MALAYSIAN JOURNAL OF

NUTRITION

ABSTRACTS



1st Southeast Asia **Public Health Nutrition Conference**

In conjunction with Nutrition Society of Malaysia 32nd Annual Scientific Conference

"Together In Advancing Public Health Nutrition" May 14 (Sun) - 17 (Wed), 2017 • Hotel Istana, Kuala Lumpur, Malaysia

Under the auspices of:



Organised by:

Co-organised by:







Supported by:







VOL. 23 (SUPPLEMENT)

MAY 2017

Official Publication of the PERSATUAN PEMAKANAN MALAYSIA NUTRITION SOCIETY OF MALAYSIA





Malaysian Journal of Nutrition is abstracted/indexed by Medline/PubMed, Google Scholar, the WHO Western Pacific Region Index Medicus, Elsevier databases of the Scopus, FBiology and Ecare, ASEAN Citation Index (ACI) and CABI Global Health database

MALAYSIAN JOURNAL OF NUTRITION

Peer-reviewed Journal of the Nutrition Society of Malaysia (Persatuan Pemakanan Malaysia; http://www.nutriweb.org.my)

EDITOR

Khor Geok Lin, PhD FASc

Emeritus Professor, <mark>Universiti Putra Ma</mark>laysia Adjunct Professor, International Medical University, Malaysia

ASSOCIATE EDITOR

Prof Dr Poh Bee Koon (*Universiti Kebangsaan Malaysia*)

STATISTICS EDITORS

Assoc Prof Dr Moy Foong Ming (University of Malaya)

Assoc Prof Dr Tony Ng Kock Wai (International Medical University)

EDITORIAL BOARD

Dr Imelda Angeles-Agdeppa (Food and Nutrition Research Institute, The Philippines)

Assoc Prof Dr Pattanee Winichagoon (INMU Mahidol University, Thailand)

Prof Rabindarjeet Singh
(Faculty of Medicine, AIMST University,
Malaysia)

Assoc Prof Safiah Mohd Yusof (Faculty of Health Sciences, Universiti Teknologi MARA, Malaysia)

Prof Dr Wan Manan Wan Muda (School of Health Sciences, Universiti Sains Malaysia)

Dr Yasmin BH Ooi

(School of Food Science and Nutrition, Universiti Malaysia Sabah)

Prof Dr Zalilah Mohd Shariff (Faculty of Medicine and Health Sciences, Universiti Putra Malaysia)

ADVISORY PANEL

Dr Azza Gohar (National Nutrition Institute, Egypt)

Prof Cecilia Florencio (University of The Philippines, Diliman)

Prof Dr JC Henry
(Singapore Institute for Clinical Sciences)

Dr Le Thi Hop (National Institute of Nutrition, Vietnam)

Assoc Prof Dr Majid Karandish
(Ahwaz University of Medical Science, Iran)

Prof Reynaldo Martorell (Emory University, United States of America)

Dr V Prakash
(Central Food Technological Research Institute,
India)

Dr Siti Muslimatun
(Indonesia International Institute for Life
Sciences)

Dr Tee E Siong (Nutrition Society of Malaysia)

Prof Mark L Wahlqvist
(Monash University, Australia & National
Health Research Institute, Taiwan)

The Journal

- Serves as a forum for the sharing of research findings and information across broad areas in nutrition
- Publishes original research reports, topical article reviews, book reviews, case reports, short communications, invited editorials and letters to the editor.
- Welcomes articles in nutrition and related fields such as dietetics, food science, biotechnology, public health and anthropology

p=0.025; and r=0.42, *p*=0.018, respectively). A 95% limit of Bland–Altman agreement was observed between the first and repeat SFFQ for all fatty acids. The proposed SFFQ is sufficiently valid and reliable for assessment of essential fatty acids intakes in Indonesian children.

<u>PP-B21</u> Dietary supplement use among university athletes in Thailand

Muktabhant B1 and Rukpanid N2

¹Faculty of Public Health, Research group on prevention and control of diabetes in the Northeast of Thailand, Khon Kaen University, Thailand; ²Research group on prevention and control of diabetes in the Northeast of Thailand, Khon Kaen University, Thailand

This cross-sectional descriptive study was aimed to investigate the dietary supplement use among university athletes in Thailand. Total of 190 students of Khon Kaen University who were athletes attending 41st Thailand University Games were recruited. A self-administration questionnaire was used for collecting data on demographical data and dietary supplement consumption. Energy and nutrient intakes were collected by 24-hr dietary recall method and analyzed by INMUCAL version 2.0 program. The respondents' mean age was 21 ± 1.0 years, and 54% were male. The results revealed that energy intake of the subjects was 114% of Thai recommendation. Energy distribution from carbohydrate, protein, and fat were 65.1%, 19.1% and 18.2% of total energy intake. The percentage of the subjects use dietary supplement was 40%. Popular dietary supplements used by the subjects were sports drink, vitamin and mineral supplements, and whey protein with 44.7%, 39.5%, and 15.8% respectively. Sixty-three percent of them reported using 1 product daily, and 26% using 2 products/ day. Fifty percent of the subjects expensed 500-1000 Baht/month for dietary supplements. Most took supplements to improve performance (75.8%), 56.8% claimed to take supplements for muscle building, and 29.5% for body repairing. Internet was the main source of information on dietary supplements (98.4%). Coaches and friend were source of information by 50.5% and 27.9% respectively. They bought the products from drug stores (25.8%), the internet (14.7%%) and convenient stores (11.6%). The people who influence decision of using dietary supplements were health personnel (92.6%), friend (55.3%), and coach (49.5%). Results indicate a need for nutrition education on dietary supplements among university athletes and their coaches. This will enable them to make informed decisions and reduce the risks associated with the misuse of supplements.

<u>PP-B22</u> <u>Dietary</u> vitamin D, calcium and body fat among adolescents in Jakarta, Indonesia.

Nadiyah and Nova Andriani

Department of Nutrition Science, Faculty of Health Sciences, Esa Unggul University, Indonesia

With the purpose to explore the relationship between dietary vitamin D, calcium and percentage of body fat in a group of adolescents, this cross-sectional study was carried out with 68 adolescents aged 13 to 14 years old; 37 girls (54.4%) and 31 boys (45.6%). Vitamin D was assessed by two non-consecutive-24 hour dietary recalls, calcium intake was assessed by a semiquantitative food frequency questionnaire (SQ-FFQ) and percentage of body fat was measured by bioelectrical impedance analysis (BIA). BIA measurements were taken at least 2 hours after meals. The mean age was 13.2 ± 0.4 years. Mean daily vitamin D and calcium intake was $5.1 \pm 3.9 \,\mu g$ and 539.8 ± 487.6 mg, respectively. The qualitative evaluation of the diet demonstrated that the main sources of calcium consumed by most adolescents were tofu, tempeh and sweetened condensed milk. Adolescents more often consume egg as a source of vitamin D that has less vitamin D content than fish. Mean percentage body fat was 23.1 ± 5.7 %. Negative correlations were found between body fat and vitamin D intake (r = -0.28, p = 0.019) and between body fat and calcium intake (r =-0.39; p = 0.001). In multivariate analysis, vitamin D intake showed a negative correlation with body fat, adjusted by energy intake ($\beta = -0.438$, 95%CI: -0.78, -0.09, p = 0.012). In conclusion, it was found a negative relationship between vitamin D intake and body fat in adolescents.

<u>PP-B23</u> Intake of fiber, PUFA, omega-3 and calcium was associated with the reported incidence of primary dysmenorrhea among adolescent girls in Surabaya, Indonesia

Nazari PE and Mahmudiono T

Department of Nutrition, Faculty of Public Health, Universitas Airlangga, Indonesia

Adolescent girls have undergo rapid physical, hormonal, and psichological changes that