

A NOTE ON NUTRITION CHOWDHURY TASNEEM HASIN Chief Dietician, United Hospital Ltd. Associate General Secretary Bangladesh Nutrition and Dietetics Forum tasneemhasin@gmail.com



A surge in appetite around the age of 10 in girls, and 12 in boys, foretells the growth spurt of puberty. This paves the way for early adolescence when the human body needs more calories than any other time in life.

Puberty is the age or period where a boy or girl starts maturing into an adult. Their reproductive organs develop. For girls, these and other changes occur between ages 10 and 14. For boys, the process happens between 12 and 16.

As children move into their teen years, dramatic physical changes occur. They gain about 20 percent of their eventual adult height, and put on half of their adult weight. Bone remodeling occurs, and bone mass increases by 45 percent. These and other changes can increase appetite.

Typically, the ravenous hunger starts to wane once a child has stopped growing. Children who are big and tall or who participate in physical activity will still need increased amounts of energy into late adolescence.

During middle and late adolescence, girls eat roughly 25 percent fewer calories per day than boys do. Consequently, they are more likely to be deficient in vitamins and minerals

Unfortunately, many teens don't make smart food choices. Convenience plays a part here. So does peer pressure, which can influence what food teenagers choose. Fast food, processed foods, and sugar-sweetened beverages play a big part in the diets for many teens.

Getting the right nutrients during infancy, childhood, and around puberty can significantly impact growth and development. It's never too late to address these nutrient deficiencies to help a teen thrive.

Getting the right nutrients requires eating the right foods in healthy amounts. Obesity might create onset of puberty early in girls and delay it in boys. Being obese can also create hormonal



Puberty — dietary needs at a special age



imbalances, including high insulin levels that can increase risk of diabetes.

Under eating can also become a problem during puberty. Girls especially might feel pressured to control their diet or otherwise lose weight in an unhealthy way.

During puberty, boys need about 2,800 calories a day, while girls need about 2,200 calories per day, including plenty of protein and nutrients like zinc, to develop and grow.

Consider magnesium, a mineral that plays a role in over 300 essential metabolic reactions. Many teens don't get enough magnesium.

Vitamin D deficiencies, on the other hand, contribute to chronic diseases including diabetes and obesity and impact puberty. Many teens have low levels of vitamin D. Other nutrients that they potentially lack include calcium and iron.

While we cannot control how our teenager eats outside of the home, we

might have plenty of influence about what foods they choose.

Make eating fun: Keep the kitchen well-stocked with healthy meals and snacks, including fruits, vegetables, nuts, and seeds. Make healthy eating fun and convenient.

Healthy breakfast: The morning meal often gets low priority among busy teens. Make this important meal easy with a smoothie or any tasty items of their own choices containing dense calorie. Milk, eggs, and fruits must be a part of the recipe.

Complex-carbohydrate:In planning meals, push *complex-carbohydrate foods* which provide sustained energy. As a bonus, many starches deliver fibre and assorted nutrients too. Oat meal with honey, brown bread sandwich with eggs and vegetables etc. can be options.

Healthy Fat: Fat should make up no more than 30 percent of the diet. Fat supplies energy and assists the body in absorbing the fat-soluble vitamins: A, D, E, and K — the healthiest kind — found in olives and olive oil; peanuts, peanut oil and peanut butter; cashews; walnuts and walnut oil, and canola oil. So, nuts should be a compulsory snack every day. Saturated fat is found most abundantly in beef, lamb, butter, cheese, cream, egg yolks, coconut oil, and palm oil, which need to be restricted.

Reading food labels: Usually young children eat a lot of packaged and processed foods. Make a habit of reading the food labels. They may be surprised to see how much fat, sugar, and salt (sodium) is in the foods, which will have a great positive impact on their food habit.

Enough protein: With the race of changes in body structures good amount of 1st class protein in highly required. Daily an egg, 2 glasses of milk (or milk products) and 3 to 4 servings of meat or fish need to be ensured. Sea fish is required at least twice a week.

Encourage regular exercise: An hour of exercise a day can help teens keep healthy body weight.Find something that the teen enjoys and can commit to. Dancing, gymnastics, roller skating, and jumping rope are all fun activities that increase movement.

Reduce environmental toxins: Every day, teens are exposed to thousands of potentially harmful chemicals in food, drinking water, skincare products, and much more. BPA (found in plastic and canned bottles) can mimic the hormone estrogen, leading to early puberty. Among their damage, these endocrine disruptors can impair the normal course of puberty.

Help them manage stress: As their bodies change, teens can experience more stress. Family issues, problems with friends, negative thinking, school demands, and taking on too many activities can create more stress. All of these stressors can lead to behaviors including anxiety, aggression, and withdrawing and poor eating choices. Displaying good choices, eating well (low carb ad high protein diet), exercising and taking enough amount of fluids can make a big impact on teens.

Promote good sleep: While teens need about 8 to 10 hours of sleep every night, most only get around 6.5 to 7.5 hours. The repercussions of sleep deprivation in teens include compromised mental wellbeing and academic performance. Even 30 minutes of extra sleep can make a big difference. A sleep ritual means turning off electronics a few hours before bed.

Helping teens create a healthy lifestyle means they are more likely to take those good habits into adulthood. With the right diet and lifestyle strategies, many factors can be addressed to ensure the teen moves through puberty healthy and happy. And lastly, we should keep in mind that adult family members are the role model for every teen. So, it is imperative that the adults lead a healthy lifestyle.