Nutrition in CKD Guideline Update: Part 3 – Protein Intake

Question and Answer

Q: For protein requirements, do you use actual body weight or ideal body weight for obese patients?

Alp Ikizler: Ideal body weight; in case of extreme obesity or wasting, an intermediary target can be fixed for example a value in-between actual and ideal BW (50%; or 75%-50%-25%)

Winnie Chan: The workgroup suggests that the choice of body weight should be based on clinical judgement related to patient’s health goals. This may include the use of ideal body weight, standard body weight, desirable body weight, adjusted body weight, or percent of usual body weight. The use of the specific weight formula should be personalized to the patients. Table 5 on page 30 of the KDOQI Nutrition in CKD Guideline document gives details and references for each of the body weight measure.

Q: Can a ketogenic diet be helpful with CKD/DM?

Alp Ikizler: There is potential research in autosomal dominant polycystic kidney disease (ADPKD) since experimentally ketogenesis may improve cyst formation. There is no data in human ADPKD so far.

Winnie Chan: Ketogenic diet is typified by its low carbohydrate and high fat content, and very often a diet very low in calorie. To date, there is not much evidence in using ketogenic diet in the management of CKD with DM. An animal study suggested that a ketogenic diet may be able to reverse diabetic kidney disease. However, in terms of clinical trials, evidence is very limited. The available literature is limited to patients with mild CKD. Although it has proven (in one small observational study) to be an effective and safe treatment for weight loss in obese patients with mild CKD in the short term, we are not sure about its long-term effects. Given the lack of clinical trials, particularly RCTs, it would be premature at this stage to make any recommendations on using ketogenic diet in the management of CKD with DM.

Q: What is the recommend source of energy? Higher in carbohydrate or fat?

Alp Ikizler: Reducing animal protein and adding more vegetables/fruit would decrease protein and fat intake and increase carbohydrate intake. Carbohydrate intake up to 60-65% of daily energy intake is acceptable. The rest is easily obtained with fat (PUFA oils).