# HOME REMEDIES FOR HAIR LOSS

# 6 TOPICAL TREATMENTS DEMYSTIFIED



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# **Folk Medicine and Home Remedies**

Interested in alternative treatments to treat your hair loss? All you have to do is surf the internet and you'll discover an endless stream of home remedies that claim to strengthen your hair and prevent baldness. Although folk medicine sites and online fashion pages offer an infinite list of available brews, concoctions and potions that claim to 'reverse' baldness, the truth is only a very few show any potential to help control hair loss.

Whether it's licorice, egg yolks or avocados there are a plethora of oily blends and yogurty pastes that hair stylist and folk medicine aficionados claim invigorate your scalp and follicles. Unfortunately the vast majority of the home remedies we investigated were



nothing but a mix of wacky old-wives tales and urban legends that would probably do your scalp and locks more harm than good.

That's why we put folk medicine to the test. We let the science speak for itself and quickly concluded that most of the natural treatments you'll find on line are nothing but snake oil. But even though we were able to dismiss the vast majority of the home remedies we profiled, the handful 'treatments' covered in this book did show some potential.

Losing your hair may be a bitter pill to swallow, and for many, waiting for the remainder of their hair to fall out is not an option. Instead they would rather fight to the end, building an arsenal of 'natural' options and over-thecounter products that might potentially reverse their hair loss. Well, if you're determined to continue fighting the good fight... maybe one of these home remedies will help lead you towards victory.

# **The Remedies**

Please be advised that "Alleged Action" and "Alleged Remedy" are taken from sources that may or may not be reliable. We are not seeking to encourage any of the following remedies but rather to inform readers about these anecdotal remedies.

#### Garlic

Not me, paranoia's the garlic in life's kitchen, right, you can never have too much. — Pynchon, Thomas Bleeding Edge

Be advised: the following treatment may leave you smelling like a souvlaki sandwich, coated with extra tzatziki.

Garlic is an irresistible ingredient that adds a unique flavor to most dishes. However, it is not generally consumed in sufficient quantities to reap the health benefits that it can provide. Regardless, garlic is an excellent source of vitamin  $B_6$  and selenium.<sup>1</sup>



Numerous sites claim that garlic can promote hair growth. But don't expect miracles because the clinical studies have yet to validate this remedy.

**The Alleged Action.** Promote hair growth; improve hair texture; strengthen roots.<sup>2</sup>

**The Alleged Remedy.** Rub garlic clove into your scalp or add garlic juice to your shampoo or soak garlic in olive oil before applying the oil into hair and scalp.<sup>2</sup>

**The Fact.** <u>Garlic</u> is reported to have many benefits such as antiseptic, antioxidant, anti-inflammatory, anti-bacterial, and anti-fungal properties.<sup>3</sup> It is highly researched and is recognized as one of the best-selling herbal remedies.<sup>4</sup>Although it has yet to be examined as a baldness treatment, scientific research will eventually hone in on its hair loss potential. But practitioners of folk medicine consider garlic to be a superb topical treatment for alopecia and dandruff.<sup>5,6</sup> However, only one clinical study has been conducted to assess this remedy.

The study evaluated the topical application of <u>garlic gel</u> on patients with alopecia areata.<sup>7</sup> Forty patients were divided into two groups. One group applied 5percent garlic gel combined with a corticosteroid gel, the other group applied solely corticosteroid gel (placebo group) for three months onto their alopecia patches. Good to moderate responses were observed in 95percentof patients using garlic gel compared to one patient from the placebo group. Of note, an improvement was also seen in the placebo group after three months compared to the baseline. The authors stipulate that the corticosteroid gel may explain the response to treatment, although the effect was greater when it was combined with garlic gel.

Of special note, if you're considering a garlic treatment: the <u>garlic gel</u> used in the study was obtained by an in-house preparation from real garlic. However, simply applying crude garlic to your scalp may not have the same effect as garlic gel. Moreover, topical use of crude garlic may cause blisters, burning sensations, contact dermatitis or allergic reactions.<sup>3, 8</sup>Ifyoudecide to give this remedy a try, it is advised to stay vigilant regarding any adverse side effects that may occur.

#### Onion

Life is an onion —you peel it year by year and sometimes cry. — Carl Sandburg

The flavor of <u>onion</u> is so irresistible we willingly continue to chop and dice it despite the tears it makes well up in our eyes. Part of the same plant family as garlic, it goes without saying that the use of onion for hair growth inspires the same type of questions that garlic does. But unlike garlic, a study that used raw onion juice to test this remedy showed promise.



The Alleged Action. Promote hair growth.<sup>9</sup>

**The Alleged Remedy.** Massage <u>onion</u> juice into your scalp and hair.<sup>9</sup>

**The Fact.** Onion has been suspected having aphrodisiac properties and is considered as a poultice for earaches, a treatment for warts athlete's foot, and appears to provide some prevention against hair loss.<sup>10</sup> However, few rigorous clinical studies have demonstrated the medicinal properties of onion in spite of its popularity as an herbal treatment.<sup>10</sup>

Researchers did evaluate the effectiveness of topical treatment for alopecia areata using <u>onion</u> juice in comparison to tap water.<sup>6</sup> The study included sixty-two participants, of which twenty-four dropped out during the twomonths of follow-ups for unknown reasons. Hair regrowth was reported after two weeks, with full hair regrowth seen after eight weeks in 86.9 percent of the patients treated with onion juice. Now if that doesn't bring to tears (of joy) to your eyes, I don't know what will.

At first glance, the results seem promising. However, a second look shows some weaknesses concerning the study design. First off, researchers were aware of the treatment received by each participant, which may have biased the results. Ideally, both researchers and participants should have been operating blindly to avoid any bias. Secondly, about half of the participants from the onion juice-group dropped out. It would have been interesting to know the reasons that prompted their withdrawal, as it may have influenced the results of the study. Complicating matters further, the method for assessment for hair regrowth was not fully disclosed. Furthermore, mild erythema (rash) was reported in 60.8 percent of the participants treated with onion juice, which suggests that this treatment may have adverse side effects. To our knowledge, no other study evaluated the relationship between topical crude onion and hair. Further research is needed to confirm the effectiveness of this remedy and to explore any other possible side effects.

#### Rosemary

"There's Rosemary for you, that's for remembrance! Pray you, love, remember."

- William Shakespeare

Superstar of the culinary world, rosemary is a chef's favorite herb due both to its versatility and aromatic flavour. And guess what? Even the beauty industry is seeking to reap the benefits of this long-favorite herb. Due to its proven anti-inflammatory, antimicrobial and antioxidant properties,<sup>11</sup> rosemary is making its way into cosmetics products.



**The Alleged Action.** Stimulate hair growth and prevents baldness; treat dandruff; use as conditioner for greasy hair.<sup>3,11,12</sup>

The Alleged Remedy. Apply on hair.<sup>3,11</sup>

**The Fact.** <u>Rosemary</u> has been claimed to aid with cardiovascular conditions, gastrointestinal circulatory systems, brain and nervous system conditions, liver function, oedema, and others.<sup>11</sup> It is also popularly used as a hair care treatment.<sup>3,11</sup>

More specifically, a recent study compared the topical use between <u>rosemary</u> oil and 2% minoxidil (a topical solution commonly used to treat hair loss) in patients with androgenetic alopecia.<sup>13</sup> The authors reported an increase in hair count as a consequence of both treatments, with no significant

difference between the two. Scalp itching was also increased in both treatments, with a higher frequency observed in the minoxidil-treated group.

Another study sought to evaluate the efficacy of topical plant-based oils from a combination of thyme, rosemary, lavender, and cedarwood.<sup>14</sup>Among patients receiving the treatment, 44percent showed improvement in hair regrowth. No adverse side effects were reported during the study.

Bureau et al. pushed the study further by investigating the effects of essential oils combined with low-intensity electromagnetic pulsein patients with androgeneticalopecia.<sup>15</sup> Although an improvement in hair quality and hair loss was seen in the treatment group, hair density was also increased in the placebo group. The authors suspect that this may be explained bythe increased care patients provided to their hair.

Although plant oils have been, anecdotally, used to treat alopecia,<sup>11</sup> there are limited clinical studies that have investigated the efficacy of plant oils in hair growth. Among the three studies mentioned above, only one used rosemary oil whereas the other two used it in conjunction with other oils or treatments. No adverse effects were reported after using plant oils, although allergic contact dermatitis may occur in certain people.<sup>16</sup> Caution should also be taken by people with bronchospasm.<sup>11</sup> Whether the use of rosemary oil alone is effective or an enhancement of its properties can be achieved by combining it with other plant-oils requires more investigation. Vigilance is always recommended and users should consult a doctor if any health abnormalities occur while using rosemary.

#### **Peppermint Oil**

Nothing except the mint can make money without advertising.

- Thomas Babington Macaulay

<u>Peppermint</u> is known for its use in confectionary foods: found in candies, ice cream, and gum. Somehow it has even managed to find its way into toothpaste and mouth wash. In folk medicine, peppermint salve is believed to help relieve headaches and body aches.<sup>17</sup> It is also thought to treat hair loss.<sup>18</sup> Fact or fiction? Let's find out!



**The Alleged Action.** Promote hair growth; stop hair loss; moisturize hair; prevent dandruff.<sup>19</sup>

The Alleged Remedy. Massage peppermint oil into the scalp and hair.<sup>19</sup>

**The Fact.** Folk medicine uses peppermint oil to relieve cold symptoms, gastrointestinal problems, gallbladder disease, and respiratory issues.<sup>20,21</sup> Recently, research has focused on its potential to provide relief from irritable bowel syndrome.<sup>22,23</sup> To our knowledge, there is only one research paper published regarding the effectiveness of <u>peppermint oil</u> in treating hair loss.

The effect of topical 3percent peppermint oil applied on mice was evaluated in comparison to a saline, jojoba oil and 3percentminoxidil application.<sup>24</sup> Topical treatment was administered six days a week for four weeks. At the end of the study, the authors observed an improvement in hair growth and

number of hair follicles when compared to the other treatments given to mice.

Even though the study demonstrated positive results in hair growth in mice, it is not possible to apply the results to humans. Hence, it is still too early to conclude the efficacy of such a <u>peppermint</u> treatment as it relates to human hair loss.

#### **Saw Palmetto**

Look, we're Americans: optimistic, addicted to the quick fix, constantly on the hunt for the new and exotic. It's much easier for us to accept a guy with a big white beard hawking his custom blend of saw palmetto and squirrel dandruff than it is to hear a real doctor telling us to lay off the big macs and get off our fat asses and take a walk every decade or so. - Dennis Miller

<u>Saw palmetto</u> may be beneficial for patients hoping to decrease the symptoms of an enlarged prostate. But the National Medicines Comprehensive Database states that there is "insufficient evidence to rate effectiveness for colds and coughs, asthma, migraine and baldness", among other alleged claims.<sup>25</sup>Despite the lack of evidence, it doesn't seem to slow down its popularity. Traditionally supplemented in pill form, it is now making his way into topical products.



The Alleged Action. Treat hair loss.<sup>26</sup>

**The Alleged Remedy.** Apply on hair roots before bedtime and leave it overnight.<sup>26</sup>

**The Fact.** <u>Saw palmetto</u> is a palm tree that is commonly found in Florida.<sup>27</sup>Research has mainly focused on using it as a treatment for prostate enlargement (medical term: benign prostatic hyperplasia (BPH)). Because BPH shares similar endocrinologic pathways with androgenetic alopecia (AGA), it is hypothesized that saw palmetto might also aid patients with AGA.<sup>28</sup> In fact, some studies reported positive effects from a treatment oral <u>saw palmetto</u> in hair loss. However, there is little documented information regarding its topical application.<sup>28,29</sup>

To evaluate the effectiveness of topical saw palmetto on hair, forty-nine patients used a topical serum, lotion and a shampoo containing saw palmetto, among other ingredients.<sup>30</sup> The serum was only used during the first four weeks of the study and contained the same ingredients as the lotion, but in higher concentration. Results indicated a significant increase in hair count after 12 weeks, but no difference was observed between weeks 12 and 24. Hair size was also increased by week 12, but later decreased, resulting in no difference between week 24 and the baseline. In light of these findings, improvement at the beginning of the study seems to be explained by the use of the serum. Overall, AGA was improved in patients. The mild side effects reported included feelings of coldness, mild burning sensations, an unpleasant smell, itchy scalp, and acne. Acute dermatitis possibly due to an allergic reaction was also reported in a separate case study.<sup>27</sup>Another research group found a 27 percent increase in hair count after applying saw palmetto for fifty weeks with no adverse side-effects reported.<sup>31</sup>

These studies show the potentially positive effect of saw palmetto in treating hair loss. However, the mechanism underlying the treatment of <u>saw</u> <u>palmetto</u> is still unclear. Because side effects have been documented in previous studies, users are cautioned when applying saw palmetto products to the scalp and hair.

#### Tea Tree Oil

Teat tree oil, or melaleuca oil, is an essential oil made from certain leaves native to Australia. It's believed by some to have medicinal properties when applied topically.

Traditionally used topically to treat blemishes <u>tea tree oil</u> is increasingly being added as an ingredient in cosmetic products. Fad or not, positive reviews from customers and beauty gurus make it very difficult to not to give the products a try. However, clinical studies are lacking and efficacy is inconsistent from one person to another.



**The Alleged Action.** Induce hair growth; moisturize scalp; prevent hair fall; treat dandruff.<sup>32</sup>

**The Alleged Remedy.** Massage into your hair and scalp;<sup>33</sup> mix tea tree oil with shampoo.<sup>32</sup>

**The Fact.** Our skin rapidly absorbs essential oils (approximately ten to thirty minutes).<sup>34</sup>In dermatology, benefits of applying <u>tea tree oil</u> were seen in

treating skin infections and other skin disorders.<sup>34</sup> Much like the other plantbased oils, the cosmetics industry is searching to enhance their products by fortifying them with tea tree oil.

Dandruff appears to be caused by yeast called Pityrosporum ovale.<sup>35</sup> The effect of 5 percent tea tree oil shampoo on patients with dandruff was evaluated during a period of four months.<sup>35</sup>The study included one hundred and twenty-six patients who were divided into two groups, one receiving 5 percent <u>tea tree oil shampoo</u> and the other a placebo shampoo. Patients were advised to wash their hair daily and to leave the shampoo on for three minutes before rinsing. An improvement of 41.2 percent was observed in patients using tea tree oil compared to the placebo group. A few adverse side-effects were reported, including: mild stinging in the eyes, mild burning of the scalp and mild itching of the scalp. Nonetheless, treatment was well tolerated among patients treated with tea tree oil.

This study highlights the potential role of tea tree oil in the treatment of dandruff, although only one patient was completely cured from dandruff at the end of the study. The amount of application, the frequency and the duration of the treatment may influence the response to treatment. Therefore, further clinical trials will be necessary to ascertain the real effect of <u>tea tree oil</u> as a cure for dandruff.

### What to remember

Alternative medicine is undeniably catching people's attention, as many believe it to be safer and more natural compared to prescribed medication. Apart from the remedies mentioned above, there are many other home remedies that boast potential in treating hair loss problems. Notably, plantbased oils are heavily used as a main or secondary ingredient in cosmetics products.

The mainstream medical community does not always incorporate home remedies and folk medicines into their practices since there are very limited clinical studies that evaluate their efficacy. But many of the methods devised to treat illness and disease have been passed down through countless generations of family and community members. Such remedies have become increasingly popular as the price and inconvenience of modern medicine takes its toll on our pocketbooks and time. Just think of the old wives tale about chicken soup and the common cold.

If you do decide to give any of these non-prescribed remedies a try, start slowly and gradually increase the frequency and intensity of the treatments. Be attentive to any changes around the area where you applied the product. In case of adverse events, stop the treatment and consult a doctor immediately.

#### References

1. Tout sur les légumes. Legault M-A, editor. Montréal: Éditions Québec Amérique; 2013.

2. PositiveMed. [Internet]. Florida: PositiveMed; c2011-2015. How to use garlic for hair growth [cited 2015 October 15]. Available from: <u>http://positivemed.com/2015/03/23/how-to-use-garlic-for-hair-growth/</u>.

3. Aburjai T, Natsheh FM. Plants used in cosmetics. Phytother Res. 2003;17(9):987-1000.

4. Yilmaz HH, Gormez O, Hastar E, Yildirim D, Aksoy MC. Garlic burn in a patient with trigeminal neuralgia: a case report. Eur J Dent. 2010;4(1):88-90.

5. Lourith N, Kanlayavattanakul M. Hair loss and herbs for treatment. J Cosmet Dermatol. 2013;12(3):210-22.

6. Sharquie KE, Al-Obaidi HK. Onion juice (Allium cepa L.), a new topical treatment for alopecia areata. J Dermatol. 2002;29(6):343-6.

7. Hajheydari Z, Jamshidi M, Akbari J, Mohammadpour R. Combination of topical garlic gel and betamethasone valerate cream in the treatment of localized alopecia areata: a double-blind randomized controlled study. Indian J Dermatol Venereol Leprol. 2007;73(1):29-32.

8. Lee TY, Lam TH. Contact dermatitis due to topical treatment with garlic in Hong Kong. Contact Dermatitis. 1991;24(3):193-6.

9. My Health Tips. [Internet]. My Health Tips; c2013. How onion helps in hair growth [cited 2015 October 15]. Available from: <u>http://www.myhealthtips.in/2014/08/how-onion-helps-in-hair-growth.html</u>.

10. Griffiths G, Trueman L, Crowther T, Thomas B, Smith B. Onions--a global benefit to health. Phytother Res. 2002;16(7):603-15.

11. Begum A, Sandhya S, Shaffath Ali S, Vinod KR, Reddy S, Banji D. An in-depth review on the medicinal flora Rosmarinus officinalis (Lamiaceae). Acta Sci Pol Technol Aliment. 2013;12(1):61-73.

12. Drugs.com. [Internet]. New Zealand: Drugs.com; c2000-2015. Rosemary [cited 2015 October 15]. Available from: <u>http://www.drugs.com/npp/rosemary.html - ref6</u>.

13. Panahi Y, Taghizadeh M, Marzony ET, Sahebkar A. Rosemary oil vs minoxidil 2percent for the treatment of androgenetic alopecia: a randomized comparative trial. Skinmed. 2015;13(1):15-21.

14. Hay IC, Jamieson M, Ormerod AD. Randomized trial of aromatherapy. Successful treatment for alopecia areata. Arch Dermatol. 1998;134(11):1349-52.

15. Bureau JP, Ginouves P, Guilbaud J, Roux ME. Essential oils and low-intensity electromagnetic pulses in the treatment of androgen-dependent alopecia. Adv Ther. 2003;20(4):220-9.

16. Ernst E. Adverse effects of herbal drugs in dermatology. Br J Dermatol. 2000;143(5):923-9.

17. La Mini-Encyclopédie des aliments. Fortin C, editor. Montreal: Éditions Québec Amérique; 2008.

18. Balick MJ. Rodale's 21st-Century Herbal: A Practical Guide for Healthy Living Using Nature's Most Powerful Plants. New York: Rodale Inc.; 2014.

19. Peppermint Oil for Hair. [Internet]. Peppermint Oil for hair; c2015. 5 uses for peppermint oil on your hair [cited 2015 October 16]. Available from: <a href="http://peppermintoilforhair.com/">http://peppermintoilforhair.com/</a>.

20. Comar KM, Kirby DF. Herbal remedies in gastroenterology. J Clin Gastroenterol. 2005;39(6):457-68.

21. Kligler B, Chaudhary S. Peppermint oil. Am Fam Physician. 2007;75(7):1027-30.

22. Cash BD, Epstein MS, Shah SM. A Novel Delivery System of Peppermint Oil Is an Effective Therapy for Irritable Bowel Syndrome Symptoms. Dig Dis Sci. 2015.

23. Khanna R, MacDonald JK, Levesque BG. Peppermint oil for the treatment of irritable bowel syndrome: a systematic review and meta-analysis. J Clin Gastroenterol. 2014;48(6):505-12.

24. Oh JY, Park MA, Kim YC. Peppermint Oil Promotes Hair Growth without Toxic Signs. Toxicol Res. 2014;30(4):297-304.

25. Medline Plus. Saw Palmetto [Internet]. U.S.: National Institute of Health; c2015. [updated 2015 February 16; cited 2015 October 19]. Available from: https://www.nlm.nih.gov/medlineplus/druginfo/natural/971.html.

26. NiceHair.org. [Internet]. Clearcut Productions; c2008-2015. Saw Palmetto for Hair Loss [cited 2015 October 16]. Available from: <u>http://www.nicehair.org/hair-loss-treatments/saw-palmetto-for-hair-loss</u>.

27. Sinclair RD, Mallari RS, Tate B. Sensitization to saw palmetto and minoxidil in separate topical extemporaneous treatments for androgenetic alopecia. Australas J Dermatol. 2002;43(4):311-2.

28. Prager N, Bickett K, French N, Marcovici G. A randomized, double-blind, placebocontrolled trial to determine the effectiveness of botanically derived inhibitors of 5-alphareductase in the treatment of androgenetic alopecia. J Altern Complement Med. 2002;8(2):143-52.

29. Miroddi M, Carni A, Mannucci C, Moleti M, Navarra M, Calapai G. Hot flashes in a young girl: a wake-up call concerning Serenoa repens use in children. Pediatrics. 2012;130(5):e1374-6.

30. Wessagowit V, Tangjaturonrusamee C, Kootiratrakarn T, Bunnag T, Pimonrat T, Muangdang N, et al. Treatment of male androgenetic alopecia with topical products containing Serenoa repens extract. Australas J Dermatol. 2015.

31. Morganti P, Fabrizi G, James B, Bruno C. Effect of gelatin-cystine and serenoa repens extract on free radicals level and hair growth. J App Cosmetol. 1998;16(3):57-64.

32. Biswas A. [Internet ]. Hyderabad: Style Craze; c2014. 18 Amazing Benefits Of Tea Tree Oil For Skin, Hair And Health [cited 2015 October 16]. Available from: <u>http://www.stylecraze.com/articles/amazing-benefits-of-tea-tree-oil-for-skin-hair-and-</u> health/.

33. Barrett B. [Internet]. BlackHair101.com; c2011. Oils Explained: Essential Oils and Carrier Oils For Hair [cited 2015 October 16]. Available from: <u>http://blackhair101.com/hair-care/oils-explained-essential-oils-and-carrier-oils-for-hair</u>.

34. Pazyar N, Yaghoobi R, Bagherani N, Kazerouni A. A review of applications of tea tree oil in dermatology. Int J Dermatol. 2013;52(7):784-90.

35. Satchell AC, Saurajen A, Bell C, Barnetson RS. Treatment of dandruff with 5percent tea tree oil shampoo. J Am Acad Dermatol. 2002;47(6):852-5.