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NUTRITION THROUGH THE LIFE COURSE: PART 6 – ADOLESCENT

Adolescence is the period of transition between childhood and adulthood. It is the period where a significant growth spurt occurs. Teenagers grow rapidly and therefore their bodies have special requirements of vitamins, minerals, energy and protein in order to prevent future health problems. These requirements can only be met by eating an adequate amount of a variety of nutritious foods from the six food groups.

Factors Affecting Food Intake in Adolescence

Some adolescents have irregular eating habits such as meal skipping, snacking, and eating away from home because of their busy schedules. They may be

attending schools which are far away from home. They may encounter challenges with transportation which means they have to leave their homes early in the morning. Some teenagers usually skip breakfast and lunch is not eaten at home. Their eating habits are often influenced by their peers and the media. They are usually engaged in frequent snacking on empty energy foods and eating out at fast food restaurants. They often follow alternate dietary practices such as vegetarianism or a specific diet to enhance sporting ability or appearance. Eating habits in adolescence are sometimes carried into adulthood.

The food choices by some teenagers makes them prone to nutrient imbalances because they consume foods high in calories,

salt and sugar but low in minerals and vitamins. The consumption of milk, fruits and vegetables tend to be particularly low in this age group. These foods are rich in calcium, zinc, iron and several vitamins. Since teenagers usually have irregular eating habits and much cannot be done about the food purchases off the school site, the type of food available at school must be nutritious so that students can make good food choices. Parents can also encourage desired food choices by providing nutritious foods at home that are low in fat and sugar and limiting the access of foods that are high in fat, sugar and have a low mineral, vitamin and fibre content. Adolescents who snack a lot rather than eating the traditional meals should consume nutritious snacks. Some



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healthy snacks include low fat dairy products such as yogurt, whole grains, juices, peanut butter and crackers, fruits and vegetables.

Meeting Nutritional Needs

The physical changes which take place during adolescence will influence nutritional requirements. Adolescents require additional energy and protein because of their growth rate and this is directly related to their increased appetites. They will also need additional iron and calcium.

Calcium

Adolescents require additional calcium for the development of strong bones during the growth spurt. Osteoporosis occurs later in life as a result of inadequate calcium intake during the adolescent years. It is vital that teenagers obtain the recommended daily requirement of calcium in order to achieve peak bone mass. Good sources of calcium include dairy products, peas and beans, nuts, fish with edible bones and dark green leafy vegetables.

Iron

Adolescents have high requirements for iron which is an important component for blood and is therefore vital for teenage girls because of the onset of menstruation which results in blood loss. Boys require

additional iron because of the greater blood volume required during the build up of muscle mass.

Iron deficiency anaemia can arise because of inadequate iron intake. Foods rich in iron include beef, pork, chicken, liver, kidney, peas and beans, green leafy vegetables, fortified cereals and whole wheat breads. To assist the absorption of iron adolescents should eat a source of vitamin C such as fruits or fruit juices along with iron containing foods. They should also avoid drinking large amounts of tea or coffee with meals because they reduce the absorption of iron.

Healthy Eating Tips for Teenagers

- Aim for three regular meals per day and ensuring that a variety of foods are chosen from all the food groups (staples, fruits, legumes and nuts, foods from animals, fats and oils, vegetables) to meet nutritional needs.
- Do not skip meals especially breakfast as this encourages over eating later in the day and choosing foods that are not healthy.
- Do not replace healthy snacks such as fruits, vegetables, nuts, replaced by empty calorie foods.
- Eat when hungry and stop when full.
- Teenagers who eat away from home should carry from home nutritious,

economical snacks such as milk, biscuits, fruits that are in season and sandwiches made with a protein source and vegetables.

- Teenagers who are concerned about their weight should eat in moderation and participate in regular physical activity.
- Spend less time watching television and be more active.

Nutritionally High Risk Groups

OVERWEIGHT TEENAGERS

During the adolescent years there is a significant increase in fat stores especially in girls. In boys, it tends to be a significant increase in muscle mass. Teenagers usually consume a lot of snack foods and foods from fast foods outlets. These foods are usually high in fat, sugar and salt and are poor in nutritional quality. Girls tend to be less involved in physical activities compared to boys who are actively involved in outdoor activities such as football and cricket.

There is also a lack of physical activity due to the increase in television watching, computer use and video games. As teenagers increase in age their schools have reduced physical education programmes due to the increased demands of academic programmes. Extra lessons also reduce the teenager's time to participate in extra-curricular sporting activities. Many teenagers are being driven to schools

and other meeting places because of security concerns. All these factors contribute to obesity which hinders the social development of teenagers and can increase the risk of health problems such as asthma, diabetes and hypertension.

Teenagers who are overweight should be encouraged to replace more high energy foods that are high in fat and sugar with a variety of nutritious, fibre containing foods such legumes, wholegrain breads and cereals, vegetables and fruits which help to induce feelings of satiety. Simply consuming water instead of sugary drinks can result in weight loss. To reduce saturated fat intake, individuals should choose moderate portions of lean meats, fish and low fat dairy products.

Adolescents should be encouraged to participate in regular physical activity because it helps to control excess weight gain, reduces stress and anxiety and improves bone mineral density along with a calcium enriched diet.

UNDERWEIGHT TEENAGERS

Some teenagers are severely fixated about their body image and idealize a thin body type. This is

significantly more common in girls than in boys who are more interested in achieving a muscular appearance. Unsupervised dieting can result in significant loss of weight which can lead to the development of serious eating disorders such as anorexia nervosa and bulimia nervosa.

Anorexia nervosa is a psychiatric disease and involves starvation due to the severe restriction of food. When weight loss is achieved, because of the individuals distorted body image perception limited food intake continues which results in extreme weight loss. Bulimia nervosa is a disorder which is characterised by frequent episodes of the consumption of an unusually large amount of food in a short time period followed by self induced vomiting and or laxative use to control body weight.

Most individuals with severe eating disorders usually have psychological problems because of peer pressure, academic concerns and emotional stress which sometimes can be alleviated through psychological support and encouragement. However, for the more severe cases, the treatment required for these disorders is hospitalization in which there is a

team of specialists which includes nutritionist, psychotherapist and a physician. If untreated eating disorders can have long lasting adverse effects on growth, and development.

The consumption of a wide range of foods to achieve overall balance with increased physical activity rather than restrictive dietary practices should be emphasized to achieve weight loss.

ATHLETIC TEENAGERS

Teenagers who are athletic need a balanced diet for good health and for optimum performance. They require additional food to supply energy and protein demands as well as important nutrients such as calcium and iron. Eating a variety of foods from the six food groups will give the correct supply of nutrients to meet the increased demands and participation in sports. Supplements and special diets such as high protein diets are not necessary to improve athletic performance. Loss of fluids in young athletes as a result of profuse sweating will require an adequate fluid intake to prevent dehydration.

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