

NUTRICOSMETICS & COSMECEUTICALS

Although still in their infancy, these segments are the shining stars of the personal care market.

By Beverly Emerson
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According to Proverbs: “Charm is deceptive and beauty is fleeting,” and yet women throughout the world relentlessly pursue beauty and youthful skin to the tune of \$382 billion a year. In the cosmetics category, the use of nutritionals to promote anti-aging, reduce wrinkles and smooth skin tone has been growing. Looking at formulation trends, it’s clear that topical skin care is moving toward natural actives, colors, fragrances and preservatives, replacing many of the artificial ingredients previously used in lotions and shampoos.

What about ingestible beauty products, though? Over the years, many companies in the U.S. have introduced supplements featuring a “beauty from within” claim. However, to date, brand growth has been slow. In fact, during the past 10 years, there have been more failures than successes at the hands of some of the world’s largest companies. Some examples in this regard include Coca-Cola, which was supposed to join forces with L’Oreal to introduce Lumae several years ago; Nes-

tle, which launched Glowelle, a beauty beverage sold in high-end department stores; and Procter & Gamble, which collaborated with Pharmavite to introduce Olay Vitamins, only to discontinue them a few years later.

So how does a brand become successful in this arena? And on the raw material side, how can ingredient manufacturers best support consumers who are embracing natural cosmetics and beauty care? As with any new product development effort, creating a successful product begins with understanding the attitudes of the target consumers.

Women’s Attitudes: Similar, But Different

Women want to look beautiful and will spend significantly to achieve this goal. Dave Siegel, managing director at Tink Thank Innovation sums up the social media monitoring that they recently conducted for a client: “Women have a strong drive to control their aging process. They

want to stay young. To look beautiful. To be confident. To be in control. That’s the role that cosmetics play!”

June Jo Lee, senior strategist with the Hartman Group says historically, with regard to skin care, U.S. women have always treated symptoms and fixed problems, looking for instant beauty. “However, we are seeing a shift in how women think about beauty. We are beginning to hear about ‘beauty from the inside’ being voiced by general consumers,” she said, adding, “They are beginning to talk about detoxification and skin hydration.”

Women love community—they love sharing their favorite recipes, their “secret” beauty tips and their recommenda-

This article in a nutshell:

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- Natural, sustainable & efficacious
- Putting it all together

tions for doctors. Their knowledge and experiences have moved from the sidelines of the soccer field to the global community via YouTube and Twitter. As Ms. Lee says, "Instant globalization of beauty rituals and the lore surrounding ingredients have given rise to a global community of women interested in sharing their personal stories. For most women, these stories begin in the kitchen, preparing food for the family. We are seeing more at-home experimentation with food ingredients used in home beauty care—and these stories are being shared around the world."

American women typically have a much different attitude toward skin care than Asians, but there are definite similarities between all women, who are eager to learn about each other's routines. One thing women have in common is the desire to keep things simple.

Women experiment with make-up from a young age, first sneaking lipstick from their mother's beauty kits. Mr.

Siegel described it this way: "Observing today's younger consumers who tweet about cosmetics and makeup, one thing comes out loud and clear: 'make-up is fun...fun...fun...' As women age, it is easy to lose this element of fun. It's hard work looking beautiful when you are a tired mother, supporting your family. If a cosmetics product can make it easier and more fun to look younger, research indicates it is likely to have higher acceptance," he said. "Any attempt to make it too technical, too difficult, too detailed or too medicinal flies in the face of consumer insight."

Attitudes toward the skin as an organ are changing. People used to consider it a protective organ, and while it certainly does play that role, consumers also view it more as a conduit to the internal body. For example, Ms. Lee said a common thought shared by women is: "If I can't eat it, why would I put it on my skin?"

Whether it is parabens, with their weak estrogenic-effect and potential

cancer link, or the potential skin-irritating effects of sodium lauryl sulfate, consumers are becoming increasingly wary about some of the chemicals they put on their skin. "As consumers increasingly see links between what is put on the body and internal health, we also see them being more open to the idea of ingesting products that have an effect on the skin," Ms. Lee commented.

Women, especially mothers, know that one of the signs of being allergic to a food is a rash on the skin. They also know that drinking a lot of water leads to a good complexion. While women have not been particularly open to it in the past, it may not be a large leap to consider ingesting dietary supplements that have a positive effect on beauty. What other evidence do they need?

Medical knowledge is only part of the efficacy story, according to Ms. Lee. "Women are looking around the world for experts—and alternative medicine and testimonials have become much



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more acceptable as 'expertise.' Women have always considered personal referrals to be the top 'expertise' there is."

Women also rely on their relationships for advice. Whether it is their pediatrician, their dermatologist, their friends or their mothers, trust plays a huge role in prompting them to make specific purchases, or behave in particular ways. This holds true in choosing healthcare products, beauty items or books.

It's possible that the failure of past beauty beverages or supplements has less to do with women not being "ready," and more to do with the believability of the brand and whether it can be trusted for good beauty advice. Brands that can tie their product to individuals that are seen as experts in skin and beauty care—including estheticians, plastic surgeons and dermatologists—may be in a better position to be trusted, compared with companies relying solely on science-based ingredients or brute marketing strength.

Natural, Sustainable & Efficacious

As was the case in many consumer packaged goods categories, cosmeceuticals sales suffered during the recession, according to New York, NY-based Packaged Facts, but the going could have been tougher were it not for cosmeceuticals' "little luxury" appeal and bang-for-the-buck ability to deliver curative and preventative benefits on top of cosmetic ones. This appeal is contributing to a market rebound amounting to 2% growth in 2010 and 4% growth in 2011. This upswing lifted U.S. retail sales of cosmeceuticals to \$9.7 billion in 2011.

For topical beauty products, recent formulations focus on natural, organic and/or sustainable ingredients, free of artificial colors, flavors, fragrances and harsh preservatives, according to Regina Miskewitz, president of Miskewitz Consulting, Phoenix, AZ.

Brien Quirk, director of research and development for Draco Natural Products, San Jose, CA, concurred. "For topical applications, there is significant interest in all natural ingredients to replace synthetics. We are seeing growth in four main



Today's topical beauty products are focusing on natural, organic and sustainable ingredients, which are free of artificial colors, flavors, fragrances and harsh preservatives.

areas: skin moisturizers, anti-aging products, natural UV protection and skin whitening agents." Additionally, he said natural polysaccharides from fruits and vegetables are a great source for natural moisturizers, due to their natural high water-holding capacity.

For some, science seems to be driving the category forward. "Marketers are introducing products substantiated by the best science possible," said Suhail Ishaq, president of BioCell Technology, Newport Beach, CA.

Similarly, Michael Wang, president, NuLiv Science USA, City of Industry, CA, said research proving and/or showing specific efficacy is a top consideration for cosmetic manufacturers.

At the same time, eco-friendly packaging (e.g., bio-based plastics, post-recycled paper products), a meaningful story, overall reduction of carbon footprint and unique, exclusive ingredients are also of high interest to manufacturers, according to Ms. Miskewitz.

Further, she is seeing manufacturers replace petroleum-sourced ingredients like mineral oil with plant-based ingredients. In fact, The International Group, Toronto, Canada, has a line of emollients called Lipid Oils that mimic the properties of mineral oil.

BeadforLife, Boulder, CO, is an example of a nonprofit organization that has

both a unique moisturizer and a compelling story. Devin Hibbard, executive director, explained, "Our mission is to help women in Northern Uganda rebuild their lives. Unique to that region, Nilotica shea butter is not only high in polyphenols, but is semisoft at room temperature due to the high oleic acid content and low melting point."

Anti-aging products are leading the growth in the skincare segment, which accounts for 30% of the global personal care market, according to Euromonitor. Whether topically applied creams or orally ingested supplements, the scientific platforms are the same. Antioxidants found in plant polyphenols reduce the damage from the sun and aging, while collagen and hyaluronic acid play a critical role in connective tissue support throughout the body.

"When you have a deep understanding of connective tissue support within the body, then you are able to understand why ingredients can be effective for both joint mobility and skin beauty," said BioCell's Mr. Ishaq. BioCell Collagen, a patented, highly absorbable combination of hydrolyzed collagen, hyaluronic acid and chondroitin sulfate, is available in both topical (with INCI designation) and oral grades.

According to Mr. Wang of NuLiv, Astrion, its proprietary cosmeceutical for-

mulation, consists of highly concentrated and enriched Astragalosides Astragalus. It has both *in vivo* and *in vitro* studies that show its ability to reduce the number and appearance of fine lines and wrinkles, and promote the synthesis of new collagen and hyaluronic acid.

Dr. Frank Schonlau, scientific director of Switzerland-based Horphag Research, says that Pycnogenol, its flagship ingredient, has been the subject of more than 40 years of research with close to 10,000 participants. Results show it provides UV protection, improves skin elasticity and controls skin pigmentation. "To date, it is the only ingredient shown to naturally elevate hyaluronic acid generation in the skin," he explained.

"Super-foods like green tea and chocolate and the super-berries (e.g., cranberries and pomegranate) are also hot. These foods are naturally high in antioxidants, which work to help 'fight' damage caused by pollution, the sun and aging," Ms. Miskewitz said.

In topical applications, Matt Stegenga, vice president of sales for Biova, Johnston, IA, is noticing increased interest in BiovaDerm, particularly because it is an all-natural, water-soluble egg-membrane product that reduces deep wrinkles by 20-30% when applied topically, based on preliminary clinical research.

Dean Mosca, president, Proprietary Nutritionals, Kearny, NJ, said a pilot study with topically applied Celadrin showed that it regenerated the skin by enhancing the lipid structure of the membrane, allowing cells to rapidly repair and regenerate. "After 21 days of use, Celadrin had penetrated every layer of the skin, and helped to improve the hydration, resiliency, elasticity and firmness," he said.

Switching gears, with new regulations coming out on sunscreen products companies are reformulating their UV-protection products. In this vein, they are utilizing naturally occurring antioxidants that both help protect the skin from aging and provide cleaner labeling. Cranberry oil and carotenoids are being touted for their ability to protect the skin from the effects of UV rays, according to industry suppliers. Nilotica shea butter, from

BeadforLife, also has some inherent UV protection properties.

Another ingredient with research behind it is Opextan, which has been shown to reduce skin sensitivity to UV rays when ingested. According to Greg Ris, vice president of sales for Indena USA, Seattle, WA, "Opextan is derived from the pulp of a specific variety of Italian olives high in polyphenols, particularly verbascoside and hydroxytyrosol."

Smooth, even skin tone is important to women, and reducing the appearance of age spots is an area of much research.

"There are several flavonoids that are effective in smoothing skin tone, like pomegranate extract, which contains up to 40% ellagic acid and can be a substitute for kojic acid in skin formulations. Both green tea extract and Sophora, a member of the pea family, have significant data behind them," said Draco's Mr. Quirk.

Pycnogenol is also being used in oral supplements to help reduce skin pigmentation.

Kasi Sundareson, manager, Research, Development and Quality, ITI Tropicals, Lawrenceville, NJ, highlighted the trend in colors. "As companies move away from artificial colors, some are embracing fruits like dragonfruit, which can provide beautiful, natural color."

Putting it all Together

NSDS/Nutra3 Complex, Pleasantville, NJ, has created a product line of Strip Melts fast-melting oral strips featuring several science-based ingredients. "These strips are able to stabilize the highest load of active ingredients ever to be assembled (250 mg/strip)," according to John Tobin, president. "We are presently formulating condition-specific products, including those supporting ageless beauty inside and out. Examples are Opextan Plus for skin anti-aging, Oligonol Wrinkle Therapy, and Fluxome Resveratrol Plus, which supports anti-inflammatory activity."

At iTi, Ms. Sundareson said the company is concentrating on beverage development. "Superfruits like acai and pomegranate were big last year, but we are doing a lot of work with coconut water right now. We are seeing more

trends toward 100% juices, but at the same time, ones that have lower sugar content. We are incorporating vegetable juices to achieve this," she said.

Regardless of whether nutritional ingredients are being used in topical cosmetics, dietary supplements or foods and beverages making cosmetics claims, the regulatory waters must be navigated very carefully.

Cosmetic claims (e.g. "improved beauty," "reduced wrinkles," etc.) for ingestible products "can be made as long as the claims are truthful, not misleading, and substantiated by competent and reliable scientific evidence," according to Ashish Talati, an attorney with Amin Talati. "Structure/function claims cannot be made for cosmetic products, but can be made for dietary supplements. Conventional foods can only make structure/function claims if the effect is derived from nutritive value."

Clearly, careful drafting is critical, as both FDA and FTC are skeptical of anti-aging products and claims. In fact, as Ms. Miskewitz pointed out, recently the National Advertising Division of the Council of Better Business Bureau weighed in on this issue by recommending that Irwin Naturals discontinue certain claims for its "Doctor Developed Clear Pure Complexion" dietary supplement.

Still, there are plenty of opportunities to develop and grow these types of beauty products, but it will require the best of consumer insight, positioning, packaging and delivery that is meaningful to women, on top of ingredients that deliver on a promise. 

About the author: Beverly Emerson, president, Olive Tree Product Development, has been growing brands through new product development since 1987. With a BS in Food Science and an MBA in marketing, she brings a rare blend of consumer insight and technical expertise to each project. Her leadership, creativity and technical grounding have enabled her to make a difference in Fortune 100 companies as well as start-ups. She has led initiatives at Kraft General Foods, Barlean's Organic Oils, Banner Pharmacaps and Alive Brands, among others. She can be reached at: bev@olivetree-pd.com; Website: www.olivetree-pd.com