

Food Facts, Nutrients and Immunity System for COVID-19 Prevention

Rokayya Sami¹, Jingwen Xu¹, Fuguo Jia¹, and Yang Li¹

¹Northeast Agricultural University

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Abstract

The world is in front of a risky epidemic due to novel coronavirus (2019-CoV or COVID-19). This virus is not only affected human health but it affected the economy and caused completely paralysis in many countries of the world. Various therapeutic, medicinal, scientific, and technological communities are demanding to find out specifically and to approve successful strategies for discovering the effective vaccine which can lead to stop the virus expansion, recognize medication, reduce humanity health hazards, serious infections, death rates. The importance of natural effective nutritious food and diet having peculiar immunity is highlighted which pointed out the unconfirmed dietary option risks which would lead to decline effective precautionary procedures. This report is aimed to focus on the most effective food and nutrients which trigger the body immunity system and prevent the coronavirus type infections.

2. General Treatment For Viral Infection

2.1. Essential Facts

There are following essential facts which are involved in treatment; (1) Effective immunity system is gained in result of regular processes of healthy food within (1-4) months, (2) Effective immunity system occurs as a result of getting (3-4) types of healthy food daily, (3) Maintaining safety procedures, sterilization and avoiding crowded places protects from COVID-19 infection, (4) Need of sufficient sleep, the body can make fewer cytokines which boost immunity against diseases, and (5) Ordinary moderate exercise reported fewer colds temporary boost in macrophages production.

2.2.1. *Nigella sativa* seed oil

N. sativa seed oil contain highly dose of thymoquinone, thymol, dithymoquinone, carvacrol, nigellimine-N-oxide, alpha-hederin and nigellicine [6]. It can be used to cure headache, nasal congestion, intermittent fever and dyspnea, and moreover, dried seeds can be used as inhalation to release cold. *N. sativa* components are used as immune-stimulatory and anti-inflammatory activity due to cytokines [7]. It is an influential, anti-inflammatory which inhibit the lipoxygenase and cyclooxygenase activities [8].

2.2.2. Star anise

The studies established a lot of medical uses mainly in sedative, antimicrobial and anti-inflammatory activities due to shikimic acid and flavonoid quercetin presence which effected on mice intestinal muscles [9]. This is a multitasking plant that may be used for flu, treating respiratory tract blockage, lung swelling bronchitis, and whooping cough. Several medical activities as antispasmodic, aromatic, antiseptic and stimulant were shown by the essential oil [10]. Trans-anethol is also an essential component that can exhibit anti-viral properties [11].

2.2.3. Olive oil

In fact, quite a lot of reports have highlighted as anti-atherogenic and cardiovascular protective effects of olive oil or even olive due to the utmost flavonoids and phenolic acid bioactive compounds [12,13]. Inflammatory mediators consist of prostaglandin E2, nitric oxide, cytokines (IL-6, TNF- α) which can develop some inflammatory diseases such as high fever and sepsis syndrome implicate [14].

2.2.4. Argan oil

Argan oil reports great levels of (g-tocopherol) the most effective antioxidant of tocopherols with highly (squalene) content which can delay or even prevent reactive oxygen species in plasma [15]. Current biochemical reports have exposed that fatty acids can modify the immune responses [16,17]. Definitely, cell mediated immunity, lymphocyte and lymphocyte-derived cytokine proliferation may be inclined by lipids on rats with obvious special effects on the function of immune cell [18].

2.2.5. Sagebrush

Sagebrush (*Artemisia spp.*) has been recognized in small amounts due to the anti-fungal, anti-parasitic and anti-bacterial activities [19]. Number polyphenols and phytochemicals as (ridentin, luteolin, aesculetins, an-tonin, quercetin, scopoletin, coumarin and apigenin) may act as biomarkers of biotic stresses [20]. *Artemisia spp.* is considered one of the medicinal plants that can be a promising alternative for a variety of diseases as human Immunodeficiency virus or (AIDS) with 2 μ g/ml tea extract [21,22].

2.2.6. Basil oil

Basil volatile oil comprises aldehydes, alkaloids, tannins, glycosides, phenols, saponins and terpenes with low amounts of β -carotene and vitamin C. Basil includes several essential oil such as eugenol, β -elemene, τ -cadinol, τ -muralol, α -caryophyllene and α -bisabolol [23]. Basils have been establish to be evidence against many bacterial, protozoal, fungal and specially viral infections. Moreover basil is proved to inhibit carcinogenic cells growth. *O. basilicum* has widespread uses of traditional medicine as headaches, colds, chest, lung problems, influenza, tonic, appetizer, expectorant, neuralgia, catarrh, fevers, coughs, asthma, influenza and bronchitis [24].

2.2.7. Fennel

Fennel seeds were establish to have highly antispasmodic, antioxidant, anti-inflammatory, antithrombotic, antiplatelet, antidementia activities [25]. Moreover, it play necessary role as pain reliever and immunity promoting against COVID-19 [26]. Beside a slight content of niacin, thiamine, riboflavin and ascorbic acid [27].

2.2.8. Garlic

Garlic is used widely against many diseases. *Allium sativum* is used as anti-bacterial and antibiotic to destroy micro-organisms without any side effect for the natural flora in body. It is recommended to be as anticoagulant against clots formation in blood; antiseptic; anti-viral expectorant which promotes discharge mucous secretions in respiratory passages; febrifuge to help in reducing fevers and as stimulant that excites or even quickens tissues to generate additional energy [28].

2.2.8. Peppermint oil

Peppermint is an important herb widely used in various medicines like inflammatory diseases, analgesic, anesthetic, nervine, antiseptic, astringent, expectorant and decongestant. The oil is the main component of cough drops, ayurvedic medicines and ointments, that can be widely used for stomach disorders such as indigestion, gas, acidity treatments [29]. Moreover, to is highly suggested due to the effective anti-plasmod and antimicrobial activities. The essential oil is able to apply virucidal effect on (HSV) directly [30].

3. Conclusion

Eating balanced healthy diet, effective nutrients, hygiene precaution, firmly adhering to social separation, smoking refrain, accompanied by a simple exercise about 20-30 minutes daily can enhance the efficiency

of immune system. Hence, all the potential interventions can be recommended to control the COVID-19 symptoms and infections.

Conflicts of interest

There are no conflicts to declare

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