## Journal of Fasting and Health

http://jfh.mums.ac.ir

Fasting in the Holy Month of Ramadan and Lipid Profile

Sayed Alireza Mirsane<sup>1\*</sup>, Shima Shafagh<sup>2</sup>, Nasrin Oraei<sup>3</sup>

<sup>1.</sup> Genetic sciences student, Surgical Technologist, Kashan University of Medical Sciences, Kashan, Iran

ARTICLE INFO	ABSTRACT
<i>Article type:</i> Letter to the editor	Ramadan is the ninth month of the Islamic calendar, and is a fasting month .Fasting is one of the Islamic obligations. This annual ritual is regarded as one of the Five Pillars of Islam according to hadith of fifth Shia imam (Peace be upon him). In the other hand, Lipid profile is a type of blood tests and this's very important for body health, Specially individuals with abnormal range of it. A complete lipid profile involves routine tests such as Total Cholesterol (TC), Triglycerides (TG), high-density lipoprotein (HDL, good cholesterol) and low-density lipoprotein (LDL, bad cholesterol).Our goal is determination of Ramadan fasting efficacy on the Lipid profile, according to the above fields. But this subject needs to have multiple studies, so it was advised to conduct more study, in order to obtain the comprehensive and exact results. Finally, Holy month of Ramadan and fasting have a lot miracles in different fields of health, So fasting is a godliness way that it have multiple remedial effects.
<i>Article History:</i> Received: 15 Jul 2016 Accepted: 2 Aug 2016 Published: 20 Sep 2016	
<i>Keywords:</i> Fasting Lipid profile Ramadan	

Please cite this paper as:

Mirsane SA, Shafagh Sh, Oraei N. Fasting in the Holy Month of Ramadan and Lipid Profile. J Fasting Health. 2016; 4(3): 93-94.

Ramadan is the holy month of fasting and the ninth month of the Islamic calendar (1). Fasting is one of the Islamic obligations. According to the hadiths of fifth Shia Imam and Muhammad prophet (Allah's prayers and peace be upon him and his Ahl al-Bayt1), this annual ritual is regarded as one of the five pillars of Islam and this is a way in order to obtain excellent life. On the other hand, lipid profile is a panel of blood tests and an important measure of overall health, especially in individuals with abnormal test results. A complete lipid profile typically involves tests, such as total cholesterol (TC), triglyceride (TG), high-density lipoprotein (HDL, good cholesterol), and lowdensity lipoprotein (LDL, bad cholesterol). This study aimed to evaluate the effect of Ramadan fasting on lipid profiles of patients. Some studies have demonstrated a notable improvement in TC/HDL level, TC level, and other lipid profile variables after Ramadan fasting, which could be associated with a decreased risk of coronary heart disease (2-6). Moreover, researchers have suggested a reduction in cholesterol level in people who fast. According to the literature, Ramadan fasting could play a significant role in the improvement of HDL level (3-8). Similarly, Adlouni et al. indicated that Ramadan fasting was associated with decreased cholesterol and promoted HDL levels (9). In another study, the results were indicative of the significant impact of fasting on HDL and TG levels (2-6, 10, 11). Shehab et al. conducted a study on 65 healthy individuals, entitled "Effects of fasting during Ramadan on plasma lipid and lipoprotein variables". According to the results of the mentioned study, a significant improvement was observed in the HDL level of the samples (12). In another study in 2014, which was conducted on healthy individuals, fasting in Ramadan led to a significant decline in LDL level (13). In addition, in a previous study, Ziaee reported a significant decrease in LDL level (8); similar outcomes have been also observed in other studies (3-5, 9, 10, 12). The results of the present study were indicative of the positive effects of fasting on lipid profile. However, it is recommended that further studies be conducted

JFH

<sup>&</sup>lt;sup>1</sup> Ahl al-Bayt refers to the Islamic prophet Muhammad and his daughter and Shia Imams.

<sup>\*</sup> Corresponding author: Sayed Alireza Mirsane, Genetic sciences student, Surgical Technologist, Kashan University of Medical Sciences, Kashan, Iran. Email: alireza.seyed70@gmail.com

<sup>© 2016</sup> mums.ac.ir All rights reserved.

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/3.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

on this subject in order to obtain more comprehensive and accurate results. In conclusion, fasting in the holy month of Ramadan could significantly contribute to the overall health of individuals. Therefore, it could be considered as a holy practice with multiple remedial effects.

## References

- 1. Mirsane SA, Shafagh Sh. A Narrative Review on Fasting of Pregnant Women in the Holy Month of Ramadan. J Fasting Health. 2016; 4(2): 53-56.
- Nematy M, Alinezhad-Namaghi M, Rashed MM, Mozhdehifard M, Sajjadi SS, Akhlaghi S, et al. Effects of Ramadan fasting on cardiovascular risk factors: a prospective observational study. Nutr J. 2012; 11:69.
- Chaouachi A, Chamari K, Roky R, Wong P, Mbazaa A, Bartagi Z, et al. Lipid profiles of judo athletes during Ramadan. Int J Sports Med. 2008; 29(4):282–8.
- Attarzadeh Hosseini SR, Hejazi K. The effects of Ramadan fasting and physical activity on blood hematological-biochemical parameters. Iran J Basic Med Sci. 2013; 16(7):845-9.
- Attarzadeh Hosseini SR, Motahari Rad M, Hejazi K. The effects of Ramadan fasting and physical activity on body composition and hematological-biochemical parameters. J Fasting Health. 2014; 2(3):96-103.
- Furuncuoglu Y, Karaca E, Aras S, Yönem A. Metabolic, biochemical and psychiatric alterations in healthy subjects during Ramadan. Pak J Nutr. 2007; 6(3):209-11.

- Fakhrzadeh H, Larijani B, Sanjari M, Baradar-Jalili R, Amini MR. Effect of Ramadan fasting on clinical and biochemical parameters in healthy adults. Ann Saudi Med. 2003; 23(3–4):223–6.
- Ziaee V, Razaei M, Ahmadinejad Z, Shaikh H, Yousefi R, Yarmohammadi L, et al. The changes of metabolic profile and weight during Ramadan fasting. Singapore Med J. 2006; 47(5):409–14.
- Adlouni A, Ghalim N, Benslimane A, Lecerf JM, Saile R. Fasting during Ramadan induces a marked increase in high-density lipoprotein cholesterol and decrease in low-density lipoprotein cholesterol. Ann Nutr Metab. 1997; 41(4):242–9.
- Khatib FA, Shafagoj YA. Metabolic alterations as a result of Ramadan fasting in non-insulin-dependent diabetes mellitus patients in relation to food intake. Saudi Med J. 2001; 25(12):1858–63.
- 11. Aksungar FB, Eren A, Ure S, Teskin O, Ates G. Effects of intermittent fasting on serum lipid levels, coagulation status and plasma homocysteine levels. Ann Nutr Metab. 2005; 49(2):77–82.
- 12. Shehab A, Abdulle A, El Issa A, Al Suwaidi J, Nagelkerke N. Favorable changes in lipid profile: the effects of fasting after Ramadan. PLoS One. 2012; 7(10):e47615.
- 13. Kul S, Savas E, Ozturk ZA, Karadag G. Does Ramadan fasting alter body weight and blood lipids and fasting blood glucose in a healthy population? A meta-analysis. J Relig Health. 2014; 53(3):929–42.