## DIFFERENTIATED EFFECT OF VEGETARIAN DIET ON PANCREATIC ENZYME SECRETION

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We showed previously that the specificity of fecal tests in the assessment of exocrine pancreatic function in vegetarians is reduced. Pancreatic enzyme output in vegetarians, although lower, was not statistically different from that observed in healthy subjects. The aim of the present study was to assess the effect of vegetarian diet on pancreatic enzyme secretion in healthy volunteers. Material & methods: 30 healthy subjects were put on vegetarian diet for a one-month period. In all subjects, fecal elastase-1 (E1) concentrations, fecal chymotrypsin (ChT) and fecal lipase (Lp) activities were measured in the beginning (normal diet - ND) and in the end of the study (vegetarian diet - VD). In addition, daily output of fecal enzymes was also assessed. Results: All values are expressed as mean+SEM. Vegetarian diet did not result in significant change of stool weight (97.6±8.8 vs. 101.2±10.8 g/day). The decrease of fecal enzyme levels (E1:  $686\pm75$  vs. 584+78 µg/g; ChT:  $21.3\pm2.0$  vs. 17.2±1.7 U/g; Lp: 123±18 vs. 104±13 U/g) was significant exclusively for the last enzyme (p<0.02). The decrease of daily fecal enzyme output (E1: 64868±7499 vs. 59744±13403 mcg/day; ChT: 1995±219 vs. 1608±214 U/day; Lp: 12197±2028 vs.  $11182\pm1861$  U/day) was significant for chymotrypsin (p<0.04). In conclusion, vegetarian diet lasting for one month affected pancreatic enzyme secretion.