

Clinical Applications

- Supports hair regrowth and minimizes thyroidrelated hair loss
- Addresses the root causes of poor hair quality, including inflammation and nutrient deficiencies
- Engineered to improve hair strength and restore hair's natural vitality

Indications

Reneuva: The breakthrough solution for thyroid-related hair loss.

Renueva is a comprehensive nutraceutical formulation designed to target thyroid-related hair loss. Its combination of botanicals, vitamins, and minerals addresses the underlying causes of hair thinning, shedding, and slow regrowth.



Overview

Hair loss is among the most troubling symptoms of thyroid disease. Many find that even after correcting abnormal thyroid levels, hair loss persists or does not grow back to its prior healthy state.

Hair loss is troublesome cosmetically, but it is also a sign of poor tissue repair. It often accompanies dry skin, brittle nails, and injury-prone tendons and ligaments.

It is crucial to correct hair loss to ensure that the body is effectively repairing itself and functioning optimally.

This article will explain the mechanisms behind thyroid-related hair loss and how nutraceuticals may help stop hair loss and improve hair regrowth.

Thyroid-related hair loss

Half of those with the most common form of thyroid disease experience distressing levels of hair loss.

"Conditions such as hyperthyroidism, hypothyroidism, and drug-induced hypothyroidism have been associated with widespread hair shedding. In approximately 50% of individuals with hyperthyroidism and 33% with hypothyroidism, hair loss is observed." 1

Hair loss can be caused by nearly any type of thyroid abnormality. These can include too much thyroid hormone, thyroid cancer, too little thyroid hormone, elevated thyroid antibodies, and excessive use of thyroid medication.

The primary connection between thyroid function and hair health is the effect of thyroid hormones on hair follicle function and growth. If thyroid hormones are not in the right amount, hair follicles do not have a proper growth cycle, leading to hair shedding and poor regrowth.

Types of Hair Loss

The types of hair loss caused by thyroid disease include the following three types. Most have the first, second, or a combination of the two.

- Telogen Effluvium (TE): This is the most common type associated with thyroid dysfunction. It appears as even, diffuse, gradual hair thinning. It occurs when hair follicles prematurely enter the resting (telogen) phase, leading to widespread hair shedding. This condition is often associated with deficiencies of zinc, biotin, and iron.
- Androgenetic Alopecia: This is the second most common. It appears as hair loss primarily along the brow line and crown of the head. While mainly genetic, thyroid imbalances can exacerbate this condition, making it happen earlier or more severely than it would otherwise. It is caused by inflammatory reactions triggered by androgenic hormones, especially DHT (dihydrotestosterone). This condition also inhibits keratin production, the main protein building block for hair.
- Alopecia Areata: This is rare and leads to complete or nearly complete hair loss. It is an autoimmune condition in which the immune system damages hair follicles by forming free radicals. Alopecia areata can be triggered or exacerbated by thyroid autoimmunity.

Mechanisms of Hair Loss

Although thyroid disease may be the final trigger for hair loss, several other mechanisms are involved. The main ones include

- Hair follicle signaling errors
 - Follicles not entering their active stage (anagen)
 - Follicles dying prematurely (apoptosis)
- Free radical damage
- Excess DHT
- Inflammation



- Nutrient deficiencies
- Poor production of keratin

Addressing these mechanisms and thyroid imbalances is often necessary in treating hair loss.

Since hair follicles go through prolonged cycles of dormancy and activity, it can take months or years to see clear improvements.

Thankfully, some nutraceuticals increase the odds of recovery and speed up the hair regrowth process.

Nutraceuticals for Hair Loss

Several natural compounds have been proven to stop thyroid-related hair loss and speed hair regrowth.

They work by several different mechanisms including:

- Helping hair follicles enter active growth stages and be less vulnerable to premature death.
- Preventing free radical damage.
- Helping the body eliminate excess DHT and block it from harming the follicles.
- Naturally lowering inflammation.
- Reversing nutrient deficiencies.
- Improving the production of structural proteins, including keratin.

The following ingredients are natural compounds with the strongest bodies of evidence. Each has excellent safety records, high-quality placebocontrolled human studies, and proven benefits for thyroid-related hair loss.

When used together in a single formulation, their benefits increase since all the main mechanisms of hair regrowth are activated.

Saw Palmetto (Serenoa repens) -Herbal Extract



Saw Palmetto is an extract from the berries of a dwarf palm tree. It has been used for centuries for the treatment of prostate disorders in men. Evidence shows that it also has a role in improving hair health.

Saw palmetto's active constituents are fatty acids such as beta-sitosterol. Saw palmetto also contains beta-carotene, vitamin E, and polysaccharides.

How it works

DHT (DiHydroTestosterone) is the connection between prostate health and hair loss. It is a byproduct of testosterone. When too much of it forms in local tissues, it can cause enlargement of the prostate or damage to hair follicles.

Men make more testosterone than women, so they are more prone to hormonal hair loss. But women's bodies still produce testosterone. In both sexes, hair loss can be triggered by unusually high amounts of testosterone but is more commonly related to how the hair follicles react to DHT.

The plant has been shown to block the enzyme that converts testosterone into DHT called 5 alphareductase. Saw palmetto also makes DHT less able to bind to androgen receptors and helps the body break it down into weaker metabolites that are less harmful to hair follicles.

Clinical Trials

Clinical trials have shown that among patients with hair loss from androgenetic alopecia (AGA) and telogen effluvium: ²

- 60% saw an improvement in overall hair quality
- 27% saw an improvement in total hair count,
- 83.3% experienced increased hair density
- 52% saw their hair loss stop.

Thyroid considerations

Saw Palmetto is well tolerated and no common side effects were reported from the clinical trials. It is not a source of hidden iodine and has no adverse effects on thyroid function or autoimmunity.

In Reneuva

Each serving of Renueva contains 160 mg Saw palmetto extract with a minimum of 85% fatty acids.

Pygeum (Pygeum africanum) Herbal Extract



Pygeum is the extract from the bark of the African prune tree. Like Saw Palmetto, it has been widely used as a remedy for prostate issues and is a known blocker of DHT.

Pygeum contains many phytosterols (herbal hormone regulators). The most widely studied of these include N-butylbenzenesulfonamide and Atraric acid.

How it works

Pygeum has specific effects that complement those of Saw Palmetto. It binds to the androgen receptors, preventing DHT from causing hair follicles to shrink. Shrunken hair follicles can lead to thinner hair and eventual hair loss, especially in female pattern baldness.

Pygeum has been shown to block the activity of DHT receptors by 60% or greater.³

Thyroid considerations

Pygeum is well-tolerated, and no severe side effects have been reported at commonly used doses. It is not a source of hidden iodine and has no adverse effects on thyroid function.

In Reneuva

Each serving of Reveuva contains 50 mg of Pygeum extract with a minimum of 13% phytosterols.

Bamboo (Bambusa vulgaris) Herbal Extract

Bamboo is an extract from the inner bark of the common bamboo plant.



Most of the ways bamboo benefits hair relate to its high silica content.

How it works

Silica is a trace mineral that helps hair by improving:

- Collagen Production: Silica plays a crucial role in collagen formation. This protein helps maintain the strength and elasticity of hair. Healthy collagen levels contribute to stronger, more resilient hair strands, reducing breakage and promoting overall hair health.
- Strengthening Hair Structure: Silica helps strengthen the hair shaft, making it less prone to damage from environmental factors like heat, styling, and pollution. This can result in thicker, more durable hair over time.

In addition to silica, Bamboo is a rich source of nutrients essential for hair health. Some of the most relevant include:

- Amino acids
- · Vitamin C
- Antioxidants

Clinical Trials

Clinical Trials

In a clinical trial, silica extracts like those in bamboo or a placebo were given to a group of women with thin hair. After nine months, those taking silica had hair that was more elastic, more resistant to breakage, and had shafts with greater thickness. None of these benefits were present in those taking the placebo. ⁴

Bamboo shoots (Bambusa arudinacea) and extracts (Bambusa vulgaris) are made from different bamboo species.

Thyroid Considerations

Thyroid considerations

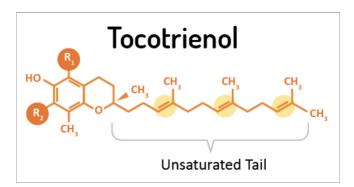
Bamboo shoots may lower thyroid function in rats when ingested in unusually high doses. This effect is likely caused by glucosides such as thiocyanate.

Bamboo extracts from Bambusa vulgaris do not contain thiocyanates and have been shown not to alter thyroid function. ⁵

In Reneuva

Each serving of Reneuva contains 50 mg of Bamboo extract with a minimum of 70% silica.

Tocotrienols



Tocotrienols are members of the vitamin E family, including tocopherols and tocotrienols. Tocotrienols are less common in the diet than tocopherols, but they have been shown to offer unique health benefits, especially for hair and skin health.

How they work

Tocotrienols are potent antioxidants that protect the scalp and hair follicles from oxidative stress, which can lead to hair thinning and loss.

By neutralizing free radicals, tocotrienols help maintain healthy hair growth and reduce the damage caused by environmental factors like UV rays and pollution.

Clinical Trials

In a clinical trial involving individuals with hair loss, tocotrienols were found to increase hair count by 34.5% after eight months of supplementation. The study participants experienced significant improvements in hair thickness and volume compared to those taking a placebo.⁶

Thyroid considerations

Tocotrienols are free of iodine and are safe for individuals with thyroid conditions. They also possess antioxidant properties that can help reduce oxidative stress, which may be beneficial for those with thyroid-related hair loss or damage.



In Reneuva

Each serving of Reneuva contains 25 mg of tocotrienols, sourced from natural palm oil extract.

Zinc

Zinc is a trace mineral necessary for various bodily functions, including immune system support, protein synthesis, and wound healing. It is also crucial for maintaining healthy hair growth.



How it works

Zinc contributes to hair health by supporting the function of hair follicles and promoting the production of proteins that form hair's structure. It also helps regulate the sebaceous glands, preventing dandruff and hair follicle clogging.

Clinical Trials

Studies have shown that zinc deficiency can lead to hair thinning and loss. Supplementation with zinc has effectively reduced hair loss in individuals with zinc deficiency, improved hair density, and reduced hair loss.⁷

Thyroid considerations

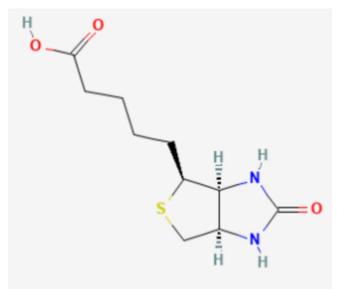
Zinc is essential for thyroid function, as it plays a role in synthesizing thyroid hormones. Supplementing with zinc can help support healthy thyroid activity, particularly in individuals with thyroid-related hair loss.

In Reneuva

Each serving of Reneuva contains 5 mg of zinc.

Biotin

Biotin, also known as vitamin B7, is a water-soluble vitamin vital for hair, skin, and nail health. It is often referred to as the "hair growth vitamin."



How it works

Biotin plays a vital role in the production of keratin, the protein that makes up the structure of hair. Adequate biotin levels help strengthen hair, reduce breakage, and promote healthy growth.

Clinical Trials

Clinical studies have demonstrated that biotin supplementation can significantly improve hair thickness, shine, and scalp coverage in individuals with thinning hair. Participants also reported a reduction in hair shedding after consistent use.8

Thyroid considerations

Biotin is safe for individuals with thyroid disorders and does not interfere with thyroid function. It can be particularly beneficial for those experiencing hair loss due to thyroid issues by supporting keratin production and improving hair strength and growth.

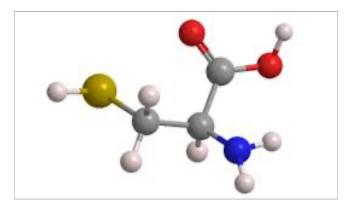
In Reneuva

Each serving of Reneuva contains 300 mcg of biotin, ensuring optimal hair growth and health support.



Cysteine

Cysteine is an amino acid essential for synthesizing keratin, the protein that makes up hair, skin, and nails. It is one of the building blocks of healthy hair structure.



How it works

Cysteine helps create strong bonds in hair that keep it from breaking. When there's not enough cysteine or it's not used correctly by the body, these bonds don't form well, making hair fragile. The study also suggests that cysteine is involved in other important body processes like fighting off stress and supporting the immune system, which might also play a role in hair loss.

Clinical Trials

A study explored the effectiveness of an oral supplement containing cysteine and other amino acids in treating hair loss conditions like androgenic alopecia (AGA/FAGA) and chronic telogen effluvium (TE). The 12-week trial involved 83 participants divided into two groups: one received the supplement and their usual hair loss medication (Group A), and the other received only the medication (Group B).

Results showed that the group taking the supplement (Group A) had significantly better hair growth and improvement scores than the medication-only group (Group B). By week 12, 50% of Group A achieved a high improvement score, compared to 23% in Group B. Participants tolerated cysteine well, indicating it can be a practical addition to hair loss treatments.

Thyroid considerations

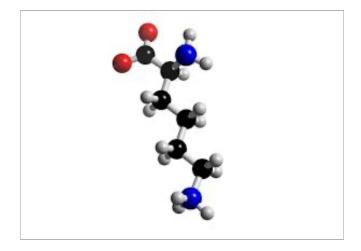
Cysteine is safe for individuals with thyroid disease as it does not contain iodine or negatively affect thyroid function. Additionally, its role in strengthening hair and combating oxidative stress can benefit those with thyroid-related hair issues.

In Renueva

Each serving of Reneuva contains 250 mg of cysteine, which is easily absorbed by the body for maximum benefit.

Lysine

Lysine is an essential amino acid critical in producing collagen and absorbing calcium, which is essential for hair health.



How it works

Lysine helps maintain hair strength and promotes the production of collagen, which supports the structure of hair and skin. It also enhances iron absorption, a mineral essential for healthy hair growth.

Clinical Trials

Research has shown that lysine supplementation, especially with iron, can significantly improve hair growth in individuals with chronic hair loss. It also helps prevent hair breakage and promotes thicker hair strands.¹⁰

Thyroid considerations

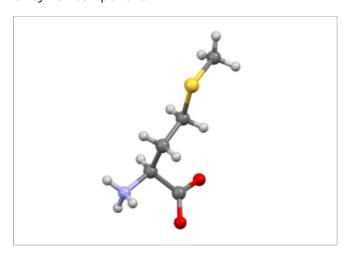
Lysine is safe for individuals with thyroid conditions and does not interfere with thyroid function.

In Reneuva

Each serving of Reneuva contains 250 mg of lysine, providing essential support for hair growth and strength.

Methionine

Methionine is an essential sulfur-containing amino acid vital for synthesizing proteins, including keratin, a key hair component.



How it works

Methionine is an essential sulfur-containing amino acid that plays a crucial role in hair health, particularly for women. It acts as a precursor to cysteine, another amino acid vital for producing keratin, the primary protein that makes up hair. Methionine contributes to hair growth and strength by supporting the formation of keratin and improving hair structure.

Clinical Trials

Research has shown that methionine supplementation can benefit women experiencing hair loss, particularly during menopause or due to conditions like androgenic alopecia.

For example, in studies where women with hair loss conditions were given supplements containing methionine and other amino acids, hair strength, growth, and overall hair health improved dramatically.

These studies suggest that methionine, along with other nutrients, can help reduce hair fragility and promote healthier hair growth.¹¹

Thyroid considerations

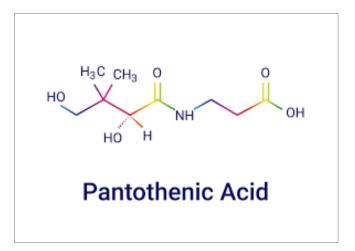
Methionine does not affect thyroid function and is safe for individuals with thyroid conditions.

In Reneuva

Each serving of Reneuva contains 250 mg of methionine, formulated to support robust hair health.

Vitamin B5 (Pantothenic Acid) (5 mg)

Vitamin B5, also known as pantothenic acid, is a water-soluble vitamin that is important for synthesizing coenzyme A, which is essential for various metabolic functions, including hair health.



How it works

Vitamin B5 helps to strengthen hair follicles, support hair growth, and prevent hair thinning. It also plays a role in maintaining the scalp's health by promoting the production of natural oils that keep hair moisturized and shiny.

Clinical Trials

Clinical research indicates that supplementation with vitamin B5 can reduce hair shedding and improve hair texture. Study participants often report smoother, more hydrated hair with fewer split ends.¹²

Thyroid considerations

Vitamin B5 is safe for those with thyroid conditions and does not interfere with thyroid function. It helps strengthen hair follicles and supports scalp health, which can benefit individuals with thyroid-related hair issues.

In Reneuva

Each serving of Reneuva contains 5 mg of vitamin B5, providing essential support for maintaining healthy hair.

Sodium Hyaluronate

Sodium hyaluronate is the sodium salt of hyaluronic acid, a naturally occurring substance in the body that helps retain moisture and keep tissues hydrated.



How it works

Sodium hyaluronate helps maintain scalp hydration, promoting a healthy environment for hair growth. It also supports the elasticity of the scalp's skin, which can prevent hair breakage and contribute to thicker, fuller hair.

Clinical Trials

Studies have shown sodium hyaluronate can significantly improve hair moisture levels, leading to softer, more manageable hair. It also enhances scalp health by reducing dryness and irritation, which can contribute to hair loss.¹³

Thyroid considerations

Sodium hyaluronate is safe for individuals with thyroid conditions as it does not contain iodine or affect thyroid function. Its moisturizing properties help maintain scalp and hair health, potentially reducing hair loss related to thyroid dysfunction.

In Reneuva

Each serving of Reneuva contains 100 mg of sodium hyaluronate, sourced for optimal absorption and efficacy.

Pumpkin Seed Powder (200 mg)

Pumpkin seed powder is derived from pumpkin seeds (Cucurbita pepo) and is rich in essential nutrients, including zinc, magnesium, and fatty acids, essential for hair health.



How it works

Pumpkin seed powder is known for its ability to inhibit the enzyme 5-alpha-reductase, which converts testosterone into DHT, a hormone that can shrink hair follicles and lead to hair loss. By reducing DHT levels, pumpkin seed powder supports healthy hair growth.

Clinical Trials

A clinical study found that men supplemented with pumpkin seed oil saw a 40% increase in hair count after 24 weeks, compared to just 10% in the placebo group. This suggests pumpkin seed powder can effectively promote hair growth and prevent hair thinning.¹⁴

Thyroid considerations

Pumpkin seed powder is safe for those with thyroid conditions and does not interfere with thyroid function. Its ability to inhibit DHT production can support hair growth, which may benefit individuals experiencing thyroid-related hair thinning.

How to Use Reneuva

Dosage

For best results, take two capsules of Renuva daily, preferably with a meal. This ensures optimal absorption of the nutrients and maximizes the supplement's effectiveness in promoting hair growth and reducing hair loss.

Duration

Consistency is key. For noticeable results, Renuva should be taken daily for at least 3 to 6 months. Hair growth cycles are slow, and it may take time to see significant changes. However, many users report improvements in hair texture, thickness, and growth within the first few months of regular use.

Side Effects

Saw Palmetto

- Mild gastrointestinal discomfort (nausea, upset stomach)
- Dizziness or headache in rare cases
- Potential interaction with blood thinners (e.g., warfarin)

Pygeum

- Gastrointestinal discomfort (constipation, nausea)
- · Occasional headache
- May lower blood pressure in some individuals

Bamboo Extract (Silica)

- Stomach upset when taken in large doses
- Rare allergic reactions (skin irritation)

Tocotrienols (Vitamin E family)

- Mild gastrointestinal issues (diarrhea or stomach cramps)
- Fatigue or headaches at high doses

Zinc

- Nausea, especially on an empty stomach
- Risk of copper deficiency with prolonged highdose use

Biotin

- Skin rashes or acne in some users
- Potential interference with lab tests for thyroid or cardiac markers

Contraindications and Cautions

Pregnancy and Nursing: Consult with a healthcare professional before using Renuva if you are pregnant, nursing, or planning to become pregnant.

Medication Interactions: If you take any medications, particularly those that affect hormone levels or blood pressure, please consult your healthcare provider before starting Renuva. The ingredients in Renuva, such as Saw Palmetto and Pygeum, may interact with certain medications, including blood thinners and hormone therapies.

Allergies: Renuva is formulated without common allergens, but avoid use if you have a known allergy to any of the ingredients. Discontinue use and consult a healthcare professional if you experience any adverse reactions.



Product Pairings

For enhanced hair growth and overall hair health, Renuva can be paired with the following products:

Thyroid Daily: A comprehensive, thyroid-specific multivitamin can help fill any nutritional gaps contributing to hair thinning or loss, providing essential vitamins and minerals that support hair health.

Omega Pure: Low iodine omega-3 fatty acids can complement Renuva by promoting scalp health and reducing inflammation, further supporting hair growth.

Easy Iron: Anemia, low iron, and latent iron depletion can contribute to hair loss and impair hair regrowth. Easy Iron is a highly bioavailable, well-tolerated form of iron, especially for those with thyroid disease.

Conclusion

Hair loss can be a frustrating and distressing experience, especially when it's related to thyroid conditions.

But Reneuva offers a natural, effective solution that can help you regain your confidence and embrace your natural beauty.

"I used to dread looking in the mirror because of my thinning hair, but Reneuva has given me back my confidence. My hair is now thicker and healthier than it's been in years. I'm so impressed with the results. I used to feel self-conscious and embarrassed about my hair, but now I feel like I can hold my head high." - Olivia

By addressing the root causes of thyroid-related hair loss and providing essential nutrients for optimal hair health, Reneuva can help you achieve healthier, more vibrant hair.

Take the first step towards a fuller head of hair today and discover the healing power of nature.





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