Reply to H Pareja-Galeano et al.

Dear Editor:

We appreciate the interest from Pareja-Galeano et al. in our study and acknowledge that they considered our study well powered and clinically relevant. Similar to others (1), our results suggested that the greatest reduction in the hazard of mortality was found between the “inactive” and the “moderately inactive” group. This reduction was observed across general and abdominal obesity groups, suggesting health benefits from increasing physical activity (PA) regardless of adiposity. On the basis of our validation study (2), we estimated that the difference between the “inactive” and “moderately inactive” group was equivalent to ~20 min of brisk walking each day. This equates to 140 min/wk, which is almost in line with current PA recommendations for public health (3–5).

We do not dispute the health benefits associated with higher levels of PA, which Pareja-Galeano et al. have highlighted, but the key message from our study was that there would be substantial public health benefits from people in the inactive group engaging in even a small amount of PA each day.

None of the authors had a conflict of interest to declare.

Ulf Ekelund
Heather Ward
Jian’An Luan
Stephen J Sharp
Søren Brage
Nick J Wareham

From the Medical Research Council Epidemiology Unit, University of Cambridge, Cambridge, United Kingdom (UE, JL, SJS, SB, and NJW; UE, ulf.ekelund@nih.no); and Imperial College London, London, United Kingdom (HW).

REFERENCES


Biomarkers of dairy fat

Dear Editor:

There were 2 interesting articles in a recent issue of the Journal in which odd-chain fatty acids (15:0 and 17:0) were used as circulating biomarkers of dairy fat (1, 2). In one of the studies (1), serum pentadecanoic acid (15:0) was shown to be inversely associated with incident type 2 diabetes, and in the other study (2) the association of pentadecanoic acid and heptadecanoic acid (17:0) with the risk of incident stroke was studied and no significant association was found. These odd-chain fatty acids are considered to be validated biomarkers for dairy fat and they correlated with dairy consumption in many studies (1–4). However, the association between the intake of dairy fat and the relative serum content of heptadecanoic acid has not been clear in all studies (5, 6). In a large cohort study [EPIC (European Prospective Investigation into Cancer and Nutrition)], there was a strong positive ecologic correlation ($r = 0.8, P \leq 0.01$) between the total intake of fish and plasma concentration of heptadecanoic acid, whereas there was no correlation between heptadecanoic acid or pentadecanoic acid and dairy products (6). Accordingly, we have seen in our studies (MA Lankinen et al., 2015) a positive correlation between pentadecanoic and heptadecanoic acids with DHA in plasma phospholipids. The fatty acid heptadecanoic acid is present in the fat of fish (0.31–2.0% depending on fish species) (7, 8). Salmon contains ~40 mg heptadecanoic acid and 20 mg pentadecanoic acid per 100 g (9). Therefore, we are a bit concerned if these odd-chain fatty acids are considered to be a valid biomarker for dairy fat intake in populations who consume considerable amounts of fish. In populations with a high consumption of dairy fat and a low consumption of fish, odd-chain fatty acids are probably valid biomarkers for dairy fat intake. In populations who consume fish, the presence of odd-chain fatty acids in fish should be taken into account to avoid misleading conclusions.

Neither of the authors had a conflict of interest.

Maria Lankinen
Ursula Schwab

From the Department of Clinical Nutrition, Institute of Public Health and Clinical Nutrition, University of Eastern Finland, Kuopio, Finland (ML; e-mail: maria.lankinen@uef.fi).

Note: Yakoub et al. chose not to submit a reply.

REFERENCES

