



# NUTRITION THROUGH THE LIFE COURSE: PART 4 - PRESCHOOLERS (2-5 YEARS)

Children aged two to five years have high energy and nutrient needs because of their continued growth and development. To ensure that the preschooler's diet is nutritionally adequate, it should be based on a wide variety of foods from the six food groups. This will provide sufficient energy and nutrients required for good health and physical and mental development. Emphasis should be placed on their intake of staple foods, peas, beans and nuts, fish, lean meat, poultry, and dairy products fruits, dark green leafy and yellow vegetables, to achieve adequate amounts of energy and nutrients especially iron and calcium which are required for healthy growth.

Parents need to plan children's meals carefully and wisely. Their diet should be balanced in

order to provide sufficient energy and nutrients required for growth without causing weight gain. Some preschoolers spend the majority of the day in day care centres and preschools. Parents should investigate the type and quality of foods and how the foods are prepared. Foods prepared for children should not only be nutrient rich but should be safely prepared and appealing. Healthy food choices, good eating habits and daily physical activity promote healthy growth and development and can prevent chronic lifestyle diseases such as diabetes, cardiovascular disease and cancer later on in life.

## Calcium

Calcium intakes must be adequate for the development of

strong bones and teeth. During the period of development children need two to four times as much calcium per kilogram of body weight as adults do. Preschool and young school aged children require about 500 mg of calcium each day. Lack of calcium in the diet can lead to poor bone density and an increased risk of developing osteoporosis later in life. Good sources of calcium include dairy products such as milk, cheese and yogurt, peas and beans, nuts, fish with edible bones and dark green leafy vegetables.

## Factors Affecting Food Intake

Young children have small stomachs and variable appetites which prevents them from

consuming large amounts of food at any one time. Some young children show variable eating patterns throughout the day and may consume very little at one meal and making up at another meal or exhibit poor eating patterns for a period of time followed by intervals of improved food intake.

Preschool should be offered three main meals with snacks in between to fulfil their nutrient and energy requirements. They should be given a morning meal, a mid-morning snack, lunch, mid-afternoon snack, dinner and even a bedtime snack.

The taste, smell and appearance of food are important factors which influence food intakes of preschool children. The way in which the food is prepared affects its appearance which in turn influences the amount of food the child will consume.

Social influences also play a part in a child's food preferences. Children's eating habits can significantly improve by eating with other children at school or in other group settings because of the influence of their peers. They usually stay longer around the table, eat more and will try a wider variety of foods. Also once at school, children are hungrier at meal times because of the reduced opportunity to eat between meals and the increased demand of energy for different activities.

Parents also have a great influence on the amount and type of food consumed by

children. They should act as role models in the food choices they make and by their eating habits. Children imitate habits such as overeating at mealtimes, rapid eating and unhealthy snacking.

### Guidelines for Feeding Preschool Children

- Children eat best when small servings of food are offered and they can ask for more if they desire. Three meals with the family along with one snack in between meals are encouraged. Consumption of frequent snacks throughout the day will interfere with the child's appetite at mealtimes. Examples of small portions of appropriate snacks include: half of a fruit or 2-3 plain biscuits.
- Young children do not eat well if they are tired. They should be allowed to rest a little before meal time to allow them to enjoy their meal. They should also be comfortable while eating.
- Children do not like foods that are too spicy. Their food should be removed from the family pot before the addition of spices and pepper.
- Children should not be given any food or drink within 1½ hours of a meal because this results in poor eating at mealtime.
- Raw vegetables are better accepted than cooked ones. If vegetables are cooked, they

should be chewy and crunchy.

- Children should be allowed to prepare some foods for themselves e.g. make a drink, butter bread or peel a fruit such as a ripe banana.
- Foods should be served in a way that the child can easily handle with the use of fingers or utensils. Food should be served lukewarm.
- Children should be given fruit juices rather than fruit drinks or powders.
- Avoid distractions at meal time such as television watching or reading a book.
- Children should also be educated about which foods are nutritious so that they can take part in the planning of menus.

### Nutritionally High Risk Preschoolers

#### OVERWEIGHT/EXCESS WEIGHT GAIN IN CHILDREN

It is important for parents and care givers to realize that children are totally dependent on them to fulfil their nutritional requirements and so they must be careful in the choice of foods they provide for children. Over-feeding a child often results in him/her becoming overweight which then leads to obesity.

Snacks are important in order for a child to obtain their daily nutrient needs. However snacks should be chosen carefully so that they are nutritious, appealing in shape, size, taste and colour and

should not be expensive. Food and drink high in added sugars should be consumed infrequently as regular intake of these foods can increase the risk of dental caries and obesity. Sweetened fruit juices and drinks are high in calories but lack the nutritional value of a nourishing meal. Unsweetened, undiluted juice (100%) should be offered once per day and water should be offered to thirsty children. High energy foods such as sweets and biscuits give little nourishment and should be replaced with whole grain crackers, cheese, fresh fruit, raw vegetable sticks, yogurt, whole grain cereals and bread, milk and fruit juices which are nutrient rich.

The longer the time period in which the child is overweight, the greater the risk of he/she being overweight during adolescence and adulthood. The consequences of obesity include decreased socialization, the risk of being picked on and teased by peers which can result in low self esteem and depression.

The management of obesity in preschoolers should focus on parent education. Diets should not be highly restrictive because they may be low in energy and essential nutrients needed for growth and development. The emphasis should not be on

weight loss but weight maintenance. The child should then be allowed to grow into the weight. Parents should provide children with a balanced diet with reduced dietary fat.

Children should be encouraged to participate in regular physical activity such as playing outdoors. Time spent in watching television should be reduced. Parents should play with children so as to make physical activity enjoyable and as a way of reducing their inactivity.

#### CHILDREN WITH ANAEMIA

The preschooler's diet should be nutrient-rich especially in iron. Foods such as lean meat, fish, eggs, enriched whole grain breads and cereals and dark green leafy vegetables are good sources of iron and should be consumed on a daily basis along with a vitamin C source to increase absorption of iron.

Iron is needed for the formation of haemoglobin which is essential for transporting oxygen to body tissues. Iron deficiency anaemia can range from mild to severe. Severe iron deficiency anaemia can lead to extreme tiredness and weakness, shortness of breath, pale skin, tongue, gums and nail beds, poor

weight gain, frequent infections, behaviour disorders and developmental delays.

#### UNDERWEIGHT CHILDREN

Parents often worry because of expectations of their child's weight gain and requirements for food. If the child is growing normally, developing properly and is healthy, it is unlikely that there is any significant problem.

The child's weight and height should be plotted on a growth chart to determine if he/she is growing normally. An upward movement in direction on the growth chart usually indicates that the child is gaining weight and growing well. However, if the child's growth line remains flat or shows downward movement, these trends are danger signs which indicate that the child may become malnourished.

Parents should increase the energy intake of underweight children by adding cheese, butter, gravies to their meals. Junk foods should be replaced with nutrient rich foods such as wholegrain bread and cereals, cheese, yogurt, fruits, vegetables, nuts and peas and beans to improve energy and nutrient intake.