**Editorial** 

# **Fasting**

### Dr. MohsinMasud Jan

Editor

"O you who believe! Fasting is prescribed for you, as it was prescribed for those before you, sothat you may guard (against evil)." Qur'an (2:183).

We, as Muslims have been enjoined by our religion to fast for this blessed, holy month of Ramazan. And hopefully, most of us are fasting, and those who aren't able to, may they be able to make up for it later. But, let us for a while consider something. As we all are well aware that in Islam, Allah has not enjoined on us anything that is not beneficial to us in one way or the other. Considering that, how many of us have actually pondered, let alone researched the effects and the benefits of fasting on our bodies, on a physiological, molecular level? I would wager to say that not many, barely a handful of us might've done so. So, we'll dedicate this issue to Fasting, its benefits and its impact on our bodies, looking at it from a medical and scientific point of view.

#### 1. Helps Weight Loss

Starting off with the most obvious one. A study published in The American Journal of Clinical Nutrition came up with the results that fasting in Ramazan leads to an increase in fat oxidation<sup>1</sup>. Which basically means that the body gets primed to burn most fat. That in addition to a sensible diet and some exercise can easily lead to some weight loss during this on month.

#### 2. Improves Insulin Sensitivity

Danish researchers found that fasting caused an increase in insulin mediated whole body glucose uptake rates, meaning an increase in insulin sensitivity, thus providing a way to reduce insulin resistance<sup>2</sup>.

## 3. Promotes Longevity& Improves Your Immune System

Prolonged Fasting Cycles have been found to Protect the Hematopoietic System and Reverse Chemotherapy-Induced Hematopoietic Suppression, Promote Lineage-Balanced Hematopoietic Regeneration, Regulate Stem Cells Independently of Chemotherapy and Help Reverse Immunosenescence<sup>3</sup>. Considering all of these factors, it can be safe to say that fasting helps improve the Immune system.

## 4. Improves Your Brain Function

A study conducted on mice, concluded that periods of fasting lead to an increase in the numbers of autophagosomes in the burking cells in the cerebella of the mice along with a reduced mTOR function<sup>4</sup>. Thus fasting might represent a simple, safe and inexpensive means to promote this potentially therapeutic neuronal response, even in humans.

Now, to conclude this topic, these 4 from the myriad of benefits provided by fasting, alone, should be enough to convince anyone that fasting is extremely beneficial for our bodies, and it is a practice that we should try to accordance into our daily lives on a regular basis.

## REFERENCES

- 1. Ati J, Beji C, Danguir J.Increased fat oxidation during Ramadan fasting in healthy women: an adaptative mechanism for body-weight maintenance. Am J Clin Nutr 1995; 62(2):302-307.
- Halberg N,et al. Effect of intermittent fasting and refeeding on insulin action in healthy men. J Appl Physiol 2005; 99(6):2128-2136.
- Cheng CW, et al. Prolonged Fasting Reduces IGF-1/PKA to Promote Hematopoietic-Stem-Cell-Based Regeneration and Reverse Immunosuppression. Cell Stem Cell 2014; 14(6):810-823.
- 4. Alirezaei M, et al. Short-term fasting induces profound neuronal autophagy. Autophagy 2010; 6(6): 702–710.