

## CHAPTER 6

# NUTRITION MANAGEMENT AND NURSING APPROACH IN PATIENTS UNDERGOING HEMODIALYSIS THERAPY

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### NUTRITION IN HEMODIALYSIS TREATMENT

Chronic kidney patients often have to change their diets because of the ingredients contained in foods and acquire new eating habits that are very different from their ethnic and cultural preferences<sup>[1]</sup>. Therefore, it is difficult for patients to change their usual eating and drinking habits<sup>[2,3]</sup>. However, diet is a crucial part of the treatment regimen. When the patients undergoing hemodialysis therapy do not adapt fluid and nutrition restriction, complications are seen like the electrolyte imbalance (such as hyperkalemia and hyperphosphatemia ) and extracellular fluid volume overload (peripheral and pulmonary edema) which may lead to potential fatal conclusions <sup>[4-10]</sup>. Dietary non-compliance also has long-term chronic effects. Hyperphosphatemia causes bone disease and non-skeletal metastatic calcification. Chronic volume overload is associated with hypertension and may eventually lead to congestive heart failure. Inadequate intake of nutrients, especially protein and calorie requirements, leads to a reduction in basic proteins, such as albumin and leads to muscle loss. Therefore, it is important for patients undergoing hemodialysis therapy to apply medical nutrition treatment. However, studies show that many patients receiving HD treatment have difficulty in maintaining health promotion behaviors <sup>[11,12]</sup>. Thus, as far as possible, patients should be advised of general healthy eating principles appropriate for hemodialysis treatment. The basic nutritional requirements and the electrolytes in the risk group in hemodialysis patients are listed below.

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plain the mechanism underlying salt restriction. <sup>[15,18,19,26]</sup>. Potassium is a mineral found in many foods consumed in daily life. It is possible for patients who receive dialysis treatment not to experience hyperkalemia by taking regular dialysis treatment and keeping the potassium in balance <sup>[26]</sup>. It is as important as hemodialysis treatment for patients to learn foods containing high and low potassium and to be able to control the portions. Nurses working with these patients should check the food consumed at regular visits and work with the patient to balance the risky electrolyte according to the patient's blood values. In addition, patients should always be informed about general nutrition principles and reminders should be made <sup>[15,19,50]</sup>.

Phosphorus is a mineral commonly found in the main food groups <sup>[26]</sup>. Foods with high phosphorus, alternative foods that can be preferred and appropriate cooking methods must certainly transfer to the patients and also patients must be supported. Research also shows that phosphorus control can be established and also protein intake can be maintained at a sufficient level in patients receiving diet counseling <sup>[26, 50,51]</sup>.

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