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The Heights and Weights of Irish Children from the Post-War Era to the Celtic Tiger

Ivan J Perry, Helen Whelton, Janas Harrington and Bernard Cousins

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The heights and weights of Irish children from the post-war era to the Celtic tiger

I J Perry,1 H Whelton,2 J Harrington,1 B Cousins3

ABSTRACT

Background: Childhood obesity is a significant global health issue. National level data on long-term secular trends are relatively sparse.

Methods: Data were obtained from three large-scale surveys of school-aged children in Ireland involving measurements of height and weight in 1948, the 1970s and 2002.

Results: Significant increases in height and weight were observed in both boys and girls and in all age groups across the decades. The increases in weight were disproportionate to the trends in height. While boys aged 14 years were 23 cm taller in 1948 than 2002, their average weight was 61 kg, compared with 37 kg in 1948, an increase of 24 kg. A substantial proportion of the increase in weight is seen between the 1970s and 2002.

Conclusions: The data provide stark and compelling evidence on the evolution of the obesity epidemic in Irish children in tandem with the increase in economic prosperity.

During the 1990s, the Republic of Ireland experienced high annual rates of economic growth (the “Celtic tiger”), which reversed decades of economic underperformance and transformed the country from one of the poorest to one of the most affluent countries in Europe. In 2002, Ireland’s gross domestic product (GDP) per capita was €150.2 billion, the second highest in Europe.1 In contrast, in the 1940s, the Irish economy was stagnant, the country did not benefit from the Marshall Plan or experience a post-war economic boom.2

Conclusions: These data provide stark and compelling evidence on the evolution of the obesity epidemic in Irish children in tandem with the increase in economic prosperity.
decades. It is likely that the weight gain between the 1940s and the 1970s was beneficial; however, the major concern from a public health viewpoint is the rapid increase in weight disproportionate to height since the 1970s.

The relative intransigence of established obesity in adulthood provides a compelling argument for population-level primary prevention strategies. It is likely that the cost of the obesity epidemic, currently estimated at up to 8% of overall health budgets, will increase substantially. Over the coming decades, health systems worldwide face bankruptcy in the absence of a cohesive and multisectoral societal approach to the problem of overweight and obesity.

One can only speculate as to the effect that the current downturn in the Irish economy will have on the prevalence of obesity in Ireland. However, it is likely that, coupled with the increasing problem of food poverty and food insecurity, socioeconomic obesity gradients will be accentuated and the underlying high prevalence of overweight and obesity will not be reversed.
What is already known on this subject

Clear secular trends of increasing height and weight in children linked to economic growth have been documented in many developed countries in recent decades. However, data from the middle of the twentieth century are sparse.

What this study adds

This study provides unique data from the Republic of Ireland, spanning a period of over 50 years and provides evidence of an accelerating trend in the prevalence of obesity form the 1970s, during the “Celtic tiger” era of economic growth. These findings add to the evidence that we face a global obesity crisis (global fattening) akin to global warming. Specifically, they highlight the need to align work addressing the global obesity epidemic with the broader climate change agenda. We are converting fossil fuels into relatively cheap calorie-dense food which is driving the obesity epidemic. We need to address our reliance on fossil fuels in food production and food transport and develop public policies to promote walking and cycling.

Table 1  Mean height (cm) and weight (kg) for boys and girls in Ireland between 1948 and 2002

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<tr>
<th>Age (years)</th>
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