

WHY IS MY HAIR FALLING OUT???

Find out the facts about hair and the reasons it falls out. Find out what to do to bring your hair back better than ever!

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By

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Note: I have personally experienced stress hair loss after surgery in 2018. I became a Trichologist to help others with their hair loss. I am dedicated to finding solutions for those who seek them.

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Hair

Hair facts are:

- The human scalp contains approximately 100,000 hair follicles when you are born. You never make new hair follicles.
- > The average person sheds 100 hairs a day.
- A person will usually lose 40,000 hairs before noticing thinning has occurred.
- Males start to lose hair younger than ever before and lose it in a horseshoe pattern.
- > Women start losing hair later than males and in a diffuse pattern.
- > The hair bulb or the follicle is the living part of the hair.
- Hair has 3 phases

Anagen – Growing phase – 3-5 years – 85% actively growing Catagen – Transition phase – hair stops growing actively Telogen – Resting phase – shedding phase, hair pushed out of the follicle.

- Actively growing hair can grow a half-inch per month.
- Hair changes occur due to alterations of the hair fiber itself, the hair cycle, and/or hair follicle.
- > Thinning hair is a symptom of internal changes in the body.
- Hair loss is usually considered cosmetic, insurance companies don't cover treatments

Hair is part of who we are and how the world sees us. Thinning, dull, or brittle hair can leave you feeling less than confident. Hair loss has been proven to have negative psychological and emotional impacts on those who experience it.

Hair growth begins deep within the skin. Located in the hair follicle at the base of each hair strand is the hair bulb, where new hair cells are made. The cells are made of protein, keratin, and hardened to form the strand of hair that is pushed up through the follicle and up and out the skin.

The hair grows in phases, the growing (Anagen) phase where the hair is actively growing. It's the longest phase, lasting about 3 to 5 years for the hairs on your head. During the anagen phase, hair follicles are pushing out hairs that will continue to grow until they're cut or until they reach the end of their lifespan and fall out. About 85 – 90 percent of the hairs on your head are in the growing phase.

The transition (Catagen) phase starts when the growing (Anagen) phase ends, this lasts about 10 days or so. During the transition (Catagen) phase, hair follicles shrink and hair growth slows. The hair also separates from the bottom of the hair follicle, yet remains in place during its final days of growing. About 5 percent of the hairs on your head are in the transition (Catagen) phase at one time.

During the resting/shedding (Telogen) phase, which can last about 3 months on the scalp, new hairs are growing in the follicles as old hairs fall away. There is about 10 to 15 percent of scalp hairs in this phase. The resting (Telogen) phase is also when new hairs start to form in follicles that have just released hairs during the resting (Catagen) phase. During the resting (Telogen) phase, hair is shed from the scalp, often helped along by washing and brushing the hair. Some scientists have made a fourth phase called Exogen or shedding phase, but most scientists lump the Telogen and Exogen phase together. For this eBook, we will keep the phases of hair growth as three. Thinning, dry hair is a symptom of internal change in the body. Many times, it is the normal sign of aging, but sometimes there is a medical issue.

Research in the field of hair loss has amped up the past few years, but there is so much the field does not know yet about the hair itself. Researchers understand inside the hair follicle are tiny mini-organs that follow an autonomous inbuilt clock that drives it through the growing (Anagen), transition, and resting (Telogen) phases. The holdup in research development is researchers do not understand the mechanism that regulates the clock. Finding the answer will change the whole field of research.



Vitamin & Nutrient Deficiency

Micronutrients are major elements in the normal hair follicle cycle, playing a role in cellular turnover, a frequent occurrence in the matrix cells in the hair follicle bulb that are rapidly dividing.

Micronutrients, such as vitamins and minerals, play an important part in hair follicle development and immune cell function. This is still unclear to researchers how it specifically works.

During healing the body metabolism increases and there is an increased need for more nutrients such as protein, iron, zinc, and biotin among others. Limited amounts will be diverted to where it is needed and hair is not one of the places. Hair and skin are usually the last places to get nutrients.

<u>Nutritional deficiency</u> may impact both hair structure and hair growth. Hair loss can happen when there is sudden weight loss or decreased protein. There will be noticeable hair loss if there is too little biotin, iron, protein, or zinc. Healthy hair also needs Vitamin A, Vitamin C, Vitamin D, and Vitamin E to thrive.

There is much to be learned about how micronutrients, such as vitamins and minerals, play in normal hair follicle development and immune cell function.

Medication

The same <u>medication</u> used to heal you can cause hair loss. When prescribed medication, always ask if hair loss is a side effect.

Here is the list of medications:

- Acne medications containing vitamin A (retinoids)
- Antibiotics and antifungal drugs
- Antidepressants
- Birth control pills
- Anticlotting drugs
- Cholesterol-lowering drugs
- Drugs that suppress the immune system
- Drugs that treat breast cancer and other cancers
- Epilepsy drugs (anticonvulsants)
- High blood pressure medications (anti-hypertensives), such as betablockers, ACE inhibitors, and diuretics
- Hormone replacement therapy
- Mood stabilizers
- Nonsteroidal anti-inflammatory drugs (NSAIDs)
- Parkinson's disease drugs
- Steroids
- Thyroid medications
- Weight loss drugs

Hormone Imbalance

A <u>hormone imbalance</u> occurs when there are too much or too few hormones in the bloodstream. Hormones are chemicals produced by glands in the endocrine system.

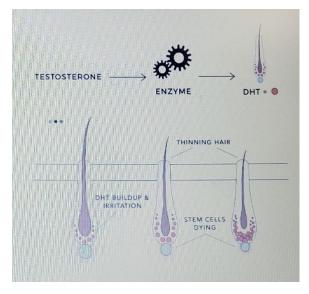
Men and women experience hormone imbalances, but all the talk is mostly about women's hormones. Menopause happens when estrogen declines and hair, skin, brain, heart, bones, and many other tissues are affected. As women age, testosterone becomes an issue also. Testosterone is intensified in a woman's body and testosterone and an enzyme equal dihydrotestosterone or DHT. DHT binds to follicles and shrinks them until they no longer produce visible hair.

PCOS is another common female hormonal disorder causing women to lose hair on the scalp and at the same time increases hair on places like the face, chest, and back. There is no cure.

In males, the reason researchers believe pattern baldness occurs is that hair follicles become sensitive to hormones on the scalp, most notably dihydrotestosterone (DHT), which binds to follicles and shrinks them until they no longer produce visible hair.

Men and women experience thyroid disease, which can cause hair loss and skin issues.

Sadly, hormone treatments usually do not improve hair growth.



Childbirth

Childbirth can also cause hair loss. When a woman becomes pregnant, there is an increase in the hormone estrogen. The growing (Anagen) phase of hair growth gets longer and does not shift into the resting (Telogen) phase. When this happens, the hair does not shed as fast giving the woman fuller thicker hair.

Six months to one year after childbirth the hormone estrogen goes back to normal. The stages of hair growth go back to normal pre-pregnant hair growth. This leaves the woman with the hair she had before she was pregnant. This is known as <u>postpartum hair shedding</u>. Instead of shedding the usual 100 hairs a day, it is normal to shed 300 hairs a day. During this time the hair texture, color, and density can change. The likelihood of shedding increases with every pregnancy.

If hair continues to get thinner or not growing to pre-pregnancy volume, there may health issues.

Stress & Surgery

Stress affects many things in life. Stress comes in the form of having surgery, a death of a close friend or family member, a divorce, or even a wedding. Every situation affects each person differently.

The most common form of hair loss is called Telogen Effluvium or stress hair loss. Typically, two to three months after a stressful situation or surgery, hair is pushed into the resting (Telogen) phase from the growing (Anagen) phase. Hair may be shed from the whole scalp, many times leaving small bald spots or gaps in the hair.

Surgery and the after-effects of surgery can cause hair loss. Stress is a major factor in surgery-related hair loss. During stressful situations nutrients are sent to the heart, lungs, muscles, and other vital organs. The hair and the skin are not needed during stressful situations, therefore the hair, having no nutrition, gets weak and pushes the hair out of the growing (Anagen) phase and into the resting (Telogen) phase. This makes the hair start to shed. The hair loss or shedding usually starts two to three months after surgery. Hair falls out by the handfuls for some, and for others, hair is in piles on pillows, drains, hairbrushes, and sinks. The hair shedding lasts for six to nine months. When the hair starts to grow in there are short spikey hairs that eventually get longer and will blend in with the rest of the hair.

During surgery, if the area experiences too much pressure or constant scratching there can be hair loss. This is called positional Alopecia and happens on the scalp when the head is kept in one position for an extremely long time. This limits the blood supply to the skin and hair follicle.

The thought of <u>anesthesia</u> during surgery causing hair loss during surgery is inconclusive. Many doctors and patients believe there is a link to anesthesia causing hair loss during lengthy surgeries lasting several hours.

Research finds anesthesia can slow down cell division and cells that are fastdividing like hair follicles get pushed into the resting (Telogen) phase from the growing (Anagen) phase for a temporary period. It will take a growing cycle for hair to start growing normally. Anyone not experiencing hair loss will say this happens fast. Those experiencing hair loss will feel like it takes a lifetime to grow back.

Post-surgical hair loss does not happen to most people and when it does, for most, it grows back to normal within the hair growth cycles.



This is hair loss after surgery, took almost one year to get normal hair growth and texture back

Illness & Covid-19

Illness can cause hair loss. Many illnesses such as high fever, fungal skin infections, bacterial infections, autoimmune diseases like diabetes and lupus can all cause hair loss. Also, scalp infections and scalp psoriasis and Covid-19 have many losing hairs in large clumps.

The fever or illness forces more hair into the shedding (Telogen) phase. This causes more hair to shed at the same time causing hair to look thin and/or have bald spots. The hair loss or shedding usually starts two to three months after the fever or illness. Hair is in piles on pillows, drains, hairbrushes, and sinks. The hair shedding lasts for six to nine months.

According to the <u>research</u>, COVID-19 infection is now a frequent and common cause of acute telogen effluvium or stress hair loss. Acute telogen effluvium is a non-scarring hair loss, that usually occurs 3 months after the stressful event that causes hair shedding, and lasts up to 6 months. It can be associated with post-COVID-19 infection. Drugs that have been used for the treatment of COVID-19 were excluded as a cause of acute telogen effluvium.

When the cause of hair shedding is due to a fever, illness, or Covid-19, hair tends to return to normal on its own. It takes time. As hair grows back, there will be short hairs that are all the same length by the hairline. Usually, hair regains its normal fullness within six to nine months.



Hair growing in after stress hair loss

Cancer

Cancer can cause hair loss when radiation and chemotherapy are used for treatments. Radiation therapy will cause hair loss on the body part that is treated. The hair usually begins growing back after the end of the treatments. Whether it grows back to its original thickness and fullness depends on the treatment. Different types of radiation and different doses will have different effects on the hair. Higher doses of radiation can cause permanent hair loss.

Chemotherapy causes hair loss to the head because it targets rapidly dividing cells. Hair follicles are some of the fastest dividing cells in the body. Hair usually begins to fall out two to four weeks after treatment starts. It could fall out very quickly in clumps or gradually. There will be accumulations of loose hair on the pillow, in the hairbrush or comb, or the sink or shower drain. The scalp may feel tender. Hair loss will continue throughout the treatment and up to a few weeks afterward. Whether the hair thins or falls out completely will depend on the treatment. It may take several weeks after treatment for your hair to recover and begin growing again.

The following <u>timeline</u> indicates what most people can expect to happen after chemotherapy:

- 3–4 weeks: Light, fuzzy hair forms.
- 4–6 weeks: Thicker hair begins growing.
- 2–3 months: An inch of hair may have grown.
- 3–6 months: Some 2–3 inches of hair may have grown, covering bald patches. People who previously had very short hair may be able to return to their original style.
- 12 months: The hair may have grown 4–6 inches and be long enough to brush or style.

It can take several years for hair to return to its previous style, particularly for people who once had very long hair.

After chemotherapy, the hair initially grows as thin fuzz. It may stick straight up or be difficult to style. Very fine hair may also not be visible from a distance.



This is hair growth after chemotherapy treatments

Some hair follicles may enter the active (Anagen) phase before others. When this happens, the length of hairs can vary, which may make the hair look patchy overall. It will likely also be more difficult to style.

Over time, the hair should settle into a more regular growth pattern. However, the texture might be different than it was before the treatment. Many people get "chemo curls," which occur when the hair grows back curlier, more brittle, or less manageable than before. In some cases, the hair may also grow back a different color.



"Chemo curls" client had straight hair before chemotherapy treatments

Heredity & Aging

Heredity hair loss or androgenic alopecia means a person has inherited genes that cause the hair follicle to shrink and eventually stop growing hair and die.

In men, it is called male pattern hair loss. It affects 30 – 50 percent of men by the age of 50 years old. The first sign is usually a receding hairline or bald spot at the top of the head. According to <u>research</u>, alopecia has been reported to be more common in Caucasian men than in any other ethnicity or nationality.

Black, Asian, Native American, and African-American men are more likely to preserve their front hairlines. These populations also experience less extensive and late-onset baldness overall than Caucasian men. Chinese men are reported to have a lower incidence of male pattern baldness than any other population. In Japanese men, the onset of androgenic alopecia occurs a full decade later than in Caucasian men.

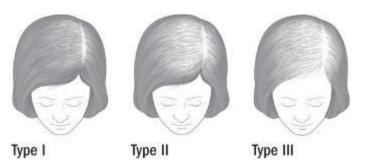


A form of male heredity hair loss or androgenic alopecia

In women, heredity hair loss is also called androgenic alopecia or female pattern hair loss. Women first notice overall thinning of the hair or a widening part.

About <u>one-third</u> of women experience some type of hair loss in their lives; among postmenopausal women, as many as two-thirds suffer hair thinning or bald spots.

Hair loss in women is less socially acceptable so often has a greater impact on their emotional well-being and quality of life.



Aging causes some hair loss. Both men and women lose 50% of their hair before noticing there is a problem. Men and women lose about 50% of their hair by the age of 50 years old and increase 10% each decade. For women hair loss worsens after menopause. Aging hair begins in your 60s and is comparable to skin aging.

After we age, hair follicles start to shrink, so the hair that is growing is finer and finer making new hairs harder to grow in. At one point the follicle stops growing hair so the hair density is less. The hairline of a woman starts to naturally recede and hair aging hair loss is all over the scalp.

Sun damage can speed up hair aging. Like pigment in your skin, the pigment in your hair is protective. Hairs that have turned grey or white are <u>more</u> <u>vulnerable</u> to ultraviolet (UV) rays. Using hair products with sunscreen and hats can help prevent damage.

If hair loss is caught early enough before the actual follicle dies, many people can regrow their hair.

Care for Thinning Hair

The best way to care for Thinning hair is:

- See a <u>hair stylist</u> to get a hairstyle that makes the hair look fuller and thicker. A hair stylist a person who cuts and styles people's hair professionally. You also need a hair stylist who is skilled in coloring and tinting hair.
- See a <u>Trichologist</u> such as myself when the first site of thinning hair. A Trichologist is a person who specializes in hair and scalp care and treatment of associated conditions (such as hair loss and thinning).
- See a Dermatologist for a medical diagnosis for hair loss if needed. A medical doctor who specializes in the treatment of diseases of the skin and scalp.
- Take daily one or two times a day <u>Collagen Elixir</u>. Collagen Elixir is a potent blend of hydrolyzed marine collagen and powerful botanicals that nourish the skin from the inside out, promoting enhanced elasticity, firmness, and hydration for a healthy and radiant completion. Your body makes collagen naturally. Collagen is found in connective tissue, skin, tendon, bone, and cartilage and has many functions. Your body makes collagen naturally. Agerelated collagen loss is unavoidable, but dietary and lifestyle factors such as smoking and excessive alcohol intake can speed up this process. Collagen is the building blocks for the hair follicle to grow in. Scott Tuckey recommends this product and you can click here to order from Scott!

Click here to order.



• Take daily <u>Hair Revival</u>. Both men and women alike may experience thinning hair or slowed hair growth with increasing age, poor diet, or environmental factors such as stress. The ingredients in Hair Revival work to support an environment that is ideal for hair growth while supplying nutrients. Hair Revival's blend of naturally sourced and clinically effective ingredients work to stimulate hair growth and support visibly thicker, stronger hair. Scott Tuckey recommends this product and you can click here to order from Scott! <u>Click here to order</u>.



About the Author



Laura Clair is an Esthetician because she loves everything aesthetics. She is a Trichologist because of a personal experience with hair loss and the patience of growing it back in. Now she wants to help you find answers to your wellness questions. She wants to help you find happiness, so she asks... Y Not You?

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You can also visit her website <u>www.ynotyouwellness.com</u> or contact her at <u>ynotyouwellness@gmail.com</u> for more information on what she has to offer. While on her site subscribe for her newsletter so you can be the first to receive her next free eBook!