

[P2-251] Reduced Intake of Nutrients from Vegetable Source Was Negatively Associated with Microalbuminuria in Type 2 Diabetic Patients.

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Dietary factors have been associated with diabetic nephropathy in selected populations. The aim of this cross-sectional study was to evaluate the role of nutrients from usual diet in microalbuminuria in type 2 diabetes mellitus (DM) patients without previous dietary counseling. After clinical and laboratory evaluation, 119 normoalbuminuric [NORMO; 24-h urinary albumin excretion (UAE) <20 mg/min; immunoturbidimetry] and 62 microalbuminuric (MICRO; UAE 20–199 mg/min) patients underwent a 3-day weighed-diet records (% of total daily energy intake; Nutribase 98 Clinical Nutritional Manager software) which reliability was confirmed by 24-h urinary nitrogen output and serum linoleic fatty acid measurements. MICRO patients [UAE=60.4(20-180.6) mg/min] were older (60.9±9.7 vs. 57.7±10.7 years; P<0.05) and more frequently hypertensive (90 vs. 73%; P<0.01) than NORMO [UAE=3.5(2.6-18.9) mg/min] patients. Gender, DM duration, BMI, blood pressure, and plasma lipoproteins were not different. MICRO patients consumed more proteins [20.5±4.4 vs. 19.0±3.5%; P=0.01] with a lower intake from vegetal (30.1±8.7 vs. 34.1±9.9% of total protein; P<0.01) and a higher intake from animal (69.8±8.8 vs. 68.9±9.9% of total protein; P=0.008) sources than NORMO patients. Polyunsaturated fatty acids (PUFA; 8.6±2.9 vs. 9.7±3.3%; P<0.03) and plant oils [0.20(0.04-0.67) vs. 0.26(0.05-0.94) ml/kg weight; P=0.02] intakes were lower in MICRO patients. Total energy, carbohydrate, total lipids, cholesterol, saturated and monounsaturated fatty acids, fiber, meats, beans and dairy products intakes were not different between MICRO and NORMO patients. In logistic regression models, adjusted for age, gender, hypertension and fasting plasma glucose, intakes of total protein (OR 1.10; 95%CI 1.01-1.21; P=0.03) and animal protein (OR 1.04; 95%CI 1.01-1.08; P=0.03) were positively associated with microalbuminuria. Vegetal protein (OR 0.96; 95%CI 0.92-0.99; P=0.03), PUFA (OR 0.86; 95%CI 0.76-0.96; P<0.01) and plant oils (OR 0.95; 95%CI 0.91-0.98; P<0.01) had a protective effect. In conclusion, in type 2 DM patients the intake of protein from vegetal source and PUFA, particularly from plant oils, may protect for the presence of microalbuminuria.