Are supplemented low-protein diets nutritionally safe?

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In patients with chronic renal failure (CRF), the reduction of dietary protein intake may correct uremic symptoms, slow the rate of progression of renal failure, and delay the onset on dialysis. Concerns have been made on the nutritional consequences of protein-restricted diets. Over 15 years, 239 patients were treated with a very-low-protein diet providing 0.3 g vegetable protein/kg/day supplemented (SLPD) with essential amino acids and keto analogs. Many adverse consequences of uremia were corrected by this regimen, such as metabolic acidosis, secondary hyperparathyroidism, resistance to insulin, decreased Na(+)–K(+)–ATPase activity. A joint physician-dietitian monitoring contributed to the maintenance or obtention of a satisfactory nutritional status, even in patients at risk, diabetics, patients with the nephrotic syndrome and with renal allograft chronic rejection. The outcome of these patients when treated by hemodialysis or transplantation was favorable, their nutritional status being preserved. Results from the present study and results of other studies show that SLPD can be used in patients with advanced CRF without adverse effects in carefully selected and monitored patients.

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