

HYPOTHYROIDISM

- Hypothyroidism means **UNDER-ACTIVITY** of the thyroid gland, or having too little thyroid hormones in my blood.
- It affects about 7 million people in the United States, mostly women over age 40.
- Early symptoms are so subtle that many cases are missed for years.
- Treatment is quite simple, usually just a thyroid hormone pill a day to make up for the deficiency.

HOW WOULD I FEEL?

ANY of the following things:

- **MY NECK MAY GET BIG** (because my thyroid is getting bigger; a kind of “goiter,” which is any sort of enlargement of the thyroid, whether it is with or without overactivity).
- I may feel **SLUGGISH** and weary.
- **DRY SKIN**
- **PUFFY FACE**
- **NO APPETITE**
- **WEIGHT GAIN** (slow metabolism) but the contribution of thyroid to weight gain is **not as big** as many people think; there are other factors that decide my weight, and I need to work on them anyway.
- **SLOW MEMORY**
- **SLOW REACTIONS**
- **DEPRESSED.**
- I may be too **COLD** when people around me are comfortable or feel hot.
- I may **SLEEP TOO MUCH.**
- My **HAIR MAY FALL OUT** when I wash it and comb it.
- I may have **CONSTIPATION**

- Sometimes, **NOTHING**; I may just feel fine (but I **still better get treatment** for it because it can raise my **CHOLESTEROL**, or change my **MOOD** without me noticing).

WHAT SHOULD I DO THEN?

These symptoms are very general, and can be caused by many things, thyroid may have nothing to do with them, or could be responsible for only part of them, and other things need to be investigated and dealt with. Tell your doctors about them; they may do tests for your thyroid.

COMMON CAUSES

1. **HASHIMOTO THYROIDITIS**: (Hashimoto = the name of a Japanese doctor; thyroid-itis = inflammation in the thyroid) It is a type of autoimmune diseases (i.e. the immune system gets confused, and fights the body's own organs, in this case the thyroid, thinking they are harmful foreign things). This frequently leads to destruction of thyroid cells, so, thyroid ultimately becomes underactive.
2. **OVER-TREATMENT** of thyroid overactivity (Hyperthyroidism) by either
 - a) taking too much pills that suppress the thyroid (Methimazole or PTU),
 - b) Too much destruction of the thyroid by **Radioactive Iodine**, or
 - c) cutting out too much thyroid during **surgery**.
3. **UNDERACTIVE PITUITARY** (the pituitary gland normally supervises and stimulates the thyroid gland when necessary)
4. **RADIATION TO THE NECK** (for treatment of cancer, etc.)
5. **DEFICIENCY OF IODINE**: Iodine is an element necessary for production of thyroid hormones. We don't have much of this problem in USA because iodine is supplemented in the table salt; but it is a common problem among people who recently came from Europe or third world countries.

TREATMENT

- To restore thyroid hormone level back to normal, we need to supplement with one of the following thyroid hormones:
 - a) T4: Synthroid (Generic: Levothyroxine): They manufacture it exactly like the T4 hormone my thyroid produces.
 - b) T3: Cytomel (Generic: Liothyronine): They manufacture it exactly like the T3 hormone my thyroid produces.
 - c) T4 + T3:
 1. Armour Thyroid:
 - It is made of pig thyroid; they dry it up, grind it, and put it in a pill form.

- Since pig thyroid (as the human thyroid) contains both T4 and T3, that is what I get if I take that pill.
 - As with any combination medication, it is difficult to fine tune one component without changing the other, because they come together in the pill from the factory as a fixed ratio.
 - In addition, there could be some differences in the actual strength inside the pills from different batches.
2. Thyrolar (Generic: Liotrix):
- They manufacture T4 and T3 combination exactly like the T4 and T3 hormones my thyroid produces.
 - As with any combination medication, it is difficult to fine tune one component without changing the other, because they come together in the pill from the factory as a fixed ratio.
- Doctor **monitors** thyroid hormones in my blood every few weeks or months to adjust the dose.
 - **ADVANTAGES:**
 - Easy to take (just a pill once a day)
 - Inexpensive
 - Few side effects if taken in the right amount. If it is too much, I may get:
 1. Palpitations
 2. Feeling edgy, snappy
 3. Figeting
 4. Losing or gaining weight
 5. Feeling warm
 6. difficulty with sleep
 7. Falling hair
 8. Frequent bowel movements
 - **I shouldn't stop** taking my medication once I begin to feel better, or when I am told my blood level is good. If I feel better, or my level is good, it's because I take the pill in the right amount for me; I shouldn't mess that up.

THIS INFORMATION IS NOT A SUBSTITUTE FOR YOUR DOCTOR'S ADVICE