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Healthy nutrition for seafarers during and after COVID-19 pandemic

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Recently the authors of this letter together with a multidisciplinary research team conducted a systematic review titled "Global overview of dietary outcomes and dietary intake assessment methods in the maritime settings" [1]. Our finding demonstrated high access to meat, processed meat and egg, frozen and canned food items, sugary drinks, alcohol, greasy and salty food among seafarers, while consumption of fruits, vegetables, dairy products, and cereals was lower than respective guidelines (e.g. Healthy Food Onboard Merchant Ships [1, 2].

Optimal nutrition strengthens the immune system and may reduce the risk and severity of coronavirus disease 2019 (COVID-19) [3]. Therefore, most studies have recommended high consumption of fruits, vegetables, whole grain foods, low-fat dairy products, and healthy fats (e.g. olive oil, fish oil) and limited intake of sugary drinks and high calorie and salty processed foods [3].

There are some studies that show a link between vitamin D deficiency and the COVID-19 risks and severity [4]. Moreover, optimal levels of vitamin D, A and C play a vital role for maintaining a well-functioning immune system [3]. Also, some nutrients like omega-3 polyunsaturated fatty acids have been associated with anti-inflammatory response and can increase resistance to upper respiratory tract infection [5]. So, adequate intake of such nutrients may favourably contribute to the prevention of or halt the progression to severe respiratory infections like COVID-19.

People who suffer from obesity, hypertension, cardiovascular disease, or diabetes often also have low vitamin D [3], and previous studies in the maritime settings have revealed that risk factors for non-communicable diseases including obesity, hypertension and metabolic syndrome are high among seafarers [6], which together with the often-unhealthy eating habits [1] may pose seafarers as a high-risk group for current health emergencies.

At the time of writing this letter, there were no special nutritional guidelines developed for seafarers during COVID-19 pandemic. Therefore, we call for a generation of new evidence-based dietary guidelines, especially for micronutrient supplementation, to this population group. Moreover, we invite shipping companies and authorities in maritime settings to support research in this field during and after COVID-19 pandemic. The results of such studies can contribute to the United Nations Sustainable Development Goals (Goal number 3: Good Health and Well-being) and improve the health of seafarers and inform similar future health emergencies.

Conflict of interest: None declared

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