

POTASSIUM IODIDE (KI) FACT SHEET

What is potassium iodide?

Potassium iodide is a chemical compound that contains iodine, which is necessary for the normal functioning of the thyroid gland. It is known by its chemical symbol, KI.

Potassium iodide is the iodine in iodized salt. Most people ingest it every day without being aware of it.

Potassium iodide is also manufactured in pill form to be used as a supplement to help prevent the thyroid gland from absorbing radioactive iodine that might be released during an emergency at a nuclear power plant. It is intended to protect against thyroid gland cancer caused by radioactive iodine.

Potassium iodide is not an “anti-radiation” pill. It is a supplemental protective measure, secondary to evacuation or sheltering in place. Evacuation and sheltering in place remain the primary protective actions during a radiological emergency.

How does it work?

Potassium iodide protects the thyroid gland by satisfying its requirement for iodine. When taken under the direction of state or local public health officials, potassium iodide is absorbed into the thyroid gland, thus protecting it from absorbing any radioactive iodine.

Who can take potassium iodide?

Most people can take potassium iodide without side effects. A small number of people could have an adverse reaction. **Anyone with an existing thyroid gland condition and allergic to iodine or shellfish should NOT take it.** Consult your physician if unsure whether you should take potassium iodide.

How will I know when to take potassium iodide?

To be effective, potassium iodide should be taken immediately before or within a few hours

after exposure to radioactive iodine. Take potassium iodide **only** at the direction of local or state public health officials, who will decide the most appropriate time to do so. The recommendation will be announced through the Emergency Alert System (EAS) and the news media. People living or working within the Emergency Planning Zone (EPZ) around the Diablo Canyon Power Plant should review the communication information section in the AT&T phone book for details on emergency notification.

What would happen if I took potassium iodide without being told to do so?

It is very unlikely that you would suffer any ill effects if you took potassium iodide because of a false alarm or “just in case” you thought a radiological emergency was under way. The potassium iodide would simply pass through the body in a day or two.

What are the side effects of potassium iodide?

Side effects are unlikely because of the low dose and the short time you will take the drug.

Possible side effects include skin rashes, swelling of the salivary glands, and “iodism” (metallic taste, burning mouth and throat, sore teeth and gums, symptoms of a head cold and sometimes stomach upset and diarrhea.

A few people have an allergic reaction with more serious symptoms. Those could be fever and joint pain, or swelling of parts of the face and body and at times severe shortness of breath requiring immediate medical attention.

Taking iodide may rarely cause over activity, under activity or enlargement of the thyroid gland (goiter.)

What should I do if side effects occur?

If the side effects are severe or if you have an allergic reaction, stop taking potassium iodide. Call a doctor or public health authority for instructions.

Should I have potassium iodide for my children?

Very young children (under 14 years old) are more susceptible to thyroid gland cancer than adults because they are growing rapidly. Therefore, you should request potassium iodide for not only the adults in your home, but also for any children.

The pre-distributed KI will come in 65 mg tablets. **Two** tablets per day is the recommended adult dosage. To help make KI easier for children (3-13) to take, crush **one** tablet in a small bowl and add 4 teaspoons of water, stir until dissolved then add 4 teaspoons of flavored drink such as juice, flat cola or chocolate milk or formula (to hide the taste.) Then give the child the following amount:

- Age 3-12 years – drink entire mixture = to **one** 65 mg tablet
- Age 1 month to 3 years – 4 teaspoons of the mixture = to ½ tablet or 32.5 mg
- Age birth to 1 month – 2 teaspoons of the mixture = to ¼ tablet or 16.25 mg

In the first few weeks of life an infant is more prone to developing thyroid problems from too large a dose. In this age group it is important not to give more than directed and to see a physician to check the thyroid within a week of or two after the dose is given. After the first month, side effects or complications of too much iodine are unlikely. When directed to give KI in an emergency it may be better to give children over 1 month a larger dose than none at all if it is difficult to precisely divide the dose.

Do not give solid tablets to children under 3 as they may cause choking.

Is taking potassium iodide mandatory?

No. The use of potassium iodide is voluntary. No one is required to accept it or use it.

Where can I get potassium iodide (KI)?

Two doses of KI are being pre-distributed free-of charge by the San Luis Obispo County Public Health Department, to anyone who lives or works in the communities located in the Emergency Planning Zone around the Diablo Canyon Power Plant. Please see the distribution locations listed on the voucher which is attached to this letter.

Potassium iodide can be ordered from several commercial manufactures by telephone, mail, or via the Internet. You may call the following numbers for information regarding FDA approved products:

- “Iosat” (Anbex, Inc), (866)463-6754
- ThyroShield, (636)343-8200

For more information contact:

SLO County Public Health Department
2191 Johnson Ave.
San Luis Obispo, CA 93401
(805) 781-5500

San Luis Obispo County Public Health Department:

<http://www.slocounty.ca.gov/health>

San Luis Obispo County Office of Emergency Services:

<http://www.slocounty.ca.gov/oes>

<http://www.fda.gov>

<http://www.nrc.gov>

<http://www.anbex.com>

<http://www.bt.cdc.gov/radiation/ki.asp>

<http://www.thyroshield.com/whatis/advantages.htm>