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# Margaret B. O'Sullivan, Clodhna Foley-Nolan, Paul Kavanagh, Joyce Kelly, Noelle Millar, Deirdre Murray and Fiona Ryan

## Aspects of Childhood Obesity in an Irish region: 'Our children...their future...*why weight?*'

Four studies highlight the concern of parents and teachers about some negative aspects of home and school life that contribute towards child and teenage obesity.

Excess body weight is now the most prevalent childhood disease in Europe, affecting one in six children<sup>1</sup>. Some countries have a higher prevalence. A recent Irish survey found over one in three of 8 year old girls to be either overweight or obese, with boys not far behind<sup>2</sup>.

Halting the rising prevalence of childhood obesity is a public health priority. Obesity is threatening our children's wellbeing, their development and their future health as adults. The 'toxic environment' in which we live simultaneously restricts mobility and stimulates higher calorie intake. It is a target for change. It requires tackling on multiple fronts.

### A Research Study Series

Against this background, the Department of Public Health, Health Service Executive - Southern Area (covering the counties of Cork & Kerry: pop 580,356)<sup>3</sup> undertook a series of four independent studies on key aspects of childhood obesity in today's Ireland. The research complemented that of recent national health and lifestyle surveys<sup>4</sup>. It delved into the "micro" environments of home and school: looking at how young families eat and enjoy their leisure time; the influence of TV food advertising on healthy eating; the physical activity practices in primary schools and the options for healthy eating in post primary schools.

Insights into how the next generation might be influenced towards healthy eating and a more active lifestyle were gained. The studies highlighted 'behind the scenes' information on the roles of both home and school environments in the development of "good" or unhealthy eating and physical activity habits. Since its launch in March 2005, the

collated report 'Our children, their future, *why weight?*'<sup>5</sup> has informed current debate and direction on the issue in Ireland. In particular, the report's findings were directed to the National Obesity Task Force as it considered future strategies to address Ireland's obesity crisis<sup>6</sup>.

### Study 1: Family Eating & Physical Activity

Family preferences and practices relating to diet and physical activity of 8-year old children were examined. Parents of children in 2nd class in ten primary schools in the greater Cork area were surveyed by questionnaire (388 parents). The schools reflected a mix of urban-rural populations with a diverse social class catchment. The response rate was 90%.

The main findings were:

- 16% of parents reported their 8 year old to be 'fat' of 'very fat'
- Parents identified environment and diet as major childhood health issues
- Worrying trends relating to eating family meals together were noted, with 30% of young children eating breakfast separately on a daily basis
- One-third of families reported eating weekday meals while watching TV
- Families tended to prefer sedentary pastimes rather than more vigorous exercise; going to the cinema was identified as the favourite family pastime (Table 1)

### Discussion points:

Study 1 portrayed a picture of modern day home life where active family pursuits are not over-popular and where time is not taken to eat together at the table as a family. The role of the home environment in the development of childhood obesity has been recognised for a long time<sup>7</sup>.

There is clear evidence internationally that patterns of behaviour and of obesity are well established by the time a child reaches 11 years of age<sup>8</sup>. Eating family meals has been shown in several studies to be associated with healthy dietary intake patterns<sup>7</sup>. Many families undoubtedly experience early morning as a rush period which is not always conducive to healthy eating habits.

Several studies have reported an association between obesity and high levels of TV viewing, and between obesity and low cognitive stimulation<sup>9</sup>. Study 1 pointed to the worrying pattern of eating dinner while watching TV, a habit reported by a third of respondents.

Parents have a strong influence on their children's activity both by direct mechanisms (practical support, equipment, transport etc) and by indirect means such as modelling and family activity.

The timing of parental influence seems to be a crucial factor in that there is a stronger association between parental and child activity behaviours than between parental and adolescent habits<sup>10</sup>.

It is of concern that active, outdoor pursuits among families with young children are not as common as they might be.

Table 1. Family Pastimes Enjoyed

	Frequency	Percentage
Cinema	289	83%
Playground	243	69%
Bowling	241	69%
Meal	234	67%
Swimming	229	65%
TV/Video	213	61%
Walk	168	48%

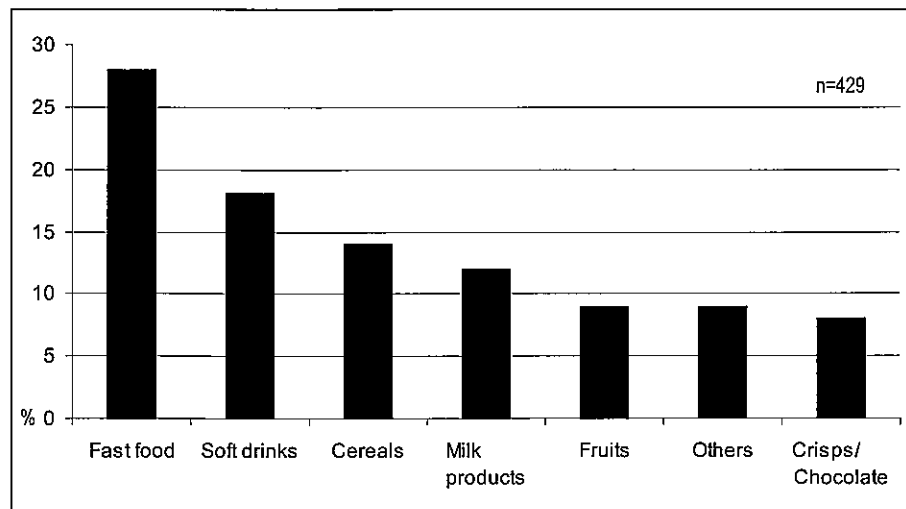
## Study 2: Child-Directed TV Food Advertising

Parental views on TV food advertising directed at children were examined. Parents of children in 1st Class (7-8 year olds) were surveyed by questionnaire (369 parents). They were selected by obtaining a stratified convenience sample of schools from the Cork city and county area. All of the parents of 1st class children from the sampled schools were surveyed. The response rate was 79%.

The main findings were:

- 73% of parents felt that children had too much exposure to TV food advertising
- Most parents (75%) considered that child-directed TV food ads usually promote 'unhealthy' foods i.e. foods high in fat, salt, sugar (Fig 1)
- 'Pester power' was perceived by parents to be common, with 50% saying their child put pressure on them to buy certain foods or drinks as a result of TV ads
- One-third of young children were reported to have a TV in their bedroom
- Satellite/cable channels were the TV channels most commonly watched by young children - channels not covered by Ireland's Children's Advertising Code<sup>11</sup>
- A majority of parents (58%) felt they had no say or influence over children's TV food advertising; only 2% had ever made a complaint

Fig. 1. What parents' considered to be the most common food/drink items promoted on children's TV ads.



### Discussion points:

Children are targeted as consumers. They are vulnerable to sophisticated marketing techniques and intense, repetitive advertising for high-calorie, energy-dense food and drinks<sup>12</sup>. Television is the principal channel used by food marketers to reach children<sup>13</sup>. Food products dominate children's advertising<sup>13</sup>. Advertising directly affects the food choices of children<sup>14</sup> who now have far more disposable income than they had

several decades ago and far greater influence on their parents' buying habits<sup>15</sup>. The type of food being advertised is of huge concern.

US and British children are exposed to about ten food commercials per hour of television time (amounting to thousands per year), most for fast food, soft drinks, sweets and sugar-sweetened breakfast cereal<sup>10</sup>.

In Study 2, televisions featured prominently in homes surveyed. One-third of the children had a TV in their bedroom. One in five children were watching 3+ hours each weekday, with 50% watching 3+ hours each weekend day.

Anti-obesity measures need to address television viewing - a major sedentary activity, as well as one that exposes viewers to countless commercials for high-calorie foods<sup>16</sup>.

There is 'reasonably robust' research evidence that food promotion influences children's food preferences<sup>13</sup>. One-quarter of parents surveyed felt that TV food adverts 'always' or 'usually' influenced their own child's consumption patterns. Combating this onslaught requires sustained efforts and reinforcement from parents at home.

It is of interest that over half of parents surveyed felt they had no influence over children's TV advertising. In addition, the Children's Advertising Code<sup>11</sup> only affects the native TV stations while their children mostly watch satellite/cable channels. A considerable number of parents had no idea who they might contact if they had a complaint to make. It is clear that an information gap exists that needs addressing.

## Study 3: Primary School PE Facilities & Practices

A random sample of fifty primary schools was surveyed in relation to physical activity facilities and practices. School principals were interviewed using a structured questionnaire; a sample of parents of 6th class children were identified and interviewed using a further structured questionnaire.

The main findings were:

- A significant percentage of primary schools were reported as lacking adequate indoor facilities for physical activity
- Most children had less than forty minutes actual exercise in PE class during the school week (Table 2)
- 40% of primary schools had a 'no running in the yard' policy
- Almost all the extra-curricular training was focused on 'sporty' children
- Most of the alternatives to competitive sports (dance classes, karate, taekwondo etc) had an additional cost

Table 2. Time spent exercising in PE class

Minutes	No. of schools (%)
<10	0 (0%)
10 - 20	9 (18%)
21 - 30	13 (26%)
31 - 40	15 (30%)
41 - 50	4 (8%)
51 - 60	8 (16%)
> 60	1 (2%)

(88% of schools had only one PE class/wk)

### Discussion points:

Schools are important settings for physical activity promotion. Because children spend over half their day in school, some experts have recommended that 30 minutes, or half of the recommended physical activity time, be accrued during the school day<sup>17</sup>.

The amount of PE per week noted in Study 3 compared poorly with other European countries such as Austria, Norway, Portugal and Spain<sup>18</sup>.

In a country like Ireland with a significant amount of rainfall, outdoor sports and physical activity in general can be weather-dependent. Ten per cent of schools surveyed lacked any indoor facility and a further 12% described inadequate facilities. In the absence of adequate indoor facilities, poor weather conditions are very real barriers to the promotion of physical activity in those schools.

To accrue a significant amount of physical activity in the school day, all opportunities (including lunch and breaktimes) should be exploited. The large number of primary schools with a 'no running in the yard' policy is a considerable barrier to this. Many primary schools are therefore not currently acting as environments that adequately facilitate and promote an active life for our children (their pupils).

Schools frequently focused on high athletic achievement and talented athletes. To increase the physical activity levels of all students, particularly older girls, best practice for interventions recommends more curricular and extracurricular activity that direct more resources to programmes that target all students<sup>19</sup>.

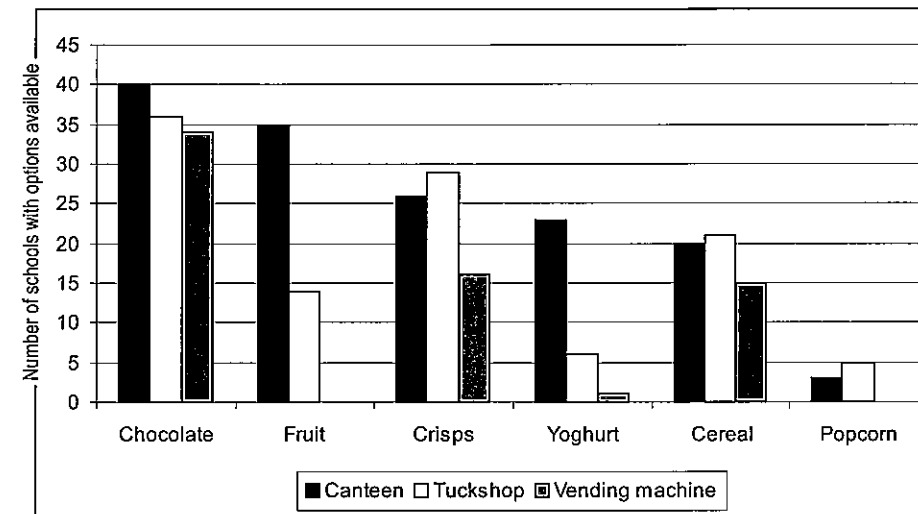
## Study 4: School Food & Drink Choice Availability

A survey of food and drink choice availability in post-primary schools in Cork and Kerry was undertaken. A questionnaire was posted to 117 schools. The response rate was 78%.

The main findings were:

- The majority of younger post-primary students stayed in school during lunchtime & were reliant of the food choices provided for them in that environment
- Fast foods or convenience foods were the most common options available in school canteens
- Sugar-sweetened fizzy drinks were widely available - 76% of canteens, 81% of tuckshops and 88% of vending machines
- Chocolate was by far the most common snack available; fruit options were extremely limited in tuckshops (Fig 2)

Fig. 2. Snacks in schools



### Discussion points:

Study 4 confirmed the impression of a changing society where teenagers are not going home for lunch and are not bringing in their own lunch or snack, but are buying their food either in the school or outside. Many are therefore reliant on the food choices provided for them in the school environment. Fast foods and convenience foods frequent school canteens with few healthy options being available on site.

The majority of schools now provide vending machines, with sugar-sweetened fizzy drinks the most common drinks provided. While the Department of Health and Children has produced food and nutrition guidelines for primary schools, no such guidelines exist at present for post-primary schools.

The UK Food Standards Agency has recently published a guide for schools on the provision of vending machines<sup>20</sup>.

Schools in Ireland need such assistance.

Providing healthy options would be a first step but must be accompanied by programmes to support and encourage students to make the healthy choices. Parents need to be involved in this process to increase awareness of healthy options and to encourage children in their choices.

### The Way Forward

Reductions in population levels of obesity are unlikely until the environments facilitating obesity development are modified. The domestic and school 'micro' environments in which children are being brought up must support the goals of healthy eating and an active lifestyle. The barriers that prevent parents, schools and young children from putting good intention into practice must be overcome.

'Our children, their future, why weight?' highlights the concern of parents and teachers about some negative aspects of home and school life that contribute towards child and teenage obesity. A number of key recom-

mendations have been made. The report urges that:

- supportive strategies for parents are needed
- campaigns to reduce television watching require consideration
- the use of TV to promote positive promotional messages to children (healthier options) should be investigated by health and education agencies
- primary schools need to act as environments that adequately facilitate and promote an active life for our children
- guidelines are required to assist post-primary schools in providing a healthy food environment for students

Our children's health and wellbeing cannot be put on hold.

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