

DOI: <http://dx.doi.org/10.5915/22-4-14322>

## Fasting in Ramaḍān as a Provocative Test for a Latent Disease

Fasting in Ramaḍān is one of the five pillars of Islam. Muslims all over the globe observe the fasting during this holy month despite the variation in geography and environmental factors. The fast includes abstinence from food, drink, and sex. Exemption from fasting is for menstruating, pregnant, and breast feeding women, sick persons, and travellers.

The fast is from dawn to sunset daily (averaging about 15 hours) for one lunar month. The fasting starts after the last meal, which is called "Saḥūr". It should be finished just before "Fajr" (dawn) about 90 minutes before sunrise. The fast is broken immediately after sunset. People usually break their fast with dates, water, yogurt as the Prophet (PBUH) used to do. A healthy practice is not to eat one bulky meal at that time but to distribute the meal throughout the night.

It has been reported that during fasting some people exhibit an increase in plasma lipids, uric acid, and/or signs and symptoms of certain illnesses, for example, hemorrhoids and gout.<sup>1-4</sup> Whether the biochemical changes are due to fasting itself, or due to overeating when people break their fast, or the type of diet consumed and meal frequency is not known, since these reports have not looked into these contributing factors. At least in regards to plasma lipids, it may be that the problem arises from eating one large meal at the time of breaking the fast. Young et al<sup>5</sup> showed an elevation of serum lipids after eating such a large meal whereas, if the same meal was divided into smaller portions, serum lipid levels actually dropped.

Even if such abnormal laboratory findings are confirmed, a Muslim should not be apprehensive. Allāh says:

" . . . And it is better for you to fast if you only knew . . . " <sup>6</sup>

This verse guides us to interpret these abnormal findings in a positive way. It is as if fasting has uncovered a "hidden" potential health problem. In other words, it seems to me that fasting resembles a clinical provocative test such as the glucose tolerance test, whereby a glucose load is given to a person suspected of having diabetes mellitus in order to see how the pancreas copes with this task. There are

many other similar clinical tests whereby another organ's capacity is tested to find out whether it can handle a specific job or not.

Muslims who start their fast and later exhibit certain signs and symptoms, or manifest biochemical changes, should not be apprehensive. On the contrary, fasting may be useful experience in revealing a possible latent disease at an earlier stage with a greater potential for cure, apart from performing a religious duty. Perhaps some measures could be adopted such as dietary modification and exercise which can help to stabilize one's future health.

While this is speculative, it may be worthwhile to pursue longterm studies of persons who manifest such symptoms/signs or demonstrate changes in their biochemical profiles to find out if they are truly at increased risk of manifesting the related illnesses compared to those who did not manifest these changes. If so, studies should be directed to find out what steps can be taken to prevent the progression from latent to a manifest disease.

S. M. Bakir, M.B.Ch.B., M.Sc., Ph.D.  
Department of Physiology  
College of Medicine  
King Saud University  
P.O. Box 2925, Riyadh-11461  
Saudi Arabia

### References

1. Fedail SS, Murphy D, Salih SY, Bolten CH, Harvey RF. Changes in certain blood constituents during Ramadan. *Am J Clin Nutr.* 1982;36:350-53.
2. Shoukry, MI. Effects of fasting in Ramadan on plasma lipoproteins and apoproteins. *Saudi Med J.* 1986;7:561-65.
3. Hazmi MAF, El-Faleh F, Al-Mofleh I. Effect of Ramadan fasting on the values of haematological and biochemical parameters. *Saudi Med J.* 1987;8:171-76.
4. Gumaa KA, Mustafa KY, Mahmood NA, Gader MMA. The effects of fasting in Ramadan: Serum uric acid and lipid concentration *Br J Nutr.* 1978;40:573-81.
5. Young CM, Scanlan SS, Topping CM, Simkov V, Lutwak L. Frequency of feeding, weight reduction and body composition. *J Am Diet Assoc.* 1971;59:466-72.
6. The Glorious Qur'ān, Chapter 2, Verse 184.