

The Hidden Curriculum of Nutrition: From Plate to Performance



Just one more bite! It is perhaps the most repeated phrase with young children thriving

J It is perhaps the most repeated phrase in our household with young children thriving at home. The most common complaints of modern mothers ranges from refusing vegetables to preferring chips over fruits and surviving entirely on ‘safe foods’ like nuggets, pasta, or cheese sticks. ‘Safe foods’ are foods with familiar taste, smell, texture, or appearance that your child willingly eats, feels comfortable eating with confidence without a struggle.

Traditional and authentic food habits of Indian people have slowly changed over time. The people have shifted from plantain leaf to ceramic. Changing food habits refer to the shifts in people's dietary preferences, choices and eating patterns over time.

The custom of preparing food thrice a day has moved out gradually, declined due to busy lifestyles and changing food habits. Everyone is interested in food, but few have the time or inclination to prepare healthy meals three times a day anymore. Unlike previous generations, Modern mothers face a unique, highly stressful set of challenges regarding their children's eating habits, driven by a mix of developmental phases, societal pressure and modern lifestyle constraints.

The ‘Short-Order Cook Trap with the Frequent Snacking and Grazing Culture’ in toddlers destroy appetite for nutrient-dense main meals. Due to working mothers’ struggle, Lifestyle Friction and Severe Time Poverty, Morning rushes often result in skipped Breakfasts, missing essential nutrients and Erratic routines disrupt metabolic rhythms and natural hunger cycles. Distraction Feeding, Screen-Time Dependency, Emotional eating, Loss of appetite control, children accustomed to hyper-palatable processed foods, reject vegetables and develop Resistance to whole foods.

Food becomes a tool to soothe boredom during digital downtime. Ask any mother what worries her most about her child's health, and one concern consistently stands out:

"Is my child eating enough and eating right?"

Mothers play a major role on having problematic feeding behaviours, e.g. food refusal, picky eating of their children. (3). The ‘Safe foods’ and ‘Fussy and Picky eating cycle’, has become a common struggle for modern parents. Honestly, cheese sticks and grain crackers aren’t terrible - especially if the child had a decent, high protein breakfast or well-balanced lunch and healthy Snacks.

Common Nutritional Problems Among Students:

In India, Protein Energy Malnutrition (PEM), Micronutrient malnutrition (MNM)- most common forms are vitamin A deficiency (VAD), Iron Deficiency Anaemia (IDA), Iodine Deficiency Disorders (IDD) and vitamin B-complex deficiencies are the nutritional problems frequently seen. (19) Of the three, Iron deficiency is the most common. Children and adolescents today face a double burden of malnutrition where undernutrition and micronutrient deficiencies coexist with overweight and obesity. Undernutrition may result in stunting, delayed puberty, poor muscle mass, osteoporosis and fractures. A majority of the school children and adolescents consume inadequate diets and are malnourished. The main contributory causes are Inadequate food production, poverty and lack of Nutrition education. Over nutrition, a recent addition to the WHO's definition of malnutrition often called as '*Modern Malnutrition or the wealth paradox*', occurs when high economic status leads to over consumption of junk foods resulting into overweight and obesity.

At the same time, Micronutrient deficiencies (Hidden Hunger) remain common, adversely affecting cognitive health - learning, bone health, and overall well-being. According to the World Health Organisation (WHO), childhood overweight and obesity has reached unprecedented levels globally, while micronutrient deficiencies including deficiencies of iron, vitamin A, Calcium, Vitamin B12, Iodine, vitamin D and zinc continue to affect millions of school-aged children, particularly in low- and middle-income countries. Every child carries within them an extraordinary potential to learn, innovate, and lead. Yet, this potential is not determined by education alone - it is profoundly influenced by what nourishes the body and the brain.

***“From Deficiency to Excess: Malnutrition Harms All!
Let’s End It Now!”***

The widespread availability and easy access to ultra-processed (JUNK) foods the so called ‘Convenient foods’, sugar-sweetened beverages, aggressive food marketing of Consumer -friendly foods, prolonged screen time, increasingly busy and sedentary lifestyles, and changing family eating patterns have contributed to a growing burden of childhood obesity, micronutrient deficiencies, Hidden Hunger and lifestyle-related disorders.

Nutrition Matters:

Nutrition is widely recognised as a cornerstone of health and human development at every stage of lifecycle. Childhood is known as Latent Time of Growth. Adolescence is characterised by profound endocrine changes that regulate growth, sexual maturation, and body composition. This crucial period of childhood and adolescence, physiological processes, rapid physical growth and development of Brain and Cognitive Function, Hormonal Changes and Pubertal development, development of a Robust Immune System substantially increases nutritional requirements. Adequate intake of energy, high-quality protein, essential fatty acids, iron, calcium, zinc, and several vitamins are necessary to support normal pubertal development, menstrual health in girls and the rapid increase in lean body mass observed in boys. Nutrition plays a pivotal role, exerting a profound influence on emotional and social well-being and overall quality of life and increase the risk of chronic diseases later in life.

Feed the body with the Healthy food & better nutrition and the brain rewards you with performance!

Nutritional requirement of Children-

Every stage in our lifecycle has its unique requirements due to different changing needs. Pre-conception Nutrition is foundation of lifetime good health. A Journey through the first 1000 DAYS after conception - Pregnancy 270 days and 730 days of life is a vital time frame. Providing the right nutrients in the right amounts is essential to support healthy growth, learning, and overall well-being. The nutritional requirements of children vary according to age, sex, growth rate and level of physical activity. Children are not just growing taller they are also building their brains, bones, muscles, and immune system every day.

Personalised Nutrition is the Key!

The Indian Council of Medical Research–National Institute of Nutrition (ICMR–NIN) provides age-specific Recommended Dietary Allowances (RDA) to help ensure that children receive adequate micronutrients especially needed for optimal growth and development.

Nutrient requirements-

Suggested Macronutrient intake proportions for children is 45% to 65% as carbohydrate - preferably from complex carbohydrates, 25% to 35% as fat- from both visible and invisible fats and 20% to 30% as protein.

The Grand Total: 30 Micronutrients, (13 Essential Vitamins - eight water soluble - Vitamin B Complex & C and four Fat soluble - Vitamin A, D, E, K and 17 Essential Minerals, seven Major Minerals - Ca, Ph, K, Na, Ch, Mg & S and 10 Trace Minerals- Fe, Zn, Cu, Se, Mo, Cr, Co, I & F). Carbohydrates are major sources of energy in our diet. Proteins are the fundamental building blocks of the human body, important for Fuelling Growth Spurts and very Crucial during childhood, pregnancy, and adolescence to support rapid physical development. Fats are vital for cell structure, brain health, and protecting your organs. Vitamin and Mineral supplements are generally not needed if you eat a healthy, balanced diet, though they help specific groups like pregnant individuals or those with diagnosed deficiencies.

A Balanced Diet-



Is a diet which provides all the nutrients in required amounts and proper proportions, fulfils all the nutritional needs of the body.

It can be easily achieved through a blend of the five basic food groups-

- 1.Cereals and Millets
- 2.Pulses and Legumes
- 3.Vegetables and Fruits
- 4.Milk and milk products - Eggs, Meat and Fish
- 5.Oils and Fats - Nuts and Oil seeds

Proper meal planning helps to achieve adequate nutrient intake specified by RDA. In addition, a balanced diet should provide other non-nutrients such as dietary fibre, antioxidants and phytochemicals which bestow positive health benefits. There is no single food which can provide all the necessary nutrients and hence these need to be obtained through a judicious choice of a variety of foods.

“Feed Your Body cells, Not Your Cravings!”

Healthy Nutrition-

More Than Just Preventing Hunger, today’s children are surrounded by an obesogenic food environment where fast foods, packaged snacks, sugary beverages, oversized portions and the convenience of online food delivery are readily available. Over time, these behaviours become lifelong habits, increasing the risk of obesity, nutrient deficiencies and lifestyle-related diseases.

The Growing Challenge, Shaping Children’s Eating Behaviours:

The studies have shown that there is a steep increase in the prevalence of underweight with increase of age, from 27% at 6 months of age to a high of 45% at 24 months of age. This is attributable to faulty infant and young child feeding practices prevailing in the community. (19)



Sedentary Lifestyle-

The Other Side of the Problem: Key Contributors are - Online education, Screen Addiction, Mobile Phones, Gaming and Television that may increase stress, reduce sleep quality and contribute to social isolation. Modern technology has transformed education and entertainment, but it has also significantly reduced children's daily physical activity, family interaction, and adequate sleep. Screens may connect us to the world, but movement connects us to good health.

Don't let blue light dim your bright future- Minimise non-essential screen time!

Physical inactivity, a cause for concern-

WHO recommends that young people get at least an average of 60 minutes of moderate to vigorous physical activity (MVPA) per day, this rate is lower among girls (51%) compared to boys (69%).

The report shows that overall, only 25% of boys and 15% of girls achieve 60 minutes of MVPA daily, with participation declining with age, particularly among girls (24% of 11-year-old girls vs. 13% of 15-year-old girls). A Healthy Childhood Needs More Play Than Display.

Health Consequences: Reduced energy expenditure combined with excessive calorie intake promotes overweight and obesity, increasing the risk of metabolic syndromes, type 2 diabetes, hypertension, Vitamin D Deficiency, Poor Posture and Musculoskeletal Problems (Prolonged sitting) and improper device use can lead to neck pain also known as 'text neck'.

Sleep Disturbances: Exposure to blue light from screens suppresses melatonin production, delaying sleep onset and reducing sleep quality. Poor sleep further affects growth, immunity, mood and academic performance.

Your Body Needs Movement not just Wi-Fi, Your screen can wait—your sleep cannot!

Obesity and overweight a growing concern-

The prevalence of overweight and obesity among adolescents has long been a significant public health concern, with over 1 in 5 adolescents affected. This figure has risen since the last survey in 2018, from 21% to 23% in 2022. Rates of overweight and obesity are higher among boys (27%) than girls (17%).

A report released by the WHO Regional Office for Europe, based on data from the Health Behaviour in School-aged Children (HBSC) study, paints a concerning picture of adolescents' dietary habits, with a particular focus on the decline in healthy eating behaviours and the rise of unhealthy choices. Fewer than two in five adolescents (38%) eat fruit or vegetables daily, with these figures declining with age (from 45% of 11-year-olds to 33% of 15-year-olds for fruit, and from 40% to 36% for vegetables). Worryingly, more than half of adolescents report eating neither fruit nor vegetables every day (56% of boys and 51% of girls aged 15). Conversely, the consumption of sweets and sugary drinks remains high, with one in four adolescents (25%) reporting daily consumption of sweets or chocolate (girls (28%) than boys (23%).

Dr. Martin Weber, Team Lead for Quality of Care and Programme Manager of Child and Adolescent Health at WHO, Europe said, "*The affordability and accessibility of healthy food options are often limited for families with lower incomes, leading to a higher reliance on processed and sugary foods, which can have detrimental effects on adolescent health.*"

Remember; Portion Control and Moderation is the Key!

Eating Disorders:

Adolescents experience many social pressures, especially from the media to be thin. This pressure to be thin or to diet can be especially strong for teens if their friends are dieting or trying to lose weight. The most common eating disorders are Anorexia nervosa ("self-starvation"), Bulimia nervosa ("bingeing") and Bing Eating disorder ("loss of control over eating"). According to science, most anorexics and bulimics are girls; however, boys can suffer from these disorders as well.

There is no single cause of an eating disorder. An estimated 10% to 20% of teens engage in disordered eating behaviours such as binge-purge behaviour, compensatory exercise, laxative and diuretic abuse and binge eating (Neumark-Sztainer et al, 2012).

Some factors include: Feeling insecure, an excessive desire to be in control, a distorted body image (feeling fat) and striving for the perfect body, a family history of depression or an eating disorder, severe family problems, a history of sexual abuse, extreme societal pressures etc.

Junk and HFSS food:



We all cherish the comfort and convenience of a quick, tasty snack. But what happens when these occasional treats become a part of our daily diet? In a country like India, which boasts rich and diverse culinary traditions, the rise of modern, ultra-processed foods (junk food) presents a serious public health challenge.

'Fast Food, Slow Health'

Understanding what junk food is, why it's so pervasive, and how it impacts our body is the first step towards making a healthier choice.

What is Junk Food?

The most accurate junk food meaning describes it as food that is high in calories, typically derived from

sugar, refined fats and salt, but contains minimal essential nutrients such as fibre, protein, vitamins and minerals.

These are often called HFSS (High in Fat, Sugar and Salt) foods or ultra-processed foods(2). Calorie-rich but Nutrient-poor: Junk foods are typically deficient in protein and fibre along with high caloric density, resulting in poor or low satiety and increased overeating contributes to frequent hunger, unhealthy snacking, poor glycemic control and weight gain.

Dopamine Effect-

Junk food is chemically engineered to trigger a strong pleasure response in the brain (dopamine release), leading to habitual overconsumption and addiction.

Fat Storage: The high intake of refined sugar is converted into fat by the liver, contributing directly to visceral fat accumulation, which is a major driver of obesity.

Feed Every Cell of Your Body with Nutrients, Not with Empty Calories!

When you look at the ingredient list you'll find the very things found in junk food that make it unhealthy-

1. Refined Flour (Maida)
2. Trans Fats and Hydrogenated Oils -***The most dangerous is the presence of Palm Oil.***
3. Excess Sodium / Salt
4. Food Additives
5. Artificial Colours
6. Artificial Flavours
7. Preservatives

If It Comes in a Packet More Often Than from Nature, Think Twice Before You Eat It.

The Indian Council of Medical Research (ICMR) has set strict nutritional thresholds for energy, added salt, sugar and fat to identify and regulate HFSS foods. Authorities promote initiatives like FSSAI's Eat Right India to help consumers reduce intake gradually.

Every Bite Is a Choice - Choose Wisely! Choose Healthy!

The Popular Junk Food Listed in India- India's street food culture and booming economy have contributed to a vast list of junk food items that are both local and international.

Here is a breakdown of the most popular culprits across the nation-

1. Fried Indian Street Snacks (Samosa, Pakora, Kachori) - these deep fried delights are the most common form of indulgence.
2. Packaged and Processed and Ultra-Processed Snacks (Breakfast cereals, Potato chips, namkeens, bhujia, and flavoured mixtures) - they are designed to be *hyper-palatable and addictive* foods, making it impossible to stop at just one serving.
3. Fast Food & Bakery Items (Pizza, Burger, Vada Pav, French fries or patties)
4. Sugary Beverages and Desserts (Cold drinks, sodas and packaged fruit juices, Indian sweets like Gulab Jamun and Jalebi) - A single soft drink Can of 300 ml contains 8-10 teaspoons of added sugar. Diet Coke contains artificial sweeteners (aspartame) and acids (Phosphoric acid, Citric acid and Carbonic acid)
5. Instant & Ready-to-Eat Meals (Instant noodles, packaged soups and frozen parathas) contain high doses and long-term exposure of THBQ, tertiary butylhydroquinone.

In essence, junk food provides '*empty calories*' - energy without the nourishment your body needs to thrive. Don't Let Junk Food Write Your Health Story.

Less Sugar. Less Salt. Less Fat. Less Confusion!

Nutrition Education:



Inadequate nutrition is not only due to inadequate food availability but also due to faulty food habits, some of them based on food prejudices, superstitions or taboos and importantly, lack of awareness of the right food choices. Thus, Nutrition Education can make a difference in people's life by helping them to make right behavioural changes for healthy living. Nutrition Education helps children understand the importance of balanced diets, food groups, portion sizes, food safety, hydration, and healthy lifestyle choices.

Healthy Choices Start with Knowledge of Nutrition education: The foundation of Lifelong Health.
Every plate matters. Every Choice Counts!

Food fortification:



Addition of nutrients to increase nutritional value!

Food Fortification Initiatives taken by Indian Government includes fortification of staple foods such as rice, wheat flour, edible oil, milk, and salt with essential micronutrients (iron, folic acid, vitamin A, vitamin D, iodine and vitamin B12) helps address widespread micronutrient deficiencies and supports healthy growth and cognitive development. Food fortification is the practice of deliberately

adding vitamins and minerals to widely consumed foods to improve public health. Key types include large-scale industrial fortification, biofortification and point-of-use fortification. It is backed by the World Health Organisation as a cost-effective strategy against malnutrition.

Decoding Food Labels:

Nutrition Facts	
3 servings per container	
Serving size 2/3 cup (170g)	
Amount per serving	
Calories	180
% Daily Value *	
Total Fat 4g	6%
Saturated Fat 3g	15%
Trans Fat 0g	
Cholesterol 20mg	7%
Sodium 56mg	3%
Total Carbohydrate 21g	7%
Dietary Fiber 2g	8%
Total Sugars 19g	
Includes 15g Added Sugars	30%
Protein 14g	
Vitamin D 0mcg	0%
Calcium 150mg	12%
Iron 0mg	0%
Potassium 220mg	5%

*The % Daily Value (DV) tells you how much as nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

GET LESS OF

GET MORE OF

Being able to understand and correctly interpret the labels on food items is vitally important to be able to make smarter choices and prepare healthy food in your kitchen.

“Know the Ingredients, Make Better Decisions!”

Reading the label is the only way to know what you are eating. In India, pre-packaged food labelling is governed by the Food Safety and Standards Authority of India (FSSAI) under the Food Safety and Standards (Labelling and Display Regulations, 2020.)

Every package must carry specific, legible declarations, including the name of the food, list of ingredients, nutritional facts, net quantity, manufacturer details and date of

manufacturing or packaging. Most global standards (such as those regulated by the FDA Nutrition and Food Labelling and UK Food Labelling Guidelines) mandate the following 12 essential pieces of information on pre-packaged goods.

Nutritional Information-

Serving Size, Calories/Energy value (kcal), amount of key macro and micro nutrients found in one serving including protein, carbohydrates (with specific sugar quantities) and fat content, sodium, total sugars, Dietary fibre per serving. ***Know what goes into your plate!***

Percentage Daily Value (DV)-

Percentage of each nutrient in a single serving in terms of daily dietary needs.

Declaration of Additives & Allergens: Added colours, flavours and major known allergens (e.g., milk, nuts, soy) must be declared. ***Stay informed, stay safe.***

Research suggests that good use of nutrition labels are related to better nutritional knowledge, practice and that overall use is linked to health motivation.

Overall, nutrition labelling empowers you and allows for more healthful food choices.

Nutrition and Mental Health of Children:



Diet directly impact brain function, mood, and mental health through the gut-brain axis and neurotransmitter regulation. Deficiencies in omega-3s, B-vitamins, magnesium and zinc are linked to depression and anxiety. A whole-food diet, like the Mediterranean style, supports brain health, whereas processed foods can increase inflammation.

Nutrition plays a key role in promoting mental health. Food choices can impact our mood and even future food choices. Nutrition can impact mental health conditions such as, but not limited to: Depression, Anxiety disorder, Schizophrenia, Obsessive-compulsive disorder. Unfortunately, nutrition is often overlooked when treating mental health conditions.

Where Food Meets Mental Health:



Our food choices, mood and mental health are interwoven. Our mood drives our food choices. Our food choices drive our current and future choices. This impacts not only our mental health; it can lead to other chronic diseases too. Some mental health conditions can cause changes in appetite. Skipping meals can lead to deficiencies of important nutrients, making matters worse. Cravings are also associated with mental health conditions. Carbohydrate cravings are correlated with low serotonin levels can be accomplished by a healthy, balanced diet, which would decrease cravings.

Our food choices also impact the health of our gastrointestinal (GI) tract, also known as the gut. What we eat can affect the types and the number of bacteria in our gut. The bacteria is very important for our health. While we all have some pathogenic, or 'bad' bacteria in our gut, we also have symbiotic or 'good' bacteria. The good bacteria help protect us from bad bacteria. They also support healthy immune function and healthy GI function overall.

You may be wondering what your gut has to do with mental health, and the answer is quite a bit!

Fibre can be thought of as the preferred source of food for the bacteria in the gut. Feeding good bacteria helps them grow. In turn, this increases the products the bacteria make which benefit us. These products include nutrients such as short chain fatty acids, vitamin K, biotin and neurotransmitters. The short chain fatty acids are the primary source of fuel for the cells in our GI tract. They help us effectively digest and absorb the nutrients we need, to feel well.

The bacteria can also produce a variety of neurotransmitters. One of the neurotransmitters produced is Serotonin, the mood neurotransmitter. In addition to regulating mood, serotonin is involved in regulating sleep, appetite and other body functions. All of these impact mental health.

For example, our body needs enough serotonin to produce melatonin, the hormone that promotes sleep. Sleep is an important part of managing mental health. Low serotonin leads to increased carbohydrate cravings, can interfere with sleep quality, and can make depression worse.

Healthy Diet, Healthy Gut Microbiome - Better Nutrient Absorption, Improved Immunity:

Better Mood • Better Memory • Better Concentration

A healthy gut nourishes both the body and the brain.

The Mediterranean-style diet pattern has been found to reduce risk of mental disorders, depression and cognitive health disorders. The pattern is rich in: Fruits, Vegetables, Whole grains, Fish, Lean

proteins, Nuts and seeds, richer in fibre, nutrient dense foods and healthy fats. These nutrients are what are thought to be protective against mental health conditions. Studies show that people with mental health conditions are often lacking in certain dietary nutrients, essential vitamins, minerals and omega-3 fatty acids. The most common nutritional deficiencies seen in people with mental health conditions are Omega-3 fatty acids, B vitamins, minerals and amino acids. It is important to make sure you meet your nutrient needs for all vitamins and minerals.

A healthy balanced diet which includes vegetables, fruits, whole grains, legumes, nuts, seeds, fish and other lean protein and healthy unsaturated fat, with nutrient dense foods can help prevent and manage mental health disorders. Diet directly impacts brain function, mood and mental health through the gut-brain axis and neurotransmitter regulation. Deficiencies in omega-3s, B-vitamins, magnesium, and zinc are linked to depression and anxiety.

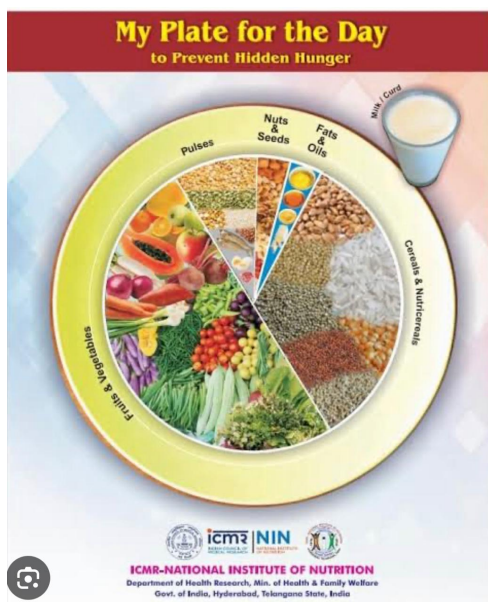
The Mediterranean diet is associated with a 30% reduced risk of depression.

Take Home Points -

- A whole-food diet, like the Mediterranean style, supports brain health, whereas processed foods can increase inflammation.
- Eat adequate fibre daily to promote a healthy gut microbiome.
- Eat adequate protein to provide building blocks for neurotransmitters.
- Avoid added sugar, highly processed foods, and sugary beverages.
- Make sure to get plenty of restful sleep and regular physical activity.
- Mental Health Matters at Every Age!

Less screen time today means better focus, better concentration, and brighter learning, Brighter Future tomorrow.

Nutrition and Academic Performance:



Optimal nutrition is fundamental to learning and academic success. A balanced diet provides a steady supply of energy and essential nutrients that support brain function, enhancing concentration, memory, attention, problem-solving skills, and overall cognitive performance.

Studies have consistently shown that well-nourished children demonstrate better classroom engagement, improved academic achievement, better exam performance, higher school attendance, and lower absenteeism compared to their undernourished peers.

Together, these practices create a strong foundation for effective learning and academic excellence.

Nutrition Now...Matters Forever!

Simple dietary habits such as eating a nutritious breakfast, maintaining adequate hydration and following regular meal timings help stabilise blood glucose levels, improve alertness, reduce fatigue and sustain attention throughout the school day.

Key Nutrients every Student Needs:

1. Proteins for Growth, repair and development
2. Calcium for Bones and teeth
3. Iron for oxygen transport, energy production and immune support

4. Vitamin D for Calcium absorption, strong bones and immunity
5. Omega-3 fats for heart and brain health, reduce body inflammation
6. Fibre for gut health
7. Water for hydration.

Superfoods , Natural Powerhouses of Nutrient -

As rightly said by the father of medicine, Hippocrates, “*Let food be thy medicine and medicine be thy food*”. Superfoods are natural, minimally processed foods that are exceptionally rich in vitamins, minerals, antioxidants, fibre, healthy fats, and other bioactive compounds (like poly phenols, Flavonoids, Lycopene etc) that provide high nutritional value and health benefits.

List of some inexpensive and easy to find Indian Superfoods from the kitchen: Millets (Ragi, Bajra, Bhagar, Rajgira), Lentils and Pulses (Bengal gram (Chana), Rajma, Soyabean, Seeds and Nuts (Sesame seeds, Flax seeds, Chia seeds, Almonds, Walnuts, Groundnuts, Coconut), Berries (Amla (Indian gooseberry), Moringa leaves, sweet potato, Spices (Turmeric, Fenugreek seeds, Cinnamon, Onion, Garlic, Ginger) and Curds and Yogurt, Eggs and Fatty fish etc.

Healthy Eating Habits For Students, Some Practical Tips:

- Never skip breakfast. Don't skip meals - Have Balanced meal with combination and variety.
- Eat seasonal and Local fruits and vegetables every day. Include protein foods in every meal.
- ***Alarming - Indians consume less than 40 gm proteins/day.***
- Don't avoid wheat unless and until you have allergy or gluten sensitivity.
- Smart Snacking - Always carry healthy alternatives like fresh fruits, Yogurt with berries, vegetable sticks with hummus, handful of Roasted Nuts like Peanuts, Chana, Almonds, Boiled Eggs, Khakhra, Parathas, Unbuttered Popcorns etc. Choose wisely.
- ***'Eat right, Aaj se thoda cum!'***
Avoid 3 whites - Maida, Sugar, salt
Reduce sugary beverages, fried foods and junk food frequency.
- Avoid eating while watching screens.
- Eat mindfully. Prefer homemade and traditional diets.
- Prep your meals or Snacks to avoid skipping meals in busy times- Healthy cooking practices are important for good health.
- Avoid cooking, reheating, or storing food in plastic and aluminium utensils; choose safer alternatives such as stainless steel, glass, or cast iron.
- ***What Holds Your Food Matters as Much as What's in It***
- Sleep adequately- A good amount of quality sleep, 8-9 hrs/day must be a priority.
- Ensure hygiene, safe and clean food.
- Stay hydrated. Drink sufficient water.
- Make half your plate with all colours of fruits and vegetables, one-fourth with good quality of healthy protein and one-fourth with healthy Carbs

Eat The Rainbow of Vegetables!

Snacking ideas and Swaps; What to eat every day?

Healthy snacking involves replacing processed junk food with whole, nutrient-dense options like unsalted mixed nuts, plain popcorn and roasted makhana. Making simple food swaps helps reduce extra sugar, salt, and unhealthy oils while keeping your energy up.

Signal for Healthier You!

STOP...

eating processed, fried, and unhealthy food

THINK....

and choose a balanced meal with the right mix of proteins, grains, and vegetables

GO

for fresh fruits, vegetables, and whole food



Crunchy & Savory Swaps:

- Potato chips → Plain popcorn or baked millet chips for a lighter crunch without heavy oils.
- Fried namkeen or pakoras → Roasted makhana (fox nuts) or roasted chickpeas for a high-protein, low-calorie bite.
- Salted peanuts → Unsalted mixed nuts or a small handful of raw seeds like pumpkin and sunflower.

Sweet & Creamy Swaps:

- Candy or milk chocolate → Frozen grapes, frozen blueberries, or a couple of squares of dark chocolate. Cookies or sweet biscuits → Rice cakes, fruit loaf, or homemade bliss balls made from dates and oats.
- High-sugar flavoured yogurt → Plain Greek yogurt topped with fresh berries and chia seeds.

Fresh & Filling Ideas:

- Processed cheese dips and crackers → Chopped fresh veggies(carrots, cucumbers, bell peppers) with lower-fat hummus.
- Sugary fizzy drinks → Water flavoured with fresh mint slices, lemon or berries and Buttermilk.

Healthy choices should be affordable, attractive, and easily accessible.

The golden rule of meal/snacks is the combination of high fibre, good quality high protein and small amount of healthy fat!

We can easily build a golden rule' plate using common ingredients:

The Traditional Combo: Poha, Upma, or Idli (Complex Carbs) + Sprouts, Paneer (Protein), or Chopped Peanuts (Fat).

The Egg Combo: Whole-wheat toast or Roti (Complex Carbs) + Omelette or Scrambled Eggs (Protein/Fat).

The Dairy Combo: Oatmeal or Ragi porridge (Complex Carbs) + Milk, Curd, or a handful of Almonds (Protein/Fat).

When we eat wide variety of nutrients, we more easily move towards better health and wellness!

Role of Parents in Promoting Healthy Nutrition in Children:

Our children are always learning from us that includes the food choices we make every day. Parents play the most influential role in shaping children's lifelong eating habits. Food preferences, meal patterns, and attitudes toward nutrition are largely established at home.

Actionable Strategies -

1. Be Role Models- Children learn by observing. Parents who regularly eat fruits, vegetables, whole grains, and balanced meals encourage children to adopt similar healthy eating habits. Eat Together as a Family.
2. Plan Balanced Meals. Encourage Home-Cooked Meals.
3. Involve Children in Meal Planning and Cooking.

4. Set Scheduled, Structured snack times to eliminate continuous grazing.
5. Keep healthy options visible like washed fruits and cut vegetables at eye level.
6. Engaging children in grocery shopping, selecting healthy foods and preparing meals increases their interest in nutritious foods, builds food literacy.
7. Avoid Rewarding with Junk Food- Using chocolates, sweets, or fast food as rewards creates an emotional attachment to unhealthy foods. Instead, reward children with praise, books, games or enjoyable family activities.
8. Device-free zones- Ban all screens from the dining table during meals.
9. Read Food Labels- Teach children to read nutrition labels and ingredient lists. Choosing foods lower in added sugars, sodium, and unhealthy fats helps develop informed and healthier food choices.

“Healthy eating begins at home. Parents don't just feed children—they shape their food habits, attitudes, and health for a lifetime!”

Role of Schools in Promoting Healthy Nutrition in Children:

As children spend a significant part of their day at school, it provides an ideal environment to reinforce nutrition education, encourage healthy food choices and support overall physical and mental well-being.

Nutrition-friendly schools initiatives (NFSI)- Practical activities make learning more encouraging. Healthy Canteen Policies Ensure school canteens offer nutritious, balanced and hygienically prepared healthy foods and drinks.

Quality Mid-Day Meals- (School meal programmes) provide balanced, nutrient-rich meals that meet children's nutritional requirements, support growth, improve concentration and enhance academic performance.

School Gardens- Establishment of kitchen or nutrition gardens where children can grow fruits and vegetables, improves nutrition awareness, environmental responsibility and acceptance of fresh produce.

Promote Daily Physical Activity -Encourage at least 60 minutes of moderate-to-vigorous physical activity engaged with Sports and Outdoor Games, which improve cardiovascular fitness, muscle strength, teamwork, leadership, and emotional well-being while yoga and relaxation techniques enhance flexibility, posture, concentration, stress management.

Regular Health Check-ups- Periodic health screening for growth monitoring, vision, dental health, anaemia, nutritional deficiencies, and BMI helps identify health issues early and enables timely intervention.

Healthy schools create healthy children. When nutritious food, physical activity and nutrition education becomes a part of the school culture, children are empowered to make healthy choices that last a lifetime.

Healthy schools don't just Educate—they Nourish, Inspire, and Empower!

Role of Government and Community:

We all know that food habits (dietary behaviour) cannot change overnight and it takes a lot of conscious steps to avoid unhealthy dietary behaviour. The School Health Programme promotes

holistic child health through regular health screening, nutrition education, immunisation, mental health support, deworming and health promotion activities.

National nutrition programmes and community participation play a crucial role in preventing malnutrition, improving dietary practices, and fostering healthier future generations.



Local bodies, NGOs, healthcare workers, teachers and volunteers can Promote nutrition education, encourage kitchen and school gardens, Organise health camps, nutrition counselling, and growth monitoring.

In order to instil confidence among citizens that even a small change in the diet can bring about a positive significant change on their health, FSSAI initiated a nation-wide social media campaign “*Aaj Se Thoda Kam*” starring Mr Raj Kummar Rao.

It encourages the consumers to gradually decrease the consumption of salt, sugar and fat; and manufacturers to reformulate their products. PM POSHAN (Mid-Day Meal Scheme), a Supplementary Nutrition Programme provides nutritious meals to children in government and government-aided schools.

“EAT RIGHT INDIA- Launched by the Food Safety and Standards Authority of India (FSSAI), this movement encourages safe, healthy, and sustainable diets through nutrition education and food labelling.

POSHAN ABHIYAAN (National Nutrition Mission) adopts a life-cycle approach, focuses on reducing stunting, wasting, anaemia and low birth weight through nutrition education, growth monitoring, behaviour change communication, and convergence of multiple sectors.

The Maharashtra Government, Food and Drug Administration, FDA, has banned the sale, advertisement, and free distribution of processed or ultra-processed foods and drinks High in Fat, Sugar, and Salt (HFSS /JUNK) within 50 meters of school premises to promote healthy eating habits among children. The United Kingdom has enforced advertising bans on television and digital platforms, prohibiting influencer partnerships and multi-buy supermarket promotions for HFSS products.

Key Takeaways:

Childhood and Adolescence is a critical window for establishing lifelong dietary habits. Nutrition is the first investment in a child's physical, mental and emotional well-being. *As nutritionists, we don't just recommend food—we help build healthier futures.*

Every child deserves not just enough food, but the right food to reach their full potential and the opportunity to grow, learn and thrive.

In Conclusion, ensuring optimal nutrition throughout childhood and adolescence is a public health priority. Creating healthy eating habits is a team effort. Good Nutrition Education begins at home, is reinforced in schools, supported by government policies, and strengthened by active community participation.

At the end of the day, healthy eating isn't about perfection—it's about making better choices, one meal at a time. Every balanced plate, every homemade meal and every healthy habit is a small step towards raising happier, healthier and more confident children.

After all, today's little bites become tomorrow's big dreams!

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