Correspondence

Glycemic index of 3 varieties of dates

Sir,

I read with interest the paper entitled glycemic index of 3 Varieties of Dates published recently in the Journal.[1] The authors refer to the studies of Lock et al,[2] and state, "this is the only study to date regarding glycemic index (GI) found in our literature search". I would like to inform that that we have previously published on the subject,[3-5] as has Famuyiwa et al.[6] We have reported the first study of metabolic responses to the ingestion of dates, the fruit of the tree phoenix dactyliferous, in normal subjects.[3] Futhermore, our study was also the first one to investigate the metabolic responses to ingestion of "Khalas" date in normal subjects involving both male and female subjects.[3] We found the GI of "Khalas" dates to be 57.7 ± 8.5 which was significantly lower compared to the Saudi breakfast. The GI for the dates in our study were not that much dissimilar to that of Lock et al,[2] who reported it to be 61.1. However, Miller et al,[1] found a lower GI of 35.5 ± 9.7 for the "khalas" dates. Apart from the methodological differences in the conduct of the reported studies, there are biological differences as well. For example, our study involved both male and female subjects. Miller et al,[1] do not mention if they studied both sexes or not. This is an important consideration. In an unrelated study, but pertinent to the issue, we have previous data in normal subjects stressing the sex-related variations in plasma glucose and insulin responses to ingestion of standard diet.[7] Other biological differences between our and Miller et al[1] study include differences in age and the body mass index; our subjects being younger with a lower BMI. Regarding their methodology, we would be interested in knowing the following: 1. If the same 8 subjects fed the barhi and ma'an dates also served as subjects for the khalas dates part of the study? 2. If so, was there a wash-out period between the ingestion of 3 different types of dates? 3. Was the feeding of 3 different dates undertaken in a random fashion? 4. The authors rightly point to the significance of the fructose content in impacting on the GI. However, there is no information provided as to the fructose content. This would be more meaningful rather than reporting simply the percentage available carbohydrates. 5. The authors refer to their previous study comparing the GIs of khalas dates in 5 different preparations. It would be nice to know the literature citation, not provided in the text. It is good to see evolving information on metabolic effects of ingestion of different types of dates with specification for harvesting, stage of maturation, ripening, processing, and storage, factors that can influence the chemical composition and are bound to impact on their GI.

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Reply from author

Sir,

We are very interested to hear about the work carried out on glycemic responses to date ingestion by Ahmed et al[4] and Famuyiwa et al[6] in the 1990s. Unfortunately, our literature search, which included the Medline data base, international GI tables and sources in World Health Organization/Food and Agricultural Organization failed to reveal the relevant articles or published values for GI of dates. Having located the articles, it is clear that our methodology, which closely followed that established and reported by Wolever et al[8] was significantly different from that of the above authors. We used dehydrated, commercially packed tamer dates, not thawed "medium ripe dates". The weights of dates we used were based on our own laboratory compositional analyses of dates from the same batch as those consumed by the subjects, not on previously reported analyses. We calculated weights of consumed dates based on equivalence to 50g available carbohydrate (66.7g of khalas dates), not weights "isocaloric with 75 g grams glucose" (110g of khalas dates) as with the correspondent's study. For the standard food, we computed the mean area under the curve as a result of 3 tests using 50g glucose, not one test of 75g as with the correspondent's study. We used capillary whole blood, not venous blood. Blood samples were taken fasting and at 15, 30, 45, 60, 90, 120 minutes after ingestion, not every 30 minutes for 180 minutes. Area calculations were therefore different. All of these differences mean that the studies can not be considered comparable. Our study gender distribution was 6 females and 5 males in the khalas study, and 4 of each gender in the barhi and bo ma'an study. Seven of the 8 subjects in the latter study participated in the khalas study. The minimum "washout" period was 2 days. Glucose or date feeds were administered by convenience, not randomly. Determining "available carbohydrate," rather than differential sugar content, was more important as it determined the weights of dates consumed. Our study

of 5 different preparations of khalas dates is currently "in press".[9]

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Erratum

In manuscript "Retroperitoneal abscess as an initial presentation of cecal carcinoma" Saudi Medical Journal 2002; Vol. 23 (8) 999-1001, Figure 1 should have appeared as follows.

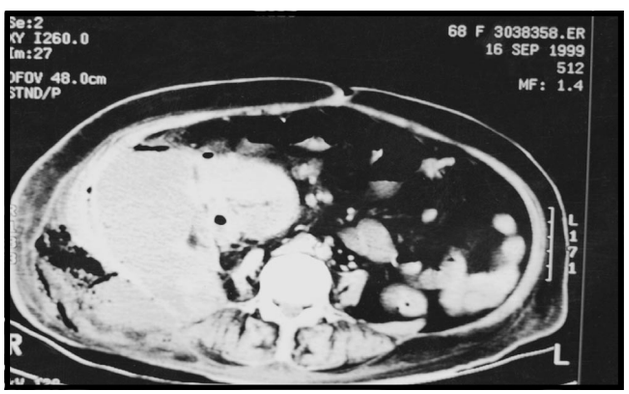

Figure 1 - Computerized tomography scan of the abdomen showing the subcutaneous gas and the retroperitoneal abscess cavity.

Erratum

In manuscript "Prosthetic dental treatment needs in Northern Saudi Arabia" Saudi Medical Journal 2002; Vol. 23 (8) 975-980, the title should have appeared as "Prosthetic dental treatment needs in Eastern Saudi Arabia".

Erratum

In manuscript "Lipid profile in patients with coronary artery disease" Saudi Medical Journal 2002; Vol. 23 (9) 1054-1058, Table 2 should have appeared as below.

Table 2 - Prevalence of dyslipidemia.

Risk factors	Coronary artery disease		p1	All % n=192	Control % n=162	p2
	DM % n=77	Non-DM % n=115				
Hypercholesterolemia	67.5	72.2	0.2451	70.3	49.4	<0.003
Hypertriglyceridemia	71.4	55.7	0.0139	62	36.3	<0.0003
High LCL-C	80.5	89.6	0.0384	86	36.1	<0.001
Low HDL-C	75.3	73.9	0.4129	74.5	18.8	<0.0001

n - number, DM - diabetes mellitus, LDL-C - low density lipoprotein cholesterol, HDL-C - high density lipoprotein cholesterol
p1 - comparison between diabetes mellitus versus non-diabetes mellitus
p2 - comparison of the coronary artery disease group versus control group