# **Renal Calculus (Kidney Stone)**

### What is it?

- <u>Renal Calculus</u>— is a renal stone which are solid concretions formed in the kidneys from dissolved urinary minerals; may form or pass into the urinary bladder
  - o Size- if 2-3 millimeters can cause an obstruction of the ureter
- <u>Types of Stones-</u> calcium oxalate, calcium phosphate, struvite and may produce uric acid or cystine stones
  - <u>Renal Calculi</u>- are solid concretions formed in the kidneys from dissolved urinary minerals
  - <u>Kidney Stones</u>- typically leave the body by passage in the urine stream, many stones are formed and passed without symptoms



## **Signs and Symptoms:**

• **Symptoms**- colicky pain, hematuria, dymaturia, pyuria, dysuria, oliguria, abdominal distension, nausea and vomiting, hydronephrosis, postural azotemia, frequency in micturition, loss of appetite and weight

## **Recommendations:**

- <u>Limit or Avoid</u>- Caffeine, Alcohol, Tofu, Sardines, Fish with bones, Dried Beans, Sweet Potatoes, quick cooking Grits, Cream Soups, Greens, Calcium Fortified Foods, Limit Milk (1-2 cups/day), Yogurt and Ice Cream or Cheese to 2 ounces per day
- Increase- Fluids to reduce the saturation level or various salts and ionic particles in the urine; need to produce 2 quarts of urine per day

### Facts:

- <u>Causes</u>- renal tubular acidosis, Dent's disease, hyperparathyroidism, medullary sponge kidney, Crohn's Disease
  - May Increase the Risk water fluoridation, symptoms of skeletal flurosis
- <u>80% of Cases</u>- are calcium oxalate stones, one of the most common diseases of the urinary tract

## What can I do?

- See your Health Care Provider- for more information
  - Confirmed by- ultrasound examination, urine tests, blood tests
  - <u>Lithotripsy</u>- sound waves that shatter into smaller fragments
- See a Registered Dietitian for help as needed
  - o Exercise Walk 1 mile per day

