

LOW MALE HORMONE

(HYPOGONADISM)

FACTS

- Both men and women have both male and female hormones, but in different proportions.
- Male hormone (testosterone) is normally produced by the testes in men.
- If I don't have enough, I need to take it to make up for its deficiency.

SYMPTOMS

1. Fatigue, Low energy
2. Sweating
3. Depression
4. Low sex drive
5. Problem with erection
6. Smaller muscle mass
7. Fractures due to thinned bones

HOW TO SUPPLEMENT

A. **SHOTS**

- Taken once weekly in the muscle. It can also be taken every 2 or 3 weeks, but the longer intervals between shots can make Testosterone level go up then down dramatically.
- I may inject it myself in a big bulk of muscles (usually in the front of the thigh), or someone else (e.g. a family member, or one of my doctor's medical assistants) can inject me.
- It is a bit thick, therefore, a bigger needle helps easier administration.
- **Advantages**
 1. Cheaper
 2. Once weekly
- **Disadvantages**
 1. It has to be injected
 2. Shot pain
 3. Testosterone level may fluctuate (especially when injected every 2 or 3 weeks, not much when injected every week), so my energy, mood and sex drive may become weaker close to the time the next shot is due.

B. **GEL** (Androgel, Testim)

- **How Do I apply it:** I apply it once daily (preferably in the morning) to clean, dry skin on the shoulders, upper arm or the abdomen. I open the packet, and squeeze its entire contents onto my skin. I allow my skin to dry for a few minutes before putting on my clothes. I wash my hands after applying it. I should not shower or swim for 5-6 hours after applying it.
- **I can store it** at room temperature between 15 and 30° C (59 and 86° F).
- If I miss a dose, I should not apply double or extra doses. Protect the gel from heat and light. Throw away any unused medicine after the expiration date.

- My female partner should avoid touching it (it can increase her testosterone, which can cause problems, e.g. growing facial or body hair, acne, or a change in her voice). If she inadvertently touches it, she should wash the area of contact with soap and water as soon as possible.
- Advantages
 1. Ease of use
 2. Testosterone levels are stable. My energy, mood and sex drive remain the same throughout.
- Disadvantages
 1. Possible skin irritation
 2. Expensive
 3. Potential for contaminating my female partner's skin

C. PATCH (Androderm)

- How Do I Apply It: I apply it to clean, dry skin on the upper arms, thighs, back or abdomen. I use a different site each day, and do not re-use the same site for 7 days. I use it once daily (preferably at night) and leave in place for 24 hours. After 24 hours, I gently peel it off and throw it away in the trash.
- I shouldn't use it on oily, damaged or irritated areas of skin.
- If I want to bathe or swim, I can remove it, set it on a clean dry surface, shiny side up, and when done, reapply it again.
- I can store it at room temperature between 15 and 30° C (59 and 86° F).
- Advantages
 1. Ease of use
 2. Testosterone levels are stable. My energy, mood and sex drive remain the same throughout.
- Disadvantages
 1. Possible skin irritation
 2. Expensive
 3. Potential for its falling if I sweat excessively

SIDE EFFECTS

1. If red blood cells are many (polycythemia), common among smokers, testosterone may increase them further. If my doctor suspects that, they should check complete blood count (CBC).
2. If my prostate is big, it can get bigger (I should have my family doctor check my prostate before starting testosterone). Enlarged prostate can cause trouble with passing urine. I shouldn't use testosterone if I have prostate cancer.
3. Swelling of feet and legs (edema) because of water retention. This may cause problems if I have heart or kidney failure.
4. Weight gain (especially in the belly), but it could be mostly extra muscles or water retention.
5. Breast enlargement or breast tenderness

6. Frequent erections
7. Becoming more aggressive
8. Acne
9. Excess facial and body hair
10. Hair recession or baldness on my scalp
11. Unmasking or worsening of sleep apnea if I already have it.
 - With sleep apnea, I frequently stop breathing during sleep, thus I don't get a good rest, therefore, all day I feel tired and sleepy.
 - I also may have more chance to have high sugar and/or blood pressure.
 - It is common among people who snore heavily at night and have thick necks.
 - If I suspect I have sleep apnea, I should discuss it with my doctors, they may order a sleep study to find out.

My doctor will **MONITOR** my testosterone level every few weeks or months to adjust my dose.

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