions of fruit and vegetables a day, as shown in Figure 6. Here we can see that the numbers achieving the target level of 5-a-day nearly doubled between 2001 and 2010 – rising from 11% of both girls and boys to 20% of girls and 19% of boys. Although the rate of increase has now flattened out, the average consumption of fruit and vegetables rose over the same period from 2.6 portions per day among girls and 2.4 among boys to 3.3 and 3.2 portions per day respectively.

Figure 6. Percentage of all children consuming 5-a-Day



6 Physical exercise

A final snippet of data contained in the HSE questions the increasingly shrill allegations that today’s children have become a nation of ‘couch potatoes’. The amount of physical exercise in which children engage has only been measured by the HSE, in ways that allow comparisons to be drawn, three times – in 2002, 2006 and 2007. We note however, that in 2007, 72% of all boys and 63% of all girls achieved the recommended levels of a least one hour of moderate to vigorous physical activity per day. These figures had risen from 70% and 61% respectively in 2002.

7 Commentary

The evidence provided by the Health Survey for England unequivocally shows a decline over the most recent six years for which data are available in both the average Body Mass Index and the incidence of obesity in English children. There is also clear evidence to show that children are increasingly adopting healthier lifestyles, with fewer smoking or drinking alcohol and even more engaging in the recommended levels of physical exercise.

Such ‘good news’, one might have thought, would have been headline material by now – the data, after all, have been freely available for some time. Instead, however, we continue to hear the same old message – today’s children are getting unhealthy fatter and will die, as a result, at a younger age than their parents.

The National Heart Forum alerted us back in 2009 to the fact that “Child obesity forecasts [are] ‘excessive’” and noted that by then the numbers of severely overweight children were already

“levelling off.”⁴ Few people seem to have paid any attention to this lone dispassionate view. Health professionals continued, and still continue, to dismiss any notion that kids may be getting a better idea of what and how much they should eat than their parents. Leading figures in the anti-obesity organisations – most of which receive generous funding from the pharmaceutical companies that make weight-loss drugs and the burgeoning slimming industry – appear undeterred by the simple facts of the matter.

It may well be the case that, whatever the trends, there are more overweight children than there should be. We certainly led to believe that we have more obese kids than do our European neighbours. This apparent differential, however, is due, perhaps entirely, to the fact that we measure overweight and obesity in children differently from most other nations. It is also the case that the UK standards for defining which children are or are not fat were established back in 1990 and even the professor of medical statistics, Tim Cole, who produced them, says that “... the idea that they are cast in stone is absolute nonsense. It is all built on sand.” He and most other statisticians estimate that if the more widely accepted international standards were adopted, the number of overweight and obese children would fall to half that currently claimed.

Running through the whole often heated and illogical debate about the ‘obesity epidemic’ is that being fat is bad for you, that it is ‘linked’ to an almost unending catalogue of morbidities and will, perhaps relatively early in adulthood, kill you. While there is some evidence associating obesity with, say, Type 2 diabetes, there is precious little to show that being overweight or even moderately obese in adulthood is likely to reduce your life expectancy. In fact, the opposite appears more likely to the case. The results of a major and very significant study by Katherine Flegal and her colleagues at the Centers for Disease Control in the United States⁵ showed that overweight Americans lived longer than those of so-called ‘normal’ weight. Even moderately obese individuals fared better than their under-weight contemporaries.

⁴ *Guardian*, 3 November, 2009.

⁵ Flegal, K.M., Carroll, M.D., Ogden, C.L., & Johnson, C.L. (2002) Prevalence and trends in obesity among U.S. adults, 1999-2000. *JAMA*, 14, 1723-1727.

And yet, the mantra that ‘thin’ is not only ‘beautiful’ but also ‘healthy’ continues to pervade every area of our modern lifestyles.

In light of the trends revealed by the HSE data perhaps it is now time to stop demonising our children as ‘couch potatoes’ and give them credit for confounding the dire predictions of so-called health professionals.

8 About the Social Issues Research Centre

The Social Issues Research Centre (SIRC) is an independent, not-for-profit organisation based in Oxford, UK. It conducts research and evaluations for a wide range of corporate bodies, UK government departments and agencies, the European Commission and other organisations. SIRC also covers a wide range of topics in the social sciences. As a result, past corporate clients have included some in the food and beverage industries. SIRC currently has no links with any companies or trade bodies in the food and drinks industry. This review of the HSE data and the accompanying commentary has been undertaken without being commissioned by any external company or body and no payment has been, or will be, received, for the work involved.