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Interpreting Research for the Kidney Patient - September, 2006

¹ Soroka N, Silverberg DS, Gremland M, Birk Y, Blum M, Peer G, Iaina A Comparison of a vegetable-based (soya) and an animal-based low-protein diet in predialysis chronic renal failure patients. *Nephron*. 1998;79(2):173-80.

² Barsotti G, Morelli E, Cupisti A, Meola M, Dani L, Giovannetti S. A low-nitrogen low-phosphorus Vegan diet for patients with chronic renal failure. *Nephron*. 1996;74(2):390-4

³ Bergesio F, Monzani G, Guasparini A, Ciuti R, Gallucci M, Cristofano C, Castrignano E, Cupisti A, Barsotti G, Marcucci R, Abbate R, Bandini S, Gallo M, Tosi PL, Salvadori M. Cardiovascular risk factors in severe chronic renal failure: the role of dietary treatment. *Clin Nephrol*. 2005 Aug;64(2):103-12.

From time to time one of you will tell me about adding meat to your diet in small quantities. I always discourage this for two reasons - my own experience and the research Dr. Walser and others have done.

I have told many of you that my own experience with a vegetarian diet lowered my creatinine to well within a normal range, 0.9 vs 1.4 while eating meats. My problems occurred as a result of an orthopedic surgeon prescribing an NSAID (a non-steroidal anti-inflammatory drug, like Naproxen or Ibuprofen -- Dr. Walser discusses these on p.22 of his book). I always tell you that animal proteins are harder on the kidneys than vegetable proteins. There is research besides my personal experience that establishes this.¹

In Dr. Iaina's study, patients were on either a low protein vegetarian diet for 6 months or a low protein animal diet for 6 months and then switched to the other diet. These patients had GFR's between 15 and 50. As you would expect, a number of the patients gave up on the diets. Some of you have given up on the diet, but this study gives you a great deal of hope. While eating the vegetarian diet, the patients had a better appetite and ate more calories. While the patients were on the vegetarian diet their GFR's fell less (their kidney function stayed higher) while eating the diet. **The decline in GFR was 73% less while the patients were on the vegetarian diet as opposed to the decline before they started the diet.** Another advantage is that the vegetarian diet provides a lower phosphate/phosphorous level (Dr. Walser talks about patients with this problem on p 67).

Earlier, Dr. Barsotti's group had noted "positive features of this special vegan diet are the high ratio of unsaturated to saturated fatty acids, the absence of cholesterol, and the lower net acid production in comparison with a mixed diet" in which both vegetables and meats or dairy are eaten.² Those of you who have problems with cholesterol will benefit from a vegetarian diet. The treatment of acid production is discussed by Dr Walser on p 107.

Yet another study by Dr. Barsotti's group showed that kidney patients with a serum creatinine level of 5.6 (advanced kidney failure) on a vegetarian diet or an animal protein diet, each eating only 20 grams of protein per day, had significantly less urea in their blood and a better lipid profile when they ate a vegetarian diet. The authors interpreted this finding as suggesting that **low-protein vegan diets were especially beneficial** for preventing the development of cardiovascular disease in patients with end-stage renal disease.³

Nutramine™, Nutramine T™, Nutramine T AminoBites™ and Nutrasentials™ all contain the amino acids you need whether you are on dialysis or trying to avoid dialysis. We want each of you to be sure you are taking the 10.5 grams a day recommended by Dr. Walser. Taking less than that has been shown not to be as effective in delaying dialysis. (See March and May issues for more on this topic - they are online at www.calwoodnutritionals.com under the health button).