

ECO 2012 – Addendum

ABSTRACT 318 (T2:PS0 – Adults)

THE INFLUENCE OF WEIGHT LOSS ON ARTERIAL STIFFNESS IN OBESE AND OVERWEIGHT SUBJECTS

Viviana Elian (Romania)¹, C. Panaite², D. Cheta¹, B. Ion³, A. Dragomir², L. Ene²

1 : UMF "Carol Davila" Bucharest (Diabetes, Nutrition and Metabolic Diseases) , Bucharest , Romania

2 : UMF "Carol Davila" Bucharest , Bucharest , Romania

3 : Universitatea Bucuresti (Facultatea de Psihologie)

ABSTRACT 520 (T3/T4:PS4 – Adipose tissues)

INHIBITORY EFFECTS OF JUL05 ON 3T3-L1 ADIPOCYTE DIFFERENTIATION AND OBESITY INDUCED BY HIGH FAT DIET IN MICE.

Hye-Lin Kim¹(Republic of Korea), Dae-Seung Kim², Yong-Deok Jeon², Mi-Young Jeonga¹, Seon-Young Kim¹, Jinbong Park¹, Hara Lim¹, Chul-Hee Yoon², Yo-Han Han², Seung-Heon Hong², Jae-Young Um^{1,*}

1 : Department of Pharmacology, College of Oriental Medicine, Institute of Oriental Medicine, Kyung Hee University, Seoul, 130-701, Republic of Korea;

2 : Department of Oriental Pharmacy, College of Pharmacy, Wonkwang University, Iksan, 570-749, Republic of Korea

Introduction: JUL05 is a combination of 4 natural components (Corni Fructus, Dioscorea Rhizoma, Aurantii Fructus Immaturus, Platycodi Radix) used as traditional Korean medicine in Asia. Obesity is a metabolic disorder characterized by chronic inflammation and dyslipidemia and is a strong predictor for the development of hypertension, diabetes mellitus, and cardiovascular disease. This study examined anti-obesity and cholesterol-lowering properties of ethanol extracts from the JUL05.

Methods: The cellular lipid content in 3T3L-1 adipocytes was assessed by Oil Red O staining. Expression of peroxisome proliferators activated receptor- γ (PPAR- γ) was determined by real-time RT-PCR. The effect of JUL05 in weight loss was also examined in high-fat diet induced obese mice.

Results: JUL05 suppressed the differentiation of 3T3-L1 adipocytes by downregulating cellular induction of PPAR- γ . *In vivo* study showed that JUL05 induced the weight loss in high-fat diet induced obese mice. These results indicate that JUL05 has a potent antiadipogenic effect in 3T3-L1 cells due to the inhibition of adipocyte differentiation and adipogenesis.

Conclusion: Our results indicate that, with the continuing spread of obesity prevention as a fundamental medicine strategy, both clinicians and researchers should take a closer look at herbal medicine. JUL05 may be beneficial in the treatment of obesity and can be used as a safe natural promoter of health.

ABSTRACT 564 (T3/T4:PS6 – Neuroobesity)

MEAL PATTERNS OF RATS MAINTAINED ON TRYPTOPHAN AND LYSINE SUPPLEMENTED DIET.

R. Ayaso (Lebanon)¹, **H. Ghattas**¹, **M. Abiad**¹, **O. Obeid**¹

1 : Department of Nutrition and Food Sciences, American University of Beirut, Lebanon