



**Growing Up  
in Ireland**  
National Longitudinal  
Study of Children

# GROWING UP IN IRELAND

## KEY FINDINGS: 13-YEAR-OLDS

### NO. 2

### PHYSICAL ACTIVITY AND OBESITY AMONG 13-YEAR-OLDS

#### INTRODUCTION

This Key Finding reports on data from the second wave of interviews with *Growing Up in Ireland's* Child Cohort. The 8,568 children and their families were first interviewed when the children were 9 years old, and then at age 13 years, when 7,400 were re-interviewed between August 2011 and February 2012. This Key Finding presents summary information on the physical activity and obesity levels among Irish 13-year-olds.

Child overweight and obesity are increasing. They are associated with a range of immediate and longer-term health risks, including higher prevalence of asthma, eczema and diabetes, and increased risk of middle-age mortality. There is a strong link between physical activity and overweight, and habits formed in youth tend to carry over into adulthood. Understanding factors associated with physical activity levels and overweight/obesity in Irish children is therefore critical to effective prevention efforts.



## PHYSICAL ACTIVITY AMONG 13-YEAR-OLDS

The 13-year-olds reported on the frequency with which they participated in hard or light exercise. *Hard* exercise was defined as sufficiently vigorous activity as to make the heart beat faster (e.g. football, jogging and fast cycling). *Light* exercise was defined as activity which did not result in being out of breath (such as walking and slow cycling).

### Boys and young people from more socially advantaged backgrounds were more likely to exercise

- About 39% of 13-year-olds participated in hard or light exercise on 9 or more of the last 14 days, and a further 21% on 6-8 of those days (Figure 1).
- Boys were likely to exercise more frequently than girls; 47% of boys exercised on 9 or more days out of 14, compared to 31% of girls.
- When asked about team or individual sports and activities outside of Physical Education (PE) classes, more girls participated in none or only one activity (52%) compared to boys (37%), whereas more boys participated in 4 or more activities (23%) than girls (14%) (Figure 2). Those 13-year-olds who did not participate in these activities gave reasons such as 'I do not like to get dirty or sweaty' (7% of girls, 2% of boys), and 'I am not competitive' (8% of girls, 4% of boys).

Figure 1: Gender and levels of light or hard exercise per fortnight at 13 years of age

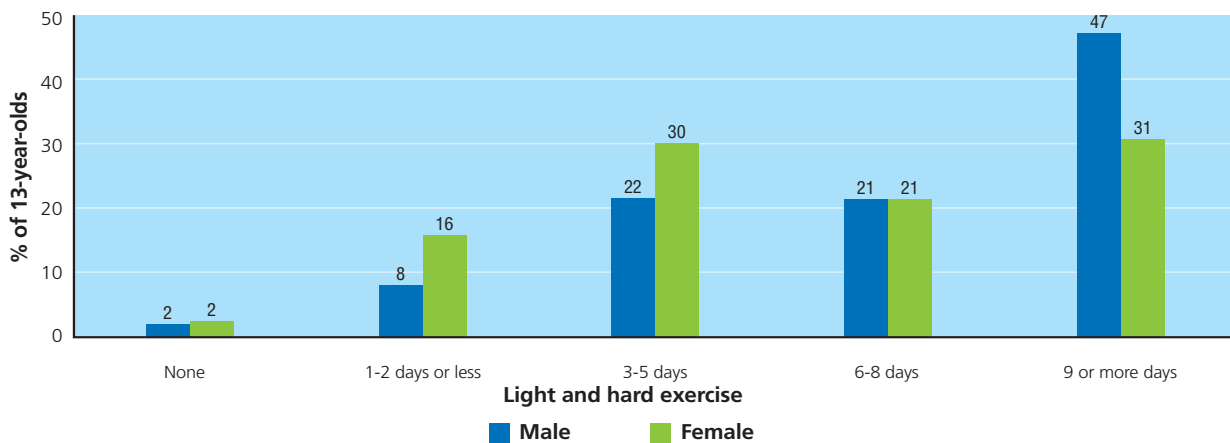
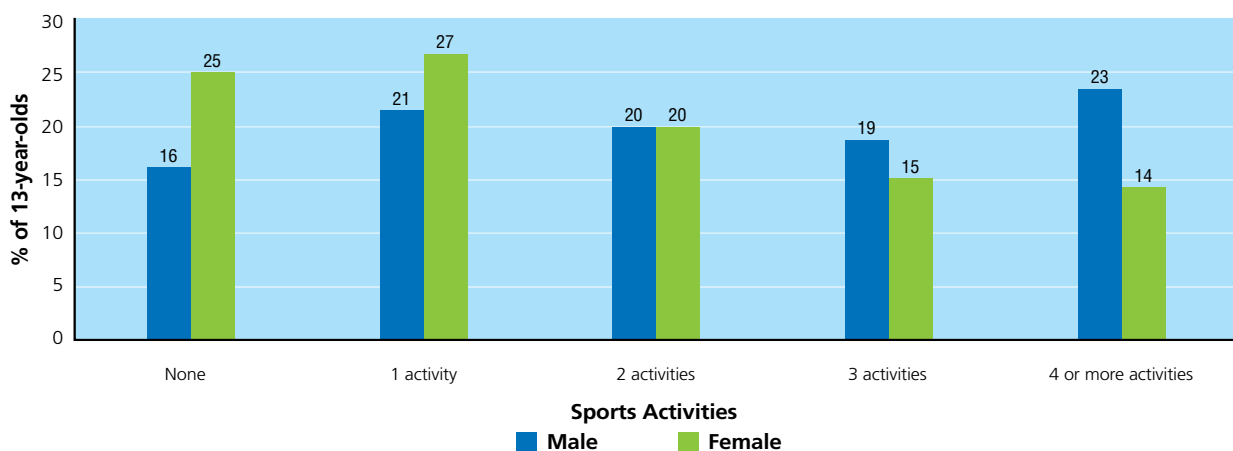
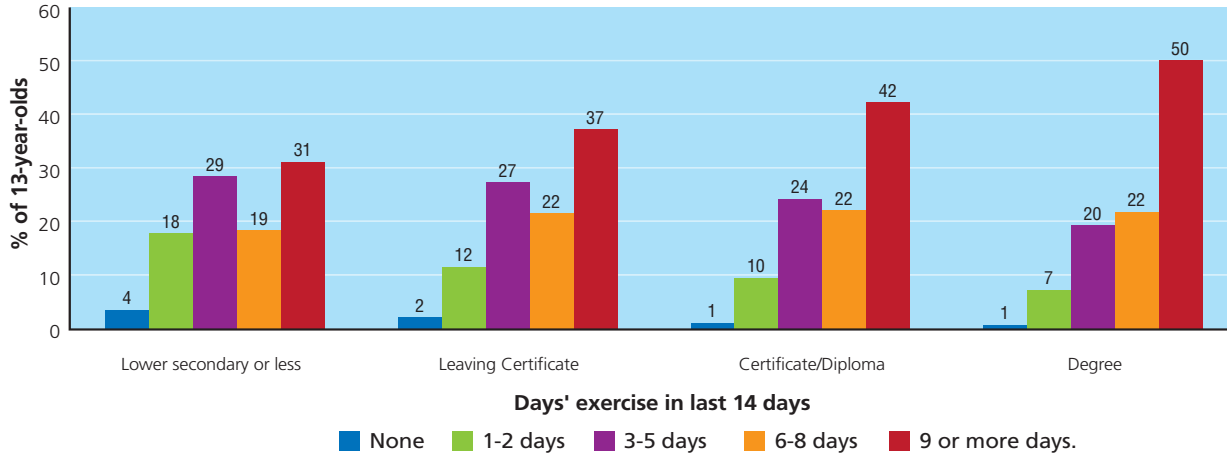


Figure 2: Gender and number of team or individual sports activities



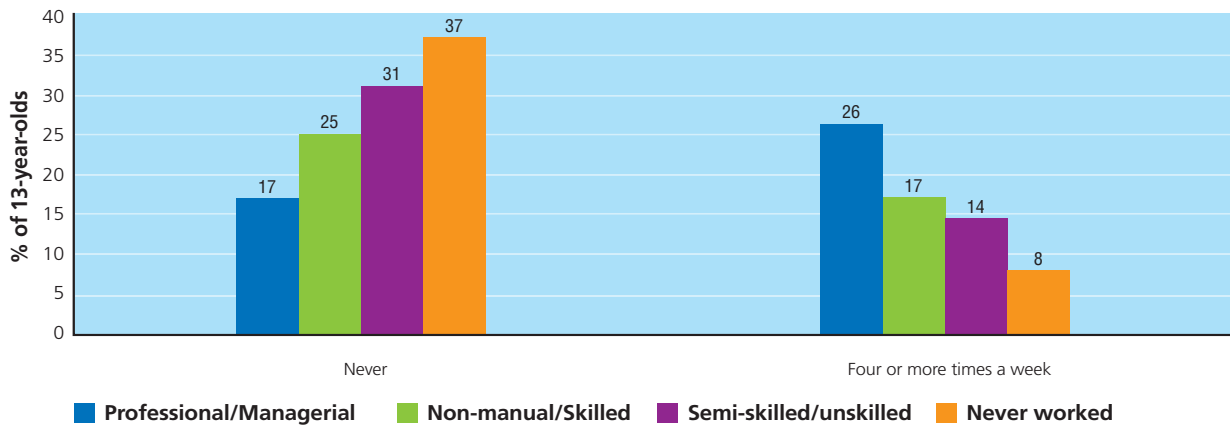
- Higher levels of exercise were associated with higher social class and more parental education. As an example, Figure 3 shows that young people whose mothers had a degree took more frequent exercise than other 13-year-olds.

**Figure 3: Frequency of exercise and mother's education**



- Young people from professional/managerial social groups were more likely than others to play organised sports (i.e. with a coach or instructor) at least weekly, while those from the lowest social group were less likely to ever be involved in these kinds of activities (Figure 4).
- 37% of 13-year-olds in the lowest social group *never* participated in organised sports, compared with 17% in the highest social group.

**Figure 4: Social class and frequency of playing sports with a coach or instructor or as part of an organised team**



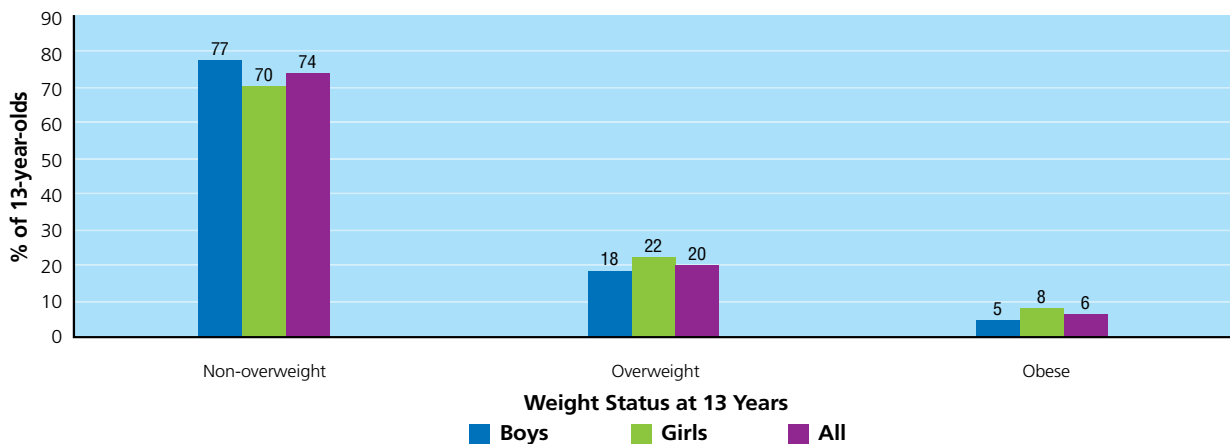
## OVERWEIGHT AND OBESITY

### Most young people maintained a healthy weight over time but one in four were either overweight or obese

Height and weight measurements were used to calculate the 13-year-old's Body Mass Index (BMI), an accepted measure of body fat that is widely used to determine if children have a healthy body weight. The International Obesity Task Force (IOTF) uses a three-fold classification of BMI to classify children and young people as *non-overweight* (including underweight), *overweight* or *obese*.

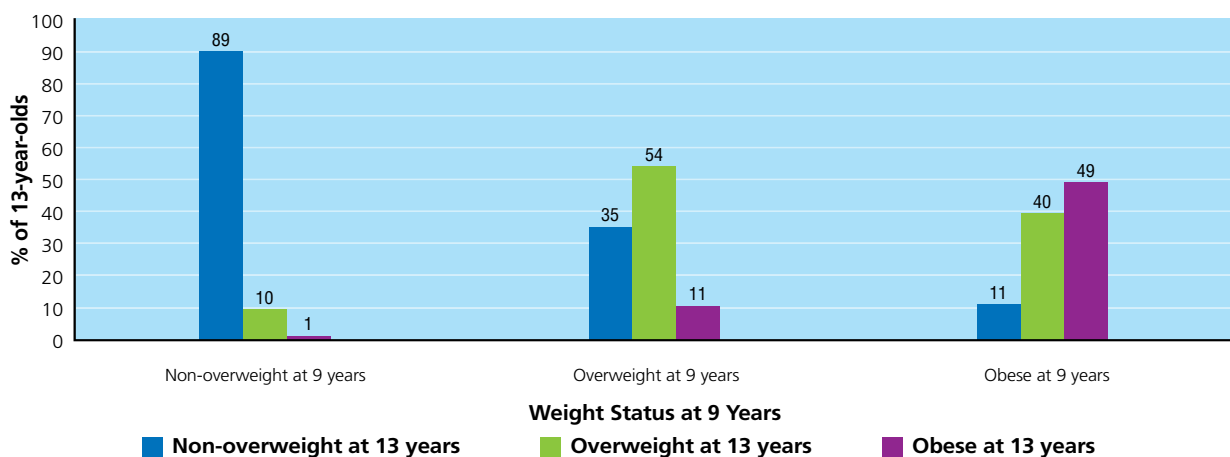
- 74% of 13-year-olds were *non-overweight*, 20% were *overweight*, and 6% were *obese*. As was the case at 9 years, more than one in four 13-year-olds were either *overweight* or *obese* (Figure 5).
- Girls were more likely to be classified as *overweight* than boys (22% compared to 18%). Girls were also slightly more likely to be *obese* than boys (8% compared to 5%).

**Figure 5: Gender and prevalence of overweight and obesity at 13 years**



- Figure 6 shows changes in weight status between 9 and 13 years of age, and indicates that relatively few *non-overweight* 9-year-olds had developed weight problems by age 13, but those with weight problems at 9 years tended to maintain them.
- Most children (89%) who were *non-overweight* at 9 years were still *non-overweight* at 13, but 10% became *overweight*, and a small number (1%) became *obese*.
- Just over half (54%) of those who were *overweight* at age 9 remained *overweight* at 13, with another 11% becoming *obese*, but over one-third (35%) had become *non-overweight*.
- Half of those who were *obese* at 9 remained so at 13, while 40% were *overweight* and 11% were *non-overweight* (Figure 6).

**Figure 6: Weight status at age 13 by weight status at age 9**

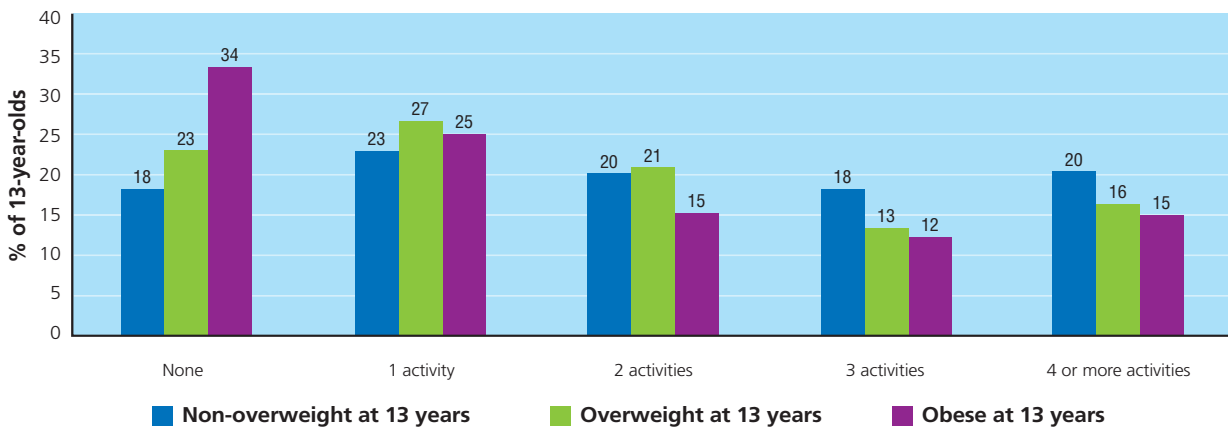


- In general, boys were less likely to develop weight problems between 9 and 13 years, while girls were more likely to maintain weight problems over this period.
- 71% of boys who were *non-overweight* at age 9 remained in this category at 13 compared to 62% of girls. Girls who were *overweight* or *obese* at age 9 were more likely to remain so than boys (16% compared to 11%).
- Social class was also related to stability of weight status. Children in the highest social group (professional/managerial) were more likely to be *non-overweight* at both ages, and those who were *obese* at 9 years were less likely to still be *obese* at 13 years, than those in the other social class groups.

## THERE IS A STRONG RELATIONSHIP BETWEEN LEVELS OF EXERCISE AND WEIGHT STATUS

- Young people who took more exercise (whether hard or light exercise) were less likely to be *overweight* or *obese*, especially in comparison to those who never exercised.
- Figure 7 shows that fewer 13-year-olds who were *obese* participated in sports or activities outside of PE classes than those who were *overweight* or *non-overweight*. About one-third of *obese* 13-year-olds (34%) participated in no such activities and only 15% participated in 4 or more such activities. Among the reasons they gave for not participating in these activities were 'I am no good at games', 'I have no opportunities to play', 'I feel people laugh at me because of my size', 'I do not like to get dirty or sweaty', and 'I am not competitive'.

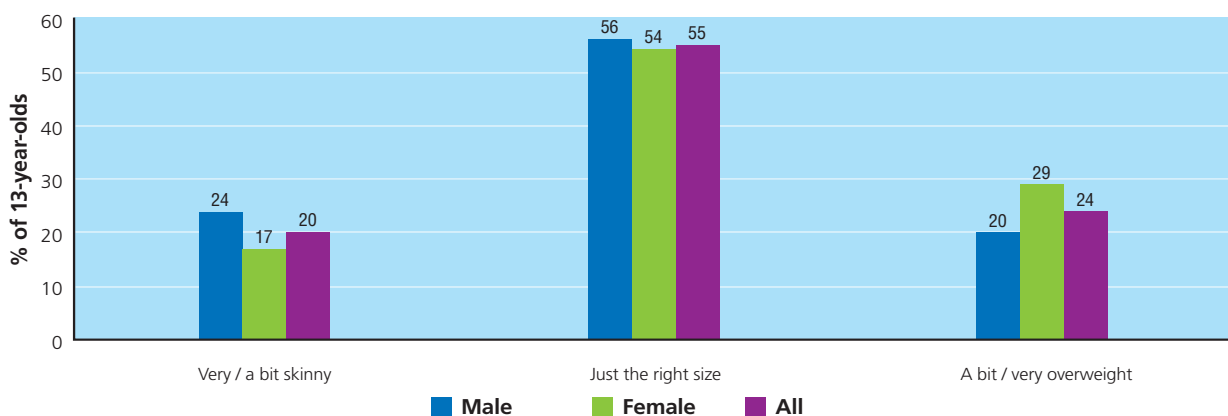
**Figure 7: Participation in sports and activities (outside Physical Education classes) for obese, overweight and non-overweight 13-year-olds**



## PERCEPTION OF WEIGHT AND BODY IMAGE

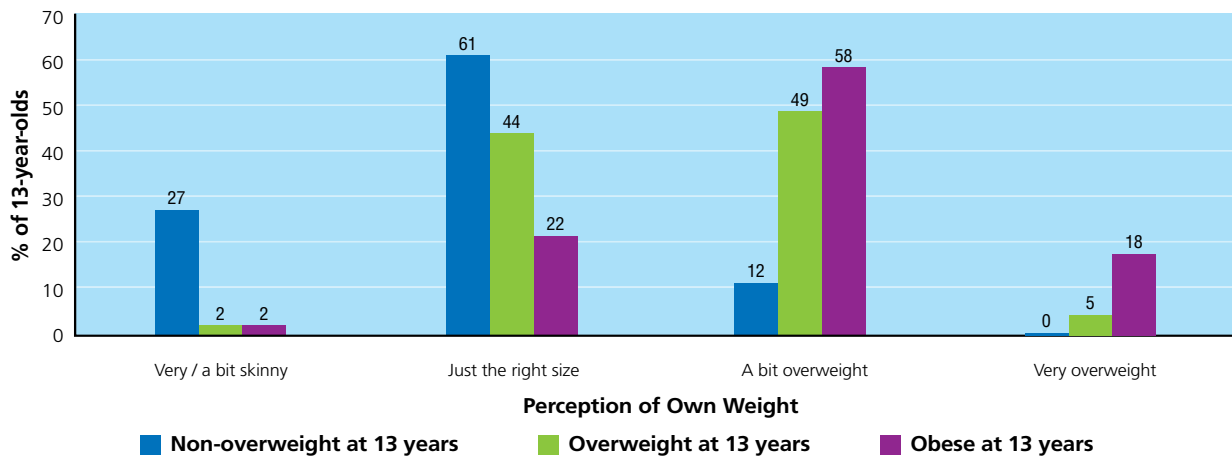
- The majority of 13-year-olds (55%) thought that they were *just the right size*. Only a small minority (3%) thought of themselves as *very skinny*, and 17% as *a bit skinny*, while 22% thought they were *a bit overweight*, and 2% said *very overweight*.
- Girls were more likely than boys to believe themselves to be *a bit*, or *very overweight* (29% compared to 20%), while boys were more likely to see themselves as being *very skinny* or *a bit skinny* compared to girls (24% compared to 17%).

**Figure 8: Gender and perception of weight among 13-year-olds**



- Figure 9 shows that many young people, particularly those who were *overweight* or *obese*, did not have accurate perceptions of their weight status.
- Those of healthy weight were the most likely to see themselves as *just the right size* (61%), while 27% believed they were *a bit skinny* or *very skinny*.
- Those who were *overweight* were most likely to see themselves as *a bit overweight* (49%) or *just the right size* (44%).
- Most *obese* 13-year-olds (58%) saw themselves as *a bit overweight* and a relatively small number (18%) viewed themselves as *very overweight*, while 22% described themselves as *just the right size*.

Figure 9: Actual weight and perception of weight among 13-year-olds

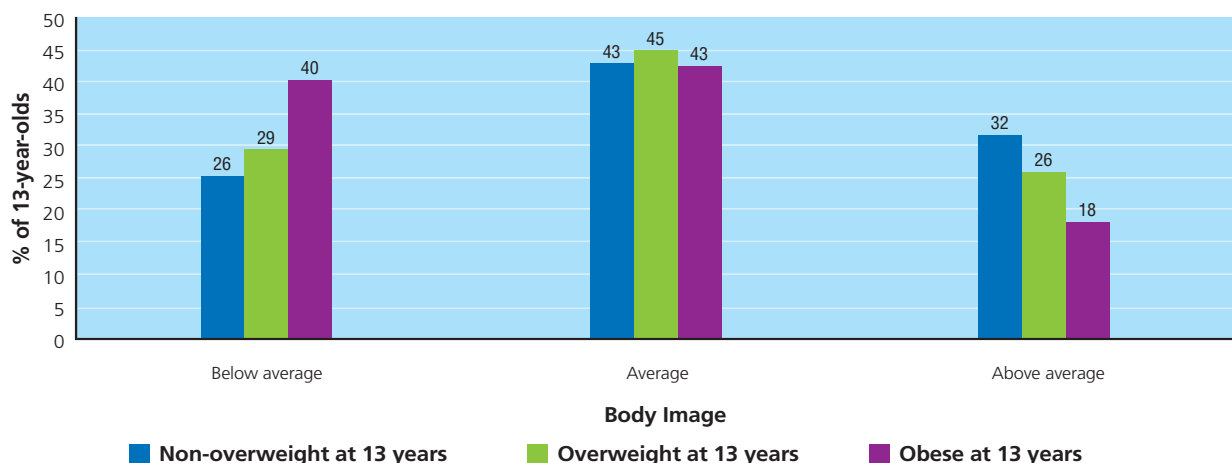


## HOW 13-YEAR-OLDS FELT ABOUT THEIR PHYSICAL APPEARANCE

The 13-year-olds' self-evaluations of their physical appearance were categorised as *below average*, *average* and *above average* (Figure 10).

- Overall, around 4 in 10 13-year-olds (43%) rated themselves as *average* in terms of their physical appearance, and almost a third (30%) rated themselves as *above average*. However, over a quarter (27%) rated themselves as *below average*.
- Girls were much less positive about their body image than boys; only 20% described themselves as *above average* physically compared to 39% of boys. In contrast, about one-third of girls (34%) described themselves as *below average* physically compared to a fifth of boys (21%).
- Children who were not *overweight* were the least likely to describe their physical appearance as *below average* (26%), while those who were *obese* were most likely to do so (40%) (Figure 10).

Figure 10: Weight status and body image at 13 years

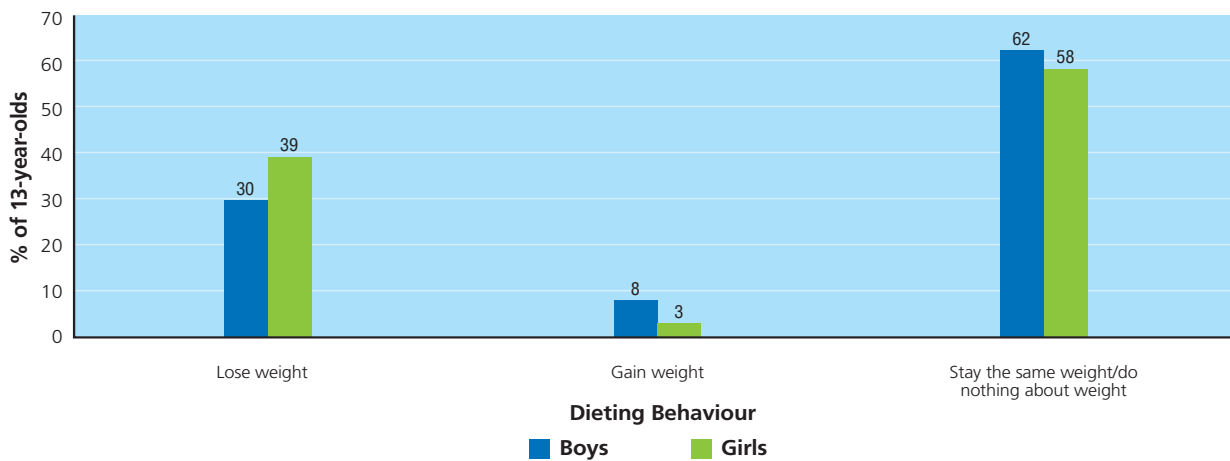


## DIETING BEHAVIOURS WERE ALREADY PREVALENT AT 13 YEARS OF AGE

The 13-year-olds were asked if they were trying to change their weight and whether or not they had participated in any activities such as exercising or eating less food, fewer calories or lower-fat foods, specifically with a view to losing weight.

- Although the majority of young people said they were currently trying to stay the same weight (doing nothing about changing their weight), girls (39%) were more inclined than boys (30%) to report that they were trying to lose weight, while boys (8%) were more likely than girls (3%) to be trying to gain weight (Figure 11).
- Just over a quarter of young people (28%) reported both exercising *and* dieting as a means to lose weight, while another quarter (24%) used one or the other of these. Girls were more likely than boys to use both (33% compared to 23%).
- In terms of weight status, over three-quarters of *obese* children (78%) exercised to lose weight, compared to 68% of those who were *overweight* and 39% of those who were *non-overweight*. Over half (55%) of *obese* 13-year-olds were both exercising and dieting, compared to 47% of those who were *overweight* and 20% of those who were *non-overweight*.

Figure 11: Dieting behaviours by gender at 13 years



### SUMMARY

The findings show that boys and young people from more socially advantaged backgrounds were more likely to exercise, and that 13-year-olds who took more exercise (whether *hard* or *light* exercise) were less likely to be *overweight* or *obese*.

While most of the young people in *Growing Up in Ireland* maintained a healthy weight over time, one in four was either *overweight* or *obese*, a finding similar to that at 9 years. Girls were also more likely to be classified as *overweight* or *obese* than boys.

The majority of 13-year-olds were quite positive about their physical appearance, although a quarter rated themselves as below average in this respect, and girls tended to be less positive about their body image than boys. Dieting behaviours had also become evident at 13.

To understand more fully the origins and course of overweight and obesity, the descriptive data in this Key Finding can be used in more complex analyses drawing on the rich data available on the child, family and other important contextual variables.





***Growing Up in Ireland*** is the National Longitudinal Study of Children. It tracks the development of two nationally representative cohorts of children: a Child Cohort (interviewed initially at 9 years and subsequently at 13 years) and an Infant Cohort (interviewed initially at 9 months and subsequently at 3 years).

The Study is funded by the Department of Children and Youth Affairs, in association with the Department of Social Protection and the Central Statistics Office. 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 first wave of fieldwork with the families of the older Child Cohort included 8,568 9-year-olds, their parents and carers, teachers and school principals. Interviews began in September 2007 and were completed in March 2008. The second round of interviews with this cohort took place between August 2011 and February 2012. Ninety per cent of the original sample of 9-year-olds were successfully re-interviewed.

#### **Access to *Growing Up in Ireland* data**

An anonymised version of all quantitative and qualitative data collected in *Growing Up in Ireland* is being made available through the Irish Social Science Data Archive (ISSDA) at:

<http://www.ucd.ie/issda/data/growingupinireland/>

and the Irish Qualitative Data Archive (IQDA) at:

<http://www.iqda.ie/content/growing-ireland>

#### **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 two occasions to make this Study possible. A very big 'thank-you' to the children and their families.

(Figures based on preliminary analysis and may be subject to change)



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