

Male Aging Hair Study Conducted by Mandom Shows Middle-Aged Scalp Oils Are More Viscous and Decrease Head Hair Volume

Mandom Corporation (headquarters: Osaka; CEO: Motonobu Nishimura; hereinafter, "Mandom") conducted a study of the scalp and head hair of Japanese men and showed that oils on the scalp (scalp lipids) are a factor in decreased head hair volume as well as thin hair in middle-aged men (late 30s through 50s). Compared with that of young men (late teens through 20s), the lipid composition of the scalp in middle-aged men has a higher percentage of triglycerides, is more viscous (viscosity property) and less fluid. Mandom reflected the results of this study in its styling agent Lucido, a brand for middle-aged men that went on sale in February 2011, and has proposed a mechanism for absorbing highly viscous scalp oils and maintaining volume.

Mandom has applied for a Japanese patent based on the results of the evaluation study, which used a scalp oil model of middle-aged men.

1. 30% of men with reduced head hair volume have oily hair

A known concern of men regarding head hair is the phenomenon of reduced volume or thinning hair. In an awareness survey conducted in June 2010, 1 in 5 men in their 40s responded that they had no hair volume, their hair was thin, and they had little hair. Meanwhile, approximately 30% of those who felt that they had no head hair volume felt that they had oily head hair, compared with approximately 20% of people who felt they had head hair volume. Therefore reduced head hair volume and oily head hair were suspected to be related in some way.

2. Thinning hair and reduced volume

In September 2006, Mandom conducted a study of 71 middle-aged and young men and confirmed reduced volume and firmness/resilience in terms of both appearance and texture (published June 2007 by the Japan Society for Biomedical Gerontology). Middle-aged men had thinner hair than young men (Figure 1). In addition, there was found to be a correlation between hair thickness and volume and that volume decreased as the hair thinned (Figure 2). These observations indicate that one reason for reduced head-hair volume in middle-aged men is thinning hair due to aging.

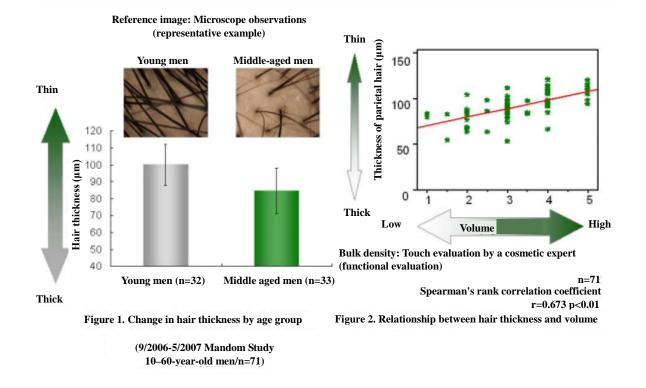
Contact

mandom corp. Public Relations Div. mail: press@mandom.co.jp Please contact us in Japanese or English.

URL: https://www.mandom.co.jp/en/



News Release



3. Middle-aged men have viscous scalp oils?

Mandom sampled and analyzed the scalp oils of middle-aged men (40s to 50s, n=22) and young men (20s, n=21). The results showed that the quantity of scalp oils did not differ by age group and that the scalp oils of middle-aged men contained fewer free fatty acids and a higher content of triglycerides (Figure 3). Furthermore, a model of the scalp oils in each group was prepared based on the analytical values, and the viscosity (degree of stickiness) was compared. The results showed that scalp oils in middle-aged men were at least twice as viscous and were less fluid than those in young men (Figure 4).

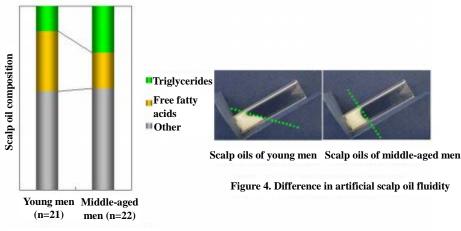


Figure 3. Change in the composition of scalp oil by age group

4. Do the viscous scalp oils of middle-aged men cause reduced hair volume?

Mandom observed the hair quality of middle-aged men in their 40s who provided their cooperation (informed consent was obtained). Although their head hair was soft and voluminous immediately after washing, it appeared oily and bundled, with reduced volume, 2 days after washing (Figure 5).

Furthermore, when artificial middle-aged male scalp oils prepared based on analytical values were applied to the hair immediately after washing, the condition of the hair was the same as that observed 2 days after washing (Figure 5), so scalp oils on the hair decreased the head-hair volume.



Middle-aged men develop age-related head-hair thinning and volume reduction, and in addition, secrete more viscous scalp oils that attach to the thin hair, causing it to bundle, which is believed to decrease volume further (Figure 6).

This study showed that scalp oils differed in composition between middle-aged men and young men and caused reduced head-hair volume in middle-aged men.

Mandom will continue to study scalp/head hair in the future and recommend the development of cosmetic head-hair products suited to middle-aged men.



Figure 6. Mechanism of head-hair volume reduction in middle-aged men

End of document