

A Balanced Diet with Dairy to Nourish Your Immunity



A healthy diet and good nutrition are the key to a strong and healthy immune system. Dairy products are densely packed with high quality proteins and a wide range of essential nutrients, helping to promote a well-functioning immune system (Górska-Warsewicz et al., 2019; International Dairy Federation, 2020).

Casein and whey that are present in cow's milk are high quality proteins that help to strengthen immunity (McCarthy et al., 2014). Probiotics delivered via fermented milk or yogurt support healthy gut microbiota that modulates the immune system (Kechagia et al., 2013; Maldonado Galdeano et al., 2019).

It is highly important for dairy manufacturers to strategically position vitamins and minerals fortification and enhance their dairy product quality. Fortification has become the accepted practice in the industry to replace the vitamins loss during product processing.

Reduced fat or fat-free milk are commonly fortified with vitamin A (Yeh et al., 2017). This anti-inflammation vitamin plays an essential role in enhancing the immune function and promotes bacterial killing (Huang et al., 2018). Vitamin A deficiency is associated with impaired barrier function, altered immune responses and increased susceptibility to infections (Calder, 2020).

Clinical trials showed that zinc may help in reducing the incidence of infections (i.e. common cold & flu) (Gholamzadeh Baeis & Qasemzadeh, 2017; Hemilä, 2017;). Zinc-fortified milk can be good replacement to the zinc tablets or lozenges, taking into account the attitude of old people to uptake milk as a preferential food (Costarelli et al., 2014).

Fortified milk is the fourth most important source of vitamin D (Harika et al., 2016). Vitamin D helps to keep our immune system healthy and reduces the risk of respiratory tract infection (Rondanelli et al., 2018). Deficiency in Vitamin D is associated with an increased in susceptibility to infection (Aranow, 2011; Cantorna et al., 2015; Hewison, 2012; Prietl et al., 2013).

Selenium-enriched milk is an efficient method for providing good dietary sources of selenium in a human diet (Cobo-Angel et al., 2014). This trace mineral selenium is important for the production and activation of antibodies (Avery & Hoffmann, 2018).

Due to the consumption of predominantly processed foods, we are gaining insufficient vitamins and minerals that are required for optimum health. Dairy products are readily available and widely accepted. Hence it is always popular for food fortification. The micronutrients fortified in dairy products serve as the gatekeepers of the immune function and help us to achieve a balanced diet.

At DPO, we are honoured to be in partnership with **Hexagon** to bring you a range of ingredient choices that could elevate your quality of life.

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