

Accepted Manuscript

Body fat mass, lean body mass and associated biomarkers as determinants of bone mineral density in children 6–8years of age – The Physical Activity and Nutrition in Children (PANIC) study

Sonja Soininen, Virpi Sidoroff, Virpi Lindi, Anitta Mahonen, Liisa Kröger, Heikki Kröger, Jarmo Jääskeläinen, Mustafa Atalay, David E. Laaksonen, Tomi Laitinen, Timo A. Lakka



PII: S8756-3282(18)30003-6
DOI: <https://doi.org/10.1016/j.bone.2018.01.003>
Reference: BON 11521
To appear in: *Bone*
Received date: 13 May 2017
Revised date: 24 November 2017
Accepted date: 3 January 2018

Please cite this article as: Sonja Soininen, Virpi Sidoroff, Virpi Lindi, Anitta Mahonen, Liisa Kröger, Heikki Kröger, Jarmo Jääskeläinen, Mustafa Atalay, David E. Laaksonen, Tomi Laitinen, Timo A. Lakka, Body fat mass, lean body mass and associated biomarkers as determinants of bone mineral density in children 6–8years of age – The Physical Activity and Nutrition in Children (PANIC) study. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. *Bone* (2017), <https://doi.org/10.1016/j.bone.2018.01.003>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Body fat mass, lean body mass and associated biomarkers as determinants of bone mineral density in children 6–8 years of age – The Physical Activity and Nutrition in Children (PANIC) Study

Sonja Soininen^{a,b,c,*}, Virpi Sidoroff^d, Virpi Lindi^a, Anitta Mahonen^e, Liisa Kröger^f, Heikki Kröger^{g,h}, Jarmo Jääskeläinen^f, Mustafa Atalay^a, David E. Laaksonen^{a,i}, Tomi Laitinen^j, Timo A. Lakka^{a,j,k}

Affiliations:

^a Institute of Biomedicine, Physiology, School of Medicine, University of Eastern Finland, PO Box 1627, 70211 Kuopio, Finland

^b Institute of Dentistry, University of Eastern Finland, PO Box 1627, 70211 Kuopio, Finland

^c Social and Health Center, City of Varkaus, Savontie 55, 78300 Varkaus, Finland

^d Department of Pediatrics, North-Karelia Central Hospital, Tikkamäentie 16, 80210 Joensuu, Finland

^e Institute of Biomedicine, Medical Biochemistry, School of Medicine, University of Eastern Finland, PO Box 1627, Kuopio, Finland

^f Department of Pediatrics, Kuopio University Hospital and University of Eastern Finland, PO Box 100, 70029 Kuopio, Finland

^g Department of Orthopedics and Traumatology, Kuopio University Hospital, PO Box 100, 70029 Kuopio, Finland.

^h Kuopio Musculoskeletal Research Unit (KMRU), University of Eastern Finland, PO Box 1627, 70211 Kuopio, Finland.

ⁱ Department of Internal Medicine, Kuopio University Hospital, PO Box 100, 70029 Kuopio, Finland

^j Department of Clinical Physiology and Nuclear Medicine, Kuopio University Hospital, PO Box 100, 70029 Kuopio, Finland

^k Kuopio Research Institute of Exercise Medicine, Haapaniementie 16, 70100 Kuopio, Finland

***Corresponding author:** Sonja Soininen, University of Eastern Finland, Institute of Biomedicine / Physiology, PO Box 1627, Fin-70211 Kuopio, Finland; sonja.soininen@uef.fi

e-mail addresses: sonja.soininen@uef.fi; virpi.sidoroff@siunsofi.fi; virpi.lindi@uef.fi; anitta.mahonen@uef.fi; liisa.kroger@kuh.fi; heikki.kroger@kuh.fi; jarmo.jaaskelainen@uef.fi; mustafa.atalay@uef.fi; david.laaksonen@uef.fi; tomi.laitinen@kuh.fi; timo.lakka@uef.fi

Download English Version:

<https://daneshyari.com/en/article/8625128>

Download Persian Version:

<https://daneshyari.com/article/8625128>

[Daneshyari.com](https://daneshyari.com)