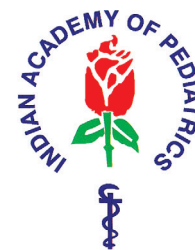


Indian Academy of Pediatrics (IAP)



GUIDELINES FOR PARENTS

Nutrition for Children Between 5–12 Years

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10 FAQs on NUTRITION FOR CHILDREN BETWEEN 5–12 YEARS

1. Doctor, what will happen if nutrition of my child remains poor?
2. How much food my child should take to have optimum growth? How can we know whether our child is taking appropriate nutrition?
3. What is balanced diet for my child? What are the things that our child must essentially eat as he is physically growing and has to do a lot of mental work?
4. What food items and drinks to be avoided? What wrong can happen if my son continues with lot of fast food and cold-drinks?
5. Can you suggest some healthy food items for the snacks and desserts for our children?
6. My daughter gets up late and often skips her breakfast. Is not taking breakfast wrong in any way?
7. What can we, the parents, do that makes our children learn to eat healthy?
8. We have always been asking you about nutrition of our children. Is physical activity also important in relation to their diet as we wish them best of health?
9. We are vegetarians. Will my child get enough nutrition without nonvegetarian food?
10. Doctor, we take healthy food at home but my son eats fast food almost everyday in school canteen, with friends. How can school be made to understand the health issues involved?

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Nutrition for Children Between 5–12 Years

Q1

Doctor, what will happen if nutrition of my child remains poor?

Children are future of our country. Their healthy nutrition in early life will enable us to have healthy and disease-free society, which, in turn, will improve overall outcome of growth and intelligence of our future population.

- Poor nutrition in early life slows down physical as well as mental growth and affect capability. This also gives rise to frequent infections. All that, in turn, may affect physical, cognitive as well as intellectual abilities of our children.
- Cultivating healthy eating habits in early life is the duty of all the parents. As age passes, it will be difficult to mold any grown-up child.
- Poor nutrition can result from lack of food or wrong food choices. Overeating is also poor nutrition and is equally harmful in long run.
- Good nutrition is just not enough caloric intake but it relies on a solid nutritional foundation, which includes the correct amount of each required nutrient, from healthy sources and at proper time.

Q2

How much food my child should take to have optimum growth? How can we know whether our child is taking appropriate nutrition?

- Children grow rapidly and mostly have moderate-to-high levels of physical activity at this age. Their body size is small and they have small stomach capacity but their energy requirement is relatively higher, and therefore they need energy dense foods.
- Individual calorie requirement depends on their age, gender, and activity levels.
- Regular meals and healthy snacks (food items consumed in between the regular meals) throughout the day is important in developing healthy eating habits. This way children get enough energy and nutrients to meet their daily requirements.
- Eating maximum of six times everyday divided between meals and snacks is the best way to have healthy food.

Eat right, eat enough, and eat regularly is the key.

Periodic assessment of their growth in school check-up or by a pediatrician can tell you whether your child is taking appropriate nutrition.

Q3

What is balanced diet for my child? What are the things that our child must essentially eat as he is physically growing and has to do a lot of mental work?

Every school-going child needs wide variety of fresh foods from five food groups. These groups provide all the nutrients for growth of the body, and energy to function including physical activity.

1. Fruits
2. Vegetables
3. Cereals (grain foods)
4. Dairy
5. Protein

Foods shown in the plate below should be the part of balanced diet.

Fruits

Focus on fruits

- Eat a variety of fruit
- Choose fresh, frozen, canned or dried fruit
- Go easy on fruit juices

Vegetables

Vary your veggies

- Eat more green dark veggies
- Eat more orange veggies
- Eat more dry beans and peas

Physical Activity

Find you balance between food and physical activity

- Be physically active for 30 minutes most days of the week
- Children and teenagers should be physically active for 60 minutes everyday or most days of the week



Oils

Know your fats

- Make most of your fat sources from fish, nuts and vegetable oils
- Limit solid fats such as butter, stick, margarine, shortening, and lard

Milk

Get your calcium-rich foods

- Go low-fat or fat-free
- If you do not or cannot consume milk, choose lactose-free products or other calcium sources

Grains

Make at least half your grains whole

- Eat at least 3 ounces of whole grain bread, cereal, rice or pasta everyday
- Look for the word "whole" before the grain name on the list of ingredients

Meats and Beans

Go lean on protein

- Choose low-fat or lean meats and poultry
- Bake it, broil it or grill it
- Vary your choice with more fish, beans, peas, nuts, and seeds

Fruits and Vegetables

- Fruits and vegetables protect us against many diseases, such as heart disease, stroke, and some cancers later in life. Vitamins, water, antioxidants, and fibers are provided by them.
- Fruits and/or vegetables should be included in every meal. Try eating fruits and vegetables of different colors, textures, and tastes.
- Locally grown seasonal fruits and vegetables should be preferred. Whole fruit is better (but after proper cleaning) as its skin has many nutrients and fiber.
- Study shows that people who grow vegetables, eat more of greens. Some children are fussy about eating vegetables and fruits initially but they gradually learn if they see others in family doing so.

Grain Foods

- Chapati, paratha, pohe, breakfast cereals, rice, corn, oats, and millets are all grain foods. Growth and learning, both need energy, which is provided by these foods.
- Chapati and wholegrain breads release energy slowly, and will give the child longer-lasting energy and keep him feeling fuller for longer time.

Reduced-fat Dairy Foods

- Milk, cheese, and curd/yoghurt are good sources of protein and calcium, which helps in building strong bones and teeth. Some children do not like taking milk, offer them different preparations of dairy, e.g., drinks of lassi, buttermilk, and cheese or curd/yoghurt.
- Children who are overweight should preferably have reduced-fat dairy products.

Protein

- Proteins are building material, and are important for your child’s growth and muscle development.
- Lean meat, fish, chicken, eggs, beans, lentils, chickpeas, tofu, and nuts are protein-rich foods. They also provide vitamins and minerals such as iron, zinc, vitamin B₁₂, and omega-3 fatty acids. Red meat and oily fish are particularly important for child’s brain development and learning, and are rich source of iron and omega-3 fatty acids.
- Be careful to substitute, if you are vegetarian (discussed in Answer 9).

Healthy drinks: Water

Q4

What food items and drinks to be avoided? What wrong can happen if my son continues with lot of fast food and cold-drinks?

Your child should avoid junk foods, ultraprocessed foods, nutritionally inappropriate foods, carbonated/caffeinated drinks, and sugar-sweetened beverages (JUNCS) because these are high in salt, saturated fat, and sugar, but low in fiber and nutrients. The risk of childhood obesity and type-2 diabetes increases when children regularly consume JUNCS.

Sweet drinks are high in sugar but low in nutrients. They can cause weight gain, obesity, and tooth decay. These drinks make your child less hungry for healthy meals.

Caffeinated foods and drinks are not recommended for children because caffeine interferes with calcium absorption. Caffeine is a stimulant, which means it gives children artificial energy. Coffee, tea, energy drinks, and chocolate, all contain caffeine.



There are many safer and healthier options. Water is the safest drink.

Q5

Can you suggest some healthy food items for the snacks and desserts for our children?

There are many healthy alternatives for snacks and desserts in Indian diet. Every region has several recipes. Indian mothers have many creative ideas.

Let your child learn to choose some of the items from healthy food groups as snacks. These can be things such as grams (चने), puffed rice (मुरमुरे), peanut/groundnut (मूंगफली), chikki (चिक्की), sprouts, nuts, cheese, curd/yoghurt, and fresh fruit or vegetables. Idli, upma, dhokla, apple, pancake and poha (pressed rice), and cornflakes can also be used as snacks.

The same ingenuity may go with dessert at the end of a meal. Sliced fruits, fruit-custard, kheer (खीर), carrot halwa (गाजर का हलुआ), श्रीखंड or yoghurt and homemade banana bread, nuts with honey, and bhapa-doi are the healthier options.

High-calorie sweet stuff such as cakes and chocolate or sweets must be reserved only for occasional consumption.

Q6

My daughter gets up late and often skips her breakfast. Is not taking breakfast wrong in any way?

There are definite benefits of breakfast and harm in skipping.

- Breakfast provides energy when its level may be low after an overnight break. It ensures better intake of nutrients and helps maintaining proper body weight.
- Not taking breakfast may negatively impact thinking and reasoning of the child, academic performance, psychosocial function, mood, and school attendance.
- Around 20% of Indian children and young people do not eat breakfast regularly. They are more likely to consume JUNCS in canteens.
- Habit of breakfast by parents and the what is available for breakfast are important determinants of regular breakfast consumption. Children mostly skip breakfast because they get up late and have lack of time in morning. They may utilize time of commute to school, taking “portable” food from home to eat on their way (e.g., fruits, roti-roll, kathi-roll, sandwich, or even drinkable tiffin).



Q7

What can we, the parents, do that makes our children learn to eat healthy?

We want our children to always stay healthy and fit. For that, they need to be physically active, eat the right nutrients in right amount and learn to avoid certain food items.

Decision of what to eat is partly determined by what is provided at home, in school and neighborhood, the influences from peers, and the media, especially TV.

Parents are role models for their children. They must encourage healthy eating habits by setting their own example before their children. Parents have to change their habits first to set a standard.

Teaching our children, how to eat healthily, is a lesson for life. They are thus more likely to make their own healthy choices thereafter. Most food habits, likes, and dislikes are set during early childhood.

Some Tips

- Meal time is family time and therefore make it 'screen-free time'.
- Healthy food can be made attractive and eating made pleasure, by decorating your dishes, cutting fruit or sandwiches into interesting shapes and dressing salad differently.
- Involve children in cooking and serving meals. Let them learn cooking and try new recipes. Encourage their creativity.
- Eating a healthy breakfast everyday is a good habit.
- Let children know, where food comes from; let them buy vegetables, fruits, and food from the shops.
- If possible, grow some vegetables at home.
- Decide menu by asking children.
- Do not keep junk food in the house, no cold-drinks in refrigerator.
- Keep fruit handy for a snack.
- Make a habit of washing hands before preparing, serving, and eating meals.

Q8

We have always been asking you about nutrition of our children. Is physical activity also important in relation to their diet as we wish them best of health?

Yes, definitely.

- Good nutrition in the growing age builds up our bones and muscles and provides fuel for every body cell to survive and function. Exercises build stamina and positive energy in children.
- Physical activity in childhood, mostly in form of play helps in social interaction, healthy growth, physical as well as mental, and in maintaining energy balance.
- This is the best prevention against obesity and reduces the risk of type 2 diabetes and cardiovascular disease in future.
- Increasing bone mass with physical activity has long-lasting effects on bone health.
- High impact of physical activity is particularly important in childhood.
- Physical activity of minimum 60 minutes is recommended. Here again, parents can set the example.

Q9

We are vegetarians. Will my child get enough nutrition without nonvegetarian food?

- This is well known when some people give up meat for more plant-based foods, it helps them to stay healthy.
- The only concern is, "Is it a safe choice for kids, whose bodies and brains are still growing?" Answer is in making sure that what they eat gives them the desired nutrients.
- Vegetarian diet may be deficient in some necessary elements of diet and you have to be vigilant to compensate them by other food items or supplements.
- If you do not eat meat, chicken, and fish but still eat dairy foods and eggs, it is not difficult to manage.
- *Protein* is needed to build and maintain muscles, organs, and immune system. We get protein in diet from eggs and dairy products and also from plant sources, such as lentils, beans, peas, seeds, nuts, whole grains, and some vegetables. Soya products have higher amount of protein.
- *Vitamin B₁₂* is needed for healthy nerves and for blood cells formation. This is found in fortified cereals (wherever available), tofu or tempeh, and in nutritional yeast. Sometimes supplement of vitamin B₁₂ may be needed.
- Deficiency of *zinc* can slow a child's growth and impair their immune system. Vegetarian sources of zinc are chickpeas, corn, soybeans, kidney beans, spinach, apricots, prunes, blackberries, raspberries, raisins, kiwi, bananas, strawberries, wheat-germ, pumpkin seeds, sesame, nuts, and dark chocolate.
- *Iron*: If iron is deficient, then red blood cells will carry less oxygen throughout body. Give spinach and other green vegetables, kidney beans, lentils and iron-fortified breakfast cereals that provide iron.
- *Calcium* makes the bones and teeth strong. Vegetarians need foods with extra calcium, such as cereals, orange juice, and soymilk. Since bones grow quickly during childhood and adolescence, if calcium is deficient, a supplement may be needed.

Q10

Doctor, we take healthy food at home but my son eats fast food almost everyday in school canteen, with friends. How can school be made to understand the health issues involved?

- Best policy is to give your children a nutritious breakfast, and then send them to school with a tiffin containing home-made food. A hungry child tends to eat, whatever is available in school canteen or nearby.
- Best training is to let your child understand, what is good and not-so-good in nutrition.

Government has taken three steps in this direction that society has to enforce:

1. Ban on the sales and advertisements of junk foods in school canteens and 50 meters around school campuses by the Food Safety and Standards Authority of India (FSSAI). They are advised to promote safe and wholesome food in schools (The Food Safety and Standards Regulations, 2020).
2. Barring food business operators (FBOs) from advertising and marketing of high in fat, salt, and sugar (HFFS) foods to children in school premises.
3. Schools are advised to promote “safe food and balanced diets” and to convert school campuses into “Eat Right Campus”. They are advised to:
 - Provide safe and healthy food, preferably local and seasonal
 - Adopt practices on food waste as per the guidelines by the National Institute of Nutrition (NIN)
 - School should engage nutritionists/dietitians to assist in the preparation of menu for the children.
 - Parents and some students may also be involved for betterment of food practices.

Concept of “fruits-bar” in school canteen is a good idea.

Potable water should be freely available in every school.