## WWD

## LifeNome and LEI Collaboration Makes Customized Skin Care a Reality

Customized skin care is a buzzy subject and a new collaboration brings it to the forefront.

By Faye Brookman on December 14, 2018



DNA is being used to create customized skin care. Shutterstock / Kotin

LifeNome, a DNA-based wellness company, has teamed with Leading Edge Innovations, or LEI, to take customized skin care to the next level.

"Personalization isn't a trend, it is a paradigm shift," said Dr. Raya Khanin, cofounder of LifeNome. "In a few years, the food we eat...the skin care we use, will be customized to our biology and environment."

Founded in 2016, LifeNome already is ahead of the game. The company uses Artificial Intelligence, genomics and lifestyle information to assess a person's unique skin-care needs. LifeNome previously launched a product recommendation engine prototype called SkinGenie that identified optimal products for a person based on their unique biology and lifestyle data.

Khanin's goal is to apply the same technologies used in precision medicine to the wellness industry, particularly skin care, to develop hyperpersonalized cosmetics solutions. "We are moving beyond beauty tech, and actually talking about beauty bio-tech," she said.

LifeNome has been able to identify ingredients that consumers should seek out in skin care products, most likely with existing brands. But LEI, a product formulating company that specializes in skin care, takes the process farther. Harnessing its MicroSperse® Technology LEI, a product formulating company specializing in skin care, can offer "virtually unlimited" customization options, according to company founder and chief scientific officer Jim Wilmott. And beyond zeroing in on the actives "right" for a person, Wilmott said it is also crucial to leave out what isn't needed or even too much of an active. "Why do you want to put something on your skin that could be detrimental and cause other problems? With this you can determine exactly how much you need."

To usher in a new world of customized skin care, the two companies are exploring potential partnerships with selected market leading skin-care brands to bring DNA-based personalized skin care to the marketplace. This DNA-based customized hyperpersonalized skin care could be sold direct to consumer or through traditional retailing.

Combining the technologies allows LifeNome and LEI to produce highly customized formulations that are personalized to more than 30 genetically influenced skin characteristics and skin nutrition traits. The skin care can be a customized program which can be delivered with a series of boosters along with one or more selected bases or freshly prepared uniquely as individually designed formulas for each specific consumer.

The consumer also submits a lifestyle questionnaire — age, location etc. — so the formula base aesthetics are also customized to meet that person's individual profile, creating product that is uniquely his or her own. This step is key, because according to the Journal of American Medical Association Dermatology, 60 percent of skin aging is based on genes, while 40 percent is determined by the environment.

"In addition to the DNA information, there are other factors such as if you live in a dry climate or a city with pollution," Wilmott said. "We attack it from both sides — the DNA and the environmental factors. We can adjust the booster to the aesthetics fit for that person."

DNA testing is one of the buzziest movements in skin care, supported by the expanding number of consumers using simple test kits. As of 2018, more than 15 million people in the U.S. and 30 million people worldwide have their own DNA data — and those numbers are expected to at least double in the next five years.