Correspondence

Dietary intake and nutritional status of Turkish pregnant women during Ramadan

To the Editor

I have read with interest the article by Kiziltan et al[1] entitled "Dietary intake and nutritional status of Turkish pregnant women during Ramadan". While one has to appreciate the heavy task of their methodology section, there are a few queries that the text of the article necessitates raising. One of these concerns is the concluding remark: "The present study on healthy young adult and pregnant women showed that Ramadan fasting has no significant adverse effects on health".[1] I believe, that this statement should require adding: "With a daily fasting period, from dawn to sunset of approximately 12 hours and an ambient maximum temperature of 18-20^{o}C". Such an addition, safeguards from misunderstanding by both health providers and the public. Ramadan fasting in Ankara, when it will come in June-July 2015, means a dawn-sunset period of 19 hours, and not the 12 hours of October-November 2004; naturally, ambient temperatures also differ.

It has been proposed that, on Ramadan fasting, the liver increases its glycogen storing capacity to maintain better glucose demands of the body during the hours of fasting which, generally exceed the usual intermeal periods of approximately 7-9 hours. This increase appears to develop during the first few days of Ramadan fasting.[2] Naturally, the task of the liver to maintain a glucose supply for an additional period of 3 (12 minus 9) hours more than the usual period of overnight fasting, is a much easier task than the 10 (19 minus 9) additional hours that fasting in Ankara during June-July necessitates. For pregnant women with an extra demand on glucose by the fetal parts, the task will be even more difficult and could be risky to the health of the fetus. However, it is up to the mother to conform with the option to fast or not to fast during Ramadan, which pregnant women enjoy.

The more than once mentioned conflicting or contradictory results in the discussion section concerning comparisons of different studies on Ramadan fasting might be reflections of different durations of daily fasting, different ambient temperatures, or both. One has to take into account the confounding role of these 2 factors when comparing different studies. Such a step is likely to diminish the frequently encountered inconsistencies of the results of different studies on Ramadan fasting, even if the studies have been performed in the same locality, but during different seasons of the year. I have to point out also that a mean, presumably daily, energy intake of 749±505 kcal for women in their third trimester of pregnancy while fasting Ramadan, as mentioned in Table 2, should have been commented on. Such a low energy intake that falls in the range of weight reducing diets, contradicts their mean weight gain of 2.5±0.71 kg during the month of Ramadan, as mentioned in Table 1. The last remark that I must mention concerns the data presented in Table 4. The total cholesterol represents the low-density-lipoprotein cholesterol, plus the high-density-lipoprotein cholesterol, plus the triglycerides in mg/dl divided by 5, provided the blood has been collected on a fasting state and the triglycerides level does not exceed 400 mg/dl.[3] Here, the blood samples were obtained 8 hours after "sahur" as to conform with a fasting state, and none of the results (mean ± SD) exceeded the 400 mg/dl limit for triglycerides; their highest mean +SD is 259.13 mg/dl. Surprisingly, only a single group out of the 9 groups of figures shown in Table 4, the last group, conformed with the above-mentioned method of calculation of total cholesterol. However, the authors are required to verify the reasons for such discrepancies; in the fifth group of figures, the total cholesterol and LDL cholesterol were both reported as 184±20.98 mg/dl.

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Reply from the Author

No reply was received from the Author

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