

INFANT
COHORT



Growing Up
in Ireland
National Longitudinal
Study of Children

GROWING UP IN IRELAND

KEY FINDINGS: INFANT COHORT AT 7/8 YEARS

NO. 2 HEALTH AND DEVELOPMENT

INTRODUCTION

This is the second in a series of *Key Findings* from the fourth wave of data collection from the Infant Cohort in *Growing Up in Ireland*.

The families of just over 11,100 infants were first interviewed between September 2008 and March 2009, when the child at the centre of the study was 9 months old. They were re-interviewed when the child was 3 years old and again at 5 years of age. In 2016, a fourth wave of data was collected from the child's primary caregiver (mainly their mother!) through a postal survey when the child was 7/8 years old.

This *Key Finding* focuses on mothers' reports on the general health of the children at 7/8 years of age, their development and health behaviours, as well as stability and changes from the age of 9 months. Health status and behaviours are important for overall well-being, enabling development in other areas of the child's life as well as for future health.



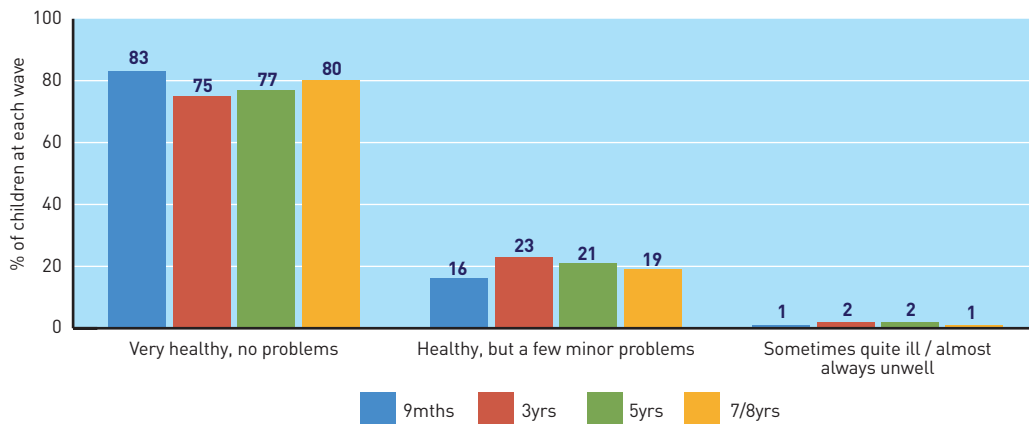
¹ As almost all Primary Caregivers were the child's mother they will be referred to collectively as 'mothers' in this *Key Finding*.

GENERAL HEALTH OF 7/8-YEAR-OLDS

ABOUT 80% OF IRISH 7/8-YEAR-OLDS WERE VERY HEALTHY

The health of children is important for their normal development. Although 80% of mothers stated that their child was *very healthy* at 7/8 years, around 1% said their child was either *sometimes quite ill* or *almost always unwell* (Figure 1). Boys were more likely to be described as *sometimes quite ill* or *almost always unwell* than girls (2% compared with 1%). Figure 1 also shows that there was a small but significant decrease in the overall percentage of children who were *very healthy* from 9 months to 7/8 years of age.

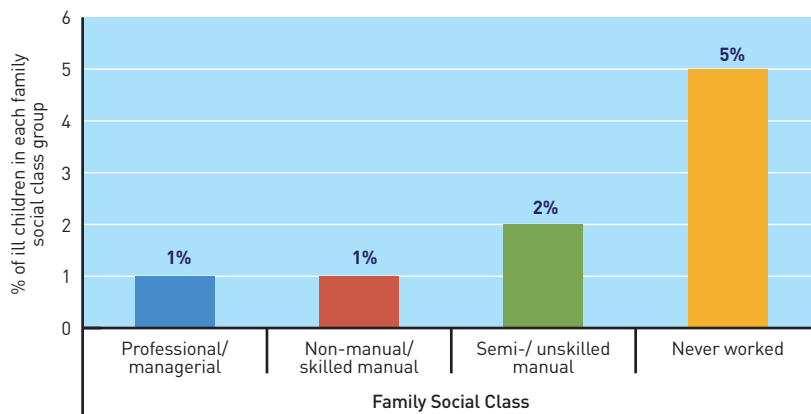
Figure 1: Mothers' reports of Study Child's general health over time



80% of 7/8 year-olds were described as *very healthy* and 19% were *healthy but with a few minor problems*

There were significant differences reported in general health according to the family's social class²: 5% of children whose parents had never worked were *sometimes quite ill/almost always unwell*, compared to 1% of children in either professional/managerial or non-manual/skilled manual households (Figure 2).

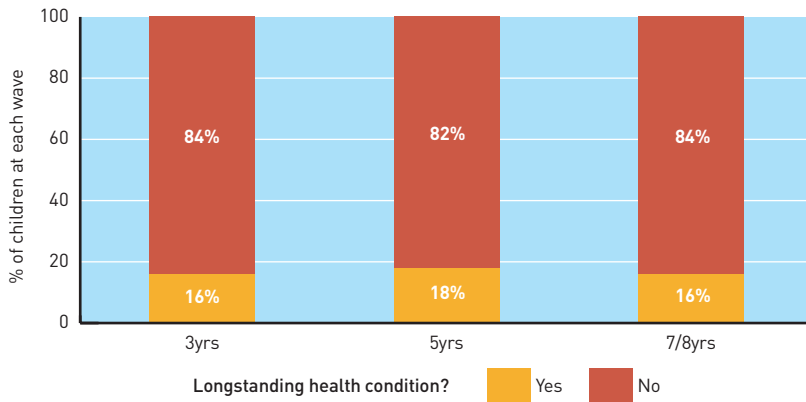
Figure 2: Percentage of children with general health ratings of *sometimes quite ill or almost always unwell* by family social class



As Figure 3 shows, 16% of mothers said their child had a longstanding illness, condition or disability at 7/8 years. Approximately 1.5% of children were reported to have two or more such conditions. The most commonly reported conditions were behavioural or learning-related conditions such as ADHD or dyslexia (reported for almost 6% of all 7/8-year-olds) and respiratory conditions such as asthma (reported for 4% of all 7/8-year-olds).

² Based on parental occupation when the Study Child was 5 years old, the most recent time it was recorded

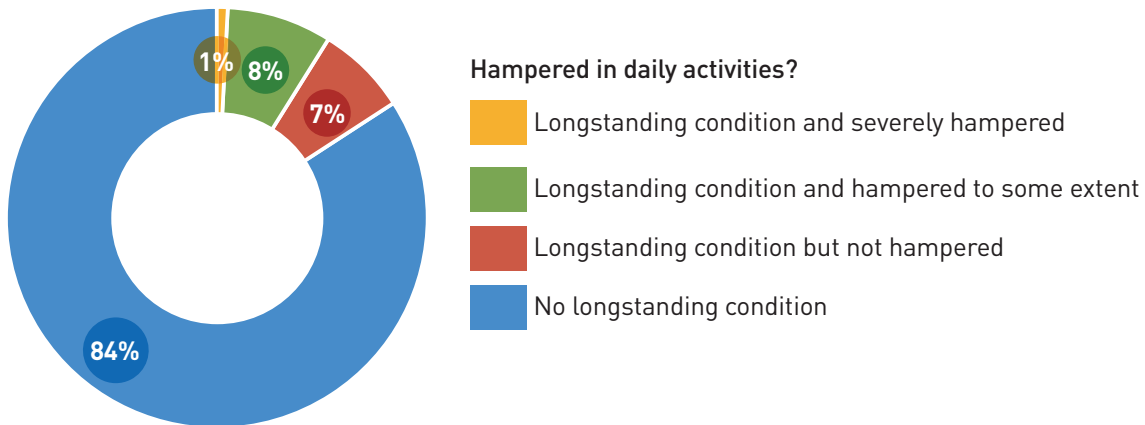
Figure 3: Children classified according to whether or not they were reported to have a health condition, illness or disability at age 3, 5 or 7/8 years (each age considered separately)



Approximately 16% of children had a longstanding health condition or disability at 7/8 years of age. This percentage was very similar to those at 3 and 5 years of age.

8% of all 7/8-year-olds were reported to have been hampered to some extent by a longstanding condition, while a further 1% were reported as severely hampered (Figure 4).

Figure 4: 7/8-year-olds classified according to whether or not they were reported to have a longstanding condition, illness or disability and (if so) whether or not they were hampered by it

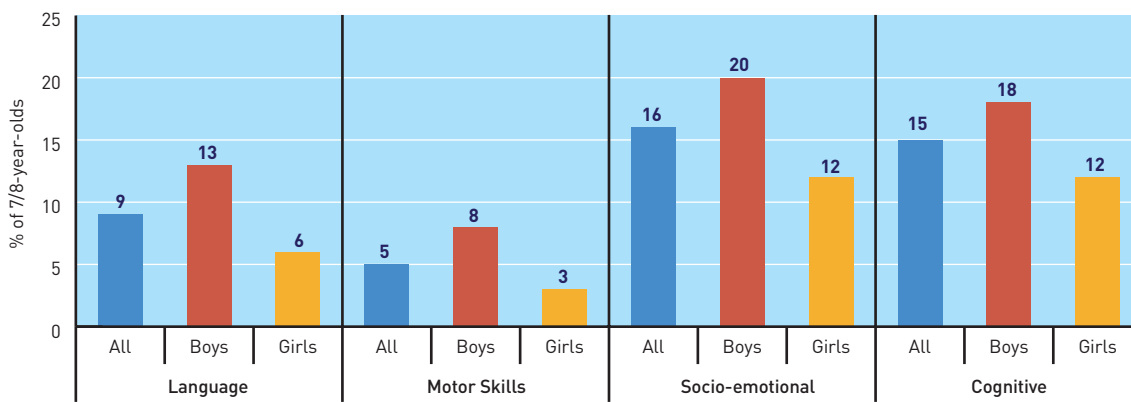


DEVELOPMENTAL CONCERNS

ALMOST THREE-QUARTERS OF MOTHERS REPORTED THAT THEIR CHILD WAS DEVELOPING NORMALLY AT 7/8 YEARS

Normal development involves balanced growth in a number of areas of the child’s life. Mothers answered questions regarding concerns they had in terms of language and motor skills, as well as socio-emotional and cognitive development of their 7/8-year-old³. Figure 5 shows that 16% of mothers had some concerns about their child’s socio-emotional development and 15% had concerns about their child’s cognitive development. Mothers had more concerns about boys than girls for all four areas of their development. Overall, 15% of mothers reported having a concern in only one area; a further 6% reported having concerns in two areas; 3% reported having concerns in three areas; and a final 3% had concerns in all four areas of their child’s development.

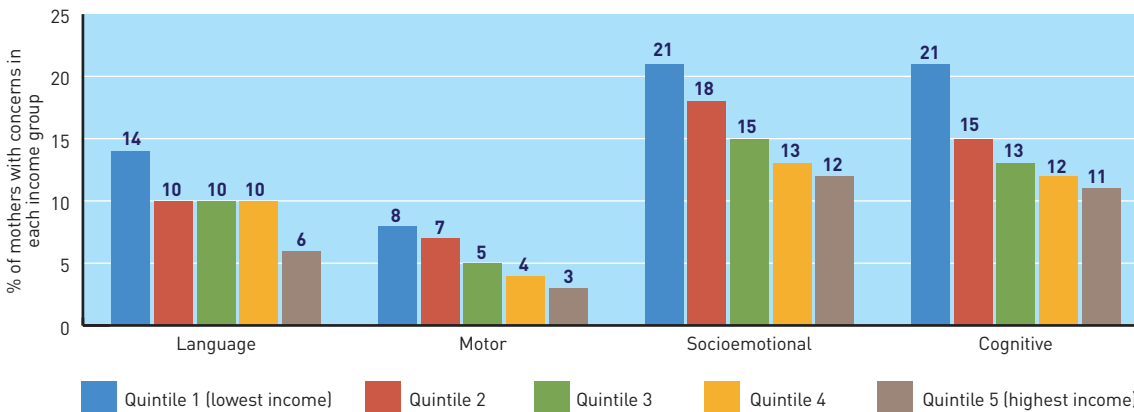
Figure 5: Percentage of mothers with concerns (concerned and a little concerned combined) about their child’s development; separately for language, motor, socio-emotional and cognitive skills. Percentages given for overall sample and within each gender



Concerns about Language Development and Motor Skills were twice as common amongst boys as amongst girls.

Overall, mothers in the lowest family income group⁴ were most likely to have concerns about their child’s development. In total, 21% of mothers in the lowest family income group were concerned about socio-emotional development, compared to 12% of those in the highest family income group. Maternal concerns about their child’s development were similarly related to their social class and level of educational attainment (not illustrated).

Figure 6: Percentage of mothers with concerns about their child’s development in the areas of language, motor skills, socio-emotional development and cognition according to family income quintile



Mothers in families with the lowest income were around twice as likely to have concerns about the child’s development compared to those in the highest income families.

³ Using a measure called Parents Evaluation of Developmental Status (PEDS), mothers were asked whether they were *not concerned*, *a little concerned* or *concerned*, with the latter two answer categories combined here for analysis in line with the recommendations of the scale’s developers. Further information on socio-emotional concerns is included in Key Finding 3 in this series.

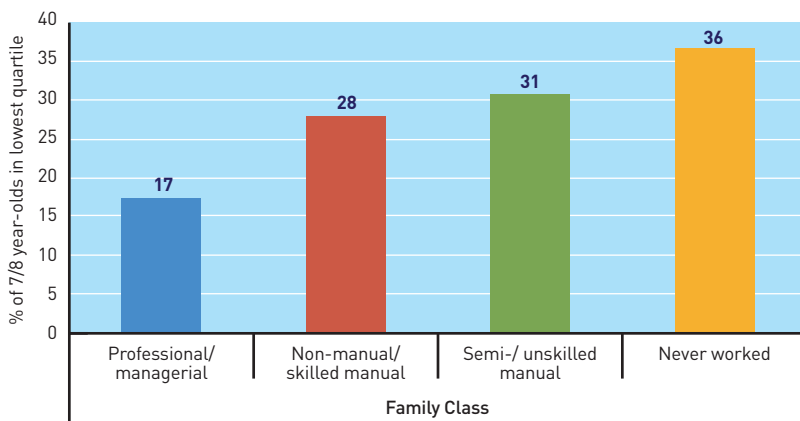
⁴ Family income is based on total family net disposable income from all sources (including transfers), adjusted to account for the size and composition of the household (equivalised income), as recorded in the face-to-face interview at 5 years of age.

DIET

MOST CHILDREN HAD RELATIVELY GOOD DIETS ALTHOUGH DIETARY QUALITY WAS LINKED TO FAMILY SOCIAL CLASS

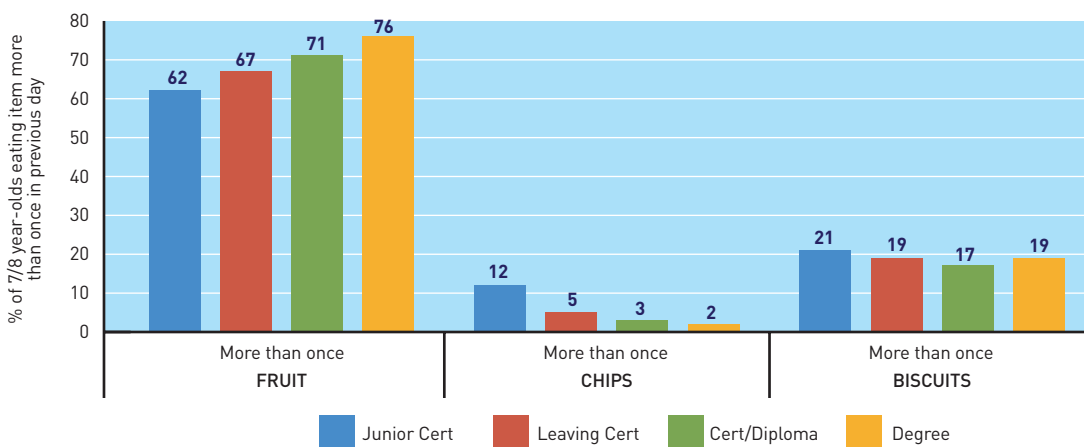
Good nutrition is essential for health and development and establishes good dietary habits for the future. Mothers recorded how often in the previous 24 hours their child had consumed items from a list of 15 different foods and drinks. The answers to these questions were used to estimate dietary quality⁵. Scores were divided into quartiles (four groups of approximately 25% each), with the lowest quartile reflecting the poorest dietary quality. Figure 7 shows that children from a professional/managerial family background were the least likely to have a dietary quality score in the lowest quartile (17%). This compares to 36% among children where parents were in the 'never worked' category (most socially disadvantaged group).

Figure 7: Percentage of children in each family social class in the lowest quartile of dietary quality



The frequency with which three sample individual food items were eaten *more than once in the previous day* is shown in Figure 8. The graph illustrates that consumption of some, but not all, food items varied by maternal education. Children whose mothers had higher levels of education were more likely to have eaten fruit more than once in the previous 24 hours: 76% among degree-level mothers compared to 62% of children whose mother had left school with a Junior Certificate or less. The opposite trend was true for chips, which were more likely to have been eaten by children whose mothers had lower levels of education. There were no differences in biscuit consumption (19% overall) among children from different family backgrounds.

Figure 8: Consumption of sample individual food items 'more than once' in the previous day by maternal education



Where there were socio-economic trends in the consumption of individual food items these tended to favour children in families whose mothers had higher levels of education.

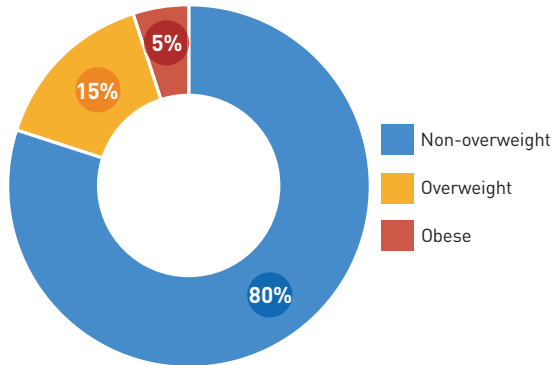
⁵ **Dietary quality scoring:** This measure was an amended version of a dietary measure used in the Longitudinal Study of Australian Children, itself derived from the Sallis Amherst Questionnaire. A positive value (1=eaten once, 2=more than once) was assigned to foods seen as beneficial (such as raw vegetables, fresh fruit, etc.) and a negative value to those generally seen as less beneficial (burger, sausage, chips, crisps, etc.). A single index of dietary quality is produced by summing the scores.

OVERWEIGHT AND OBESITY

ONE IN FIVE 7/8-YEAR-OLDS WAS OVERWEIGHT OR OBESE, THE SAME PROPORTION AS AT AGE 5

Overweight and obesity affect the health of children in both the short and long term. Mothers provided their children’s height and weight measurements at 7/8 years⁶. These were then used to determine if a child was not overweight (which includes underweight), overweight or obese⁷. Figure 9 shows that 80% of 7/8-year-olds were non-overweight, while 15% were overweight and 5% obese.

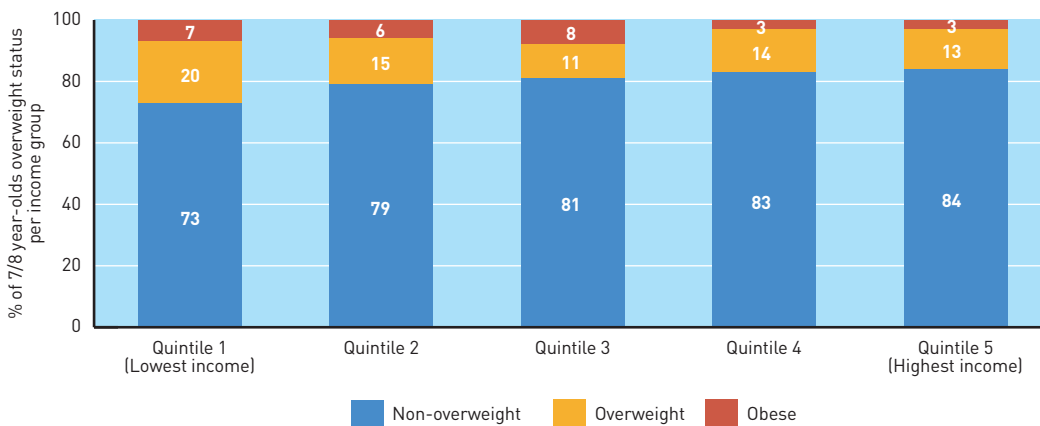
Figure 9: Distribution of BMI weight status among 7/8-year-olds based on mother-reported measurements



There were no significant gender differences in weight status.

There were noticeable differences in the prevalence of overweight and obesity according to the child’s family income status (Figure 10): 73% of children in the lowest quintile were non-overweight, compared with 81% in the middle quintile and 84% in the highest quintile. Similarly, overweight and obesity levels were 20% and 7% respectively for children in the lowest income quintile compared to 13% and 3% respectively in the highest income quintile.

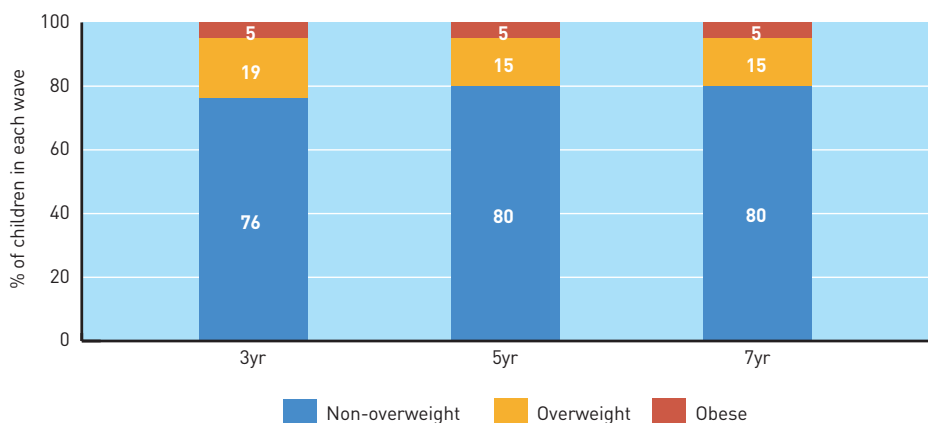
Figure 10: Child’s BMI weight status as reported by child’s mother at 7/8 years, classified by family income quintile



Children in higher income families were less frequently reported to be overweight or obese.

Figure 11 shows the percentage of children who were overweight or obese at 3, 5 and 7/8 years of age. In broad terms there were few changes in levels of overweight/obesity over this period in the children’s lives.

Figure 11: BMI weight status from 3 years to 7/8 years



Overall levels of child overweight /obesity remained stable since age 5 years.

⁶ It is important to note that the methods for recording physical measurement varied across study waves. At 3 and 5 years, height and weight were measured by trained interviewers using medically validated equipment, but at 7/8 years height and weight were self-reported by the child’s mother.

⁷ Height and weight measurements were used to calculate Body Mass Index (BMI). Age-specific thresholds recommended by the World Obesity Federation (formerly IOTF) were used to determine the overweight and obesity classification.

Figure 12: Summary of individual changes in BMI weight status from 3 years to 7/8 years

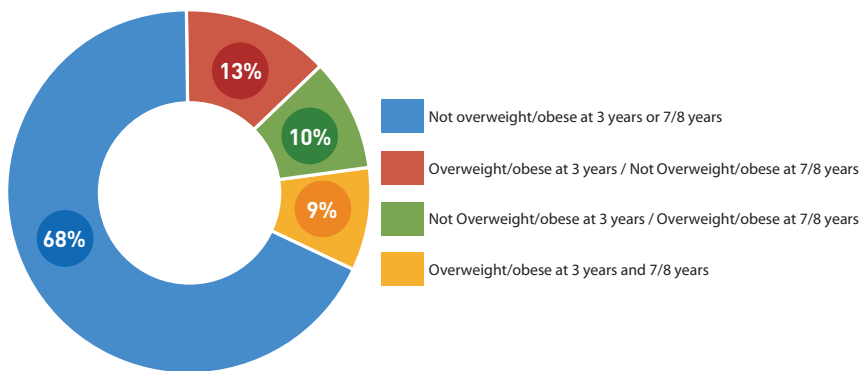
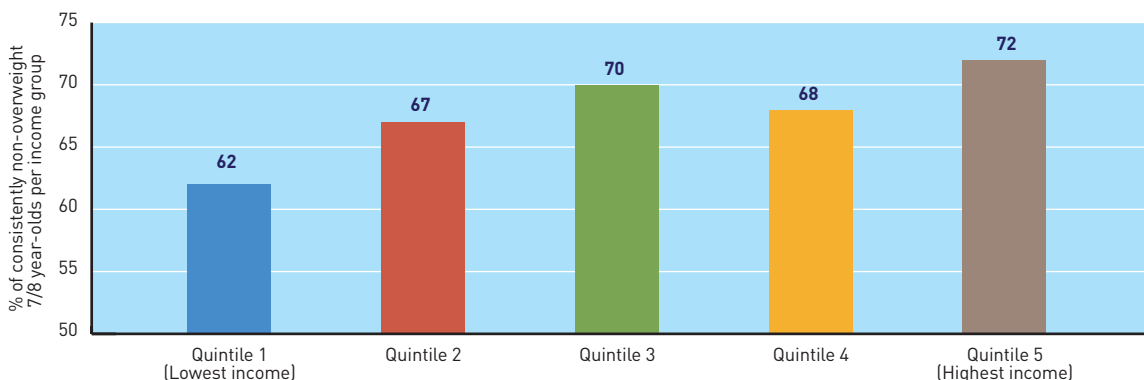


Figure 12 summarises change in BMI weight status at the level of the individual child, from 3 to 7/8 years of age. 68% of children were non-overweight at both 3 and 7/8 years of age. In contrast, almost one in ten (9%) children was either overweight or obese at both ages. The remaining 23% were divided between becoming overweight/obese over time (10%) or becoming non-overweight (13%).

Children in higher income families were more likely to avoid becoming overweight or obese. 72% of children in the highest income families were non-overweight at both waves (3 years and 7/8 years), compared to 62% of children in families with the lowest income (Figure 13).

Figure 13: Percentage of children who were not overweight at 3 years and 7/8 years, according to family income quintile



DISCUSSION POINTS

- Overall, the vast majority of 7/8-year-olds were reported to be in very good health. However, 16% were reported as having a longstanding illness and 9% were reported as being hampered by one. The most common conditions reported were behavioural and learning-related conditions such as ADHD and dyslexia.
- Social advantage was linked to certain health outcomes: associations were observed between study children's general health and family social class; between overweight/obesity and family income; and between dietary habits and maternal education.
- One in five 7/8-year-olds was overweight or obese, the same overall level as at 5 years of age.
- There was, however, evidence to indicate that there was quite a degree of change in BMI weight status over time at the level of the individual child. Although 68% were not overweight/obese at 3 years and 7/8 years there was quite a bit of movement in and out of overweight/obese categories: 10% moved from non-overweight to overweight/obese; 13% moved from overweight to non-overweight, while 9% were overweight/obese at both ages.



Background: *Growing Up in Ireland* is the national longitudinal study of children and young people. The study is funded by the Department of Children and Youth Affairs, with a contribution from The Atlantic Philanthropies. It is being carried out by a consortium of researchers led by the Economic and Social Research Institute (ESRI) and Trinity College Dublin (TCD).

The study tracks the development of two nationally representative cohorts of children over time. One is the **Infant Cohort**, interviewed initially at 9 months, subsequently at 3 years, 5 years and, most recently, 7/8 years (on a postal basis). The second is the **Child Cohort**, initially interviewed at 9 years and subsequently at 13 and, most recently, 17/18 years of age.

The first round of fieldwork with the families in the Infant Cohort involved just over 11,100 9-month-olds, their parents and carers. Interviews took place between September 2008 and March 2009. The second round of interviews took place when the children were 3 years of age, between January and August 2011, and the third round of interviews, when the children were 5 years of age, was completed between March and September 2013. All interviews in these rounds of fieldwork were carried out on a face-to-face basis in the Study Child's home. The response rate at the first wave of interviews was 65% and 90% at both the second and third waves.

The fourth round of data collection (which forms the basis of the current series of *Key Finding*) was conducted on a postal basis (between March and October 2016), when the children were 7/8 years of age. The questionnaire can be found at <http://www.growingup.ie>.

The response rate to the postal survey was 55 per cent, representing 5,308 families. The information recorded in the postal surveys was statistically adjusted on the basis of mother's education, family income and family social class. This ensures that the data are representative of the population as a whole. All figures presented in this *Key Finding* are based on the statistically adjusted data. The figures presented in this *Key Finding* are purely descriptive and do not control for potential interactions or confounding effects. *All figures are preliminary and may be subject to change.*

Several indicators of family advantage/disadvantage were used in this set of *Key Findings*. These include the family's income group, level of mother's education and family social class.

These background variables have been 'carried forward' from the detailed interviews conducted with the families on a face-to-face basis when the child was 5 years of age.

Access to Growing Up in Ireland data: Anonymised versions of all quantitative and qualitative data collected in *Growing Up in Ireland* are available for research through the Irish Social Science Data Archive (ISSDA) (<http://www.ucd.ie/issda/data/growingupinirelandgui/>) and the Irish Qualitative Data Archive (IQDA) (<https://www.maynoothuniversity.ie/iqda/collections>).

THANK YOU TO ALL PARTICIPANTS

The success of *Growing Up in Ireland* is the result of contributions from a large range of individuals, organisations and groups, many of whom helped to recruit the sample and collect the data. We are particularly grateful to the thousands of families from every part of the country who gave so generously of their time on numerous occasions to make this study possible. A very big 'thank you' to all the children and their families.



If you would like further information about *Growing Up in Ireland* visit www.growingup.ie
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Department of Children and Youth Affairs