

We've sifted through hundreds of hair loss solutions to find the most effective treatments. And yes, the 'big 3' — Minoxidil, Finasteride, and Ketoconazole—are at the top of the list when used together. Experts agree: the secret sauce is mixing treatments based on your hair loss causes.

From boosting blood flow and slowing hair loss to using prescription medications and reclaiming 'dead zones' on your scalp, this is your guide to what actually works.

## 1. Improving blood flow

The key to strong, healthy hair lies in your scalp's blood flow. Hair stem cells need oxygen and nutrients from blood flow to grow and maintain hair.

### Minoxidil

FDA-approved for male hair loss, it works by extending the hair growth phase, slowing down hair loss.

- Topical application: apply and leave on the scalp for 3 to 5 minutes
- Opt for 5% concentration for better results
- Requires long-term commitment; hair loss resumes if you stop
- Not enough on its own for severe or rapid hair loss
- Oral form is prescription-only and has more side effects; proper dosing is crucial

*Extra reading:*

 [Huberman Lab Podcast: 00:37:38](#) (Minoxidil & blood flow)

 [Does Rogaine work?](#), healthline.com

 [Minoxidil Dosage for Hair Loss](#), hims.com

 [The structure of people's hair](#), PeerJ

### Tadalafil

Originally a drug for prostate health (Cialis). Works similarly to Minoxidil.

- At low doses, it slows the rate of hair loss by increasing blood flow (2.5mg to 5mg)
- Fewer side effects than Minoxidil

*Extra reading:*

 [Huberman Lab Podcast: 00:48:14](#) (Tadalafil)

### Platelet-rich plasma (PRP) treatment

Involves multiple injections across the thinning areas of the scalp using your platelets [[Huberman Lab Podcast: 00:49:12](#)].

- Typically done in under half an hour and with minimal discomfort and downtime
- Results tend to be short-term and can be expensive

Extra reading:

 [Here's What You Need to Know About PRP Treatment for Hair Loss](#), Allure.com

## Scalp massage

While it won't regrow hair, it can help you relax and increase scalp blood flow.

- Scalp massages can be done as often as you like, with your fingers or a massager
- Essential oils can be added. Peppermint oil (diluted) enhances blood circulation, while pumpkin seed oil blocks DHT

Extra reading:

 [How to Massage Your Own Scalp](#), WikiHow

 [The 5 Best Types of Oil to Promote Hair Growth](#), Real Simple

 [How to Use Pumpkin Seed Oil to Strengthen and Grow Hair](#), Elle

## Red light therapy

Uses light wavelengths to energize cells and encourage the growth of new blood vessels. It is considered relatively safe with minimal side effects but requires months to see results.

- The cost can add up if done professionally, but home devices are an option
- Not effective for some people

Extra reading:

 [The 5 Best Hair Growth Devices That Can Reverse Genetic Hair Loss](#), Elle

## Botox treatments

Botox injections to the scalp can offset hair loss by relieving tension in the scalp, thus promoting blood flow to hair cells [[Huberman Lab Podcast: 01:03:36](#)]. It is a reasonably safe alternative to options like Minoxidil if done properly.

- Only a skilled professional should administer Botox
- Repeated treatments are needed as effects wear off (between 3 weeks to 5 months)

Extra reading:

 [Do Botox Scalp Injections Promote Hair Growth?](#), Wimpole Clinic

## 2. Recovering “dead zones” on the scalp

Some hairs can restart their growth phase with the right balance of stem cells, oxygen, blood, and hormones. Microneedling is the most effective mechanical stimulus for hair regrowth [[Huberman Lab Podcast: 00:53:17](#)], but patience is required for results.

## Microneedling

Creates tiny injuries in the skin to rejuvenate hair follicles and improve blood flow. It works well with Finasteride, and is more effective for "dead zones" when combined with Minoxidil.


- Opt for needle lengths of 1 to 2.5mm for better results
- Consider professional treatment over at-home derma rollers for safety and effectiveness
- Expect some discomfort or pain based on needle size

*Extra reading:*

 [Can Scalp Microneedling Regrow Your Hair?](#), Healthline.com

 [Dermaroller for hair growth: does it work?](#), Medical News Today

 Home use derma rollers, "[microneedling hair 2mm](#)", Amazon.com

 [Microneedling and Its Use in Hair Loss Disorders: A Systematic Review](#), Dermatology and Therapy

## 3. Slowing hair loss

Hormones strongly regulate hair growth, and the main culprit behind male pattern baldness is dihydrotestosterone (DHT) [[Huberman Lab Podcast: 00:34:25](#)]. While these natural methods are less effective than the other treatments, they're typically budget-friendly and have low side effects.

### Topical caffeine

Caffeine can stimulate hair growth, block DHT, and improve scalp health.

- Available in many forms: shampoos, hair treatments, creams, serums, and ointments
- Apply directly to the scalp a few times a week, depending on the product
- It can be as effective as topical Minoxidil application without the negative side effects

*Extra reading:*

 [Can Caffeine Help With Hair Growth?](#), Nioxin

 [Caffeine and Its Pharmacological Benefits in the Management of Androgenetic Alopecia: A Review](#), Skin Pharmacology and Physiology

 [Differential effects of caffeine on hair shaft elongation...](#), British Journal of Dermatology

### Herbal supplements

Most herbal compounds have limited effectiveness for slowing hair loss, but can be taken alongside other treatments [[Huberman Lab Podcast: 01:28:23](#)].

- Saw Palmetto
  - 300mg a day, divided into two or three doses
- Curcumin (turmeric)
  - Taken orally, as a supplement, powder, or tea

- It can cause digestive upset if taken in high doses

*Extra reading:*

📖 [Does Saw Palmetto Work For Hair Loss? We Investigate.](#), Byrdie

📖 [What Studies Show About Turmeric For Hair Loss](#), Hair Guard

## 4. Other medications to offset hair loss

### Finasteride

The only other FDA-approved drug for hair loss. Available in both oral and topical forms. Studies show it can increase hair count by up to 20% and reduce hair loss in 90% of users. The topical form has 30% to 50% less side effects.

- Stick to the lowest effective oral dose to minimize side effects (0.2mg in the blood)
- Use topical Finasteride once a week for fewer side effects
- Be cautious if you're a younger male, as stopping treatment can lead to Post-Finasteride syndrome, especially at higher doses

*Extra reading:*

📖 [Finasteride for Hair Loss: How to Save Your Hair and Money](#), GoodRx

📖 [Post-Finasteride Syndrome](#), MedSafe.gov.nz

### Dutasteride

Similar to Finasteride. It is two to five times faster at inducing hair growth. [[Huberman Lab Podcast: 01:56:13](#)]

- Even at low doses (0.5mg to 2.5mg), oral Dutasteride reduces DHT by up to 95%
- Similar side effects as Finasteride, such as reduced libido, increase in estrogen and prolactin

*Extra reading:*

📖 [Finasteride vs Dutasteride for Hair Loss](#), Essential Clinic

### Ketoconazole shampoo

An over-the-counter antifungal that can help with hair loss, even if someone doesn't have dandruff.

- Use a minimum of 2% concentrate
  - Recommended by Huberman: [Keeps](#), [Nurx](#), [Siena Health](#), [Intelligent](#)
- Massage the shampoo into the scalp before rinsing off 2-3 times a week
- Biotin shampoos can help reduce side effects like scalp irritation, thinning, and brittle hair.
  - Recommended by Huberman: [Holisitics](#), [Ouai](#), [R+Co](#)

*Extra reading:*

 [The Science Behind Ketoconazole Shampoo and Hair Loss](#), Keeps.com

## 5. Increasing hair growth and regrowth

### Lifestyle changes

A balanced diet and regular exercise can help you maintain good hormone levels and nutrient balance, which are key for hair growth and regrowth.

- Keep a regular bedtime so your body naturally releases growth hormones
- Maintain normal iron levels. Iron deficiencies can be boosted with iron or ferritin supplements
- Huberman recommends cardiovascular and resistance exercises while maintaining a healthy body fat percentage

*Extra reading:*

 [The Huberman Lab podcast, 01:21:07](#) (Increasing IGF-1 Levels)

### Prescription growth hormones

Primarily used for treating growth hormone deficiency, increasing human growth hormones (HGH) might also stimulate hair growth or slow hair loss.

- Sermorelin peptide therapy can help with hair loss
- Treatment is customized for each individual after hormone level assessments, usually in the form of injections

*Extra reading:*

 [The benefits of Sermorelin](#), Seeds Scientific Research

### Increase insulin sensitivity

These options boost IGF-1 (insulin growth factor 1) levels, which are linked to hair health, by improving insulin sensitivity. If you have insulin resistance due to type 2 diabetes or excess body fat, address that first for other treatments to work.

- **Myoinositol supplement.** Taking 900mg 30 minutes before bedtime for added sleep benefits
- **Metformin** is a prescription option with anti-inflammatory and hormonal balancing effects. Most commonly used to treat type 2 diabetes, but some people take this for hair loss.
  - Best taken with carbohydrates as it reduces blood sugar levels
- **Berberine.** A non-prescription alternative to Metformin and is equally effective

*Extra reading:*

 [Which nutritional supplements are best for treating hair loss?](#), Medical News Today

 [Does Metformin cause hair loss?](#), The Checkup