## Growing Up in Scotland — 2009 — Topic Research Findings

# Growing Up in Scotland (GUS): Food and Activity Summary Report

## The Growing Up in Scotland Study

The Growing Up in Scotland study (GUS) is an important longitudinal research project aimed at tracking the lives of a cohort of Scottish children from the early years, through childhood and beyond. The study is funded by the Scottish Government and carried out by the Scottish Centre for Social Research (ScotCen). Its principal aim is to provide information to support policy-making, but it is also intended to be a broader resource that can be drawn on by academics, voluntary sector organisations and other interested parties. Focusing initially on a cohort of 5,217 children aged 0-1 years old (birth cohort) and a cohort of 2,859 children aged 2-3 years old (child cohort), the first wave of fieldwork began in April 2005.

### **Background to Report**

This document is one of a series that summarise key findings from the third sweep of the survey which was launched in April 2007.

This report uses data from the Growing Up in Scotland study to explore issues related to, food and activity in Scotland specifically in relation to young children. Findings are based on data taken specifically from the older cohort involved in the study which was collected over the first 3 years of GUS. These data therefore refer to a period when the cohort children were aged between 2 years and 10 months (sweep 1), and 4 years and 10 months (sweep 3). Interviews were carried out annually between April 2005 and May 2008. This

data comes from interviews with the child's main carer (usually the mother) and information from child height and weight measurements collected at sweep 2.

Although more limited in scope than dedicated diet and nutrition studies, GUS is able to provide useful information on the range of food types - both healthy and unhealthy - eaten by pre-school children on a typical day. Moreover the study has the additional benefit of including a suite of questions designed to examine parental views and experiences in relation to their children's eating. In combination these allow for the exploration of choice, behaviour and experiences in early years provision and consumption of food across socioeconomic groups.





#### **Diet**

#### Fruit and vegetables

- Overall, the consumption of fruit and vegetables by children in the survey was encouragingly high: almost all children (96%) ate at least one type of fruit a day, with 60% having two or three types a day and 24% eating four or more.
- In addition, over half (52%) of children ate two or three types of vegetables a day and 7% ate four or more, although 27% of children ate only one type of vegetables and 14% ate none in a typical day.
- Children in the lowest income group and those living in deprived areas were much less likely to eat four or more types of fruit and vegetables per day, and more likely to eat sugary snacks and drinks, than were children from affluent backgrounds.

#### **Unhealthy foods**

- However, consumption of sugary and salty foods were also high in this age group: almost half of all children (49%) ate sweets or chocolates once a day or more, and 43% drank non-diet soft drinks. Indeed, a significant minority of parents (16%) said they found it fairly or very difficult to control the amount of sweets, sugary snacks and drinks their child eats or drinks.
- Crisps or savoury snacks were slightly less popular, though a quarter (25%) of children in the survey ate crisps once a day or more.
- Furthermore, 41% of children in the most deprived areas had eaten a takeaway in the last week, compared to only 23% of children in affluent areas.

#### Knowledge of healthy eating

Respondents were asked how much they knew about healthy eating and the extent to which that, and other things had an effect on what they gave their child to eat. Again, socio-economic differences could be seen between groups: half of mothers in the highest income bracket knew 'a great deal' about healthy eating, compared to less than a third (30%) in the lowest income bracket.

#### The cost of food

■ The cost of food had an effect on what food parents provided for their child for 41% of the lowest income group and 34% of those in deprived areas, compared to only 11% of those in the top income group and 19% of those in the least deprived areas.

#### **Mealtimes**

- The 'mealtime experience' was also explored. Encouragingly, the majority of parents (52%) felt that mealtimes gave the family time to talk to each other and almost half (48%) said that mealtimes were mostly enjoyable.
- However, while 55% of mothers in the least deprived areas said mealtimes were mostly enjoyable and 60% said the family mostly had time to talk, the corresponding figures for the most deprived areas were 36% and 38%. Twice as many parents in the highest income category said mealtimes were 'never' rushed (42% compared to only 20% in the lowest income group).

## **Activity**

#### Physical activities

The vast majority of children had done some form of physical activity in the previous week, with two thirds of children participating in five or more types of activity. The most popular activities were running and/or jumping (99%), throwing or kicking a ball (87%), dancing or gymnastics (64%), riding a bike (62%) and playing at a play/swing park (62%).

#### Sedentary activities

- Sedentary activity, such as watching TV or playing on a computer or games console was also a daily part of life for most children. Eighty-five percent of children were reported to have watched TV every day in the past week, with just 1% having watched no TV.
- Around half of children were watching under an hour on the average day and half watching over an hour, including around one in ten who were watching more than two and a half hours on the average day.
- In addition, almost a quarter of children were playing on a computer or games console everyday, with just 20% never doing this activity.
- Not all children who had high physical activity levels had low sedentary activity levels and vice versa.

#### The socio-economic divide

■ There appeared to be a considerable socio-economic divide between highly active and highly inactive children: highly active children were more likely to be in households in the highest income quartile with parents in managerial and professional occupations.

- Car ownership appeared to increase activity levels, perhaps through widening access to a greater range of facilities.
- Neighbourhood also had an effect, with 29% of children with low activity levels living in the most deprived areas, in contrast to 14% who lived in the least deprived areas. Highly active children were more likely to live in areas where their parent reported there being 'very good' or 'good' facilities for young children, and where social and leisure facilities for parents themselves were good.
- Parents of highly active children tended to also report being active themselves with their child and were also more likely to participate in activities such as playing outside with their child than were parents of less active children. Parents with highly active children were also more likely to think exercise was important, and that cultural and social activities were important.

## The relationship between diet and activity

- There appeared to be a relationship between diet and activity in four year olds: among children with a relatively poor diet, 42% were in the low activity and 22% in the high activity group.
- Less active children appear more likely to consume unhealthier foods: they were less likely to eat a variety of vegetables on a typical day than their more active counterparts.
- Less active children were also slightly more likely to eat unhealthy foods more often than their more active counterparts although the differences are small: 42% of less active children ate sweets or chocolates once a day, compared with 38% of more active children. A similar pattern can be seen in relation to sugary soft drinks.

- In addition, the data show an association between sedentary activities and eating unhealthy foods. For example, among those who watched TV for more than two and a half hours on weekdays, 53% ate crisps, and 45% ate chocolates and sweets between meals, in contrast to children who watched up to thirty minutes of TV on weekdays, of whom 32% ate crisps, and 33% ate chocolates and sweets between meals.
- There was a very small difference in Body Mass Index (BMI) and in the relative quality of children's diets in sweep 3: among obese toddlers, 9% were in the relatively good diet category, and 29% in the relatively poor diet category, while the respective figures for normal weight children are 13% and 24%.

## Breastfeeding and nutrition in childhood

- Children who had been breastfed had a healthier diet in childhood than those who had not been breastfed.
- Children who were breastfed were more likely to snack on fruit (a difference of 11% between those who were breastfed and those who were not), and more likely to snack on savoury snacks like cheese than children who were never breastfed (again a difference of 11%).
- Children who had not been breastfed were more likely to eat sweets (a 7% difference) and more likely to consume sugary drinks more than once a day than breastfed children (14% difference).
- There was a socio-economic effect related to children's breastfeeding history. Children of wealthier households, born to mothers with more qualifications and more advantaged socio-economic backgrounds were more likely to be breastfed.
- A child's breastfeeding history seems to have a significant, yet small, effect on the child's BMI in later childhood. Children who had been breastfed were marginally more likely (by 3%) to have a 'normal' weight, and marginally less likely (by 3%) to be obese.

Further information on the Growing Up in Scotland Study can also be found at: www.growingupinscotland.org.uk

If you wish further copies of this Research Findings or have any enquiries about the GUS project, please contact:

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Or visit our Website: www.scotland.gov.uk/insight

The research findings and the main report can be viewed on the Internet at: <a href="http://www.scotland.gov.uk/Topics/Research/by-topic/children-and-young-people/publications">http://www.scotland.gov.uk/Topics/Research/by-topic/children-and-young-people/publications</a>

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