Natural herbs for weight loss: Recent findings of exercise-dependent augmented effects
Ahmad Alkhatib
Qatar University, Qatar

Natural herbs have been in use for weight loss purposes since the history began. However, the global obesity epidemic and the rise in obesity-related chronic diseases, including type-II diabetes and cancer, have highlighted the need for novel and effective approaches for herbal remedies. Whilst the popularity of several prescribed and non-prescribed slimming aids and herbal plant supplements have been marketed for their weight loss efficacy, single and multi-ingredient herbal supplements are still being investigated for their single or combined weight loss benefits. Limited research have highlighted an interesting efficacy for several popular herbal plant supplements including caffeine and capsaicin, Ayurvedic preparations and herbal teas, resulting in various degrees of effectiveness including thermogenic, appetite control and psychological benefits such as mood state. Recent research has suggested acute augmented weight-loss effects of combining herbal ingestion with exercise. For example, ingesting green tea, yerba mate and/or caffeine have been shown to increase metabolic rate, and augmented fatty acid metabolism and increase energy expenditure from fatty acid sources during exercise with various intensities, particularly low and moderate intensities. Other promising weight-loss effects have also been also reported for multi-ingredient herbal supplements, particularly those that are rich in phytochemicals and caffeoyl derivatives. Combining herbal ingestions with exercise still require further research in order to establish the supplement’s most effective protocols in terms of dosage and timing, and the long-term benefits, particularly those related to exercise protocols and exercise adherence.

drahmadalkhatib@gmail.com

Effects of high-intensity lifestyle intervention on increased cardiometabolic risk in truncal obese adults
Vera P Simovska
St. Kliment Ohridski University, Macedonia

Obesity is a chronic disease that increases the risk for coronary heart disease (CHD) and type II diabetes (T2DM) and it’s a growing public health problem worldwide. The purpose of our study was to develop a model of therapeutic efficiency high-intensity lifestyle intervention intended for truncal obese adults with increased cardiometabolic risk. Within the randomized controlled trial at a group of truncal obese adults with risk factors for CHD and T2DM, we suggest the following two types of high-intensity lifestyle interventions: 1st-low fat, hyperprotein, restriction diet (RD) of 1200-kcal/d (female) and 1500-kcal/d (male) with low glycemic (GI) and atherogenic index, and a specific proportion among SFA, MUFA and PUFA. The 2nd-RD and the individually dosed physical activity (PA) with gradually, from low to moderate and peaks of high intensity (50%-60%-75% VO2 max) in accordance to the initial level of the individual aerobic capacity (VO2 max), expressed into METs. After 30 days there was increase energetic value of RD for 200-kcal/d in accordance with increased PA. The changes in anthropometric measures, metabolic profiles, VO2 max and BMR are evaluated after 30 and 50 days. The efficiency of the progammed PA in combination with RD represents a significant higher reduction of BMI (kg/m2), WHR, fat mass index, risk factors for CHD and metabolic complication (hyperglycemia, dyslipidemia, arterial hypertension and atherogenic indexes) associated with truncal obesity and significant improvement in cardiorespiratory fitness for 17.16% VO2 max from initial level.

vera.simovska@uklo.edu.mk