

Dietary Needs of Patients with Renal Failure

By Miss Mariam Joseph*

DIET therapy in the treatment of renal conditions is not a new development. Diet is very significant in the treatment of renal failure. The progress of patients with renal failures often depends upon the intake of different components of diet, particularly proteins, water and salts. Special emphasis on diet is more than justified in patients on long term dialysis, because much of their renal functions are impaired and strict diet can cut down the number of dialysis.

Experiments in diet therapy have shown that endogenous area which is presumably high in these patients can be used for protein synthesis and several symptoms of uremia can be reduced. The diet most suited in renal failure is determined by several factors. Amount of protein is usually planned according to the amount of urine voided, protein metabolites retained in the blood, the clinical manifestations presented by the patient, particularly the mental changes. Protein is not completely withheld because a minimum of 20 grams at least is considered to be essential for preventing the excessive catabolism of body proteins. Most of the patients are given a diet which consists of 20 grams of protein when they are in the oliguric phase. The rest of the calories should be from carbohydrates and fats. Many patients do not tolerate too much of fats. In the diuretic and post diuretic phases protein is increased up to 40 grams and maintained till the blood urea level comes down to normal.

The introduction of prescribing diet in terms of 'Protein unit' seems to be helpful in planning diet and it ensures the adequacy of first class

protein. One protein unit provides seven grams of protein of high biologic value. It is equivalent to one medium sized egg, and thirty grams of cooked meat, if a patient has to get 20 grams of protein. The remaining thirteen grams of protein can be from cereals and grams and vegetables. Too much milk is not advisable because of its high content of sodium, potassium and phosphorous.

Intake of sodium and potassium also should be cut down depending upon their level in the serum and the manifestations seen in the patient. In the oliguric phase salt free diet is usually adhered to, but in the diuretic phase salt is supplied. When patient is on diuretics specified amount of salt is supplied. Intake of potassium can be restricted without much difficulty.

Fluid content of the diet is usually planned according to the urinary output, the blood chemistry and the amount of fluid retained in the body. As a rule each day's intake of fluid is calculated considering the previous day's output. Four hundred cc plus the previous day's output gives the total amount of fluid for the day. When the patient is anuric usually 400 cc of fluid is given a day except when the anuria is due to dehydration intake of fluid is increased very much.

In meeting the nutritional needs of patients with renal failure the nurse faces several problems. The physician prescribes the diet designed to meet the individual requirements of the patients. Most often the dietitian translates this prescription into food. It turns out a failure if patients refuse to eat them, and this happens very often. The nurse should be more concerned as to how the patient takes the food. Providing a diet which meets

both the requirements and desires of the patient can be a problem.

A study was undertaken by the author to explore into some of the problems encountered and also define the role if the nurse is meeting the nutritional needs of these patients. Twenty patients with the diagnosis of renal disease were chosen for the study. This study revealed several factors that call for the attention of the nurse. As against the common belief that patients have a tendency to take what is restricted, there was no record of any patient who has taken more than what had been prescribed.

Majority of the patients on special diet were on hospital diet. It was shown that by merely being on hospital diet does not ensure an adequate diet intake. There are many factors which need to be considered. The physical conditions of these patients are so liable that it may be difficult to predict what type of food may be tolerated. Several times it was noticed that the patients could not take the diet that was brought and so it had to be changed. Patients may have nausea and vomiting which may be due to the uremic toxins affecting the gastro-intestinal systems.

Too many restrictions in the diet which gives a different taste and to add to that the different way of preparing diet in the hospital, makes it less attractive to the patients. There is also lack of understanding on the part of the patients and the relatives. Most of the time patients find it difficult to understand and accept the restrictions in diet when they become ill. Many times the food items and the preparations are quite different from what they are used to. Some of the patients eat the food supplied from the hospital whether they like it or not just because they think that hospital food is good for them. The study reveals that much of what patients learn in the hospital is not what they are taught, but what they 'pick up' and it may or may not be relevant to their health.

In spite of the fact that, the development of dietetics as a

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