

## MSM and Hair Loss for a Treatment

Posted by : admin on Oct 10, 2007 - 10:33 PM

Editorials

Dr. Marty Sawaya reviews the supplement MSM, and its ability to treat hair loss, naturally. Dr. Marty Sawaya reviews the supplement MSM, and its ability to treat hair loss, naturally... I know the internet discussion forums on the various hair loss sites have so much information from people who have taken things like: MSM, beta-sitosterol, and of course my long time favorite is biotin, not to mention a half-dozen others or more. I will try to review some of the frequently used herbal/nutritional supplements such as: MSM (Methyl-sulfonyl-methane), beta-sitosterol, pygeum, nettles, green tea, biotin and fish oil (Omega-3).

Overall, some of these things “may work for some people” and this just happens to be so, where about 10-15% of folks will swear it really helped their loss, and shedding, or helped to stabilize the hair loss. We don't know why it works for some, and not others, except that with the human scalp hair cycle, there is a regrowth of the hair, then a cycle where the hair that grows back is thinner, shorter and less pigmented. The hair cycle becomes shorter and shorter with each successive cycle. The hair cycle is a very complex thing to understand, and there is variation to some extent in everyone, but once you understand the hair cycle, it is easier to understand hair loss and why the regrowth that we see is just a part of the shortened hair cycle.

As for some of these herbal agents, let's review some of them and try to get a handle on them with regard to hair growth.

### MSM for hair loss

msm.jpg

MSM

Methyl-sulfonyl-methane (MSM): a naturally occurring sulfur compound found in the body, as well as in various foods. Reviewing the website: [www.msm.com](http://www.msm.com), it states that MSM is found in milk, coffee, tea, vegetables, etc. It is sold as capsules, tablets, powders, as well as topical preparations. According to the website, MSM is supposed to maintain structural proteins, form keratin proteins which make up the hair fiber and help the immune system. MSM has also been stated to help with pain, inflammation, increase blood flow, soften scar tissue and reduce muscle spasms. Reviews on the website also mention studies using MSM to help those with arthritis. From these reports, the users stated improvement to their nails and hair. “Those taking MSM showed 50% increased nail length, thickness and growth compared with placebo, and 100% of the subjects showed increased hair growth compared with placebo. In addition, 30% of the subjects taking MSM showed improvement in hair brilliance”.

Wow, those are pretty good numbers, but I wish I could see their standardized photography, and how these parameters were assessed. I didn't see any hair counts, computerized systems for hair counting, biopsies, macro or microphotography. It's really tough to determine what they mean by “100% increased hair growth”. So, until you see the full-published report done by the most rigorous testing methods, it is best to be skeptical. The website describes physicians who conducted the study, but to be honest, family practitioners don't know enough about dermatology

and hair growth to conduct such a study. Many dermatologists in general, are not comfortable with hair disorders and will even tell you so. It's probably best to get the few who know anything about hair to do these studies.

(Continued on next page...)

- Legitimate Proven Hair Loss Treatments for Men

- Legitimate Proven Hair Loss Treatments for Women

### **The Absence of real Data**

When a product is used for so many purposes, such as MSM, (used for inflammation, arthritis, blood circulation, scar tissue, etc.) it is best to review any human and animal studies that may have been done. It's really tough to assess hair brilliance, as this is so subjective, but at least they could have done hair counts by macro photography, which is really the way to go these days, and it wouldn't cost that much. If they could test it in the appropriate "accepted methods" which hair studies are done today, and they prove to be positive, imagine how much money they could really make?

researcher.jpg

The website suggests doses of 1,000 mg taken by mouth, three times a day with meals. It is stated that MSM is non-toxic at extremely high doses, but it is best to review how this was assessed and what animal toxicity studies were done. I wouldn't suggest taking doses this high unless I really did some investigative homework to know all toxicology that has been done in human and animal studies.

### **MSM may help, however...**

From my past research experience, it is true that there are many enzymes in skin that are important for adding sulfur and taking sulfur away from hormones and proteins, such as the keratins. During my doctoral years of studying the male-hormone enzymes that convert testosterone to dihydrotestosterone (DHT) and other pathways, there are sulfhydryl-oxidizing and reducing enzymes that make the hormones water soluble to be transported in the blood. There are a lot of sulfhydryl bonds in hair fiber, and keratin-proteins which make-up hair. The sulfur mediating enzymes and their pathways are so complex and not totally known.

It is doubtful that taking them by mouth will have any effect at the intracellular (inside the cell) level where they need to be to influence hair fiber growth.

Because of limited research funds, a lot of the "sulfur-mediating enzymes" story is just incomplete. We don't really know, but it sure sounds good, and it could be possible, but it is best to have a company spend about \$100,000 for some limited clinical trial testing, done by experienced physicians, in a double-blind fashion for a 6 month to 1 year period of time to really test any claims for hair growth.

### **Conclusion**

There have been so many herbal supplements that have hit the marketplace, and for some people taking them who have hair loss, they swear they are seeing improvements. The problem is documentation. People want proof in the way of standardized photography taken by experts with controlled lighting, film exposure and film quality. Taking a snapshot, or quick digital photo just doesn't cut the mustard.

For now, CAUTION is advised for any nutritional/herbal supplement you decide to take to treat your hair loss. For many, like biotin, they may not hurt you, but I doubt it will really help you. Next issue will continue on herbal remedies and will discuss: Pygeum, Nettles, Green Tea, and Omega-3 Fish Oils.

Marty Sawaya MD, PhD

- Legitimate Proven Hair Loss Treatments for Men
- Legitimate Proven Hair Loss Treatments for Women

HLT