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IMMUNITY AND NUTRITIONAL MANAGEMENT IN COVID

WAVES

- Ms. Chinmayee Pattnayak

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# IMMUNITY AND NUTRITIONAL MANAGEMENT IN COVID WAVES

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#### Ms. Chinmayee Pattnayak

Asst. professor, Food Nutrition and Dietetics, Faculty of Agriculture, Sri Sri University, Cuttack



#### INTRODUCTION

ovid is no more a threat to society. People are more conscious and self-confident to manage the after effects. With the wake of Covid pandemic people are more inclined towards the immunity and immunity building foods. In all the three waves food is one which is coming under the major commodities. But the handling, packaging, preparing etc. involves the

transmission related risks, The reason is any possible chances of contact by an infected person. After maximum coverage in vaccination, next important step is to develop immunity in the body to cop up with the virus, other pathogens and the after effect of the covid management.

According to "National Institute of Nutrition" food guidelines, now the slogan, which everybody should follow is "MY FOOD PLATE OF THE DAY". The plate should contain different types of food groups with the variety and diversity in it. Half portion of the plate should be comprised of vegetables, green leafy vegetables, fruits and root veggies followed by cereal, millets, pulses, milk and milk products then egg, fish, meat, nuts and oils of different types.

#### NUTRITIONAL FACTS

Immunity is an integrated system. It is not dependent on single nutrient; all the nutrients play their respective roles having interaction and interrelation with each other.

In micronutrients, vitamin A, D, E, K, Selenium, Zinc, Iron, Copper, in macronutrients amino acids, essential fatty (omega 3 fatty acids) are important for optimal immunity of the body.

SL. NO.	NUTRIENTS	FUNCTION	SOURCES	RECIPES
1.	Proteins	Responsible for body healing and recovery.	soya products, milk and milk products, pulses, legumes, unsalted dry nuts and seeds, lean meats, fish, sea foods, egg, poultry.	Sprouted salads, soups, milk shake, snacks, curry
2.	Omega three fatty acids	Enhance the function of immune cells.	Chia seeds, pumpkin seeds, walnut, watermelon seeds, sunflower seeds, fish like tuna, salmon, Rani fish etc.	Smoothies, chutney, curry, raw or lightly roasted, drinks
3.	Vitamin A	It protects skins, tissues of mouth, stomach, intestine, respiratory system	sweet potato, carrot, papaya, mango, apricot, spinach, milk and milk products.	Salad, juice, pickle, shake Cut fruits, jam, jelly, curry

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4.	Vitamin D	The particular vitamin is having anti-microbial effect	Milk and milk products, fatty fish, egg, liver and sunlight.	Egg, fish preparations, milk shakes etc
5.	Vitamin E	Acts as Antioxidant.	Garden cress seeds, almonds, pistachio, flax seeds, sunflower, safflower seeds.	Roasted, soaked seeds, smoothies, salad, drink, chutney
6.	Vitamin B6	Intestinal immune regulation, reduces inflammation	soyabean, lentil, masoor dal, whole moong, Bael, drumstick leaves, fenugreek leaves, fresh ginger, garlic, methi seed, cumin, whole wheat flour, brown rice, jowar, barley, bajra, maize.	Dal, bhaji, curry Chutney, snacks
7.	Vitamin B9	Helps in antibody production and response to antigen	soya, rajmah, lentil, masoor, black chana, mango, papaya, spinach, fenugreek green, amaranth, beet root, peas, capsicum, drumstick, walnut, pista, ground nut, til, flax seeds	Dal, bhaji, curry
8.	Vitamin B12	Responsible for gut microbiota and T cell production(immu nity)	Fish, egg, meat, poultry, milk and milk products.	Egg recipes poach, omelet, scrambled egg, shake, smoothies, curries
9.	Vitamin C	It stimulates antibody formation	Green leafy vegetables, citrous fruits	Soup, salad, cut fruits, juice
10.	Pre biotics	special type of fiber stimulates growth of gut microflora	Garlic, onion, banana, barley, oats, apple, flax seed, wheat bran.	Porridge, snacks, roasted seed, chutney
11.	Pro biotics	These are specific strains of live bacteria found in food.	Fermented milk and other products, yoghurt	Curd recipes like kadi, appam
12.	Zinc and Selenium	reduce oxidative stress, resisting viral infection	Whole grain, dal, black til, garden cress seed, watermelon, pumpkin seed, chia seed, tuna salmon	grilled fish, chutney, smoothies
13.	Magnesium	It boosts immunoglobulin.	Ragi, jowar, pulses, legumes, green leafy, almonds, cashew	Porridge, chilla, curry,

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14.	Herbs, condiments and spices	Acts in antiviral and antimicrobial activity.	Ginger, tulsi, neem, lemon grass, turmeric, garlic, kalongi, jeera, coriander, cinnamon, black pepper, cloves, ajwain	Tea, chutney, decoctions, mouth freshener, chutney
15.	Hydration	The state maintains the mucous membrane of nose and respiratory tract, helps in flushing toxins.	ltidisciplinary	Plain water, coconut water, nimbu panni, green tea, herbal tea, soup, milk, butter milk, un sweetened and unsalted drink,

#### www.idaindia.com/covid-tool-kit

So here are some of the nutrients and their functions mentioned below with a glance of respective sources and recipes-

#### **Conclusion:**

So, in management practices of covid, emphasis on diet and lifestyle should be at utmost priority. Choosing healthy, locally available foods, cereals, grains, fresh fruits and veggies, preference of traditional methods and recipes should be kept in mind. Avoiding over and under eating with good habit of portion control in different food groups, avoiding consumption of highly processed food, trans fats, sugar should be done to suppress undesirable free radical formations in the body, ensuring the exposure to sun light for availing Vit D3 in the body are also important. Moderate yoga, exercise will keep body fit, stress free by maintaining immunity in the body. Body hydration is also a major factor for proper physiological functioning, metabolisms and utilization of the nutrients in the body. Smoking and alcohol intake should also in control to avoid the hindrance in immunity. Taking adequate sleep, always being with your family and friends affect the happy hormones. Always go for right professional for medical and nutritional advice. The pandemic has not only drawn our attention towards enhancing immunity or body's resistance for a particular

communicable disease, but also taught us to keep our body future ready for noncommunicable, fatal, degenerative diseases. Because we should not forget the say "Let food be thy medicine and medicine be thy food" (Hippocrates).

