Thyroid Uptake and Scan

How to prepare for your scan

What is a nuclear medicine thyroid uptake and scan?

Thyroid nuclear medicine uptake and scan are tests that are used to study the structure and function of the thyroid gland. It is a 2-part study.

How does the exam work?

For the uptake, you will swallow a small dose of radioactive material. This compound, called a tracer, collects in the thyroid gland and gives off gamma and beta rays. A Geiger machine will detect how much of this tracer is absorbed by the thyroid. In the second part of the exam, a small amount of tracer is injected into your vein. Images of your thyroid are then taken with a camera.

How should I prepare for the uptake and scan?

6 Weeks Before

- You must NOT have had X-ray exams involving iodine contrast (such as IVP or CT) in the last 6 weeks.

4 Weeks Before

- Most people will stop taking thyroid hormone medicine (synthroid, cytomel, levothyroxine, lithyronine) 4 weeks before their exam. Check with your doctor before you stop taking this medicine.

In the Week Before

- Do not take any oral iodides (such as Lugol’s solution or SSKI) for 5 days before your exam. Remain off them until exams are completed.

- Do not take vitamins that contain iodine for 5 days before your exam.
• Most people will stop taking anti-thyroid hormones, Propthyouracil (PTU), Methimazole, or Tapazole thyroid medicine 4 days before their exam. **Be sure to check with your doctor before you stop taking these medicines.**

**Day of Scan**

• Do not eat for 2 hours before your appointment. You may drink water.

• Bring 2 forms of identification (ID) with you to the scan.

• You must tell us if you are pregnant, even if you plan to end the pregnancy. If you might receive Iodine-131 (I-131) therapy after the uptake and scan and you are a female of childbearing age, we may send you for a pregnancy blood test on Day 1 of the exam. Plan to be here 1½ extra hours to get the results of the pregnancy test.

• Tell us if you are currently breastfeeding. You cannot continue to breastfeed after you receive the radioactive tracers.

**How is the scan done?**

**Day 1**

• When you arrive at Imaging Services, you will swallow a capsule that contains a tracer.

• You must fast for 2 more hours after swallowing this capsule. You may drink water. You may eat after this 2-hour fasting period, before you return for your uptake study.

• You will return for an uptake study 3 to 4 hours after you swallow the tracer. This part of the visit will take 10 minutes.

**Day 2**

• You will return the next day for another uptake measurement.

• After this second uptake measurement, you will have a thyroid scan.

• For the thyroid scan, a tracer will be injected in your vein. You will then need to wait 10 to 15 minutes before imaging begins. The entire visit takes about 1 to 1½ hours.

• If you are going to be treated with a therapeutic dose of I-131 after the 24-hour uptake and scan, do not eat any solid foods for 2 hours before this appointment. Treatment with I-131 will add 1 more hour to your appointment time.

• After the uptake and scan, it will take about 1 hour for your therapy dose to arrive.
Questions?

Your questions are important. Call your doctor or health care provider if you have questions or concerns. UWMC clinic staff are also available to help.

- UWMC Nuclear Medicine/Imaging Services: 206-598-6200
- Harborview Imaging Services: 206-774-3105

If you will be treated with a therapeutic I-131 dose after the uptake and scan, please review the radiation safety information. See Instructions for Patients Receiving Radioactive Iodine Therapy for Hyperthyroidism.

What should I expect during and after the exam?

- It may be hard for some patients to lie still on the exam table.
- Most of the tracer passes out of your body in your urine. The rest simply goes away over time.

Who interprets the results and how do I get them?

A doctor with special training in nuclear medicine will review the images and send a report to your doctor. Your doctor will share the results with you.