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# NUTRITION THROUGH THE LIFE COURSE: PART 5 - SCHOOL AGED CHILDREN 5-12 YEARS

School aged children require a varied balance of foods from the six food groups for overall growth and health. Eating healthy assists their full potential in physical and mental development.

Children require sufficient energy and nutrients to meet the needs of their growing bodies. Adequate protein is needed for the formation of bone tissue and lean body mass. Iron is essential for growth, the immune system and cognitive functions. Good sources of iron include lean meat, green leafy vegetables, enriched whole grain breads and cereals. Fruits and fruit juices which are excellent sources of vitamin C assists with the absorption of iron from plant foods and should be consumed with iron rich foods.

School aged children require an adequate supply of calcium for good bone density and to prevent the development of osteoporosis later in life. They require 800 mg of calcium daily for the development of strong bones. Dairy products, green leafy vegetables and peas and beans are excellent sources of calcium.

Children also require regular physical activity for good health and for the maintenance of a healthy weight while growing and developing.

## Factors Affecting Food Intake

The dietary patterns of children are influenced by social factors. The influence of parents and family is significant in the food choices children make. Children usually adopt their parents likes and dislikes. It is important for parents to set a good example by consuming healthy foods and by participation in regular exercise. The selection of foods rich in saturated fats and sugars should be minimized.

The provision of healthy snacks and meals at home and at school can help to increase energy and nutrient intakes. The type of foods offered at school can affect the consumption patterns and food choices of school aged children. Since many of them consume lunch at school it is essential that healthy foods are available. Parents who pack lunches for their children should





ensure that lunches are appealing and nutrient-rich. Nutrition education at school is also very important. Children who are educated on nutritious foods are more likely to select healthy foods. They should also be taught the benefits of regular physical activity.

The appearance, taste, smell and texture of foods influence appetite and food intake in children. It is important that parents present healthy nutrientrich foods attractively that children develop the taste for these foods and acquire healthy eating habits.

## Guide for Healthy Eating

The following is a guide to assist parents in providing adequate nutrition for school aged children:

- Provide three well balanced meals each day along with two to three nutritious snacks.
- Start the day with a healthy breakfast. An example of a quick healthy breakfast could be a fruit, milk, whole grain cereal, peanut butter sandwich.
- Serve a variety of nutrientrich snacks such as fruits, sandwiches, yogurt, cheese and crackers, milk and cereal.
- Serve meals around the dinner table. Meal time should be enjoyable and pleasant.

- Encourage children to drink several glasses of water daily. Provide children with water or other unsweetened beverages instead of sweetened drinks.
- Children should also be educated about the nutritive quality of foods so that they take part in the planning and preparation of meals.
- Give children fruits instead of cookies and candies.
- Give children 100% juice instead of fruit drinks.
- Limit the amount of time children spend around the computer and television. This should be replaced with activities that require active movement.

# Nutritionally High Risk School Aged Children

### **OVERWEIGHT CHILDREN**

Many children have an inadequate intake of nutritious foods such as fruits, vegetables and whole grains. Frequent snacking of non-nutritious foods that are high in calories, fats and sugars and a decrease in physical activity leads to excess weight gain. Increase in television watching, video games and private transportation accounts for reduction of physical activity. In addition, some children do not have adequate and safe places in their neighbourhood to play. These lifestyle factors increase the risk of obesity in school aged children. Obese children face problems such as being teased and discriminated against by their peers. This leads to a low self esteem which may affect their performance at school.

It is essential that children be supported to eat healthily and engage in regular physical activities that they enjoy such as playing with family and friends. Families should also adopt healthy eating patterns so that they are good role models for their children.

#### **UNDERWEIGHT CHILDREN**

Parents are usually concerned about their children©s growth rate. Children©s growth should be monitored on growth charts to determine if they are growing normally and developing properly. A child who is gaining in weight and height will show an upward movement in direction on the growth chart. However if the growth line begins to flatten or move downwards on the chart, this indicates a faltering in the childs growth rate. Poor weight gain in school-aged children is due to inadequate nutrition as a result of poverty, unhealthy food choices and eating patterns and the effect of infections. Children who are not growing should be seen by a medical doctor for a full evaluation of contributory causes.

To increase weight gain in school aged children who are picky eaters or underweight, parents should:

Provide a variety of nutritious meals.

- Avoid foods that are low in nutrients such as junk foods.
- Have a consistent schedule of meals and snacks which include three meals and 2-3 snacks each day of high calorie, nutritious foods.

## **Children with Anaemia**

#### **ANAEMIA**

Iron deficiency anaemia is the most common form of anaemia found in school aged children. It occurs as a result of a decreased number of red blood cells in the blood due to lack of iron. This occurs because of a diet lacking in adequate amounts of iron rich foods. Symptoms of iron deficiency anaemia include shortness of breath, weakness, brittle nails, fatigue, headache, irritability and pale skin colour. This disease can affect the child©s school performance due to decreased attention span and alertness.

Greater consumption of iron rich foods is important to prevent and treat iron deficiency anaemia.

These include lean meat, fish, peas and beans, enriched whole grain breads and cereals and dark green leafy vegetables. Iron rich foods should be consumed on a daily basis along with sources of vitamin C to increase the absorption of iron. Excess amounts of high fibre foods and tea should be avoided as this results in decreased absorption of iron.

## **Children with Diabetes**

#### **DIABETES**

Type 1 diabetes usually occurs in young people. Their intake of carbohydrate varies according to age, growth rate, medications and level of physical activity and should be adequate to support optimum growth and development. However excess energy intake over a period of time without adequate physical activity can lead to obesity. Prevention of obesity is important in the management of diabetes. Families should be educated about appropriate portion sizes of food and lowering the intake of foods

high in fat and sugar. It is important that the whole family has healthy eating habits since these influence childrens dietary intakes. Fibre rich foods such as wholegrain breads, cereals, legumes, fruit and vegetables should replace processed foods. Fatty meats and dairy products high in saturated fats should be replaced by lean meats, fish and low fat dairy products. These foods are also good protein sources which are important for growth in school aged children. Water should be encouraged instead of sugary drinks. Children who are on insulin should follow a meal plan prepared by a nutritionist/dietitian to stabilize blood glucose levels.

Children with diabetes should be encouraged to participate in regular physical activity for weight maintenance, improvement in insulin sensitivity and regulation of blood glucose levels. However careful planning before undertaking physical activity should be done because this can cause hypoglycaemia.

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