



Hormone Shifts You Should Know About

Hormonal shifts are a natural and inevitable part of the aging process. Understanding the transformations that occur as you age can help you feel more prepared to enable you to take proactive steps to manage your health.

Hormonal Changes in Women

For women, hormone levels fluctuate significantly during menopause and perimenopause, the 10-year period before menopause.¹

- **Estrogen:** This female sex hormone supports sexual and reproductive functions. Women typically experience a gradual decline in estrogen starting in their late 30s. This decline accelerates during perimenopause, which can begin as early as the mid-40s. By the time women reach menopause, estrogen levels can drop by as much as 90% compared to peak levels.
- **Progesterone:** This hormone helps to stabilize menstrual cycles and prepare the body for pregnancy. Progesterone decreases with age, which often leads to irregular menstrual cycles and increased menstrual symptoms. By their late 40s and early 50s, many women will notice changes in their cycle frequency and flow.
- **Testosterone:** This sex hormone helps maintain bone mineral density and regulate mood. Although it is often thought of as a male hormone, women produce testosterone as well. In women, levels typically decline gradually, starting in their 30s, which can impact libido, energy levels, and muscle mass.

Signs and symptoms of hormonal changes in women can include hot flashes and night sweats, mood swings and irritability, changes in libido, sleep disturbances, weight gain (particularly around the abdomen), and thinning hair and dry skin.

When to Seek Guidance

It is important to recognize when hormonal changes may warrant medical intervention. Consider consulting a healthcare provider if you experience severe mood swings or depression, persistent fatigue that does not improve with rest, significant changes in libido or sexual function, unexplained weight gain or loss, or any other symptoms that interfere with your daily life.³ Women frequently experience significant mood changes during menopause, yet many do not seek help or discuss these changes openly. Awareness and open communication with healthcare providers will ensure you get the care you need.

Hormonal Changes in Men

Men also experience significant hormonal changes as they age, although the process tends to be more gradual, and often goes unnoticed, compared to women.²

- **Testosterone:** This male sex hormone supports fertility and sexual desire. Testosterone levels usually peak in the late teens to early twenties. After that, men can experience a gradual decline of about 1% per year starting in their 30s. By age 50, testosterone levels may be significantly lower, leading to various symptoms such as reduced sex drive and erectile dysfunction.
- **Dihydrotestosterone (DHT):** This hormone is a derivative of testosterone and supports sexual development and function. As hormone levels decrease, it can impact prostate health and hair loss.
- **Estrogen:** In men, estrogen supports sperm production, sex drive, and erectile function. Interestingly, while testosterone levels drop, estrogen levels can increase due to the conversion of testosterone into estrogen. This shift can lead to unwanted weight gain, particularly around the abdomen.

Signs and symptoms of hormonal changes in men can include decreased libido and erectile dysfunction, fatigue and decreased energy levels, mood changes (including depression or anxiety), loss of muscle mass and increased body fat, and difficulty concentrating.

1. Pataky MW, Young WF, Nair KS. Hormonal and Metabolic Changes of Aging and the Influence of Lifestyle Modifications. *Mayo Clin Proc.* 2021;96(3):788-814. doi: 10.1016/j.mayocp.2020.07.033

2. Mayo Clinic. "Though Men Go Through Hormonal Change as They Age, Most Experience No Symptoms as a Result." April 22, 2011. Accessed November 12, 2024. <https://newsnetwork.mayoclinic.org/discussion/though-men-go-through-hormonal-change-as-they-age-most-experience-no-symptoms-as-a-result/>

3. Cleveland Clinic. "Menopause." April 22, 2011. June 24, 2024. Accessed November 10, 2024. <https://my.clevelandclinic.org/health/diseases/21841-menopause>

Breathing Easier

Smoking or vaping, even only occasionally, may seem harmless in the moment, but the cumulative effects can be devastating. Smoking has been linked to cancers, lung disease, heart disease, low birth weight, miscarriage, type 2 diabetes, erectile dysfunction, and other chronic health conditions.¹ Fortunately, by quitting you can significantly improve the quality—and quantity—of your life.

Benefits of Quitting

Choosing to quit smoking offers numerous advantages, both immediate and long-term. Here are some compelling reasons to make the change:²

- **Improved Heart Health:** Smoking is a major risk factor for heart disease, high blood pressure, and stroke. Quitting can significantly reduce these risks and lead to a healthier heart and cardiovascular system.
- **Enhanced Lung Function:** Smoking damages the lungs and can lead to chronic respiratory issues, such as bronchitis and emphysema. When you quit, lung function improves and breathing becomes easier.
- **Reduced Cancer Risk:** Smoking is linked to various cancers, including lung, throat, and bladder cancer. By quitting, you lower your risk of developing life-threatening diseases.
- **Better Physical Appearance:** Smoking accelerates skin aging, leading to wrinkles and a dull complexion. Quitting can result in healthier skin and a more youthful appearance.
- **Increased Energy Levels:** As your body recovers from the effects of smoking, you may experience increased energy levels and improved overall vitality.
- **Financial Savings:** Smoking is an expensive habit. Quitting will not only improve your health but also save you a substantial amount of money over time.
- **Healthier Environment for Others:** Secondhand smoke poses significant health risks to those around you, including family and friends. By quitting, you create a healthier environment for everyone.

The Great American Smokeout

Mark your calendar for the Great American Smokeout on November 20, 2025.³ This annual event spearheaded by the American Cancer Society encourages smokers to quit for at least one day, with the hope that this one day will be the beginning of a smoke-free life. It is an excellent opportunity to take a stand against smoking and commit to a healthier lifestyle.

Other Resources to Support Your Journey

You do not have to quit smoking alone. Numerous national resources are available to help you every step of the way:

- **National Cancer Institute's Smokefree.gov:** Provides comprehensive resources, including quit plans, support communities, and a free mobile app to track your progress.
- **American Lung Association's Freedom From Smoking Program:** Offers both online and in-person support, educational materials, and personalized assistance.
- **The National Quit Line 1-800-QUIT-NOW:** provides free and confidential coaching to help you become—and stay—smoke free.
- **CDC's Tips From Former Smokers:** Features real-life stories from people who have quit smoking and provides valuable tips and motivation to help you stay on track.
- **Mayo Clinic's EX Program:** offers evidence-based quitting approaches and an online quit community.

Take advantage of the many resources available to you and move toward a smoke-free future.

1. Cleveland Clinic. "Smoking." March 18, 2024. Accessed November 10, 2024. <https://my.clevelandclinic.org/health/articles/17488-smoking>

2. Centers for Disease Control and Prevention. "Benefits of Quitting Smoking." May 15, 2024. Accessed November 10, 2024. <https://www.cdc.gov/tobacco/about/benefits-of-quitting.html>

3. American Cancer Society. "The Great American Smokeout." June 24, 2024. Accessed November 10, 2024. <https://www.cancer.org/cancer/risk-prevention/tobacco/great-american-smokeout.html>



Metabolic Syndrome: Know Your Risks

Metabolic syndrome is a condition that includes a cluster of factors that can increase the risk of heart disease, stroke, and diabetes.

To be diagnosed with metabolic syndrome, you need to meet at least three of the following five criteria:²

- 1. Abdominal obesity:** Waist circumference greater than 40 inches in men and greater than 35 inches in women.
- 2. Elevated triglycerides:** Levels of 150 mg/dL or higher.
- 3. Reduced HDL cholesterol:** Less than 40 mg/dL in men and less than 50 mg/dL in women.
- 4. Elevated blood pressure:** Systolic BP of 130 mmHg or higher, or diastolic BP of 85 mmHg or higher.
- 5. Elevated fasting blood sugar:** Levels of 100 mg/dL or higher.

Similar to prediabetes, which is a condition where blood sugar levels are higher than normal but not yet high enough to be classified as diabetes, approximately 70% of individuals with metabolic syndrome will go on to develop type 2 diabetes within a decade if they do not make lifestyle changes.¹ For this reason, it is important to have regular check-ups and screenings, especially if you have risk factors such as obesity, a sedentary lifestyle, or a family history of diabetes.

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and screenings.*

Adopting healthier lifestyle habits can also significantly reduce your risk of developing metabolic syndrome. Consider these effective preventive strategies:³

- 1. Adopt a Balanced Diet:** Focus on fruits, vegetables, whole grains, lean proteins, and healthy fats, and limit your intake of processed foods, sugary snacks, and beverages to help maintain a healthy weight.
- 2. Engage in Regular Physical Activity:** Aim for at least 150 minutes of moderate aerobic exercise each week, such as brisk walking or cycling, each week, and incorporate strength training exercises into your routine at least twice a week to make your body more sensitive to insulin. Most exercises can be modified to address physical limitations.
- 3. Get Adequate Sleep:** Aim for at least 7 hours of quality sleep each night to help balance blood glucose and support metabolic health.
- 4. Manage Stress:** Chronic stress can negatively impact your blood sugar and blood pressure levels. Practice stress management techniques such as mindfulness, yoga, or meditation.

If you have been told that you have metabolic syndrome or prediabetes, focus on making small lifestyle changes to enhance the course of your health.

1. Cleveland Clinic. "Metabolic Syndrome." September 13, 2023. Accessed November 10, 2024. <https://my.clevelandclinic.org/health/diseases/10783-metabolic-syndrome>
2. American Heart Association. "What is Metabolic Syndrome?" October 17, 2023. Accessed November 10, 2024. <https://www.heart.org/en/health-topics/metabolic-syndrome/about-metabolic-syndrome>
3. Harvard Health. "Metabolic syndrome is on the rise: What it is and why it matters" May 9, 2024. Accessed November 10, 2024. <https://www.health.harvard.edu/blog/metabolic-syndrome-is-on-the-rise-what-it-is-and-why-it-matters-2020071720621>

BAKED LEMON-GARLIC SALMON WITH ASPARAGUS

Enjoy your high-protein, hormone-supportive, and respiratory-friendly Baked Lemon-Garlic Salmon with Asparagus with all its added health benefits.

Ingredients

- 2 salmon fillets (about 6 ounces each)
- 1 bunch of asparagus, trimmed
- 4 garlic cloves, minced
- 2 tablespoons extra virgin olive oil
- 1 lemon (half sliced, half juiced)
- 1 teaspoon honey or maple syrup (optional, for balancing flavors)
- Salt and fresh ground pepper to taste
- Fresh dill or parsley, chopped (for garnish)

Dressing/Marinade:

- 2 tablespoons extra virgin olive oil
- Juice of half a lemon
- 1 tablespoon fresh dill or parsley, chopped
- 1 garlic clove, minced
- Salt and pepper to taste

Instructions

1. Preheat Oven: Preheat your oven to 400°F (200°C).
2. Marinate the Salmon: Whisk together the marinade ingredients in a bowl. Place the salmon fillets in a baking dish and pour the marinade over them. Let marinate for 15 minutes at room temperature.
3. Prepare Asparagus: Place the asparagus in a single layer on a baking sheet, drizzle with 1 tablespoon of olive oil, minced garlic, honey or maple syrup, and season with salt and pepper. Toss to coat.
4. Bake the Asparagus: Place the asparagus in the preheated oven and roast for 10 minutes.
5. Add the Salmon: Remove the asparagus from the oven, push it to one side of the pan, and place the marinated salmon fillets on the other side. Top each salmon fillet with a slice or two of lemon.
6. Bake Together: Return the baking sheet to the oven and bake for an additional 10-12 minutes, or until the salmon is cooked through and flakes easily with a fork.
7. Serve: Sprinkle the dish with chopped dill or parsley for garnish and serve with the remaining lemon wedges on the side.



Nutrition Facts

The following nutrition facts are an estimate based on the ingredients listed and for a serving size of one portion (half of the prepared recipe):

Calories: 500-600 kcal

Protein: 35-40 g

Total Fat: 28-33 g

Saturated Fat: 4-5 g

Monounsaturated Fat: 15-18 g

Polyunsaturated Fat: 8-12 g

Carbohydrates: 10-15 g

Dietary Fiber: 4-6 g

Sugars: 3-4 g

Sodium: 200-300 mg

Cholesterol: 60-70 mg