Vitamin D deficiency and obesity are both prevalent conditions in the northern countries, especially among immigrants. The aims were to assess the possible relationship between body fat and vitamin D status, and to investigate the effect of body fat on the response to oral vitamin D supplementation in Pakistani immigrants in Denmark. Data were obtained from a 1-year double-blind randomised controlled trial with oral vitamin D supplementation. A total of 122 women and men received either vitamin D3 supplementation (10 or 20 µg/day) or placebo. No association was found between body fat percentage and vitamin D status in a multiple linear regression model (P<0.001). No effect of body fat was seen on the vitamin D status response following the intervention with vitamin D. In conclusion, there was no baseline association between body fat percentage and vitamin D status, and body fat percentage had no effect on the response to vitamin D supplementation.

**General information**
Publication status: Published
Organisations: National Food Institute, Division of Nutrition, Division of Food Chemistry, Technical University of Denmark, University of Copenhagen, Slagelse Hospital
Contributors: Grønborg, I. M., Lundby, M., Melgaard, C., Jakobsen, J., Ovesen, L., Andersen, R.
Number of pages: 3
Pages: 405-407
Publication date: 2015
Peer-reviewed: Yes

**Publication information**
Journal: European Journal of Clinical Nutrition
Volume: 69
Issue number: 3
ISSN (Print): 0954-3007
Ratings:
BFI (2015): BFI-level 1
Scopus rating (2015): CiteScore 2.86 SJR 1.5 SNIP 1.218
Web of Science (2015): Impact factor 2.935
Web of Science (2015): Indexed yes
Original language: English
DOIs: 10.1038/ejcn.2014.254
Research output: Contribution to journal › Journal article – Annual report year: 2014 › Research › peer-review