Know Your Pills

- Levothyroxine is the pharmaceutical name for synthetic thyroid hormone T4, the medication most often prescribed to thyroid cancer patients and survivors as thyroid replacement hormone. Brand names include Levo-T®, Levoxyl®, Synthroid®, Tirosint® and Unithroid® in the USA. While this document does not cover every global formulation of levothyroxine, some international products include Eltroxin® (UK) and Euthyrox® (Canada). Manufacturing processes differ, as do fillers and dyes. These differences may affect how well your body absorbs the drug. For this reason, thyroid cancer specialist physicians usually recommend that thyroid cancer patients consistently take levothyroxine from the same manufacturer. If you need to change manufacturer, your doctor should have you check your thyroid levels 6-8 weeks later. Please refer to the table on page 3 for more information about synthetic levothyroxine manufacturers and doses and refer to the pill images on page 5.
- **Liothyronine** is the pharmaceutical name for synthetic thyroid hormone T3. Thyroid cancer patients take T3 for 2 different reasons: (1) to supplement T4 due to poor T4 to T3 conversion, or (2) to temporarily use T3 as part of their withdrawal process from thyroid replacement hormone for Radioactive Iodine (RAI) treatment and scanning. The T3 brand name in the US is Cytomel®. Cytomel is available in 5, 25 and 50 mcg (microgram) doses.
- Levothyroxine with liothyronine made from desiccated porcine thyroid extract is not prescribed as often for thyroid cancer patients. It is a combination therapy (contains both natural T3 and T4) under the brand names Armour®, NP Thyroid®, Nature-Throid®, and WP Thyroid®. Note that these formulations contain naturally occurring Thyroglobulin (Tg) making the use of Tg as a cancer marker more challenging. Please refer to the table on page 4 for more information about desiccated porcine thyroid extract manufacturers and doses and refer to the pill images on page 6.
- Always double check your pills. Some name brand medications and generics look very similar.
- **Taking levothyroxine**. Follow the instruction insert included with your medication. It will usually tell you to wait 30 to 60 minutes after taking your pill before you eat or drink other than water. Try to be consistent in how you take your thyroid hormone. Some foods and medicines can affect absorption. These include soybean flour, walnuts, dietary fiber, grapefruit juice, antacids, iron, and calcium supplements. Manufacturers recommend that you wait at least 4 hours before eating or drinking any of these items.
- If you miss a dose or more. Most thyroid specialists agree that you should take the missed dose(s) as soon as you realize you have missed taking them based on how you normally take this medication. ThyCa recommends you confirm this with your own doctor.
- Other medications. Always let your doctor know about any prescriptions, over-the-counter medications or supplements you are taking so you can discuss potential medication interactions. Note: some supplements contain thyroid hormone extract and can impact your thyroid hormone dose and absorption.
- **Medical conditions**. Tell your doctor if you have any other medical conditions, if you're breastfeeding, pregnant, or plan to become pregnant. You may require adjustments to your thyroid hormone dosage during pregnancy and subsequent breastfeeding.

Know Your Pills

- Be careful when having your prescription filled. Some pharmacies and some health insurance plans allow switching from the name brand medication to a generic. Pharmacies may also switch generic manufacturers without informing you. Make sure that your prescription specifies the brand name, or the pharmaceutical name such as "levothyroxine" followed by the name of the manufacturer. It is helpful if the prescription states "Dispense as written" or "Do not substitute." If your manufacturer changes from refill to refill, you should have your thyroid levels checked 6-8 weeks later.
- ThyCa and its medical advisors do not recommend any particular brand, type of product or combination of medications in preference to others.
- Check prices and co-payments. Prices vary among pharmacies and sometimes the out-of-pocket cost of the pills is lower than the co-payment. Also check manufacturer's websites as well as product name websites as some offer patient financial assistance programs as a way to save on medications.
- Levothyroxine is temperature-sensitive. Mailing during the heat of the summer may result in lowered potency. Ordering a three-month supply at the beginning of the summer is encouraged. Picking up pills at a local pharmacy also helps avoid temperature extremes. Requesting a cold-pack be inserted into the package is also an option.
- Store your levothyroxine away from heat, humidity, and light including when traveling. Remember parked cars can become hot. Storing your pills in an insulated container can be helpful when traveling.
- For information about taking pills, and about potential interactions between levothyroxine and other medications, visit the section of our website titled "How to Take Levothyroxine" (www.thyca.org/pap-fol/more/levothyroxine). If you do not have Internet access, please mail your request to ThyCa, Inc., Attn: How to Take Levothyroxine, P.O. Box 1102, Olney, MD 20830-1102 and we will mail you a printed copy.
- Read the information pamphlet that comes with your prescriptions. The pamphlet describes what the medicine is, how to take it, any other drug interactions or potential concerns with taking the medication, possible side effects, and more.
- If you have any questions about any medications you are taking, ask your doctor or pharmacist for more information.
- For current information about thyroid replacement hormones (including availability concerns) and thyroid cancer management, visit ThyCa: Thyroid Cancer Survivors' Association, Inc. at www.thyca.org.

Disclaimer: The information presented here is intended for educational purposes only. It is not intended, nor should it be interpreted, as medical advice or directions of any kind. Any person viewing this information is strongly advised to consult their own medical doctor(s) for all matters involving their health and medical care.

Know Your Pills – levothyroxine table of pills

| Brand Manufacturer Note on color | Levo-T Alara Colors are pill colors. | Levoxyl Pfizer Colors are pill colors. | Synthroid Abbvie Colors are pill colors. | Tirosint IBSA Colors are on box and blister packs. Gel capsules are all amber color. | Unithroid JSP Colors are pill colors. |
|----------------------------------------|-----------------------------------------------|----------------------------------------|------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------|
| Dosage strength | | | | | |
| 13 mcg/0.013 mg | | | | Green | |
| 25 mcg/0.025 mg | Orange | Orange | Orange | Orange | Peach |
| 50 mcg/0.050 mg | White | White | White | White | White |
| 75 mcg/0.075 mg | Violet | Purple | Violet | Purple | Purple |
| 88 mcg/0.088 mg | | Olive | Olive | Olive | Olive |
| 100 mcg/0.1 mg | Yellow | Yellow | Yellow | Yellow | Yellow |
| 112 mcg/0.112 mg | | Rose | Rose | Rose | Rose |
| 125 mcg/0.125 mg | Brown | Light brown | Brown | Brown | Tan |
| 137 mcg/0.137 mg | Turquoise | Dark blue | Turquoise | Turquoise | Blue |
| 150 mcg/0.150 mg | Blue | Light blue | Blue | Blue | Light Blue |
| 175 mcg/0.175 mg | Lilac | Turquoise | Lilac | Lilac | Lavender |
| 200 mcg/0.200 mg | | Pink | Pink | Peach | Pink |
| 300 mcg/0.300 mg | | | Green | | Green |

Notes about dosage strength:

- Commonly most levothyroxine users will say the mcg (microgram) strength when referring to their dosage. For example, "I take 150." Milligrams are also noted here.
- Micrograms is abbreviated as mcg. You may also see it expressed as μg, but mcg is preferred for pharmaceuticals.
- Milligrams is abbreviated as mg.

See photos of pills on page 5.

Know Your Pills – thyroid USP information table

| Armour®* Allergan | NP Thyroid® ^Z Acella & Armour | Nature-Throid® ^Q RLC Labs | WP Thyroid® [™] RLC Labs | Synthetic T4 levothyroxine | Synthetic T3 liothyronine |
|---------------------------------------------|---------------------------------------------|----------------------------------------------|----------------------------------------------|----------------------------------|---------------------------------|
| 1/4 grain (15 mg) [TC] | 1/4 grain (15 mg) [327] | | ¹ / ₄ grain (16.25 mg) | 25 mcg | 5 mcg |
| ½ grain (30 mg) [TD] | ½ grain (30 mg) [329] | ½ grain (32.5 mg) | ½ grain (32.5 mg) | 50 mcg | |
| | | ³ / ₄ grain (48.75 mg) | ³ / ₄ grain (48.75 mg) | 75 mcg | |
| | | | | 88 mcg | |
| 1 grain (60 mg) [TE] | 1 grain (60 mg) [330] | 1 grain (65 mg) | 1 grain (65 mg) | 100 mcg | 25 mcg |
| | | 1.25 grain (81.25 mg) | 1.25 grain (81.25 mg) | 125 mcg | |
| | | | | 137 mcg | |
| 1.5 grain (90 mg) [TJ] | 1.5 grain (90 mg) [331] | 1.5 grain (97.5 mg) | 1.5 grain (97.5 mg) | 150 mcg | |
| | | 1.75 grain (113.75 mg) | 1.75 grain (113.75 mg) | 175 mcg | |
| 2 grain (120 mg) [TF] | 2 grain (120 mg) [328] | 2 grain (130 mg) | 2 grain (130 mg) | 200 mcg | 50 mcg |
| | | 2.25 grain (146.25 mg) | | | |
| | | 2.5 grain (162.5 mg) | | | |
| 3 grain (180 mg) [TG bisected] ^a | 3 grain (180mg) | 3 grain (195 mg) | | 300 mcg | |
| 4 grain (240 mg) [TH] ^a | 4 grain (240mg) | | | | |
| 5 grain (300 mg) [TI bisected] ^a | 5 grain (300mg) | | | | |

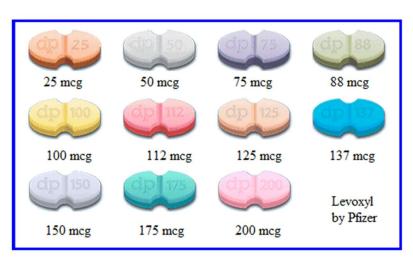
^{*} Armour® pills are all light tan, round tablets. Strength codes are on the pills and noted above in the table in brackets. Also noted are the two strengths that are scored (bisected) to easily be cut in half. See photo example of 15 mg strength [TE] on page 6.

^Z NP Thyroid® are all light tan, round pills except for the 15 mg strength which is oval. Strength codes are on the pills and noted above in the table in brackets. See photo examples of 15 mg and 60 mg strengths on page 6.

 $^{^{\}mathrm{Q}}$ Nature-Throid® pills are all light tan, round pills. All are scored except for the $\frac{1}{2}$ grain strength. See photos on page 6.

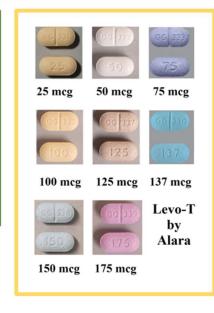
TWP Thyroid® pills are all light tan, round pills. All are scored except for the ¼ and ½ grain strengths. See photos on page 6.

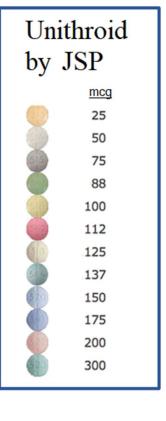
Know Your Pills – pill images











Know Your Pills – pill images

