



Facts About “KI”

Preparing for a Nuclear Emergency

What is KI?

KI stands for potassium iodide. Potassium iodide is an ingredient found in table salt. If taken in time and at the appropriate dosage, KI protects the thyroid gland from radioactive iodine and can reduce the risk of thyroid cancer after a severe nuclear emergency event resulting in a release of radiation.

What is the benefit of taking KI during a nuclear emergency?

During a nuclear emergency, people can either swallow or breathe in radioactive iodines. Once inside the body, the radioactive iodines can cause a variety of health effects. The thyroid gland is very sensitive to radiation. KI can help prevent thyroid disease if taken within several hours of exposure to radiation released from a nuclear power plant.

How soon after a nuclear emergency should KI be taken?

KI should be taken as soon as possible after public health officials tell you to do so. You should take one dose. Taking more will not help you because the thyroid can “hold” only small amounts of iodine.

Can everyone take KI?

People who are allergic to iodine should NOT take KI. You may take KI even if you are taking medicine for thyroid problems, but check with your doctor first. Do not take KI if you have the rare disorders of dermatitis herpetiformis or hypocomplementemic vasculitis. Women who are pregnant or breast feeding can take KI. KI can also be given safely to babies and children.



Is KI the best protection from radiation?

While KI can help to protect the thyroid gland, it cannot protect against other health effects caused by radiation. In the event of a nuclear emergency, it is best to avoid exposure to the radiation. Evacuation or “sheltering in place” are the best ways to avoid the problems caused by radiation. Be sure to follow any directions given by state/local health officials regarding any protective procedures.

**We are on the
Web!!!**

For more information, visit the NJ Dept. of Health & Senior Services website at www.state.nj.us/health

Are there any common side effects caused by KI?

KI has few side effects. Children are not at higher risk of side effects. Side effects usually happen when people take more doses than needed. Take the amount indicated on the table below and do not take it for longer than you are told. Possible minor side effects are skin rashes, swelling of the salivary glands, metallic taste, burning mouth, sore teeth/gums, stomach upset, diarrhea, or headaches. If you have severe side effects or a severe allergic reaction, call a doctor or go to the nearest hospital.

How should KI tablets be stored?

KI tablets come in a sealed foil packet. Do not open them until instructed by a public health official. Keep the tablets in a safe and readily available location in your home at room temperature. Keep out of the reach of children. KI tablets can be stored in your home for up to five years.

Do I need a prescription for KI?

KI tablets can be purchased over-the-counter at some local pharmacies without a doctor's prescription.

What is the recommended dose of KI?

The following table gives the dosages recommended by the Food and Drug Administration (FDA). You have been given 130 mg tablets that can be easily cut in half. One full 130 mg tablet is the dose for adults. For most children, the appropriate dose is half a tablet. On a firm, hard surface, using a sharp knife, cut the tablet in two. If the child is younger than three years, cut the tablet in quarters. Infants under one month of age need 1/8 of a tablet. Cutting and/or crushing tablets may be difficult during a stressful emergency situation. We recommend that you practice this process using a small, uncoated aspirin-type tablet. For younger children who may not be able to swallow a tablet, crush the tablet and add the powder to a small amount of applesauce, pudding, water, or milk. Stir to make sure the powdered tablet mixes in thoroughly.

KI Dosages (FDA Recommended)

Risk Group (age)	Dose (milligrams)	# of 130 mg tablets	How much of tablet to take
Over 18 years	130	1	
Children over 3 yrs through 18 years *	65	1/2	
Children over 1 month through 3 years	32	1/4	
Birth through 1 month	16	1/8	

*Adolescents over 12 through 18 years approaching adult size (154 lbs. and over) should receive the full adult dose.



"KI" For Children

Special Instructions

Administering Potassium Iodide to Children

The thyroid gland in children is very sensitive to the effects of radioactive iodines. In the event of a nuclear emergency, it is important for adults to fully understand how to prepare the proper dosage for young children. The following information will help you to give KI to your children properly.

Children over 3 through 18 years of age*

For children in this age group, the dose is a *half-tablet*.  On a firm hard surface, using a sharp knife, cut the tablet in half. The tablets are marked for easy cutting. If the child cannot swallow pills, the half tablet can be crushed and mixed into milk or water (see below for directions).

Children over 1 month through 3 years of age**

For children in this age group, the dose is a *quarter-tablet*.  On a firm, hard surface, using a sharp knife, cut the tablet into four equal pieces (quarters). Put a quarter-tablet into a cereal bowl and crush the tablet into a fine powder using the back of a teaspoon. Add the powdered quarter-tablet to milk or water and shake thoroughly to make sure the powder mixes in. Have the child drink the mixture right away. Another option is to mix the powdered quarter-tablet with applesauce or pudding and feed to the child.



Birth through 1 month of age**

For newborns, the dose is an *eighth of a tablet*.  On a firm, hard surface, carefully crush the entire tablet to fine powder using the back of a teaspoon (be careful the spoon doesn't propel the tablet off the surface). Choose **one** of the following options:

- Using a knife, divide the powder into eight equal piles. Put the powdered eighth-tablet into a baby bottle, add formula or breast milk, shake thoroughly to make sure the powdered tablet mixes in, and give bottle to the baby immediately,
- **Or**, dip a wet finger into the powdered eighth-tablet and have baby suck the powder off the finger,
- **Or**, crush one full tablet, add to 8 oz. of liquid, and have the baby drink 1 oz.

*Adolescents over 12 through 18 years approaching adult size (154 lbs and over) should receive the full adult dose of 1 tablet.

**According to the FDA, it is not critical to divide the tablet in exact amounts. The benefits of KI exceed the risk of overdosing, especially in children.