

### INTRODUCTION

- The idea of boosting your immunity is enticing and possible.
- The immune system is a system, not a single entity. To function well, it requires balance and harmony.
- No one food/supplement can prevent illness. However, it is prudent to include some specific nutrients on a regular basis.

### **HYDRATION**

Hydration helps to relieve congestion and flushing of toxins and maintain the mucus membrane of the nose and upper respiratory tract intact



**Sources:** Plain Water, Coconut Water, Nimbu Pani, Green Tea, Herbal Tea, Infused Water, Soups, Milk, Buttermilk, Unsweetened & Unsalted Drinks, Fruits and Vegetables

### OMEGA 3 FATTY ACIDS

### Enhances the function of Immune Cells



**Sources:** Chia Seeds, Walnuts, Pumpkin Seeds, Watermelon Seeds, Sunflower Seeds, Fish like Mackerel, Tuna, Salmon, Bombay, Rani Fish

Various Recipes : • Smoothies • Curry • Raw or lightly roasted seeds • Drinks • Chutney

### PROTEINS

#### Plays a role in the body's healing & recovery



**Sources:** Soy Products, Unsalted Nuts and Seeds, Beans and Pulses, Eggs and Poultry, Learn Meat, Fish & Sea Food, Milk And Milk Products

Various Recipes : • Curries – Veg & Non Veg • Sprouted Salads • Dals & Dal Soups • Snacks • Milkshake • Curds • Paneer, And Cheese

### VITAMINS

#### Vitamin A

Protects by keeping skin & tissues in the mouth/ stomach/ intestines & respiratory system healthy.



**Sources:** Sweet Potatoes, Carrots, Mango, Papaya & Apricots, Eggs, Glv's: Spinach, Milk & Milk Products

Various Recipes : • Curries, Salads, Juices, Pickles • Chutney, Soups • Cut fruit, Juices, Shakes, Jams, Jellies • Milk, Shakes, Sweets

### VITAMINS

#### Vitamin D

Antimicrobial Effects, Reduces Proinflammatory Cytokines and Promotes Healthy Gut Microbiota





Sources: Milk & Milk Products, Sunlight exposures between 11 am-1 pm (Exposure of 18% of Body), Fatty Fish, Eggs, Liver

### VITAMINS

#### Vitamin B6

Intestinal Immune Regulation, Cytotoxic Acitvity, Reduces Inflammation, Amino Acid Synthesis & Metabolism



Sources: Soyabean, Lentil, Masoor Dal, Whole moong, Val Banana, Drumstick Leaves, Fenugreek Leaves, Garlic, Ginger Fresh, Curry Leaves, Green Chilli, Methi Seeds, Jeera Seeds, Whole Wheat Flour, Brown Rice, Parboiled or Ukada Rice, Barley, Jowar, Bajra, maize

Various recipes : Dal, Whole pulses, Curries, Bhaji • Banana Bread, Banana Milkshake, • Curry leaves Chutney, Idli Dosa, Sambhar, Chikki, Mixed Nuts Milkshakes

### VITAMINS

#### Vitamin B12

Gut microbiota, T-Cell Production, Immunomodulator, Intestinal Immune Regulation





Sources: Fish, Meat, Poultry, Eggs, Milk, and Milk Products. Various Recipes : • Boiled Eggs • Omelette • Poached Eggs • Curries • Milkshakes and Smoothies

### VITAMINS

#### Vitamin E

Acts As An Antioxidants & Radical Scavenger and Helps In Modulating the Host Immune Responses In Elderly



Sources: Sunflower Seeds, Safflower Seeds, Garden Cress Seeds, Flax Seeds, Almonds, Pistachio

Various Recipes : Roasted / Soaked Seeds, Salads, Drink & Smoothies, Dry Chutney Folate-Idli, Dosa

## VITAMINS

#### Vitamin B9

Cytoxic Activity, Antibody Production & Metabolism, Antibody **Response To Antigens** 



Sources: Soyabean, Matki, Rajma, Lentil, Masoor dal, Chawli, Dal, Black chana, Mango, Papaya, Spinach, Fenugreek Leaves, Amarnath Leaves, Beet Root, Fresh Peas, Capsicum, Drumstick, Walnut, Pistachio, Groundnut, Til Seeds, Flax Seeds, Sunflower Seeds

Various Recipes: Dal, Whole Pulses, Curries, Bhaji • Vegetable Chilla, Curry Leaves • Chutney, Idli Dosa, Sambhar, Chikki,

### VITAMINS

#### Vitamin C

Simulates Antibody Formation, Supports Cellular Functions



Sources: Green Leafy Vegetables, Citrus Fruits (Amla, Guava, Oranges, Grape Fruit), Papaya, Strawberries & Raw Mango, Capsicum, Lemon

Various recipes : • Curries, Chutney, Soups • Cut fruit, Juices, Shakes, Jams, Pickles, Mouth Freshener • Salad, Pickles Raw or Lightly Roasted Seeds

### MINERALS : ZINC & SELENIUM

#### Helps Reduce Oxidative Stress Altering Host Response **To Viral Infections**

Whole Grains, Dals and Pulses, Soybeans, Black Til, Garden Cress Seeds, Watermelon Seeds, Pumpkin Seeds, Chicken & Eggs Chia Seeds, Walnuts, Sunflower Seeds, Fish like Mackerel, Tuna, Salmon, Bombay, Rani Fish



**Sources:** Whole Grains, Dals and Pulses, Soybeans, Black Til, Garden Cress Seeds, Watermelon Seeds, Pumpkin Seeds, Chicken & Eggs Chia Seeds, Walnuts, Sunflower Seeds, Fish like Mackerel, Tuna, Salmon, Bombay, Rani Fish

Various Recipes: • Fish and Chicken: Curry, Grilled, Pulav • Dal, Chilla, Chutney • Rotis / Parathas / Dosa / Whole Grain Khichdi • Egg: Scrambled / Curry/ Boiled/ Omlette • Wheat Flour: Roti , Parathas, Chilla • Soya Pulav • Curry / Biryani / Pulav • Dals/ Dhokla/ Dal Dhokli • Mukhwas

### **PREBIOTICS & PROBIOTICS**

Helps to Reinforce The Immune System, Increases Immune Responses and Promotes Specific Immune Signaling



Prebiotics: Special Form of Dietary Fibers That stimulates The Growth of Gut Microflora

Sources: Garlic, Onion, Banana, Barley, Oats, Apples, Flax Seeds, Wheat Bran

Various Recipes: • Porridge, Khichdi • Roasted Flax Seeds Carefully Washed & Wiped Fruits

### MINERALS : MAGNESIUM

#### Plays A Role in Innate And Acquired Immunity By **Boosting Immunoglobulins**

Plays a Role in Innate and Acquired immunity By Boosting Immunoglobulins



Sources: Ragi, Jowar, Pulses & Legumes, Green Leafy Vegetables, Almonds, Cashews, Black Til, Sunflower Seeds, Garden Cress or Halim

Various Recipes: • Curries, Bhakri, Chilla, Porridge Drinks, Smoothies & Soups • Vegetables • Idli, Rotla & Thaleepith • Raw or Roasted Nuts

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Probiotics: Specific Strains of Live Bacteria Found in Foods Sources: Fermented Milk, Yoghurt, Fermented Food Products Various recipes Using Probiotic Containing Curd : • Curd Rice • Kadhi, Curd Poha • Fermented Foods

### HERBS, CONDIMENTS & SPICES

Immune Boosters From The KitchenPossess Antiviral / Antimicrobial Activity Which Help To Fight Infections



Sources: Ginger, Tulsi, Neem, Lemongrass, Turmeric, Garlic, Moringa, Mint, Kalonjee, Star Anise, Jeera, Coriander Seeds, Cinnamon, Black Pepper, Dry Ginger, Munakka, Ajwain, Cloves, Fenugreek Seeds Various Recipes: • Tea • Decoctions • Mouth Freshener • Additives • Chutney



Issued in Public Interest by:

# INDIAN DIETETIC ASSOCIATION