

## Daily consumption of StemEnhance helps reduce hair graying

### Introduction

Many consumers of StemEnhance reported, after a few months of daily consumption, reduction of hair graying. Consumers reported a slow return to one's natural hair color. Although such reports were first received with skepticism, a brief search of the scientific literature rapidly provide evidence that bone marrow stem cells have the ability of differentiating into melanocytes responsible for hair pigmentation, therefore providing for a mechanism of action behind such observation.

Altering hair color by restoring one's natural hair color has little relevance when considering human health, however such an effect would constitute a strong indication of the rejuvenating properties of StemEnhance. In this study we investigated the effect of daily consumption of StemEnhance on the density of white in the hair of middle age men.

### Methods

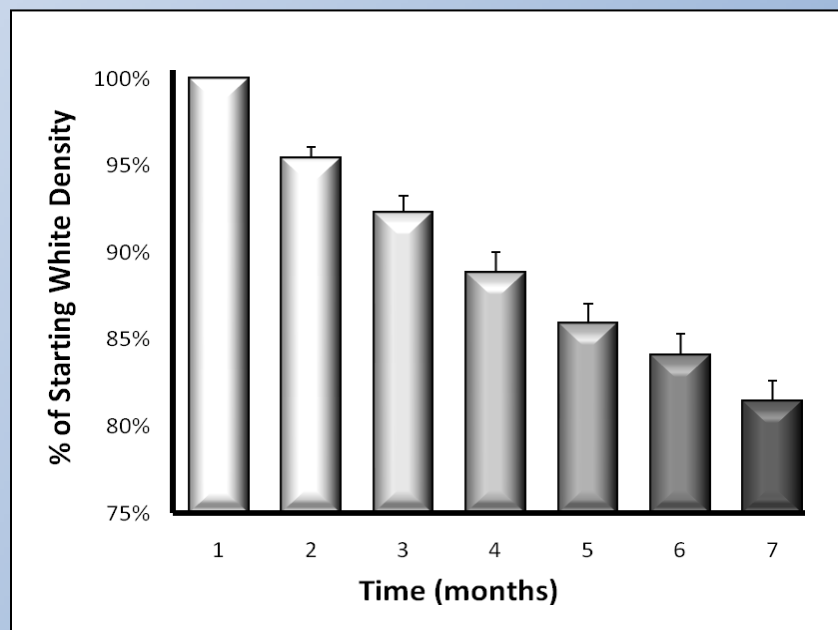
In brief, 6 healthy men between 46 and 61 years of age exhibiting significant hair graying were selected. The participants were provided StemEnhance and were instructed to consume 2 capsules three times daily. The subjects were instructed to report any adverse reaction. Finally, participants were instructed not to change their hairstyle, grooming products or schedule of haircuts for the duration of the study.

At baseline and once monthly visual and instrumental hair color evaluations were conducted using Matched Scientific Photography. The technicians involved in this study were all certified by a Board Certified Ophthalmologist using the Farnsworth-Munsell 100 Hue Test, which determine a person's ability to discern color against a black background. Finally, at each visit the participants were asked to fill a SF-36 Quality of Life Questionnaire.

## Results

No adverse effects or unexpected reactions of any kind were observed on any of the participants. Most participants empirically reported a greater level of energy and an overall greater level of well being for the duration of the study, which was objectively measured using the SF-36 Quality of Life Questionnaire. **Stat and graph.**

A reduction in the density of white was seen in all participants in both sides of the head and in the back. Although the effect was more pronounced on the sides of the head (-19%) than in the back (-17.5%), the difference was not significant. Therefore, the data was



pooled and on average the reduction in white density gradually reached -18.5% after 6 months of consumption, ranging between -11% and -28.6%. The difference measured

was statistically significant ( $p < 0.001$ ). In at least three participants empirical observations also suggested a thickening of the hair, although this was not quantified.

## Discussion

As mentioned previously, reversal of hair graying does not carry much relevance to overall health. Hair graying is a natural process associated with aging and many people with graying hair have very good health. Yet, hair color is a symbol of rejuvenation and so far nothing is known which, when taken orally, can naturally bring back one's natural hair color. Therefore the effect of StemEnhance on hair graying reported in this study can have far-reaching implications.

These observations lend a strong support to the fact that stem cells from the bone marrow can migrate in various tissues and become cells of these tissues. Although no clinical test was used to actually quantify the increased density of melanocytes associated with hair follicles, the fact that the effect was seen in all participants strongly suggests that the reduction in white density was caused by the migration and differentiation of stem cells into melanocytes. Given the irrelevance of hair color in health, it is fair to assume that if stem cells have migrated to become melanocytes, the body has certainly guided many stem cells to migrate and become other types of cells, further supporting the regenerative properties of StemEnhance.

Although this was not the purpose of the study, the fact that StemEnhance is the only product taken orally that was shown to affect hair color, this study lends support for an entirely new application of StemEnhance in cosmetology. Furthermore, empirical observations made in this study support prior reports that StemEnhance elevates mood and enhances overall quality of life.