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The Senior Hair Care Market: Active Ingredients for Healthy Scalp & Hair

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abstract

24 % of the world population is older than 50 years old. In Europe and in the United States of America, these values respectively reach 40% and 36% of the population. How does ageing influence their beauty routine needs? And what does it mean for hair care? 24% of the world population is older than 50 years old. In Europe and in the United States of America, these values respectively reach 40 % and 36 % of the population [1]. Seniors born between 1946 and 1964, the last year in which annual births exceeded 4 millions, are called baby-boomers and belong to the “Silver generation”. They grew up in a consumerism and marketing boom, evolving in a positive economic context [2]. How does ageing influence their beauty routine needs?

Introduction

If, on one hand, 67% of the 55 and over accept having a longer beauty routine to answer the new needs of their skin and hair, on the other hand 67% of boomer women like to experiment new products to feel confident [2], highlighting the importance of beauty care to address these consumers and empower them. In the end, the first step to consumer satisfaction is to show understanding for their needs and to offer dedicated care. But what does it mean for hair care?

The industry focused a lot in the past decades on hair colorations as the main hair concern of seniors. In the past years though, the well-ageing and inclusivity movements showed a growing tendency [4]. Grey or white hair are not meant to be covered anymore, but to be proudly assumed as a way to empowerment and self-confidence. Consumers want to age well and to have “healthy” hair, whatever is the color. Grey hair has partly hidden the other concerns of consumers so far. And indeed, age influences hair in many other ways than just color, especially for women.

With the menopause, the synthesis of collagen decreases, the lipid production in skin and scalp decreases and skin dryness increases. The metabolism slows down and consequently, the epidermal renewal is less efficient overtime [3]. Hair growth may become slower and less performant, up to hair loss, and hair may also lose its pigmentation. All these factors impact the scalp and the hair growing on it, becoming thinner and lacking volume. These parameters were identified by Mintel like the concerns to address specifically when targeting the senior market(4). “Wesource by seppic” developed different solutions adapted to the senior hair care market: a sea beet extract, targeting damaged hair, hair volume and cell senescence, a golden samphire extract, targeting hair protection,

energizing and lipid replenishing effects and a 3-in-1 tonic, rich in vitamin, to boost hair growth and density.

A sea beet extract for smooth hair and volume

The sea beet is a halophytic plant, leaving on the seaside and resistant to different stresses like salt, UV and wind. This environment confers it an interesting composition in antioxidant molecules. Our oil soluble extract was tested *in-vitro* for scalp benefits and *in-vivo* for hair fiber benefits. *In-vitro*, on reconstituted epidermis, it demonstrated a significant reduction of lipoperoxidation (-13%) versus non treated, thus reducing the risk of oxidative damages on scalp and hair fiber. Tested on keratinocytes exposed to UVB stress, it also exhibited significant soothing action from 0,2% by reducing the amount of inflammatory mediators like PGE2 (-13%), IL-1 (-21%) and IL-6 (-21%). Finally, it was shown that the sea beet extract protects the cell from ageing by significantly slowing down the senescence process (beta-galactosidase assay).

In-vivo, the sea beet extract was tested at 1% on 20 women with dry & damaged hair. The structure of the hair fibers was evaluated by an electron microscope. After 28 days of daily use, the hair structure was significantly improved versus D0: +62% improvement of scales aspect (smoothing effect). The self-evaluation also allowed identifying the key benefits perceived by the consumer. Shine improvement was the benefit n° 1 with +22% satisfaction versus placebo while volume was the benefit n° 2 with +14 % satisfaction versus placebo.

This global approach, combining scalp and hair benefits, is extremely interesting for seniors exposed to increased scalp and hair dryness and inflamm'ageing.

A golden samphire extract for hair protection & lipid replenishment

In the same way as the sea beet, the golden samphire is a halophytic plant having a stress resistant profile. Our oil soluble golden samphire extract was tested *in-vitro* for scalp benefits and on tresses for hair fiber benefits. Tested on reconstituted epidermis, under physiological and under UVB stress conditions, it demonstrated a significant energizing action by 14 and 22% respectively by measuring the cell mitotic index. Furthermore, tested on explants, it demonstrated a significant boosting effect of total lipids (+73%) and also more particularly polar lipids (+87%), both categories, polar and apolar, playing an important role in the internal and external hair lipidic barrier (Figure 1).

On tresses, the golden samphire extract was tested at 1% in a rinse-off application. After a single shampoo, an increase in shine and softness was observed, thus making the product of interest for dull and damaged hair.

Our golden samphire extract, with replenishment of dry scalp and hair benefits, is therefore very well suited to fulfill senior's hair & scalp needs. Energizing benefits complete these effects by supporting a better cell renewal balance and preventing metabolism slow-down.

A mixture of pro-vitamin B5 and seaweed extracts for higher hair density

Enriched in pro-vitamin B5, our 3-in-1 tonic also contains two seaweed extracts: an extract from the channeled wrack, a seaweed with high resistance to desiccation and rich in antioxidant molecules, and an oarweed extract, known for

its nutritional value and traditionally used as a fertilizer. We tested this mixture *in-vivo* on volunteers with a chronic hair loss. We compared the growth speed and the hair density at D3 and D63 after shaving (Figure 2).

After 8 weeks of treatment, we observe an increase of +27% hair length and +10% hair density (Figure 3). Even without any application from D60 to D63, hair is able to grow faster and in higher density versus before treatment, translating a long-term scalp condition improvement. Thus, this study highlights the long-term scalp healthiness benefits, being often underestimated and neglected.

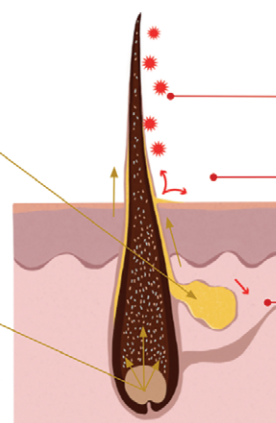
THE HAIR LIPIDIC BARRIER

SEBUM, scalp & hair maintenance

- For a long-term healthy fiber
- Produced by sebaceous glands
- Source of "external" lipidic barrier, covering scalp as well as nearby hair shaft,
- Composition rather rich in apolar lipids like squalene, wax esters and triglycerides

CONSTITUTIVE LIPIDS, inner barrier

- For healthy new hair
- Produced by hair matrix cells
- Source of "internal" lipidic cement
- Composition rather rich in polar lipids like fatty acids, especially 18-methyl eicosanoic acid, ceramides and phytosphingosine



CHALLENGES

The protective film present on hair can be removed or damaged

The sebum protective film present on hair is not well distributed

The amount of sebum decreases with age

Fig.1 The hair lipidic barrier

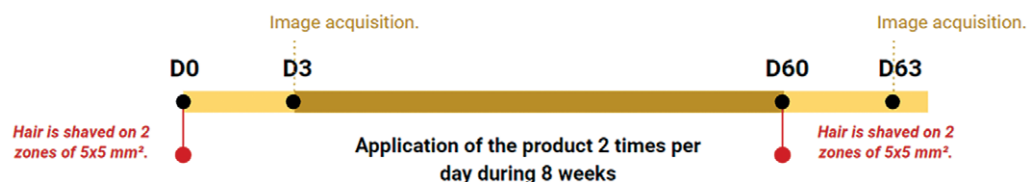


Fig.2 In-vivo protocol of the 3-in-1 tonic (pro-vitamin B5 + seaweed extracts)

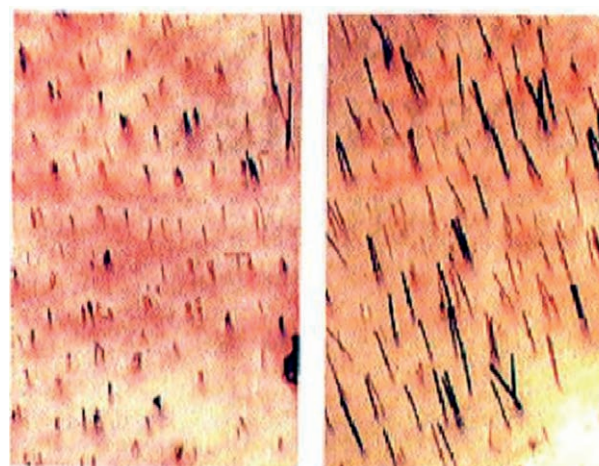


Fig.3 Scalp at D3 on the left, Scalp at D63 on the right

Conclusion

The senior hair care market is evolving. First, the target population is bigger than ever. Secondly, the progressive empowerment of generations has been leading to less complexes and shame towards ageing, thus changing consumers' expectations. The focus is not on "hiding ageing" anymore, but rather on "exhibiting well-ageing". A new category of ingredients deserves therefore to be highlighted to address these new consumers. Our two oily extracts from the sea beet and the golden samphire are particularly of interest to replenish hair and scalp in cleansing routines as well as in daily care products. Our 3-in-1 tonic is of interest for nourishing and stimulating scalp health and ensuring healthy hair growth. Indeed, healthy scalp and hair are the key claims to hair care well-ageing.

References:

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