ASIA PACIFIC NUTRIGENOMICS NUTRIGENETICS ORGANISATION

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Fu Jen Catholic University Hospital, New Taipei City

Organizer: APNNO

Fu Jen Catholic University Co-organizer: Taiwan Nutrition Society

National Science and Technology Council

Ministry of Education











Abstracts for Young Investigation Award

| Number | Name | Title |
|--------|---------------------------|---|
| Y-1 | Li-Ling Peng | Impact of nutrition summer camp Healthy Eating for Children in Taiwan (Camp HECT) on children's nutrition knowledge, attitude, dietary practices (KAP), and dietary diversity (DD) toward healthy eating in Taiwan. |
| Y-2 | Vanessa Joy A. Timoteo | Elucidation of the causal role of iron status on anemia and on cardiometabolic syndrome in UK White and Taiwan Han Chinese ethnic groups using GWAS and Mendelian randomization analysis |
| Y-3 | Dita Hasni M.Biomed | ACE rs4298 and WNK1 rs1208878838 Gene Polymorphisms are Unrelated with Hypertension in Minangkabau Ethnic Women |
| Y-4 | Yuan-Kei Ching | Dietary patterns and their interactions with fatty acid desaturase gene on metabolic syndrome among vegetarians in Malaysia |
| Y-5 | Chih-Hao Wang | The Novel Regulator of Mitochondrial Uncoupling Protein 1 and Adaptive Thermogenesis |
| Y-6 | Wan-Jing Chen | Low-folate status as stress factor to promote insulin resistance on type 2 diabetes mellitus by reprogramming glucose energy metabolism |

Y-3

ACE rs4298 and WNK1 rs1208878838 Gene Polymorphisms are Unrelated with Hypertension in Minangkabau Ethnic Women

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Background: Hypertension is a significant cause of cardiovascular disease mortality and a global health concern. Blood pressure variations are known to be influenced by genetic factors, such as the polymorphism of the WNK1 and ACE genes. Therefore, this study aims to ascertain the frequency of polymorphism of the genes in Minangkabau ethnic women with and without hypertension.

Methods: After satisfying the inclusion and exclusion criteria, 190 ethnic women between the ages of 18 and 45 (95 with and 95 without hypertension) were included in this case-control study. The samples were collected at the Water Children's Health Center in Padang, Indonesia. DNA was isolated from peripheral venous leukocyte blood, and the KASP genotyping method was used to check for variations of rs4298 and rs1208878838.

Results: There was no difference in frequency and percentage of genotypes from ACE rs4298 gene polymorphism between hypertensive and non-hypertensive groups. Meanwhile, in WNK1 rs1208878838 gene polymorphism, no AG and GG genotypes were found.

Conclusion: ACE rs4298 and WNK1 s1208878838 gene polymorphisms are not related to hypertension in Minangkabau women

Keywords: ACE, WNK1, hypertension, female, minangkabau