

Methods: The Jerusalem artichoke tuber was processed by rotary vacuum microwave, hot dry air blower, and then blender-hammer mill machine into 600 micrometers in size. The dietary fiber components of processed powder were analyzed. Regarding the clinical pilot, the selected diarrhea patient in surgical ICU was received of 2 gram in each 100 mL of hospital enteral feeding formula for 5 days. The daily diarrhea score was recorded. The diarrhea was defined when the King's stool chart score ≥ 12 .

Results: The swelling artichoke powder particle was very low. The mixing of hospital blenderized diet formula increased the viscosity only 0.6–0.7 RVU. The component of dietary fiber was comprised of 20.8–21.6% and fructans (inulin and oligofructose) 66.0–71.5%. After mixing this power into the hospital enteral formula in 11 patients who suffering from diarrhea [median of score (interquartile range) 18 (12–26)], the diarrhea was improve (diarrhea score < 12) in 7/11 patient (63.6%) at the 5th day. The effect of improving was begin at 2nd day [diarrhea score: 15 (8–32); $p = 0.03$] and significant improve at 4th and 5th day [9(5–24); $p < 0.01$ and 8(5–24); $p < 0.01$ respectively]. There were no report of vomiting and tube clogging between the study period. Three patients had the high gastric residual volume (> 200 mL) in the study period.

Conclusions: The processed powder of Jerusalem artichoke tuber mixing in hospital enteral feeding formula might be improve the diarrhea score. However, the future randomized control trial should be performed for demonstrate the more valid results.

References

- Chittawatanarat K, Pokawinpuadisun P, Polbhakdee Y. Mixed fibers diet in surgical ICU septic patients. *Asia Pac J Clin Nutr*. 2010;19(4):458–64.
- Tanjor S, Judprasong K, Chaito C, Jogloy S. Inulin and Fructooligosaccharides in Different Varieties of Jerusalem Artichoke (*Helianthus tuberosus* L.). *KKU Res J*. 2012;17(11):25–34.
- Judprasong K, Tanjor S, Puwastien P, Sungpuag P. Investigation of Thai plants for potential source of inulin-type fructans. *J Food Comp Analysis*. 2010;24:642–9.

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Geriatrics I

SUN-PO032

DOES THE INTAKE OF NUTRIENTS ASSOCIATED WITH CARDIOMETABOLIC RISK DIFFER ACCORDING TO OCCUPATIONAL STATUS IN 60–65-YEAR-OLD SUBJECTS? PRELIMINARY RESULTS

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Rationale: The aim of the study was to compare the intake of those nutrients which are associated with cardiometabolic risk in pre-elderly subjects.

Methods: We recruited 300 subjects aged 60–65 and divided into three equal groups of white-collar, blue-collar workers and unemployed subjects; 50% were women. Anthropometric measurements and clinical interview were conducted, metabolic syndrome was assessed according to International Diabetes Federation. The pattern of consumption of various nutrients was analyzed in detail.

Results: The most beneficial intake of nutrients was in the white collar women: vitamin C [103 mg (68–159)], % energy from saturated fats (SFA) [10,8 (7,1–13,7)], the amount of kilocalories per 1 gram of fiber [78 kcal (5–103)], sodium [2761 mg (1922–4108)]. Metabolic syndrome occurred in 72% of subjects in this group.

Among men, the highest sodium intake [4216 mg (3142–5660)], the highest % SFA energy [14,5 (10,6–17,6)] and the least favorable index of kcal per 1 g of fiber (106 kcal (91–149)) occurred in the group of blue-collar workers. The incidence of metabolic syndrome in this group was 78% of the subjects.

Conclusions: Occupational status differentiated the level of consumption of the assessed nutrients. The most convergent with recommendations diet occurred in white collar workers group, the least beneficial in blue collar workers. Multifactor analyzes can determine to what extent the diet as compared to other factors, eg lifestyle, smoking determines the risk of metabolic syndrome.

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SUN-PO033

INFLUENCE OF PHYSICAL EXERCISE AND PROTEIN SUPPLEMENTATION IN QUALITY OF LIFE (SF36) IN SENIORS TO LIVE IN THE COMMUNITY

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Rationale: Ageing is characterized by a gradual loss of functions, being a natural and physiological process and markedly heterogeneous. However it is possible to modify the trajectories of functional decline and promote successful ageing; physical exercise and nutrition have shown benefits in the promotion of better quality of life. The objective of this study to verify the influence of protein supplementation associated with the practice of physical exercise in Quality of life (QoL) in Seniors living in the community.

Methods: A clinical, prospective, double-blind, randomized, placebo-controlled study was developed. Sample was probabilistic and randomly assigned. Subjects were distributed through the 4 arms of the study with 19 participants each: 1-physical exercise (strength and resistance)+protein supplement (20 g); 2-physical exercise (strength and resistance)+placebo; 3-only protein supplement (20 g); 4-control group, without intervention. Each of the 4 groups was assessed at baseline and after 12 weeks.

QoL was assessed through SF36 questionnaire, before and after intervention. Descriptive and inferential statistics were used.

Results: The sample consisted of 79 individuals, 55 women and 25 men, with a mean age of 68.54 ± 5.72 years, mean height 1.57 ± 0.09 m, mean weight 72.7 ± 14.3 kg, being homogeneous with respect to age, sex and the anthropometric characteristics (BMI, arm and leg circumference). Groups 1 and 2 significantly improved their QoL ($p < 0.05$) during the study. QoL improvement was greater in groups 1 and 3 than 2 and 4 ($p < 0.05$).

Subjects in group 4 worsened their outcomes in all domains of QoL assessed.

Conclusions: Protein supplementation revealed a positive influence on QoL, especially when associated with exercise. In fact, seniors who were not supplemented and did not performed a prescribed exercise (control group) showed a worsening of their QoL throughout the study.

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