

5 What are the influences on children's eating?

Many factors influence children's eating, including their parents and family members, their friends, educational institutions and the mass media, especially television. Like most adults, most children do as their peers do. Birch (1999) showed that the food consumption of toddlers and primary and secondary school children is influenced by the social groups to which they belong. If we are to influence children's eating, therefore, we should try to influence these groups, as well as appeal to the children directly. This approach has several implications.

Parents

The ways in which parents consume food will influence their children (Koivisto Hursti 1999; Koivisto Hursti, Fellenius and Sjoden 1994; Michela and Contento 1986). If the parents do not eat fruit, for example, then the children will be unlikely to do so. Interventions should aim, therefore, to influence parents' habits because parents are the gatekeepers for much of the food entering the family (Campbell and Crawford 2001; Harnack et al. 1998). This means the messages of any intervention program have to appeal to parents, who must find any changes worthwhile for themselves as well as their children.

Informing parents about how *The Australian Guide for Healthy Eating* (Smith, Kellet and Schmerlaib 1998), for example, is relevant to their families and how to apply the guidelines, may initiate a powerful change process because parents can adapt the guidelines to their children's needs and goals. There is uncertainty about parents' knowledge of nutrition, with few studies having been performed in Australia. However, Wardle, Parmenter and Waller (2000) showed that people with high levels of basic nutrition knowledge are 25 times more likely to consume large amounts of fruits and vegetables each day, compared with those with little knowledge (even when accounting for socioeconomic differences). Explanations of basic nutrition principles may thus be worthwhile. Parents benefit from being clear about what healthy eating entails and being advised on eating options to help children eat healthy foods in an enjoyable manner.

Parents can experience a variety of pressures, which can contribute to poor eating habits such as:

- major time pressures (Pusey, 2003)
- financial problems; food insecurity is experienced by at least 5 per cent of Australians (Booth and Smith 2001)

- lack of access to car transport and access to cheap sources of healthy foods (Ellaway and McIntyre 2000)
- unfamiliarity with the foods available in Australia (in the case of some newly arrived communities) (Renzaho, Burns and Reidpath 2002).

The following are examples of communication tools to reach parents:

- Schools often use newsletter to provide hints.
- The 'Food Dudes' program provides a video to demonstrate ways in which to feed preschoolers.
- The Department of Human Services Victoria has produced nutrition tip sheets to help parents improve their family's eating patterns and these are disseminated widely across Victoria.

Other adult carers

Other carers of children, such as preschool workers and school teachers, are important targets of any intervention. Western Australia's preschool program (Pollard, Lewis and Miller 2001) has provided preschool staff with training in nutrition and child feeding behaviour (along the lines suggested by Birch), which appears to have given staff more practical knowledge and confidence in developing children's preferences for healthy foods and advising parents on how to shape their children's eating behaviours (J Lewis, pers. comm., 2002).

Peer groups

Some research has been conducted on ways in which to influence the peer group. The CATCH program, for example, recruited secondary students who were one or two years older than their target group (Luepker et al. 1996). These group leaders were instructed about healthy eating and other health issues. There was some evidence that these older children, whom the juniors 'looked up to', had a positive influence on their junior peers' behaviours. Experienced school and preschool teachers often use this approach informally by identifying which child is an 'opinion leader' and then recruiting him or her to influence the other children's behaviours.

Cultural norms and values

Any healthy eating interventions must account for children's and parents' opinions, practices and views of what is 'right' or 'appropriate' eating behaviour, as well as the children's preferences. Much behaviour is influenced by social norms (called subjective norms in the theory of planned behaviour) (Ajzen 1991; Montano, Kasprzyk and Taplin 1997). This involves expectations about what is considered to be 'normal' behaviour, as well as perceptions of the degree to which others will approve or disapprove of a behaviour.

The fruit and vegetable mass media campaigns in Western Australia during the past decade and the recent Coles–Dietitians Association of Australia program (Reeve 2001) have attempted, with some success, to influence people's expectations about the amount of fruit and vegetables that should be eaten each day. Market research has shown that Australian teenagers aged 15–18 years disapprove of drinking beverages with straws because the behaviour is considered to be 'sissy' or 'juvenile'; teenagers that use straws face group disapproval or ostracism (D Windus, pers. comm., 2000). Educational activities, which can influence these social norms, are thus likely to bring about changes in the food consumption behaviours within the group.

People have many more expectations about the consequences of eating and drinking than about the nutritional benefits. In this sense, children and adolescents do not differ from adults. They have more immediate concerns than the long term benefits of nutrition promotion, such as being with friends, playing computer games, studying, having fun and looking good. The benefits of reduced serum cholesterol levels, for example, are probably not in the mindset of most 16 year olds, never mind 5 and 10 year olds (Nowack and Crawford 1998). Some subcultures of children and adolescents may be more or less nutritionally centred—for example, adolescents concerned about their body shape may be highly interested in certain aspects of nutrition (such as the fat content of food), whereas others in more 'macho' teenage male culture may have no interest in nutrition or healthy eating.

It is important, therefore, to identify what interests and motivates children and adolescents, and to ensure healthy eating programs engage their interests and needs (where possible). Food and eating need to be linked to children's aspirations, such as the need to 'eat properly' (Charles and Kerr 1998), to be accepted by their friends, to eat like their friends do (Fieldhouse 1986; Neumark Sztainer et al. 1999) or like their television heroes do (Morton, 1990) or even, in adolescence, to eat according to their ecological values (for example, to adopt a vegetarian diet so they can care for the environment (Worsley and Skrzypiec 1997).

Television

Television has several roles in many families: it can be a useful child minder (Salmon et al. 2004), a source of constant stimulation, an escape into fantasy and/or a source of information about people and the outside world (Gerbner et al. 1993). Television and the mass media play important roles in the postmodern society in which most of us are highly dependent on others—for example, we rely on others to fix the photocopier, mend the leaking tap, and grow and prepare foods (over one quarter of foods eaten in Australia are prepared outside the home). They enable us to 'see' into areas of society that we do not experience directly—for example, what it is like to be a detective, how foods are grown, how the people we aspire to be live and eat (Gerbner 1993). The mass media, especially television, allow us to fantasize

through the stories told (via science fiction, soap, detective, sports and even home and garden shows—Gerbner 1993).

From the point of view of healthy eating, television advertising is a problem. Australian children are exposed to more television food advertising than probably every other nationality (Morton 1990). Morton showed that 80 per cent of food advertising in children's viewing hours is for confectionery and foods and beverages that contain large amounts of fat, sugar and salt. Long hours of exposure to television programs are associated with increased risk of obesity in children (Campbell et al. 2002; Dietz 1996). Current guidelines suggest children should spend no more than two hours per day viewing all electronic entertainment media (American Academy of Pediatrics 2001; Australian College of Pediatrics 1994), but Australian primary children watch television for an average of two and a half hours per day (ACNielsen Media International 2001).

The problem is not only the exhortations to consume foods that are the out of balance with the Australian Dietary Guidelines, but also the potentially misleading portrayal of 'normal' eating. Advertising has been called the 'distorting mirror' of society (Pollay 1986). Cartoon characters, sports heroes and film stars, for example, are used to promote a narrow variety of food and beverages to children (Lewis and Hill 1998; Morton 1990; Story 2003). Younger children often model their behaviours on their favourite cartoon characters ('virtual persons'), while teenagers in particular tend to aspire to be like members of reference groups such as football or netball teams, or music or film stars. These virtual characters, whether present in advertising or in programs and movies, appear to have strong influence over many children and teenagers (Solomon 1994). Children and adolescents often judge the social desirability of their own behaviours by referring to these portrayals—that is, they refer to these portrayals and the groups that they represent to judge the appropriateness of their own actions (Solomon 1994).

Parents and educators face the challenge of providing attractive alternatives to compete with this commercialism. A number of initiatives have supported schools and families to deal with this issue. Education courses have been developed to build scepticism among primary children about the mass media (Chandler 1997). In Victoria, the SWITCH program encourages children to reduce their television viewing in favour of physical activities (Salmon et al. 2003). At a national level however, major changes to television food advertising content are required to reduce children's exposure to models of unhealthy food and beverage consumption. These changes will require the development of advocacy coalitions and the encouragement of innovation in the food industry. As a starting point, raising people's awareness of the problems of food advertising is important.

The physical environment

The physical environment affects everyone's eating and drinking behaviours, as shown by the increased sales of cold drinks on hot summer days. Proximity to supermarkets and other food outlets is an important influence (Cheadle et al. 1993). In the United Kingdom, Ellaway and MacIntyre (2000) showed that the further away people are from shops, the less they use those shops. In Melbourne, Reidpath et al. (2002) found that suburbs of low socioeconomic status have four times as many fast food outlets as found in suburbs of high socioeconomic status, which they argued may be one factor in the greater prevalence of obesity found in the poorer suburbs. In the United States, Cheadle has shown in a series of studies that the types of food sold by local supermarkets strongly predict the nutrition status of the local population (Cheadle et al. 1990; Cheadle et al. 1991; Cheadle et al. 1993; Cheadle et al. 1995). Finally, French et al. (2001) in the CHIPS project (box 13) found that the availability and pricing of foods in school vending machines has major affects on the foods purchased by the students.

The implication of all these studies is that efforts to work with children and their families should account for the proximity of food shops and for the micro-environment in the home, the school and other areas where children purchase or consume foods. In particular, the quality of foods and drinks stocked in vending machines that are close to children may need to be questioned and improved (see the school canteen discussion below).