

## **Review: Food labels to maintain Phosphorus level in CKD Diet**

### 1. Why controlling Phosphorus level is important?

One of the kidney functions is to remove the extra phosphorus in your blood. When you have CKD (chronic kidney diseases) the kidney will not be able to extract the extra phosphorus from the blood causing pulling calcium out of bones which will make the bone weak. On the other hand, increasing the level of the calcium in the blood along with the high phosphorus level will lead to increase the risk of heart attack, stroke, or death.

### 2. How much phosphorus removed in dialysis session?

The recommendation for adult with normal kidney to have between 700 mg to 1,200 mg/day.

In case of kidney failure, phosphorus starts to increase in the blood leading to a condition called (hyperphosphatemia).

The amount of the phosphorus removed in dialysis session ranged from 100 – 250 mg/session. This number is affected by the pre-dialysis phosphorus level, the type of dialysis received and the duration of dialysis session. The dialysis alone not enough to control the phosphorus in the blood, that is why we need to control our phosphorus intake.

### **High phosphorus food**

The following chart for examples for high phosphorus food and suggestion for alternatives lower in phosphorus:

| High phosphorus food                | Lower phosphorus alternatives                       |
|-------------------------------------|-----------------------------------------------------|
| ½ cup milk: 120 mg                  | ½ cup rise milk or soy milk (unenriched) : 30-60 mg |
| ½ cup ice cream: 70 mg              | ½ cup Italian ice: 0-30 mg                          |
| 1 cup raisin bran: 200 mg           | 1 cup rice krispies: 28 mg                          |
| 2 tablespoons peanut butter: 120 mg | 2 tablespoons cream cheese: 20 mg                   |
| 1 ounce chocolate candy: 60 mg      | 1-ounce sweet candy                                 |
| ½ cup instant pudding: 340 mg       | ½ cup jelly: 10 mg                                  |
| 12-ounce cola: 45mg                 | 12-ounce 7up                                        |
| One medium biscuit: 202mg           | One medium French roll: 36 mg                       |

## Observation of nutrition labels on food package for hidden phosphorus

It is rarely to list the phosphorus content on the food label. But if milligrams or percent Daily Value are listed, use the below chart as a guide to evaluate the amount of phosphorus in food:

|                   |                                       |
|-------------------|---------------------------------------|
| Low phosphorus    | 0-50 mg or less than 5% Daily Value   |
| Medium phosphorus | 51-150 mg or 5-15% Daily Value        |
| High phosphorus   | 150 mg or higher than 15% Daily Value |

Focus on the hidden phosphorus by knowing the different word of the phosphate, like phosphoric acid, sodium aluminum phosphate, pyrophosphate, polyphosphates, and calcium phosphate. Also don't forget to check the medicines and supplements label for the phosphorus contain.