



Ann Nutr Metab 2015;67(suppl 1):1–601 DOI: 10.1159/000440895

Published online: October 20, 2015

This article is licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License (CC BY-NC-ND) (http://www.karger.com/Services/OpenAccessLicense). Usage and distribution for commercial purposes as well as any distribution of modified material requires written permission.

12th European Nutrition Conference (FENS)

Berlin, Germany, October 20-23, 2015

Abstracts

Guest Editors
Heiner Boeing, Nuthetal
Helmut Oberritter, Bonn
Hannelore Daniel, Freising-Weihenstephan
on behalf of the German Nutrition Society



Prof. Heiner Boeing

Department of Epidemiology German Institute of Human Nutrition Potsdam-Rehbruecke, Nuthetal, Germany

Dr. Helmut Oberritter

German Nutition Society, Bonn, Germany

Prof. Hannelore Daniel

Technical University Munich, Freising-Weihenstephan, Germany

Correspondence:
Dr. Helmut Oberritter
German Nutrition Society (DGE)
Godesberger Allee 18
DE-53175 Bonn (Germany)
E-Mail oberritter@dge.de

S. Karger Medical and Scientific Publishers Basel · Freiburg · Paris · London · New York · Chennai · New Delhi · Bangkok · Beijing · Shanghai · Tokyo · Kuala Lumpur · Singapore · Sydney

Disclaimer

The statements, opinions and data contained in this publication are solely those of the individual authors and contributors and not of the publisher and the editor(s). The appearance of advertisements in the journal is not a warranty, endorsement, or approval of the products or services advertised or of their effectiveness, quality or safety. The publisher and the editor(s) disclaim responsibility for any injury to persons or property resulting from any ideas, methods, instructions or products referred to in the content or advertisements.

Drug Dosage

The authors and the publisher have exerted every effort to ensure that drug selection and dosage set forth in this text are in accord with current recommendations and practice at the time of publication. However, in view of ongoing research, changes in government regulations, and the constant flow of information relating to drug therapy and drug reactions, the reader is urged to check the package insert for each drug for any change in indications and dosage and for added warnings and precautions. This is particularly important when the recommended agent is a new and/or infrequently employed drug.

All rights reserved.

No part of this publication may be translated into other languages, reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording, microcopying, or by any information storage and retrieval system, without permission in writing from the publisher or, in the case of photocopying, direct payment of a specified fee to the Copyright Clearance Center (see 'General Information').

© The Authors. Published by S. Karger AG, Basel Abstracts reproduced directly from the author's copy. e-ISBN 978-3-318-05631-0

EDITORS ABSTRACT

Every four years, the Federation of the European Nutrition societies (FENS) organizes a scientific conference that brings together European and Paneuropean experts to discuss most recent scientific developments in the food, diet and health arena. The 12th FENS conference took place in Berlin, October 20 to 23, 2015, under the hospice of the German Nutrition Society with the motto "Nutrition and Health during life cycle – science for the European consumer". Sessions were dedicated to latest research and outcomes of studies on the impact of diet into body functions, on dietary intake and dietary status of the population and of specific groups as well on the role of diets in disease occurrence and prevention. Translational research addressed strategies and approaches to change dietary behavior and policy measures. Four plenary sessions framed the program with distinguished speakers covering health aspects in the life cycle but also the global dimension of food security.

The present supplement comprises the 950 submitted abstracts and additional 320 abstracts of invited and selected speakers. The abstracts are ordered according to the scientific sessions of the conference, and the industry sponsored satellite activities, and posters. Within the program up to eight scientific sessions were held in parallel with thematic areas of (1) Food and nutrient intake, dietary patterns, dietary guidelines, (2) Advances in dietary studies, methodology and design,(3) Metabolic diversity, (4) Nutrition, public health, chronic diseases, and (5) Food quality, food safety, sustainability, consumer, behavior and policy.

The supplement can be searched with pdf-tools by using keywords such as authors, topics, specific compounds, etc.

Keywords: Nutrition, Nutrition policy, FENS, German Nutrition Society

Index

PLENARY LECTURES	7
ABSTRACTS LECTURES SCIENTIFIC PROGRAM	. 10
ABSTRACTS LECTURES INDUSTRY SPONSORED PROGRAM	. 81
SUBMITTED ABSTRACTS FOR POSTERS AND ORAL PRESENTATIONS	103
AUTHORS LIST	563

However, there is no comprehensive assessment of the relation between vitamin D deficiency and risk of diabetic nephropathy (DN). In addition, the effect of vitamin D supplementation on DN is still unclear.

Objectives: The aim of this meta-analysis was to assess these issues by pooling together the results from cross sectional studies and clinical trials.

Method / Design: A systematic literature search of PubMed, Scopus, and Google Scholar was conducted up to September 2014. For cross-sectional studies, odds ratio (OR) was used as a measure of the association between vitamin D status and risk of DN, and for clinical trials mean and standard deviation (SD) of the main outcome (urine albumin/creatinine ratio (UACR)) in intervention and placebo groups were considered for analysis.

Results: The final selected articles were published between 2009 and 2014. A total of 3700 and 219 patients were enrolled in observational and interventional studies, respectively. The pooled ORs from 6 cross-sectional studies was 1.80 (95% CI, 1.25 to 2.59; p=0.002) indicating a significant inverse association between serum vitamin D status and risk of nephropathy in diabetic patients. However, the pooled data of UACR levels in clinical trials suggested no significant change following vitamin D supplementation (17.98; 95% CI, -35.35 to 71.32, p=0.51).

Conclusions: This meta-analysis showed the higher risk of nephropathy in vitamin D deficient diabetic patients. Causality in this association was not supported by pooling together the results of available clinical trials following vitamin D supplementation.

Keywords: (maximum 5): Cholecalciferol; Calcitriol; Diabetes mellitus; Nephropathy

149/1223. Body composition and nutritional status among adults in northern Serbia

Author(s): (1) Anka Dzigurski; (2) Bojana Vidovic; (3) Sanda Dilber; (4) Brižita Đorđević.

Affiliation: (1) Student/Department of Bromatology. Faculty of Pharmacy. University of Belgrade. Belgrade. Serbia.; (2) Student. Department of Bromatology. Faculty of Pharmacy. University of Belgrade. Belgrade. Serbia.; (3) Professor. Department of Organic Chemistry. Faculty of Pharmacy. University of Belgrade. Belgrade. Serbia.; (4) Professor. Department of Bromatology. Faculty of Pharmacy. University of Belgrade. Belgrade. Serbia.

Introduction: Overweight and obesity are a well-known public health problem associated with chronical diseases such as heart disease, stroke and type 2 diabetes. Body composition and nutritional status monitoring are very important for planning preventive measures towards health promotion.

Objectives: The aim of this study was to evaluate nutritional status and body composition among a sample of adults in Vojvodina, a northern region in Serbia.

Method / Design: 287 female and 105 male adults, aged between 18 to 65 years participated in the study. Nutritional status was defined

using body mass index (BMI), according to World Health Organization (WHO) criteria. Body composition was measured by InBody 720 body analyzer device, using the bioelectrical impedance method.

Results: A prevalence of overweight of 31,6% and of obesity by 58,6% were found. Additionally, 16,9% of subjects met criteria for class 2 obesity and 9,4% met criteria for extreme obesity. Women showed higher percentage of overweight (33,4%) than men (26,7%) but levels of obesity were higher in men (69,5%) than in women (54,7%). Mean of % body fat within BMI groups: in normal BMI (22,57%), overweight (32,74%) and obese (43,86%). The average values of the fitness score and % skeletal muscle mass decrease with increasing age.

Conclusions: High prevalence of overweight and obesity requires public health action. Healthy lifestyle, balanced diet with low caloric intake and increased physical activity must be promoted within prevention strategy and control of obesity in adults in northern Serbia.

Keywords: (maximum 5): overweight, obesity, body composition, body fat percentage

149/1224. Evaluation of vitamin D status in newly diagnosed pemphigus vulgaris patients

Author(s): (1) Hoda Derakhshanian; (2) Moahammad Hassan Javanbakht; (3) Mahnaz Zarei; (4) Cheida Chams-Davatchi; (4) Maryam Daneshpazhooh; (4) Mahmoud Djalali.

Affiliation: (1) PhD candidate. School of Nutrition Sciences and Dietetics. Tehran University of Medical Sciences. Tehran. Iran.; (2) Professor. School of Nutrition Sciences and Dietetics. Tehran University of Medical Sciences. Tehran. Iran.; (3) Biochemist. School of Nutrition Sciences and Dietetics. Tehran University of Medical Sciences. Tehran. Iran.; (4) Professor. Autoimmune Bullous Diseases Research Center. Department of Dermatology. Razi Hospital. Tehran University of Medical Sciences. Tehran. Iran.

Introduction: Pemphigus vulgaris (PV) is an autoimmune blistering disorder of the skin or mucosa and low vitamin D status has been linked to many immune disorders.

Objectives: This study was designed to compare the vitamin D status in PV patients with healthy controls.

Method / Design: In this case-control study, vitamin D status of 32 newly diagnosed PV patients was compared with 36 healthy control subjects. All patients were selected from the specialized dermatology departments of Razi Hospital, Tehran University of Medical Sciences in a 2-year period of time. The severity of the disease was estimated according to Harman's scores. Serum concentration of 25(OH)D was measured by Roche Elecsys System. Data were analyzed by independent t-test.

Results: Both groups were similar based on sex, age and body mass index. The mean duration of disease was 5.57 ± 0.93 months. The mean oral and skin severities were 1.81 ± 0.20 and 2.31 ± 0.17 respectively, based on Harman's scores. Serum 25(OH)D was significantly lower in PV patients compared to controls (-8.90; 95% CI, 2.29-15.51