

# **Childhood Obesity Research**

CHOICE / Newspoll Survey

October 2006

57 Carrington Road Marrickville NSW 2204 Phone 02 9577 3333 Fax 02 9577 3377 Email ausconsumer@choice.com.au www.choice.com.au The Australian Consumers' Association is a not-for-profit company limited by guarantee. ABN 35 799 246 568 ACN 000 281 925

## Summary

The purpose of this study was to survey consumers about the perceived causes of childhood obesity and support for various potential strategies to combat the rise in childhood obesity, particularly regulation of food marketing to children. The survey was conducted in May 2006 via a telephone survey of 1200 Australian adults. Thirty-three per cent (33%) of respondents were parents or guardians of children under 18 years. The report compares the responses of this group to those of respondents who were not parents or guardians of children under 18.

Insufficient physical activity and an abundance of unhealthy foods were perceived by consumers to be the two biggest causes of children putting on weight. Eighty-six per cent (86%) of all respondents thought that parents could do more to prevent children becoming overweight while 60% of all respondents thought that government could do more.

Eighty-two per cent (82%) of all respondents were in favour of governments regulating the way food and beverages are marketed to children. Eighty per cent (80%) were in favour of governments spending more to educate parents and children about how they can develop healthy eating habits. Eighty-three per cent (83%) were in favour of governments requiring manufacturers to make children's food products healthier. Eighty-nine per cent (89%) of all respondents were in favour of governments regulating the advertising of unhealthy foods during TV programs that are popular with children. Eighty-five per cent (85%) of respondents were in favour of governments regulating the use of cartoon characters, popular media personalities and toys to market unhealthy food to children.

This research suggests that while many respondents acknowledge that parents are responsible for preventing childhood obesity, there is widespread community support for government action. To date, the Commonwealth government has bee reluctant to place any further restriction on the food and advertising industries, favouring voluntary industry initiatives to improve food marketing, labelling and nutrition content. This research suggests that consumers support governments placing greater restrictions on the practices of these industries in order to prevent childhood obesity.

#### Introduction

Childhood obesity in Australia has reached critical levels. About one in five Australian children are estimated to be overweight or obese<sup>1</sup>. More recent estimates from NSW suggest it could now be as many as one in four<sup>2</sup>. More

<sup>&</sup>lt;sup>1</sup> Magarey, AM et al (2001). Prevalence of overweight and obesity in Australian children and adolescents: reassessment of the 1985 1995 data against new standard international definitions. *Medical Journal of Australia*. 174, p561-564.

<sup>&</sup>lt;sup>2</sup> NSW Centre for Overweight and Obesity (2006). *NSW Schools Physical Activity and Nutrition Survey 2004: Short Report*. Sydney : NSW Department of Health.

alarmingly, today's children might be the first generation to have a shorter life expectancy than their parents<sup>3</sup>.

Overweight and obesity have enormous health and social consequences. Children who are overweight are likely as adults to have an increased risk of high blood pressure and blood cholesterol levels, two factors associated with heart disease. Type 2 diabetes - often called adult-onset diabetes because it usually doesn't develop until adulthood - is now appearing in children and adolescents.<sup>4</sup>

Short-term health problems associated with childhood obesity include orthopaedic problems such as back pain and flat feet, respiratory conditions such as asthma and sleep apnoea, and psychosocial impacts such as poor selfesteem, depression and learning difficulties. Longer-term health impacts of overweight and obesity include cardiovascular disease, Type 2 diabetes, stroke, cancers, osteoarthritis and kidney and gall bladder disease<sup>5</sup>.

Overweight and obesity affect about 9 million Australian adults and a further 1.5 million children, and its associated illnesses place an enormous burden on

<sup>&</sup>lt;sup>3</sup> Australian Medical Association (24 April 2006). Media release, *National Nutrition Survey needed in war against obesity 'epidemic*. http://www.ama.com.au/web.nsf/doc/WEEN-6P69Q9. Accessed 27/9/06.

 <sup>&</sup>lt;sup>4</sup> National Obesity Taskforce (2003). Healthy Weight 2008: The national action agenda for children and young people and their families. Canberra, Department of Health and Ageing.
<sup>5</sup> National Obesity Taskforce (2003). Healthy Weight 2008: The national action agenda for children and young people and their families. Canberra, Department of Health and Ageing.

our health system and society in general. The total cost of obesity is estimated to be as high as 1.3 billion each year<sup>6</sup>.

Poor eating habits coupled with a sedentary lifestyle over a prolonged period lead to weight gain. Overweight children are more likely to become overweight adults. Bad childhood eating habits are difficult to break so it's vital that children have a healthy diet from an early age.

Over the last decade there has been increased government attention given to childhood obesity, with a series of obesity forums held by Commonwealth and State and Territory governments. At the national level, the Commonwealth government rallied experts, governments and stakeholders from across the country to develop a national strategy to combat childhood obesity. The result was a document called *Healthy Weight 2008 - The National Action Agenda for Children, Young People and their Families*<sup>7</sup>. Acknowledging the many factors that have contributed to the problem, the document outlined a range of strategies in a variety of settings that could help to address the problem.

The strategies focussed on:

- 1. Child care centres and schools
- 2. Health and community care services

 <sup>&</sup>lt;sup>6</sup> National Obesity Taskforce (2003). Healthy Weight 2008: The national action agenda for children and young people and their families. Canberra, Department of Health and Ageing.
<sup>7</sup> National Obesity Taskforce (2003). Healthy Weight 2008: The national action agenda for children and young people and their families. Canberra, Department of Health and Ageing.

CHOICE/Newspoll Childhood Obesity Research

- 3. Neighbourhoods, communities and workplaces
- 4. Food supply, food marketing and the media

There are many causes of childhood obesity and therefore a range of strategies are needed to address the problem. CHOICE is concerned that progress in relation to improving food marketing and the food supply has been limited, primarily due to resistance from the food and advertising industries that are fearful of the impact of stricter regulation on their bottom line.

There is sufficient evidence to suggest that Australian children continue to be bombarded with TV ads for unhealthy foods and exposed to significantly fewer ads for healthy foods<sup>8,9</sup>. International research shows that food advertising influences children's food preferences and diet<sup>10</sup>. More recently we are seeing less obvious and more insidious forms of marketing appear on the internet<sup>11</sup>.

Previous research by CHOICE highlighted that many foods designed for and aimed at children were unhealthy. A survey of lunchbox snacks found that 75% were too high in kilojoules, saturated fat, sugar or sodium to be a healthy everyday lunchbox snack<sup>12</sup>. More than half of children's breakfast cereals

<sup>&</sup>lt;sup>8</sup> Australian Centre for Health Promotion (2006). *Report to NSW Health: Food advertising on Sydney television - the extent of children's exposure*. School of Public Health, University of Sydney.

<sup>&</sup>lt;sup>9</sup> Chapman, K et al (2006). How much food advertising is there on Australian Television? *Health Promotion International*, 21, 172-180.

<sup>&</sup>lt;sup>10</sup> Hastings, GB et al (2003). Review of Research on the Effects of Food Promotion to Children. Food Centre for Social Marketing, Glasgow.

<sup>&</sup>lt;sup>11</sup> CHOICE (2006). Food marketing: child's play? CHOICE Magazine, June 2006, p12-14.

<sup>&</sup>lt;sup>12</sup> CHOICE (2005). Lunchbox Lessons. CHOICE Magazine, January/February 2005, p23-27.

assessed contained more than 27% sugar and half of those contained more than 40% sugar. Most were a poor source of fibre compared to many other breakfast cereals that weren't aimed specifically at children<sup>13</sup>.

Parents play a vital role in ensuring that children eat a healthy diet, but they need help. Governments have a role to play in providing parents with the tools to make healthy choices for their children and removing the barriers that make their job difficult.

#### Method

CHOICE wanted to find out what ordinary people think is causing the childhood obesity epidemic and what they felt the government could do to turn it around. In May 2006, CHOICE commissioned Newspoll Market Research to conduct a survey on childhood obesity. As part of a telephone omnibus survey, interviews were carried out nationwide with 1,200 respondents aged 18 years and over.

The survey sample was randomly selected using current phone listings. A quota was set for each capital city and non-capital city area.

Demographic data collected included age, sex, marital status, household income, employment status, level of responsibility for household shopping, number of adults and children living in the household, whether respondents

<sup>&</sup>lt;sup>13</sup> CHOICE (2005). Breakfast Basics. *CHOICE Magazine*, March 2005, p8-13.

were currently parents or guardians of children under the age of 18 years and the highest level of schooling completed. To reflect the population distribution, results were post-weighted to Australian Bureau of Statistics data on age, highest level of schooling completed, sex and area.

Respondents were asked a series of questions about:

- $\Rightarrow$  The perceived causes of childhood obesity
- $\Rightarrow$  How much more, if anything, parents and governments could be doing to prevent children becoming overweight.
- ⇒ Support for government interventions such as regulating food marketing to children, educating parents and children about healthy eating and making kids' food products.

Of the study sample, 33% were currently parents or guardians of one or more children under the age of 18 years. Throughout this paper these respondents are referred to simply as 'parents'. Those who are not in this category are referred to as 'non-parents', but some of these respondents may have children aged 18 years or over.

# **Results of Survey**

#### Perceived causes of obesity

Figure 1 (page 8) shows responses to the question "In your opinion, what is causing more children to be overweight?" Respondents could name more than

one reason. Without being prompted, respondents primarily attributed childhood obesity to poor diet (77%) and exercise (65%).

The category 'total diet reasons' includes responses such as: too much junk food or take-away; junk food cheaper and more easily available; over-eating; parents over-feeding children; too much sugar/fatty foods/soft drink; lack of time/too busy to cook; poor diet; school canteens; and the need for more fresh/home cooked meals.

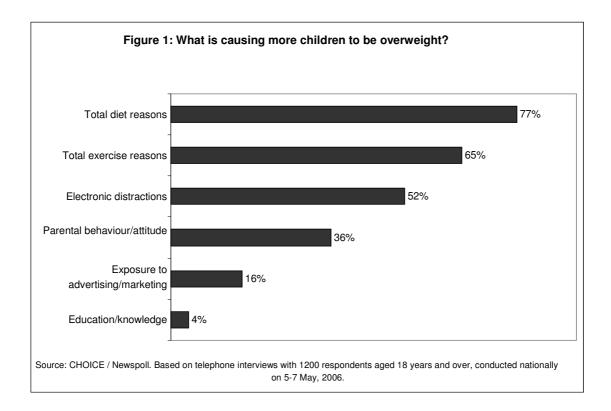
Of the "total diet reasons" given in response to this question, the most frequently mentioned diet-related cause of children being overweight was "too much junk/take-away/processed/fast food". This was mentioned by 47% of all respondents. Being too busy and parents not having enough time to prepare meals was mentioned by 16% of respondents, while accessibility, affordability and convenience of unhealthy food was mentioned by 13% of respondents. Poor diet and unbalanced eating habits were also mentioned by 13% of respondents.

Of the "total exercise reasons" given in response to this question, 52% of all respondents mentioned lack of exercise or activity. Lack of time spent playing or in outdoor activity was mentioned by 12% of respondents. Other exercise-related causes included the tendency to be driven places rather than walking (5%); limited opportunities or inability to participate in organised sports (5%);

lack of interest or encouragement to participate in sport (5%); and parents too busy to get involved (3%).

More than half of all respondents (52%) mentioned electronic distractions such as computer games, internet and television as a cause. The role of parental behaviours and attitudes (36%) as well as exposure to advertising/marketing (16%) were also mentioned. Lack of knowledge or education was mentioned by 4% of respondents.

In many cases the responses of parents did not differ significantly from the responses of non-parents. Parents were more likely than non-parents to suggest that parents' behaviours and attitudes caused children to become overweight. Forty-two per cent (42%) of parents gave this response compared with 32% of non-parents.



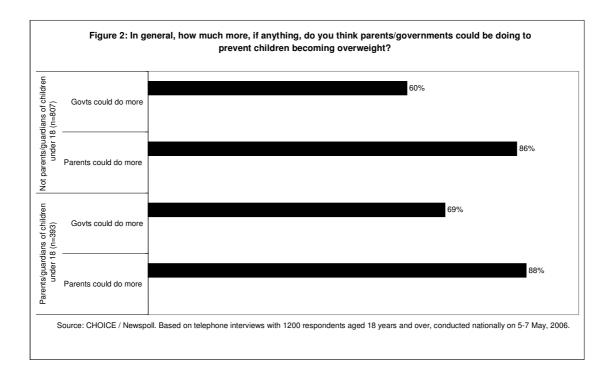
#### The role of parents and governments in obesity prevention

When asked how much more, if anything, parents could do to prevent children becoming overweight, a total of 86% of all respondents thought that parents could do more. Sixty-two per cent (62%) said parents could do a lot more, while 24% said parents could do a little more. Ten per cent (10%) of respondents said that parents were doing as much as they could.

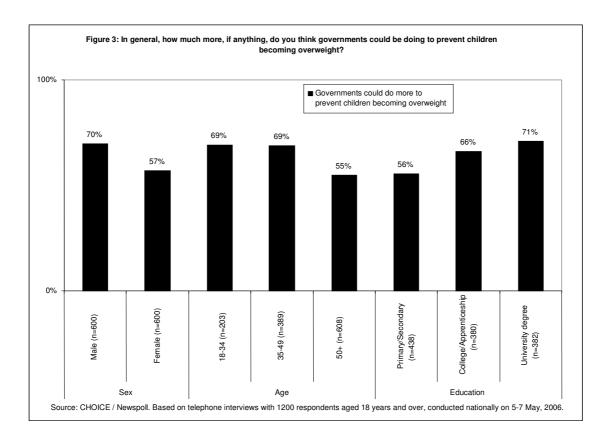
There was only a small difference in the responses of those respondents who were parents of children under 18 years compared with those who were not. A total of 88% of parents thought that parents can do more compared to 86% of non-parents. Sixty-four (64%) per cent of respondents who were parents said parents can do a lot more compared with 61% of respondents who were not parents. Twenty-four (24%) per cent of parents said parents can do a little more compared with 25% of respondents who were not parents. Eleven (11%) per cent of parents and 10% of non-parents said parents are doing as much as they can.

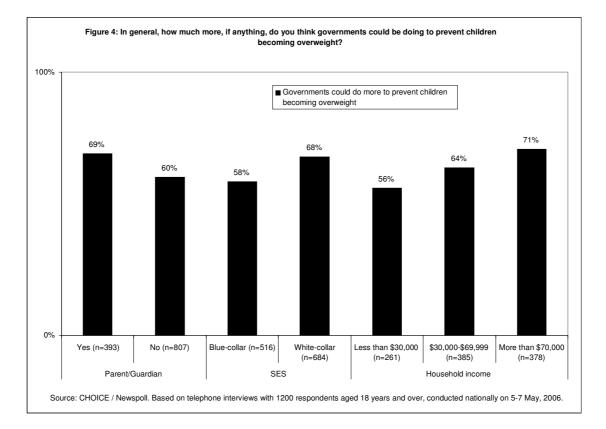
When asked how much more, if anything, governments could do to prevent children becoming overweight, a total of 63% of respondents thought that governments could do more. Thirty-six per cent (36%) thought governments could do a lot more while 27% thought governments could do a little more. Twenty-nine (29%) per cent of respondents said that governments were doing as much as they could.

Unlike the previous question asking how much more parents could do to prevent children becoming overweight, there was greater variation between the responses of parents and non-parents to the question of how much more government could do to prevent children becoming overweight. In total, 69% of parents thought that governments could do more, while 60% of non-parents thought governments could do more. More parents (39%) than non-parents (34%) thought governments could do a lot more and similarly, more parents (30%) than non-parents (26%) thought governments could do a little more. On the other hand, fewer parents (26%) than non-parents (31%) thought governments were doing as much as they could. Figure 2 compares responses of parents and non parents. The majority in both groups believe that parents and governments could do more to prevent childhood obesity. In both groups, the number of respondents who thought that parents could do more was greater than the number of respondents reporting that governments could do more.



Figures 3 and 4 show the percentage of people in various population subgroups who indicated that governments could do more to prevent children becoming overweight. A general trend is noted here - increases in income, level of education and socioeconomic status are associated with increases in the proportion believing that governments could do more. Similarly, the belief that governments can do more about childhood obesity was more common among men, respondents aged between 18 and 49 years, and parents.





## Support for government regulation

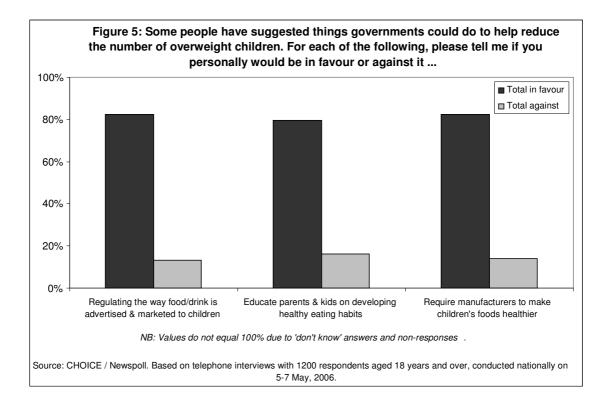
The survey sought to investigate attitudes towards specific initiatives that governments could take to tackle the obesity problem. Three possible actions were canvassed and each received strong support (See Figure 5, page16).

Eighty-two per cent (82%) of all respondents were either strongly (62%) or somewhat in favour (21%) of governments regulating the way food and drink is advertised and marketed to children (86% of parents compared with 81% of non-parents). Thirteen per cent (13%) of respondents were against this action (11% of parents compared with 14% of non-parents). Eighty per cent (80%) of all respondents were either strongly (52%) or somewhat in favour (28%) of governments spending more to educate parents and children about how they can develop healthy eating habits (84% of parents compared with 77% of non-parents). Sixteen per cent (16%) of respondents were against this action (12% of parents compared with 18% of non-parents).

Eighty-three per cent (83%) of respondents were either strongly (61%) or somewhat in favour (21%) of governments requiring manufacturers to make children's food products healthier (89% of parents compared with 79% of nonparents). Fourteen per cent (14%) of respondents were against this action (9% of parents and 16% of non-parents).

In all three cases support among parents was greater than support among nonparents. Likewise, in all three cases more non-parents than parents were against government action.

Figure 5 shows the total proportion of respondents in favour of and against each of the proposed initiatives.



Advertising and marketing of unhealthy foods to children has been considered by some commentators to be a key contributor to the obesity problem. Survey interviewers presented respondents with two examples:

(1) advertising unhealthy foods and drinks during TV programs that are popular with children, and

(2) marketing unhealthy products to children by using cartoon characters,

popular media personalities, or toys.

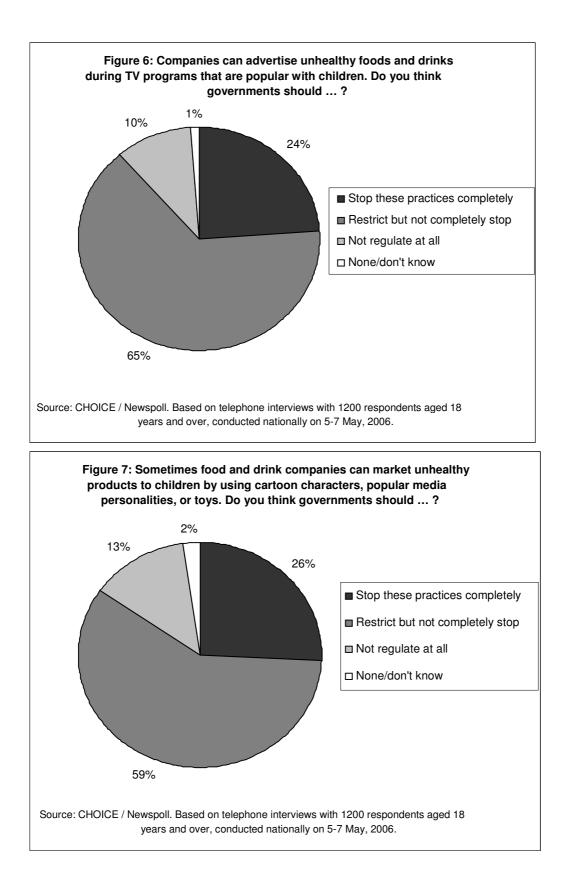
Respondents were asked whether they thought governments should stop the practice completely, place some restrictions on the practice but not stop it completely or not regulate the practice at all.

A total of 89% of respondent were in favour of governments regulating the advertising of unhealthy foods during TV programs that are popular with children (See figure 6, p19). Parents more strongly supported government regulation (92%) compared with non-parents (87%).

There was greater support for government placing some restrictions on advertising of unhealthy food and drinks during TV programs popular with children (65%) rather than stopping these practices completely (24%). More parents (68%) than non-parents (63%) were in favour of governments placing some restrictions on this sort of advertising but not stopping it completely. The same proportion (24%) of parents and non-parents supported stopping these advertising practices completely. A total of 10% of respondents did not support regulation of these practices at all. Support for no regulation was stronger among non-parents (12%) than parents (8%).

A total of 85% of respondents were in favour of governments regulating the use of cartoon characters, popular media personalities and toys to market unhealthy food to children (See Figure 7, p19). Parents (89%) were more supportive of government action than non-parents (83%). There was greater support for governments placing some restrictions on these practices (59%) rather than stopping these practices completely (26%). More parents (64%) than non-parents (56%) were supportive of governments placing some restrictions on these practices rather than stopping them completely. Interestingly, slightly more non-parents (27%) than parents (25%) supported stopping these practices completely. A total of 13% of respondents supported no regulation of these practices at all. More non-parents (14%) than parents (11%) were in favour of no regulation at all.

Figures 6 and 7 show that the majority of respondents believe governments should restrict but not ban these practices, although a sizeable minority believes these practices should be stopped completely. In combination, the overwhelming majority (between 85% and 89%) believe governments should take some action.



## Discussion

The results of this research suggest that there is community awareness of childhood obesity and consumers understand that many factors can contribute to the problem. There is also widespread community support for government to take action.

#### Causes of childhood obesity

Consumers perceive insufficient physical activity and the abundance of unhealthy foods to be the two biggest causes of children putting on weight. Too much time spent watching TV, playing computer games and on the internet was mentioned by a significant number of respondents. A range of parental behaviours such as being too busy to cook or participate in sport, and lack of knowledge were also reported by a significant number of respondents as factors contributing to children becoming overweight.

In conducting this research CHOICE was particularly interested in gauging consumer support for government regulation of food and beverage marketing to children, as is evident in the later questions. Sixteen per cent (16%) of respondents listed exposure to advertising and marketing of unhealthy foods as a cause of children becoming overweight. While it was not the most frequently mentioned causal factor, this number is significant because it was an unprompted response. If prompted, many more respondents might have reported food advertising and marketing as a cause of children putting on weight.

#### Parents and governments could do more

It is interesting to note the variation in responses to the questions about whether governments and parents can do more to prevent children becoming overweight. While a significant majority thought both parents and governments could be doing more, there were more respondents who thought parents could be doing more than respondents who thought governments could be doing more.

This research suggests that consumers (regardless of whether they are parents or not) acknowledge that parents can do more to prevent children becoming overweight. In fact, significantly more parents than non-parents nominated parental behaviours and attitudes as potential causes of children becoming overweight. While not included in this present study, it would be useful to ask parents whether they thought *they* could be doing more to prevent *their* children becoming overweight or whether they thought they were doing enough but *other* parents could be doing more.

Despite the fact that more respondents thought parents could do more to prevent children becoming overweight than governments, a significant majority of respondents thought governments could do more. This suggests that most consumers (including parents) acknowledge the vital role that parents play in preventing children becoming overweight but realise that parents need help in doing so. Governments have responsibility not only to provide parents with the tools to assist them in making healthy choices for their children but also to remove some of the barriers faced by parents.

#### Support for government intervention

The level of support for the three proposed government responses confirms this. In each case around 80% of respondents supported government action to:

- 1. regulate food and drink marketing to children,
- 2. educate parents and children on healthy eating, and
- 3. require manufacturers to make children's foods healthier.

The results of this survey showed little variation in support for the interventions that would give parents the tools to make healthy choices (i.e. education) compared with interventions that remove barriers to healthy eating (i.e. regulating food marketing to children and making children's food healthier). Parents in this survey would like the government to provide them and their children with healthy eating education but at the same time they would also like governments to place restrictions on the practices of food and advertising industries that can undermine their role as guardians of healthy choices.

#### Food marketing to children

There is considerable public debate about the regulation of food marketing, particularly TV advertising, to children. To date, the Commonwealth government, which has the authority to regulate advertising and marketing, has resisted calls to ban or regulate food advertising to children. Instead, the Commonwealth government has supported food and advertising industry initiatives to strengthen voluntary codes of practice.

The research suggests that a large majority of consumers (regardless of whether they are parents or guardians of children under 18 years) support government intervention to regulate the way food and drink is advertised and marketed to children. The majority supported restrictions, rather than an outright ban, on advertising of unhealthy foods during TV programs popular with children, but a sizeable minority (24%) supported stopping these practices completely. While the majority of consumers did not support a complete ban, such an approach is supported by many public health, nutrition and obesity experts on the basis that it would provide greater protection of children from heavy marketing of unhealthy foods.

Further research should be carried out to determine the level of support for different aspects of regulation of food marketing to children including the times and programs that should be covered, the imbalance of ads for healthy foods compared to unhealthy, and other forms of marketing (e.g. internet marketing) that are currently not covered adequately in any government regulation or voluntary codes.

This research also shows strong community support for restricting the use of cartoon characters, popular media personalities and toys to promote unhealthy foods to children. In 2005, the Parents Jury, an online parent advocacy group, awarded its inaugural "Smoke and Mirrors" award to Kellogg's for an advertisement in which popular children's personality Monica Trapaga promoted Coco Pops as a healthy breakfast cereal because it contained added vitamins and minerals<sup>14</sup>. Coco Pops are around 37% sugar<sup>15</sup> and a poor source of fibre compared with many other breakfast cereals<sup>16</sup>. The Parents Jury awarded the "Pester Power" award to McDonalds for promoting Happy Meals to children focussing on the free toy that is given away with the meal<sup>17</sup>.

#### Making children's food healthier

As stated early in this report, CHOICE magazine surveys of children's lunchbox snacks and breakfast cereals show that many foods designed for and targeted to children are unhealthy<sup>18,19</sup>. For parents to make healthy choices for their

<sup>&</sup>lt;sup>14</sup> Parents Jury (28 June 2005). Media release: Junk food ads slammed by Parents Jury. http://www.parentsjury.org.au/downloads/2005\_Awards\_announcement\_media\_release.pdf. Accessed 27/9/06.

<sup>&</sup>lt;sup>15</sup> Kelloggs (2006).

http://www.kelloggs.com.au/NutritionInfo/NutritionInfo.asp?NutritionInfoID=270 Accessed 27/9/06.

<sup>&</sup>lt;sup>16</sup> CHOICE (2005). Breakfast Basics. CHOICE Magazine, March 2005, p8-13.

<sup>&</sup>lt;sup>17</sup> Parents Jury (28 June 2005). Media release: Junk food ads slammed by Parents Jury, http://www.parentsjury.org.au/downloads/2005\_Awards\_announcement\_media\_release.pdf. Accessed 27/9/06.

<sup>&</sup>lt;sup>18</sup> CHOICE (2005). Lunchbox Lessons. CHOICE Magazine, January/February 2005, p23-27.

children, they need to be able to purchase healthier foods. The survey of lunchbox snacks found that 75% were too high in kilojoules, saturated fat, sugar or sodium to be a healthy everyday lunchbox snack. More than half of children's breakfast cereals assessed contained more than 27% sugar and half of those contained more than 40% sugar. Most were a poor source of fibre compared to many other breakfast cereals that weren't aimed specifically at children.

In recent years a number of State governments have introduced healthy school canteen policies, placing limitations on the availability of unhealthy foods in school canteens<sup>20</sup>. There have been anecdotal reports that this has led some manufacturers to modify recipes in order to improve nutrient content of their products and make them eligible for sale in school canteens. In August 2006, the Australian Beverage Council announced that it would remove soft drinks from primary school canteens<sup>21</sup>.

The concept of improving the nutritional content of children's food has not been explored to any great extent, however the present study shows that there is strong community support for government interventions to require manufacturers to make children's foods healthier.

<sup>&</sup>lt;sup>19</sup> CHOICE (2005). Breakfast Basics. *CHOICE Magazine*, March 2005, p8-13.

 <sup>&</sup>lt;sup>20</sup> Parents Jury (2006), Around Australia - school nutrition regulation and guidelines. http://www.parentsjury.org.au/tpj\_browse.asp?ContainerID=1838. Accessed 27/9/06.
<sup>21</sup> Australian Beverages Council Limited (2006). Commitment Addressing Obesity and other Health & Wellness Issues.

The Commonwealth government's childhood obesity strategy *Healthy Weight* 2008, highlighted reduced serving sizes and energy density of manufactured foods and drinks as an strategy that could be implemented to address childhood obesity<sup>22</sup>. To date there has been no government mandate to do this and as a result progress has been limited. Instead, the Commonwealth government has supported individual manufacturers that have introduced healthy alternatives or provided more meaningful nutritional information. We are yet to see any concerted efforts across the food industry to improve the nutritional content of all children's foods.

# Conclusion

This research indicates that while many respondents acknowledge that parents are responsible for preventing childhood obesity, there is widespread community support for government action. To date, the Commonwealth government has been reluctant to place any further restriction on the food and advertising industries, favouring voluntary industry initiatives to improve food marketing, labelling and nutrition content. This research suggests that consumers support greater government restrictions on the practices of these industries in order to prevent childhood obesity.

<sup>&</sup>lt;sup>22</sup> National Obesity Taskforce (2003). Healthy *Weight 2008: The national action agenda for children and young people and their families.* Canberra, Department of Health and Ageing.

### Sources

Australian Beverages Council Limited (2006), *Commitment Addressing Obesity and other Health & Wellness Issues*.

Australian Centre for Health Promotion (2006). *Report to NSW Health: Food advertising on Sydney television - the extent of children's exposure*. School of Public Health, University of Sydney.

Australian Medical Association (24 April 2006). Media release, National Nutrition Survey needed in war against obesity 'epidemic. http://www.ama.com.au/web.nsf/doc/WEEN-6P69Q9. Accessed 27/9/06.

Chapman, K; Nicholas, P; and Supramaniam, R (2006). How much food advertising is there on Australian Television? *Health Promotion International*, 21, 172-180.

CHOICE (2006). Food marketing: child's play? CHOICE Magazine, June 2006, p12-14.

CHOICE (2005). Breakfast Basics, CHOICE Magazine, March 2005, p8-13.

CHOICE (2005). Lunchbox Lessons, CHOICE Magazine, January/February 2005, p23-27.

Hastings, GB; Stead, M; McDermott, L; Forsyth, A; MacKintosh, AM; Rayner, M; Godfrey, C; Caraher, M; and Angus, K (2003). *Review of Research on the Effects of Food Promotion to Children*. Centre for Social Marketing, Glasgow.

Magarey, A; Daniels, LA; and Boulton, TJ (2001). Prevalence of overweight and obesity in Australian children and adolescents: reassessment of the 1985 1995 data against new standard international definitions. *Medical Journal of Australia*, 174, p561-564.

National Obesity Taskforce (2003). Healthy *Weight 2008: The national action agenda for children and young people and their families.* Canberra, Department of Health and Ageing.

NSW Centre for Overweight and Obesity (2006). NSW Schools Physical Activity and Nutrition Survey 2004: Short Report. Sydney : NSW Department of Health.

Parents Jury (2006). Around Australia - school nutrition regulation and guidelines. http://www.parentsjury.org.au/tpj\_browse.asp?ContainerID=1838. Accessed 27/9/06.

Parents Jury (28 June 2005). *Media release: Junk food ads slammed by Parents Jury*. http://www.parentsjury.org.au/downloads/2005\_Awards\_announcement\_media\_relea se.pdf. Accessed 27/9/06.