What are the estimated costs of childhood overweight and obesity on the island of Ireland?

1 in 4 children is overweight or obese

**Total lifetime cost**

- €4.6 billion ROI
- £2.1 billion NI
- €7.2 billion IOI*

**Lifetime direct & indirect costs**

- €16,036 ROI
- £18,797 NI

**Direct health care costs**

- 21% ROI
- 26% NI

As a result of healthcare expenditure

**Indirect health care costs**

- 79% ROI
- 74% NI

Non-health or "societal" costs due to work absenteeism, premature mortality and lifetime income losses.

What would the savings be if there was a 1% or 5% reduction in BMI?

- BMI ↓ 1%
  - €270 million ROI
  - £79.5 million NI

- BMI ↓ 5%
  - €1.1 billion ROI
  - £329.3 million NI

Costs estimates are conservative because:

- There is insufficient data available to accurately capture direct healthcare costs in community and primary care.
- Psycho-social impacts on schooling, social life and work prospects are not included due to unavailability of data.
- Monetary value of productivity of older adults is not included

*Abbreviations: BMI (body mass index), ROI (Republic of Ireland), NI (Northern Ireland), IOI (island of Ireland).
Conclusions

One in four children on the island of Ireland is overweight or obese. Research in 2012 estimated the costs (€1.64 billion) associated with current levels of excess body weight in adults, and this report addresses the projected lifetime costs of childhood overweight and obesity.

• This study provides, for the first time, reliable, contemporary and locally relevant data on the human and economic burden of childhood overweight and obesity.
• The findings on distribution of costs between direct healthcare and indirect societal costs are in agreement with previous research indicating that most of these costs are societal and borne in adulthood rather than in childhood.
• These estimates of excess lifetime costs attributable to childhood overweight/obesity are conservative and lower than those reported in the literature to date but comparisons are difficult as available literature is dominated by studies from the United States of America, where direct health care costs are higher than in Europe.

Aims

• To estimate and combine direct and indirect cost estimates to provide an overall estimate of the lifetime cost of childhood overweight and obesity on the island of Ireland.
• To explore the effect on lifetime costs of a 1% and 5% reduction in population mean childhood body mass index (BMI).

Recommendations

The estimated lifetime costs in this research identify an unsustainable situation, with costs defaulting to the taxpayer, creating a legacy of debt for future generations that require this public health epidemic be tackled. The specific recommendations are:

1. The obesity strategies and action plans in NI and ROI should be implemented, supported with adequate resources, to prevent and manage childhood overweight and obesity.
2. A population and life-course approach to the obesity epidemic is necessary to tackle the current epidemic with a strong emphasis on intervening in the obesogenic environment (food and physical activity) balanced with supports for parents and carers.
3. An annual evaluation of progress of the obesity action plans including for example the impact of measures such as the tax on sugar sweetened drinks, is indicated given the demonstrated potential benefit (financial and societal) of interventions to address overweight and obesity highlighted by this research.
4. That there be increased investment in data collection that will provide accurate and reliable population-based data for conducting cost-of-illness studies and related health economic analysis. Data collected must include information on utilisation of health services (both primary care and hospital services) and illness-related productivity loss and absenteeism from work and school.
5. Research into the psychosocial impacts of overweight and obesity on the island of Ireland is warranted given the information gap identified.

Implications

• The estimated costs can be used to inform discussion of the economic and societal burden associated with the major health problem that is childhood overweight and obesity.
• The priority assigned to overweight and obesity in public policy should be driven primarily by estimates of the incremental costs and the incremental benefits of interventions to prevent and/or manage overweight/obesity.

Link to full report:
www.safefood.eu/costsofchildhoodobesity

Acknowledgements

safefood wishes to acknowledge Professor Ivan Perry, Dr Seán Millar, Prof Kevin Balanda and Dr Anne Dee for their significant contribution to the completion of this piece of work. The partners who collaborated on this project are also acknowledged: the School of Public Health, University College Cork; the Institute of Public Health In Ireland; the Department of Public Health, Mid-West Health Service Executive; the J.E. Cairnes School of Business & Economics, National University of Ireland Galway; Temple Street Children’s University Hospital; and the United Kingdom Health Forum.