**Vitamin D and Important Roles in Immun System**

Tülay BİCAN SÜERDEM1, İlke Ceren Kıral1

Çanakkale Onsekiz Mart University, Faculty of Arts and Sciences, Department of Biology, 17020 Çanakkale, TURKEY, e-mail: ilkeceren1759@gmail.com

**ABSTRACT**

Vitamin D is the general name for a group of fat-soluble steroids that are naturally found in foods. It is responsible for the absorption of minerals such as calcium, magnesium and phosphate in the intestines and is one of the important parameters for a healthy immune system. Therefore, it is one of the necessary conditions that our body's vitamin D reserves are full enough for our immune system to function in the best and healthy way. According to the World Health Organization, the amount of vitamin D2 that an adult should take daily is determined as 600 IU / 100 g. However, this value is variable for individuals of all ages.

Scientific researches in vitamin D deficiency can extend from rheumatic diseases to cancer, diabetes, heart diseases, mental retardation, memory problems, depression, rheumatic diseases, allergies, immune system diseases, susceptibility to infection, etc. shows that it paves the way for a group of acute and chronic diseases. Many studies have shown that people with high levels of vitamin D in the blood have a lower incidence of intestinal, breast, ovarian, kidney, pancreatic and prostate cancers. However, since vitamin D is a vitamin that can be stored in the body, excessive intake of it into the body can also cause kidney stones and some other problems. Although vitamin D is not a substance found in high amounts in foods, mushrooms that grow in their natural environment by getting sunlight, especially shiitake (*Lentinus edodes*) are important sources of vitamin D. Cholecalciferol (D3) in animal foods and ergocalciferol (D2) in plant foods can be taken with diet. In particular, taking natural products such as fatty fish (salmon, mackerel), fish liver oil, egg yolk, dairy products and wild mushrooms (*Agaricus bisporus and Pleuretus ostreatus*) will help us replenish the reserves of this important vitamin in our body.

As effective protection method is hand hygiene, mask and social distance against Covid 19, strengthening our immune system with the help of vitamin D has an effective role to protect ourselves from this virus. In this case, the importance of vitamin D enriched foods or vitamin D supportive therapy increases even more.

**Key words:** Vitamin D, control system, macro fungi