



¹³¹Iodine Therapy (Thyroid Cancer)

PREPARATION:

- Absolute fasting of **6 hours**.
- Pregnancy should be ruled out, and it is necessary to bring the result of recent Beta-HCG (collected less than three days before the exam date) for women in the fertile period, not hysterectomized.
- Medications to be suspended:
 - ✓ For 15 days: Triiodothyronine (T3).
 - ✓ For 30 days: Levothyroxine (Puran T4, Synthroid, Levoid, Euthyrox).
 - ✓ Medications containing iodine, such as cough syrup, vitamins and vitamin supplements enriched with iodine or containing red dye (erythrosine) must be suspended for at least 30 days. **Check the package insert or label of the medicine.**
 - ✓ **For at least 90 days prior or at the doctor's discretion:**
 - ✓ Medications containing amiodarone as the active ingredient. In cases of prolonged use of this medication, the discontinuation period may be longer than this;
 - ✓ There are no limitations on the use of analgesics, antibiotics and anti-inflammatories, as long as they do not contain red dye (erythrosine);
 - ✓ Topical solutions and use of cosmetics: topical solutions containing iodine, such as Povidine, iodized alcohol, Schiller's test (gynecological exam), as well as the use of red/pink lipstick should not be used for at least 15 days;
- Iodinated radiological contrasts should not be used for at least 30 days before the exam;
- Avoid walks on the beach and bathing in the sea, in addition to using suntan lotions for 15 days before the exam. (sunscreens are allowed);
- This test is not recommended for pregnant or breastfeeding women;
- The patient will be asked to take TSH, thyroglobulin and anti-thyroglobulin antibody tests, which must be collected in the days prior to the exam. **Check the laboratory for the expected result delivery time**, as the therapy will only be performed upon the result of these tests.
- If you have any questions about medications, please contact our call center.

DIET:

- 1) The goal of the diet is to reduce as much as possible the amount of iodine that comes from food and drinks. This is necessary to increase therapeutic efficacy.
- 2) Check the product label if there is a reference to iodine or erythrosine dye in its composition or if there are any of the ingredients listed below.
- 3) Do not confuse sodium with iodine, for food or medicines that contain only sodium are allowed.

Foods that should not be consumed for <u>15 days prior to therapy</u> .	
Salt	All foodstuffs containing iodized salt (snacks, fried potatoes, cookies, etc.). Custom-ordered Non-iodized salt is allowed.
Fish and food from the sea	All seafood (oysters, fish, seaweed, shrimp, etc.). Freshwater fish is allowed.

Meat and derivatives	Smoked meat, sun-dried meat, meat broth, sausages (salami, bologna, mortadella, ham, bacon, sausage). All <u>fresh meats</u> are allowed.
Eggs, sauces, oils and seasonings	Egg yolk (egg whites are allowed), mayonnaise, soy oil and sauce, industrialized tomato sauce, ketchup, industrialized seasonings and broths (Sazon, Knorr, etc). Other seasonings, such as vinegar, olive oil, parsley, oregano, homemade tomato sauce, rosemary, thyme, corn/sunflower oil are allowed.
Fresh fruit	Strawberry, cranberry, blueberries.
Leaves and vegetables	Watercress, celery, Brussels sprouts, cabbage, artichokes, unpeeled potatoes and spinach.
Grains and flours	Soybeans and derivatives. Chestnuts, peanuts and salted nuts . Other grains (e.g., rice, beans, corn, wheat) and flour are allowed.
Canned goods and preserves	All canned vegetables (such as olives, pickles, sauerkraut, etc.), canned or syrupy candies and prunes.
Sweets and drinks	All chocolates, candies made with eggs and/or milk, candies and drinks containing red/pink dye. Instant or instant coffee, industrialized teas, coconut water and dark soft drinks. Natural juices and teas, clear soft drinks, light beer, and white wine are allowed. Vegan sweets, honey and molasses are also allowed.
Dairy	All milk of animal origin and its derivatives (butter, cheese, cottage cheese, yogurt, ice cream), soy milk and tofu (soy cheese). Other milks, such as oats, almonds, rice and unsalted margarine, are allowed.
Breads and pastas	Industrialized breads, pizza and all pasta made with eggs/milk.
Food Supplements	All food supplements (e.g. Whey protein, casein, creatine, etc.) should be suspended.

HOW IS THERAPY PERFORMED?

After filling out the registration form at the reception desk, the patient will undergo a brief interview to check their data, exam preparation, check blood tests, and receive radioprotection instruction, and will then be sent to the radiopharmaceutical administration room in the clinic or for hospital admittance (depending on the amount of iodine that will be administered).

Once in the room, the dose of iodine will be administered orally. The patient must remain fasting for another 2 hours to ensure that the dose is fully absorbed.

The patient will remain in the room until the radiation levels determined by the National Nuclear Energy Commission (CNEN) are reached. Exposure rate measurements will be taken shortly after dose administration and at the end of the day or the next day. Upon reaching radiation levels, the patient will be discharged from the hospital with radioprotection and aftercare instructions.

THErapy USING THYROGEN:

In therapy with the use of Thyrogen (exogenous TSH), the patient should proceed as follows:

- The preparation is the same, however, IT IS NOT NECESSARY TO WITHHOLD LEVOTHYROXINE (LEVOID, SYNTHROID OR EUTHYROX). Depending on the clinical evaluation, the nuclear physician may request the withholding of levothyroxine for only one week before therapy;
- Thyrogen medication will be administered only after confirmation that the patient is not pregnant (if applicable);
- The administration of Thyrogen is intramuscular, on the first and second days before the administration of radioiodine iodine (preferably perform this procedure in the nuclear medicine clinic);
- Collect a TSH blood test, as a matter of urgency, on the 2nd or 3rd day. The result should be sent to the nuclear physician;
- The dose will be administered on the 3rd day;
- Collect thyroglobulin and anti-thyroglobulin antibody tests (if applicable) on the 5th day after the Thyrogen injection (consider as the “1st day”, the day of the first Thyrogen injection).

