



## Development of Nutrition product to improve immunity in the control of covid 19,

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### Abstract.

Developed Nutritional product to improve immunity in the control of covid 19, Developed product composed of turmeric, brown rice, green tea powder, ginger powder, amla, fenugreek, clove, pepper, cinnamon, cardamom, omkhal, bajra, ragi, milk powder etc, with accurate proportion in such way to meet the nutrition requirement to improve the physiological immunity power. Developed product tested in terms of sensory evaluation, palatability, taste, aroma, colour etc. Storage of Product was improved by adding salt and astringency was reduced by adding milk powder and to proportionate the protein composition, while using the product boiled the table spoon of product with teaspoon of jaggery to improve its palatability as necessary taste. Instructed to use once per day in the morning after breakfast. Evidenced that developed nutritional product composed of mainly antioxidants, biocompounds, and balanced nutrition to improve the health in terms immunity power to resist Corona virus to control covid. Introduction Good nutrition is fundamental to improving immunity. The immune system is the body's defense against disease and infection and it has long been established that several factors influence the function of the immune system including stress, sleep and nutrition. The WHO guidance on diet, especially during the current pandemic states that "good nutrition is crucial for health, particularly in times when the immune system might need to fight back" (WHO, 2020). Providing a diet high in nutritious foods rich in vitamins and minerals supports optimal function of the immune system by providing antioxidants to slow damage of cells caused by free radicals assisting in T-cell production. Although, presently, we do not have data concerning nutritional factors in relation to the risk and severity of viral diseases such as COVID-19 the role of nutrition in immunity has been well established. Good nutrition is thus important in supporting an optimum immune system which can reduce the risk of viral infections. Diet Rich in nutrition, antioxidants, minerals, bio compounds help to build immunity in the body.

Methodology:

Nutritional product was developed for prevention and control of Corona various food groups of biocompounds and antioxidants products such as turmeric, brown rice, green tea powder, ginger powder, amla, fenugreek, clove, pepper, cinamon, cardamom, omkhal, 5 percent of brown rice, bajra, ragi, green gram, milk powder etc, to were added to stabilize the health through providing

biocompounds and antioxidants and various nutrients to procure the health. food groups were selected randomly with the concept to fulfill the requirement of antioxidants, biocompounds, protein, vitamins and minerals to improve the immunity power of the body to fight against coronavirus. Selected food items with good quality of good grade. Subjected to cleaning and washing with pure water and dried to maintain the purity, cleaned spices, pulses and cereals were added in the proportionate quantity, of 2 gram each of spices ginger, turmeric, pepper, clove, cardamom, cinemom, cardmom, omkal, amla, fenugreek, pepper, green tea, etc, 5 gram of cereals and pulses and milk product and leaf added with to proportionate quantity to meet their requirements of antioxidants, vitamins, minerals, and other essential requirement for the body, to fight against the disorders causing virus by strengthening the immunity.. Partially processed food products were powdered and required quantity of salt was added to enhance the preservation and taste subjected to standardization in terms of sensory evaluation concepts such as taste, aroma, colour, palatability etc are evaluated in triplicate. statistically standardization for the samples in terms percentage and mean. Standardised product was packed with hygienic food pouches.

Results and discussion: Table 1 Composition of value added spices of nutritional product

SI No	Spices	Quantity (GM's)	Percentage
1	ginger	2	4%
2	turmeric	2	4%
3	pepper	2	4%
4	clove	2	4%
5	cardamom	2	4%
6	cinnamon	2	4%
7	Amla	2	4%
8	Omka	2	4%
9	Fenugreek	2	4%
10	Pepper	2	4%

The information regarding value added spice food products in the table 1 4 percent of proportionate quantity of spices such as ginger, turmeric, pepper, clove, cardamom, cinnamon, amla, omka, fenugreek, pepper etc. Recent research reveals that dietary spices in their minute quantities has an immense influence on the human health by their antioxidative, chemopreventive, antimutagenic, anti-inflammatory, immune modulatory effects on cells and a wide range of beneficial effects on human health by the action of gastrointestinal, cardiovascular, respiratory, metabolic, reproductive, neural and other systems (Henrietta, et al 2017)

Table 2. composition of cereals and pulses and green

SI No	Cereals	Quantity (Grms)	Percent
1	Brown rice	10g	20
2	Green gram	10g	20
3	Milk powder	5g	10
4	Green tea	5g	10

Composition of nutritional products are 20 percent of cereals, pulses and 10 percent of green tea, milk powder etc. To meet the requirements of protein and vitamins and minerals percent share of minerals. percent share of ingredients spices, cereals, pulses and green tea composition of different types of spices such as Whole grains consist of three major parts, including: bran – the outer layer of the grain which contains fibre, omega-3 fatty acids, vitamins and minerals endosperm – the main part of the grain, which contains mainly starch germ – the smallest part of the grain, which contains vitamin E, folate, thiamine, phosphorus, and magnesium.

## Reference

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