

March 31, 2011

## Potassium Iodide for Kidney Patients?

In the weeks since the earthquake and Tsunami combination hit the shores of Japan and severely impacted the nuclear power plants, we have heard news coverage of the dangers of nuclear exposure. Some in the U.S. have been suggesting a supplement called potassium iodide, in response. Experts in the U.S. feel the use of potassium iodide is not needed, due to the likelihood of very low exposure rates in the U.S. Of great importance to kidney patients is the question of how much potassium is in a single dose, and how this would affect their total intake of potassium per day. The answer to this question has been worked out for us by Katy Wilkens, MS, RD, and her team at the Northwest Kidney Centers, in the Seattle area.

The FDA (Food and Drug Administration) has approved two different forms of potassium iodide- tablets and liquid. The tablets come in two strengths, 130 milligrams (mg) and 65 mg. The usual adult dose is 130 mg and a one time dose is usually all that is needed, unless the radioactivity remains in the environment for longer than 24 hours, then the dose may need to be repeated, but only on the advice of their doctor. Potassium iodide is **only** useful in protecting the thyroid gland against taking up radioactive iodine. It is **not** a general radioprotective agent.

- One adult dose of 130 mg contains 31mg of Potassium
- This is less potassium than is contained in 1/3 of a medium apple, which is a low potassium food.
- Generally kidney disease patients are allowed 2,000mg of potassium/day.
- So, a standard dose would add a very small amount of potassium to a day's intake.

As people with special, complex medical needs, kidney patients should not take this medication except on the advice of their doctor, working with other public health officials. Some people may have allergies to iodine or other conditions that make taking this medication without the advice of their doctor a concern.

### **Added Resources:**

- Centers for Disease Control and Prevention Website  
<http://emergency.cdc.gov/radiation/japan/ki.asp>
- U.S. Food and Drug Administration- Frequently asked questions:  
<http://www.fda.gov/Drugs/EmergencyPreparedness/BioterrorismandDrugPreparedness/ucm072265.htm>