





# For Better Health Series (2) Exercise, Immunity and COVID-19 Pandemic

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A well-balanced healthy diet and regular exercise is one of the most important pillars of a healthy body. We can easily monitor the amazing effects of increased effort and regular exercise for diabetics and arterial hypertension patients, as it helps increase endurance for patients with heart and lung disease. This is in addition to the fact that sport is an essential part of any weight loss program. Also, sport is essential in maintaining muscle strength and the flexibility of the musculoskeletal system, especially in old age. Active mobility and exercise strengthen bones in the young people and reduce osteoporosis in the elderly as well as regular exercise has significant psychological implications. Hopefully we will address all of these in the future, God willing, but the question now is whether exercise help us increase our body's resistance toward infectious diseases?

## The effect of exercise toward the immunity

As I mentioned in the previous topic, the body's immune system is complex, and it is assumed that maintaining a healthy body in general is reflected positively on its immunity. Researchers have tried to study this effect despite its complexity and have noticed that moderate exercise, which people usually exercise from running, walking, regular bike sport, or regular exercise with or without using equipment at the gym or at home has positive effects on the immunity. One of these effects is the get rid of the germs from the respiratory system, increased blood circulation that lead to increase in the production of white blood cells and antibodies, as well as reducing psychological stress which negatively affects the immunity.

#### What about Stressful Exercise

Some studies conducted on professional athletes have indicated a temporary negative effect on the immunity after a long exhausting exercise following a period of immune activation followed by a period of immune suppression before the body recovers again.

## What Can We Do Currently Where We Need Better Immunity?

Moderation again seems the best, especially at times like this. Regular light and medium exercise according to body's abilities even at homes is essential for healthy body and immunity. Also, I recommend avoiding strenuous exercises temporarily especially for those who have not done previously.