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Letter to the Editor: The first Ramadan during COVID-19 pandemic: 1.8 billion Muslims should

fast or not?



Competing interests

None declared.

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Dir Sir,

With great interest we have read the recent article entitled "Fasting glucagon concentrations are associated with longitudinal decline of β -cell function in non-diabetic humans" which was published in your valuable journal [1]. We want to congratulate the authors for this successful article, and make a new contribution about fasting during COVID-19 pandemic.

In early December 2019, a novel coronavirus emerged in China [2]. Due to high rate of transmission of the disease, officially confirmed cases have been reported in most countries around the world [3,4]. With the introduction of the disease as a pandemic, the importance of COVID-19 is increasing day by day [5]. In addition, the confirmed cases of this disease in Muslim-majority countries are prevalent [6–8]. 1.8 billion Muslims live in more than 180 countries around the world [7,9]. One of the main activities of Muslims in less than one month later (Ramadan: the ninth month in the Islamic calendar) is fasting [10]. To date, various studies have been conducted on the health effects of fasting [11,12]. Majority of them, studied the impact of fasting on the lipid profile, diabetes and, body weight [13]. In addition, recent studies have shown the effect of fasting on the immune system [14,15]. It can be concluded that the results of previous studies on the immune system have been inconsistent. With the increasing importance of COVID-19, a fundamental question needs further investigation. During the outbreak of new corona, healthy Muslims must fast in this Ramadan as in previous years? In the next section, we briefly reported some concerns.

Due to suppression of immune system, patients with or recently recovered from cancer, are susceptible to COVID-19 [16,17]. In the one hand, the effect of fasting on suppressing immune system remains unclear [14,15] and on the other hand recent review study reveals the positive effect of fasting during Ramadan on treatment of cancer [18]. Further confirmed protocols and guidelines must produce to clarify the status of fasting or not fasting for Muslims.

Beginning of the Ramadan is considered for reducing smoking among Muslims. However, only little studies have shown the effect of smoking on increasing the chance of COVID-19 [19], more studies are needed in this regard.

A recent study revealed that, due to the treatment protocol, patients with hypertension, or diabetes, who are treated with ACE2-increasing drugs, are at higher risk for severe COVID-19 infection [20]. Due to the effect of fasting on Diabetes, Blood fat and Hypertension, rigorous studies are needed to find the effect of fasting on reducing/increasing the chance of a healthy person to becoming ill.

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