Train the Trainers

Module 1 – Teachers



www.aahaarkranti.org







Learning Objectives

What is Positive Nutrition?

Nutrition and Your Health

Nutrition and Your Immunity

Nutrition and Your Brain

Aan Kranti

State No. 3the Park





What Is Positive Nutrition?





Positive Nutrition fulfills all nutritional requirements of a body

- Nothing less, nothing more

- Nutrition is the single most important factor that we could control for our health and wellbeing.
- Healthy nutrition is more important than medicines that any doctor could prescribe.
- Nutrition alone could be used to alter or reverse diseases including even chronic ones.



Seven Steps To Your Health, Starting Today!



1 Eat a mindful, balanced diet.



4 Eat before extreme hunger and cravings.



Eat a rainbow of fruits and veg.



5 Drink enough water every day.



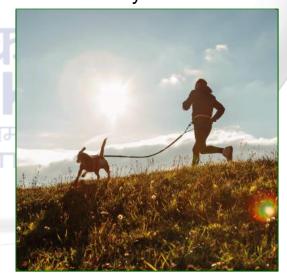
6 Get enough sleep and reduce stress.



Avoid processed/ preserved foods.



7 Exercise regularly and stay active.







A Nutritious Diet Must Include All Food Groups



Macronutrients



CARBOHYDRATES (including Fiber)
Provide energy to the body



FATS
Help development of the Nervous System



PROTEINS
Help growth and build a healthy body

Micronutrients



VITAMINS and MINERALS
Help cell function, growth, immunity & overall development

Spices



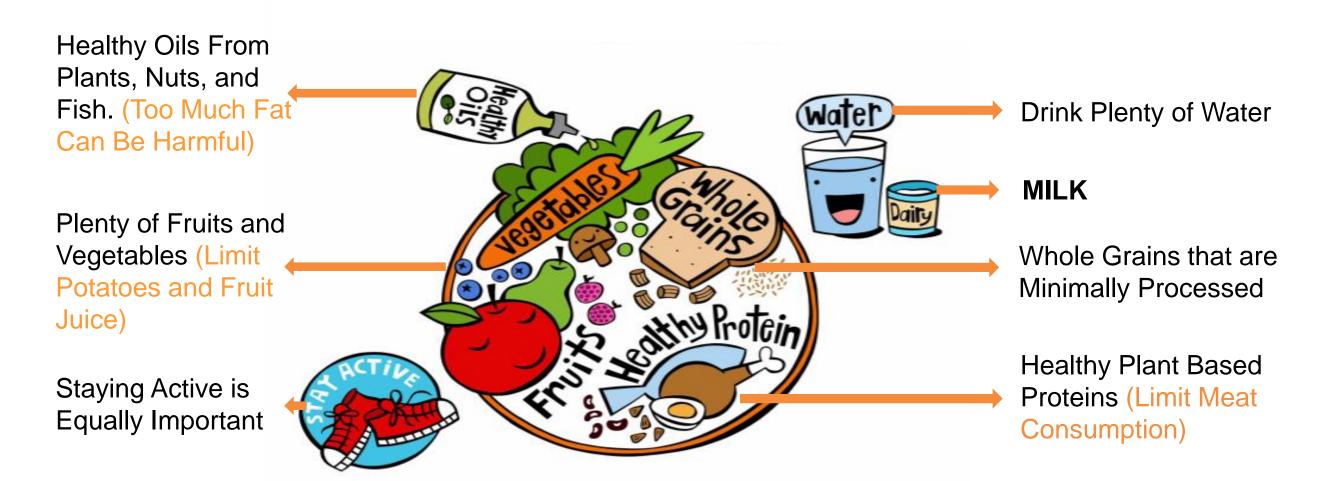
SPICES
Keep the body and the mind healthy and help boost immunity





Kids' Healthy Eating Plate





A healthy plate includes all food groups in proportion.



5

Traditional Indian Thalis

- Indian culinary traditions are balanced, with nutritionally rich Thalis in all regions/ states.
- Locally grown and seasonal flora and fauna, cooked in local recipes add to nutritional wholesomeness.





Source: <u>Columbia University</u>, <u>CSIR</u>, <u>Indian Institute of Public Health</u>, <u>Journal of Ethic Foods</u>, <u>University of Chicago</u>, <u>UNSW Australia</u>, <u>Yale Journal of Biology and Medicine</u>



Eat A Rainbow

- Each color depicts a different micronutrient with a different benefit.
- No color is inferior or superior, however it's important to Balance all the Colors.
- A rainbow minimizes the risk of chronic diseases.
- Seasonally grown and local fruits and vegetables are especially beneficial.



Source: Amer J of Phytomedicine & Clinical Therapeutics, Amer Soc for Nutrition, Harvard SPH, U of Mauritius



prunes raisins

purple figs

dates eggplants

grapes

blueberries

black currants



pomegranates radicchio red radishes red apples red grapes red peppers red potatoes rhubarbs strawberries tomatoes watermelons

RED & PINK

cherries

cranberries

pink grapefruit

The best way to get all of the vitamins, minerals and nutrients you need is to eat a variety of colorful fruits and veggies. Add color to your plate each day with the five main color groups.

GREEN

artichokes asparagus avocados

bok choy broccoli

Brussels sprouts celery

collard greens cucumbers green beans

green cabbage green grapes green onions

green peppers kale

kiwis leeks limes

mustard greens

okra pears peas

romaine lettuce snow peas spinach

sugar snap peas watercress

zucchini

mushrooms bananas cauliflower onions garlic potatoes Jerusalem parsnips artichokes shallots

acorn squash butternut squash apricots cantaloupes carrots corn grapefruit lemons mangoes

pineapples pumpkins summer squash sweet potatoes tangerines yams yellow apples nectarines yellow peppers yellow squash oranges

orange peppers

papayas

peaches



Each Color Is For Different Micronutrient(s)





RED Vitamin A & C, manganese, antioxidants (quercetin, lycopene)

- Reduces risk of cancer and heart disease.
- Increases immunity and reduces inflammation.
- Helps eye, skin, and hair health.



GREEN Vitamin K & B, folate, potassium, antioxidants (chlorophyll, carotenoids, lutein)

- Promotes eye, lung, liver health and healthy cell.
- Reduces risk of cancer.
- Increases blood clotting. Lowers blood pressure.



YELLOW/ ORANGE Vitamin C, A, & B6, potassium, folate, antioxidants (b-carotene, lutein, a-carotene)

- Reduces risk of cancer and heart disease.
- Promotes eye/skin/hair health.
- Increases immunity and decrease inflammation



PURPLE Different B-vitamins, antioxidants (anthocyanins, resveratrol, flavonoids)

- Reduces risk of cancer and heart disease.
- Protects cells from damage and prevents aging.
- Improves memory.



WHITE/ BROWN Vitamins C & K, folate, potassium, antioxidants (allicin, quercetin, anthoxanthins)

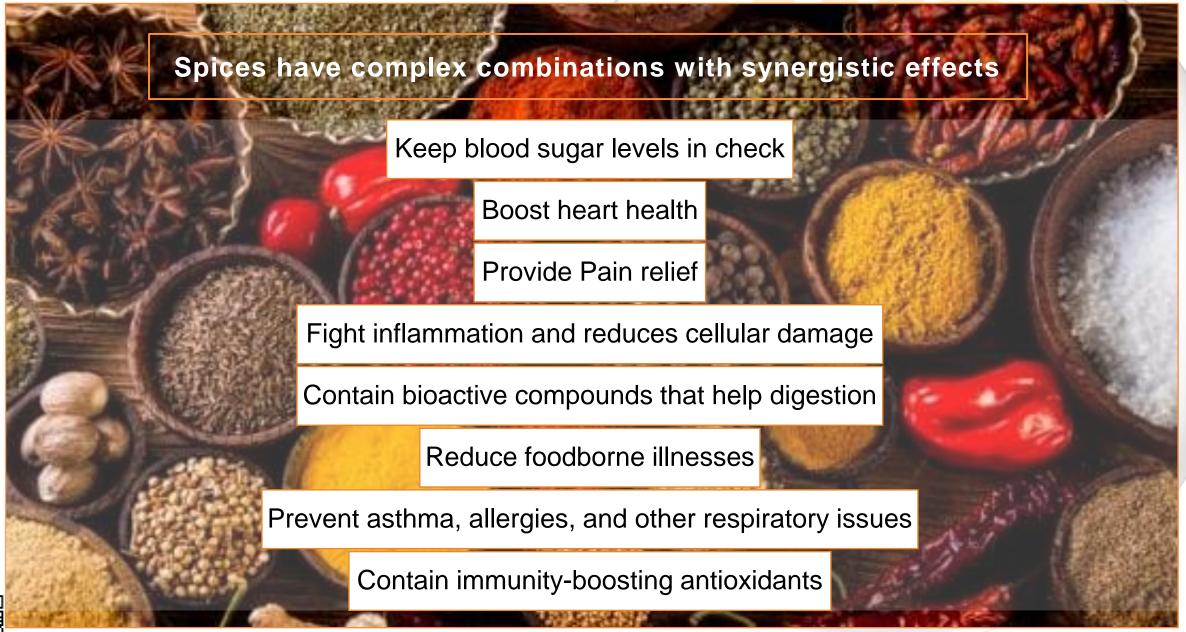
- Lowers cholesterol.
- · Promotes eye, skin and bone health.
- Reduces risk of cancer and heart disease.
- Protects cells from damage. Increases immunity.















Avoid Processed, Packaged And Fast Foods





Freshly Prepared/ Natural Foods

- Foods with little or no pre-processing, including fruits and vegetables.
- They are nutrient-dense, rich in vitamins, minerals, fibers and healthy fats.
- No unnecessary sugar or salt.
- Washing, cutting, freezing, or cooking can be helpful and healthy.



Processed/ Packaged/ Fast Foods

- Highly processed foods far from their natural state, including junk/ fast food.
- They are calorie-dense, nutrient-poor, low in vitamins, minerals, and fiber.
- Contain added sugar, salt, unhealthy fats such as trans-fat, and other preservatives, often artificial.





Avoid Foods With Synthetic Preservatives





- Chemical / synthetic preservatives are frequently added to packaged and other foods:
 - For increasing shelf life by preventing bacterial contamination.
 - To make food distribution more convenient.
 - To make the food-colour appealing.
- Preservatives as additives may alter gut bacteria, potentially leading to chronic diseases.
- Not all preservatives are bad for health.
 - Good preservatives include salt, sugar, spices, oils and other natural preservatives.

UTTAM AAHAAR, UTTAM VICHA

 Always check food labels of packaged foods to ensure there are no synthetic preservatives.





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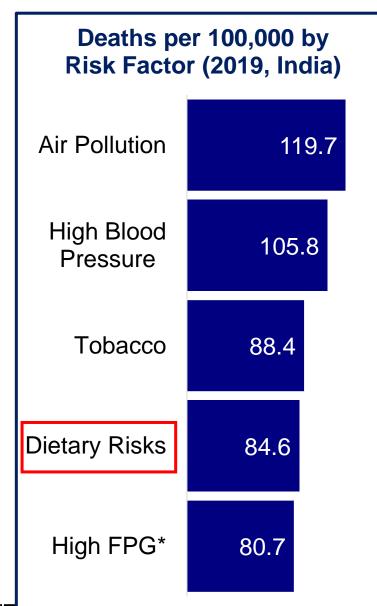
UTTAM AAR, UTTAM VICHAAR

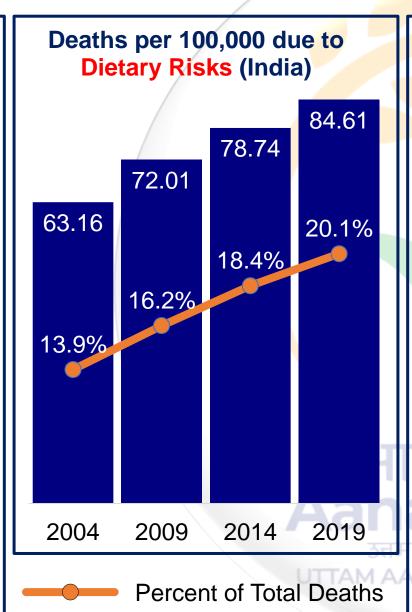


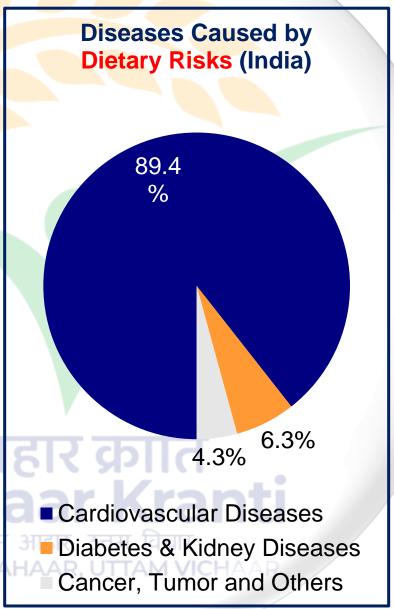














^{*} Fasting Plasma Glucose – An indicator of Diabetes/ Pre-diabetes
Source: Institute for Health Metrics and Evaluation, University of Washington



Malnutrition Adversely Impacts Most Body Systems...





Poor Dental Health, Asthma, Sleep Apnea

Weak Immune System, Autoimmune Diseases

Obesity, Wasting

Non-Alcoholic Fatty Liver

Osteoporosis, Arthritis

Type-2 Diabetes (Sugar)

Poor Appetite and Digestion

Poor Cognitive Function, Loss of Memory, Anxiety, Learning Problems, Increased Risk of Stroke, Depression

Hypertension (Blood Pressure), Heart Disease

Gastroesophageal Reflux Disease, Peptic Ulcer

Poor Gut Health, Chronic Constipation





...And Leads To Multiple Life-Long Health Problems



Examples of Malnutrition Driven Health Problems

Several Types of Cancer

Worsened Quality of Life

Stunting and Wasting for Children

Slower Wound Healing

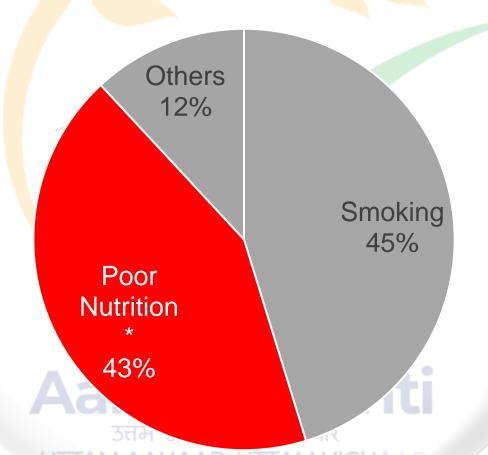
Eating Disorders

Metabolic Diseases

Many Other Chronic Illnesses

Overall Lower Life Expectancy

Causes of Preventable Cancers



^{*} Excess body weight, alcohol consumption, poor nutrition, and physical inactivity





Positive Nutrition Is The Right Answer



1 Leads to an overall healthy growth.



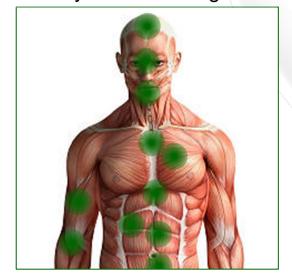
Improves gross and fine motor skills.



Develops sharper brain and memory.



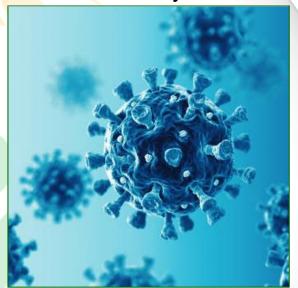
5 Leads to stronger systems and organs.



6 Reduces risk of lifestyle diseases.



3 Supports a strong immune system.



7 Maintains a healthy gut (microbiome).



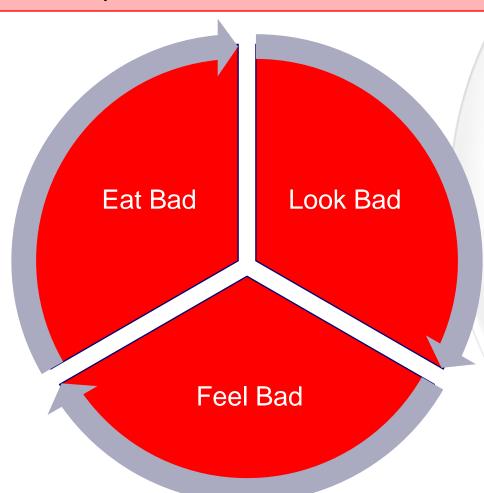


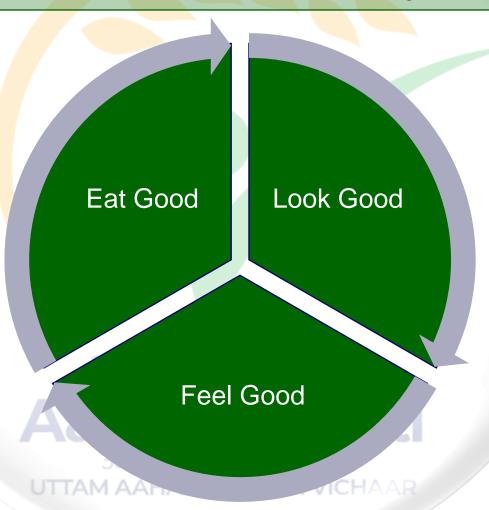
We Are What We Eat



Our appearance and mood are dependent on what we eat.

Balanced diet leads to better physical health and mental wellbeing.







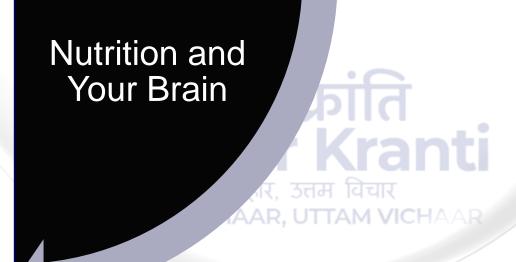


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Nutrition Is Important To Life-Long Brain Development

Seven Years

Two to

Brain and Birth nervous system begin to develop

Initiation of

Before Development

Coordination of senses and responses

Object

Birth to Permanence

Two Years

Thought process

Focus

Inability to understand that actions are reversible

Egocentrism

Childhood is the most critical time for brain development

even to

Conversation

Hierarchical classification

Mind applied to concrete events

Mind applied to abstract

ideas

Logical, systematic thinking

Age 11 Onwards



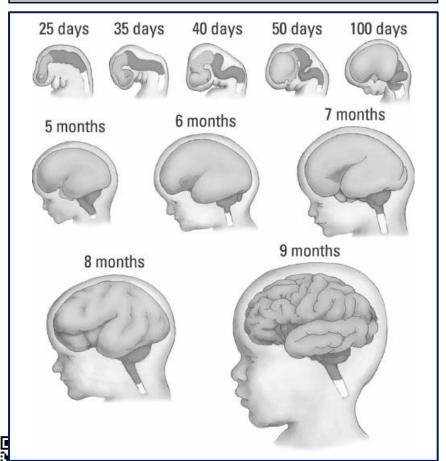


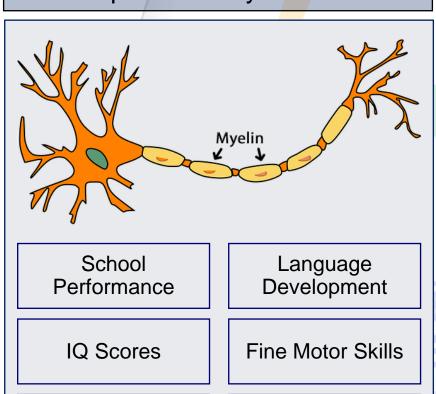
Brain Needs Positive Nutrition Till Age 25 And Beyond

An expectant mother's nutrition is very important because it shapes physical and mental health of the baby throughout life.

Nutrition for toddlers, from breast or cow-milk, supports brain development through a process called Myelination and impacts many skills.

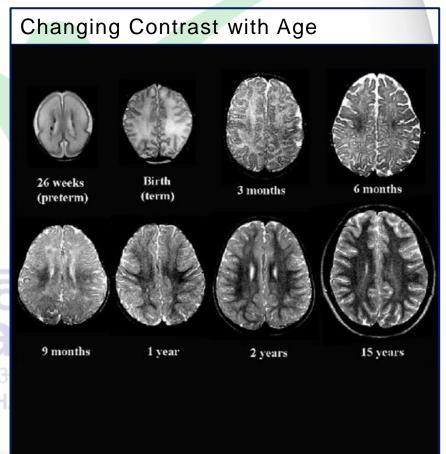
Brain keeps developing till 25. Nutrition during youth is related to cognitive outcomes. Iron deficiency can esp. be a risk.





Faster/ More

Organized Brain



Source: Prenatal development of the human brain showing a series of embryonic and fetal stages. (Adapted from Cowan, 1979), <u>Additional references,</u> Nutrition and Developing Brain, Lise Elliott's What's Going on in there?

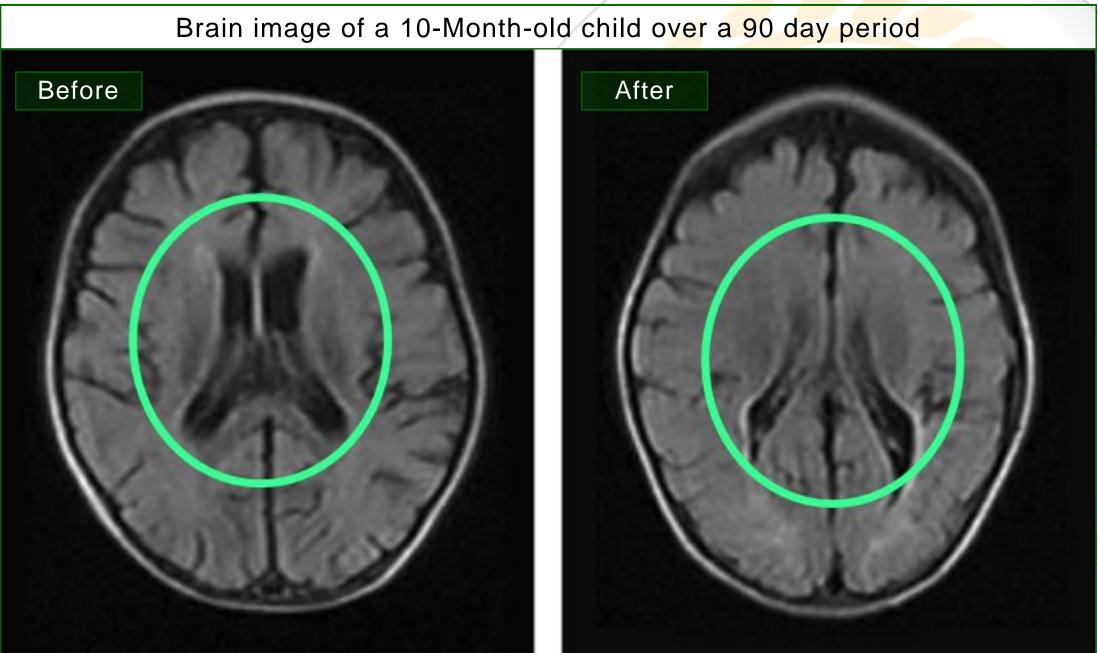
Behavioral

Development



Nutritional Interventions Show Immediate Results







Source: Life Science Journal



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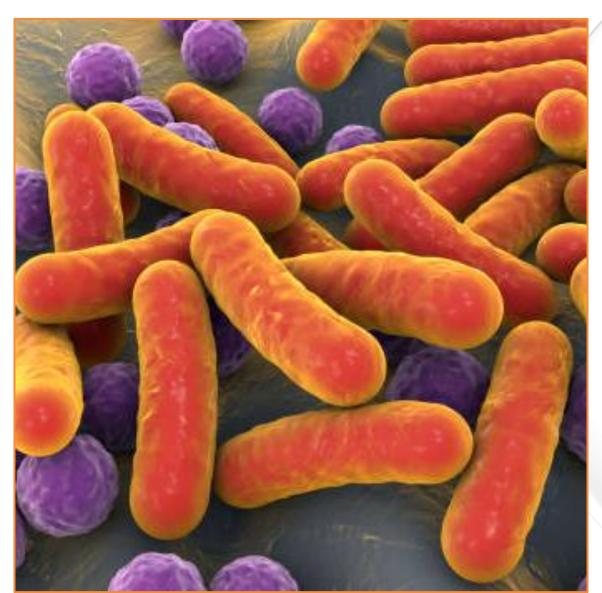
Nutrition and Your Immunity





Nutrition Leads To Immunity Via Gut Microbiome





Positive Nutrition

Optimum Health Virtuous Cycle

Diverse Gut Microbiome



Improved Immunity

UTTAM AAHAAR, UTTAM VICHAAR





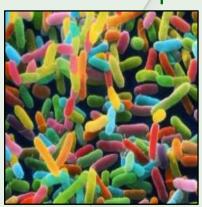
Nutrition, Microbial Health And Immunity Are Linked



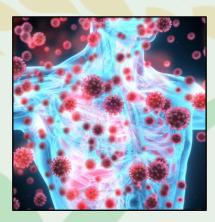


Traditional and natural foods

Positive Impact on Health



High microbial diversity



High interaction with the immune system



Packaged and processed foods

Negative Impact on Health



Low microbial diversity



Low interaction with the immune system





Preservatives Are Particularly Harmful For Microbes



- Chemical Preservatives accumulate in our body over time.
 - Long-term effects continue even after we stop consuming them.
- Preservatives are generally known to:
 - Transform into carcinogens after interacting with gastric acids.
 - Kill both good and bad gut microbes.
 - Cause stress on microbes, causing them to produce toxins.
- Even traditional preservatives, such as sodium benzoate, in use for long time, have raised health concerns.

Some foods with preservatives







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Good Nutrition Is The Greatest Investment

Let us eat "Food as Medicine"

If not, "Medicine Will Become Our Food"

- Children are our most precious treasures
 - Nourish children with good nutrition
 - Primary consideration is health and wellbeing
 - Invest well in long-term health
- Combine elders' pearls of wisdom with Doctors' emphasis on optimum nutrition
- Food is the best Medicine to ward away many diseases





National Awareness for Positive Nutrition

आयुष्मान

Increase in life-expectancy, malnutrition and other metrics.

विद्वान्

Improvement in cognitive and academic performance.

कृषि प्रधान

Better yields per acre with push for valued added horticulture.



समृद्ध

Domestic/ export opportunities for food processing industry.

स्वस्थ

A return to traditional knowledge on nutrition with Ayurved.

विश्वगुरु

Agricultural and developmental role model for developing world.



