



Sami/Sabinsa cultivates 40,000 acres in India, including thousands of acres of turmeric. Now, the company is finalizing plans to add acres of land in Indonesia.

True to His Roots

Sabinsa's founder has created an international company built on the power of turmeric and other Ayurveda-based, natural ingredients.

Tom Branna • Editorial Director

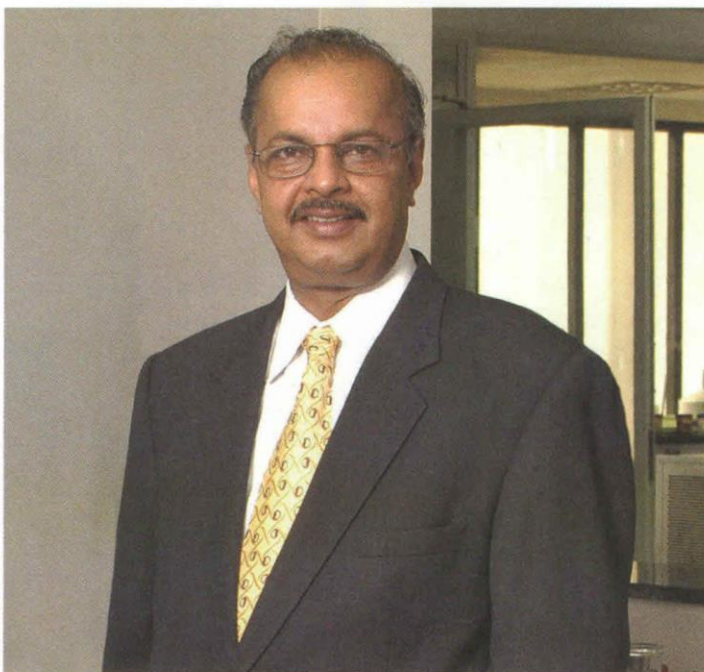
NATURAL, SUSTAINABLE and effective. While marketers and their suppliers scour the world, rack their brains and spend thousands of hours searching for ingredients that meet this profile, Sabinsa has built a multinational corporation

based on these three criteria. With recent investments in new technology and forays into new markets, the company is positioned to maintain double-digit growth for years to come.

With the growing popularity of Ayurveda-based products, Sabinsa, and its sister company Sami Labs, now operate in four areas: cosmetics, nutrition, food and pharmaceuticals. The company's primary product, accounting for about 40% of sales, is curcumin, derived from turmeric, which has many applications in pharmaceutical and nutritional formulations, due to a variety of benefits.

"Turmeric is a wonderful molecule with applications to treat a range of maladies from inflammation to Alzheimer's Disease," explained VG Nair, group CEO, Sami Labs Limited. "Turmeric demand is booming right now."

In the personal care industry, turmeric has applications as a whitening, anti-acne and wound-healing ingredient. No wonder then, that turmeric and its derivative, curcumin, accounts for the bulk of Sami/Sabinsa's business. The company produces, on an average, 30 tons of Curcumin C3 Complex a month, with monthly production climbing as high as 40 tons, according to Nair. Clearly, curcumin's popularity is on the rise, but Sabinsa executives are quick to point out that not all curcumin sold around the world is equal. In fact, an Indian competitor was exporting product to the US that contained 43% synthetic curcumin. Another competitor exported 100% synthetic curcumin to Singapore, claiming to be natural curcumin. In contrast, Sami/Sabinsa's Curcumin C3



Sami/Sabinsa Founder and Chairman Dr. Muhammed Majeed

Complex is 100% natural—and company executives insist that they can prove it.

“For the past several years, we have tested every batch at the University of Georgia,” explained Nair. “Each test costs \$700—a price that our competitors won’t pay, but we pay it gladly. But it is just another example of our core values.”

Core values that start with the company’s founder, Dr. Muhammed Majeed. Sabinsa is a homecoming of sorts for Dr. Majeed. After graduating with a degree in pharmacy from Kerala University, Majeed emigrated to the US in 1975. He continued his graduate studies in Long Island University, New York (MS) and St. John’s University New York (PhD) specializing in industrial pharmacy. During his career, Dr. Majeed spent 15 years in progressively responsible research positions with Pfizer Inc., Carter-Wallace and Paco Research.

By 1988, Dr. Majeed was ready to bring to market the benefits of Ayurveda-based ingredients with clinical efficacy backed by modern methods. He established Sabinsa in East Windsor, NJ, where today, the company employs more than 60 people in research and product development. Still, Dr. Majeed knew that nature would be the foundation of the company’s success, and in 1991, he founded Sami Labs Ltd. in Bangalore, India. The Research & Development Center of the company was established in Peenya, Bangalore in 1998. This Center of Excellence employs over 100 senior scientists of which more than 40 are PhDs and houses some of the most modern and sophisticated analytical equipment of the highest standards for the nutraceutical and cosmeceutical industries.

“I always knew that the company would be based in India—that’s where the materials are located,” he told Happi.

Today, Dr. Majeed still spends 10% of his time in the fields—and there are plenty of them to tend to, as Sami/Sabinsa cultivates 40,000 acres in India and is finalizing plans to expand into Indonesia.

Ethical Sourcing

Dr. Majeed and his team have built a \$100 million company with operations in dozens of countries, but the company remains especially focused on its roots—turmeric and more—and the farmers who care for them.

“We assure the farmers we work with a fixed profit,” explained Nair. “Plus, before the planting and again before harvesting, we give them all the resources that they need, because so many of them live week to week and month to month. We protect our farmers.”

Farmers who work with Sami/Sabinsa, for the cultivation of the company’s ingredients, receive good returns when compared with other farmers who grow traditional crops. On average, they earn between 15-20% extra. Sabinsa’s fair practices have paid off; it has under contract more than 3,000 turmeric farmers and thousands more who supply the raw materials to create hundreds of Sabinsa products that are formulated into pharmaceuticals,



VG Nair, group CEO, Sami Labs Ltd., explains how turmeric grows.

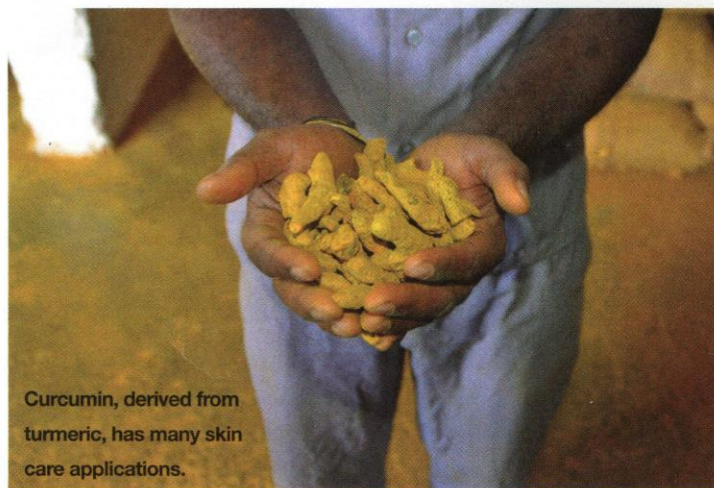
nutraceuticals, food and cosmetics.

“We remove a lot of uncertainties from the farmers’ lives,” Nair added.

This facet of Sabinsa’s sustainability efforts hasn’t gone unnoticed. In fact, the company’s agricultural projects were cited in the book, “Stepping Out of the Brain Drain: Applying Catholic Social Teaching in a New Era of Migration.” The authors note that by emigrating back to India from the US, Dr. Majeed has been able to improve the lives of not only those directly employed by Sabinsa, but also the lives of thousands of farmers and their families throughout India.

“I’ve practiced sustainability from the start,” noted Dr. Majeed. “Ayurveda relies on plants, but out of 400 or so materials, 340 are on the endangered list. These plants must be cultivated correctly or else they will disappear.”

And what are these farmers growing with the help of Sabinsa? Turmeric, of course, which is the primary ingredient in the company’s Curcumin C3 Complex, an antioxidant that has applications as a treatment for skin conditions, such as psoriasis and even squamous cell carcinomas. The company has published data on the role that curcumin plays in joint health and in the suppression of cancer progression.



Curcumin, derived from turmeric, has many skin care applications.

Then there's Forskolin, which in a patented 1% solution, has been proven to be an effective glaucoma treatment. Sabinsa harvests *Coleus forskohlii* for its Forskolin line. Besides glaucoma, Forskolin improves lean body mass and is very effective in the management of obesity.



Coleus is the source for forskolin, which has been used as a treatment for a variety of skin conditions.

Another key crop is Amla (Indian Gooseberry), the critical ingredient in Sabinsa's Saberry natural extract. Natural amla is described as a super fruit, with powerful antioxidant properties. Among its health benefits are support of healthy digestive functions,

liver detoxification and cosmeceutical applications.

Finally, BioPerine is a patented, standardized extract obtained from black pepper. The material is a clinically-proven bioavailability enhancer for nutrients, including amino acids, antioxidants, minerals and vitamins.

Currently, Sabinsa researchers are working on a new weight management ingredient and have a couple of products in the pipeline. Meanwhile, more studies are underway to measure the impact that curcumin derivatives have on obesity and diabetes.

Sabinsa executives contend the company launches 10 new products a year on average.

A Potent Lineup of Cosmetic Ingredients

In recent years, Sabinsa has become a leading supplier to the global cosmetics industry, thanks to a potent lineup of ingredients to treat skin blemishes, moisturize skin and more. For example, curcumin has applications as a skin-lightening agent; coleus oil has anti-acne applications; and Cococin, derived from



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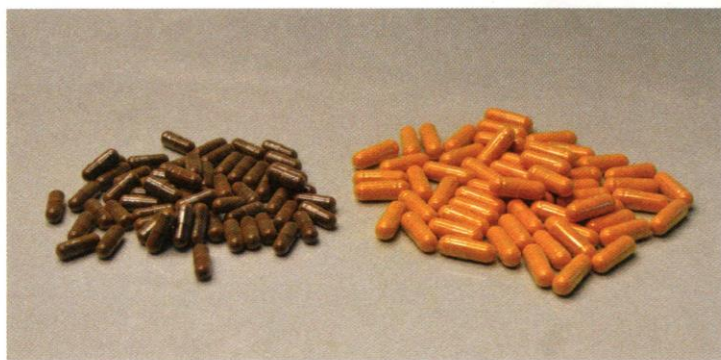
coconut water, is an effective skin moisturizer. All are backed by solid research too.

Sabinsa recently published results of a clinical study evaluating the efficacy and safety of an oil control moisturizer containing policosanol, aloe vera extract and niacinamide as its active ingredients. The study results were published in the *European Journal of Biomedical and Pharmaceutical Sciences* (Vol. 3, Issue 10, p. 462-466). At the end of the two-week study period, volunteers using the oil control moisturizer cream showed beneficial effects in the form of reduction in shine on skin, improved skin softness, smoothness and moisturizing effect. Application of this oil control moisturizer is beneficial for oily skin to control excess oiliness of the skin with no reported adverse effects, according to researchers. Following use of this oil control moisturizer for two weeks, sebum secretion levels on the forehead skin significantly decreased. There were no complaints of dryness or irritation of the skin during the study, which is notable since consumers often observe those effects with many oil-control skin care products.

With its history as a supplier of topical and internal actives, Sabinsa has been promoting the important role that its popular probiotic LactoSpore plays in maintaining a healthy skin microbiome. Sabinsa's shelf-stable microbial preparation from *Lactobacillus sporogenes* (*Bacillus coagulans*, MTCC 5856) has the US Food and Drug Administration's GRAS (generally recognized as safe) status and is found in a vast number of functional foods and dietary supplements. While the benefits of probiotics when ingested are well known, new research demonstrates the key role that probiotics play in skin care. LactoSpore has already been successfully incorporated into products, such as soaps and lotions designed to support healthy skin. While it imparts a positive effect on the skin by modulating mechanisms related to the immune system, it also provides benefits for atopic conditions by restoring residential and beneficial skin microflora.

Inflammation is becoming a key endpoint for health care professionals, but it's been a target for skin care product formulators for decades. Sabinsa's Boswellin CG (INCI: *Boswellia serrata* resin extract) contains two boswellic acids, which were found to inhibit two pro-inflammatory enzymes, 5-lipoxygenase (which generates inflammatory leukotrienes) and human leukocyte elastase (HLE). HLE is a serine protease that initiates injury to the tissue, which in turn triggers the inflammatory process. This dual inhibitory action on the inflammatory process is unique to boswellic acids, according to Sabinsa.

Cococin (INCI: *Cocos nucifera* (coconut) fruit juice) is a freeze-dried form of tender coconut water, which ensures that the solids retain optimum biological activity. According to Sabinsa, when incorporated into personal care and cosmetic formulations (1-5%), Cococin supports cell growth of human tissues, such as hair follicles. It is non-irritating to the skin and is rich in nutrients that provide moisture and support blood circulation. A double blind, placebo-controlled clinical study was conducted on 22 healthy



***Coleus Forskohlii* (left) and Curcumin (right) are popular nutritional supplements.**

female volunteers, in the age group 20–35 years. An “Age Defying Cream” containing 1% Cococin (and other natural ingredients) was applied on the left arm, and cream base was applied to the right arm. Application was for a period of eight weeks. The efficacy of the product was evaluated by measuring the percentage reduction in skin roughness parameters and percentage reduction in skin elasticity. The skin roughness was measured using a Skin Visiometer and the skin elasticity was measured using a Cutometer. With continued use, this product can also improve skin elasticity and skin tone, and decrease skin roughness, while nurturing keratinous tissue to potentially reduce the appearance of the signs of aging.

Obviously, the company has a solid intellectual property pipeline. In fact, Sabinsa holds more than 120 patents and has more than 150 patents pending in the US and around the world, and several of them are related to cosmetic formulation. For example, US Patent No. 6607712 for Coleus oil is for composition and methods containing an antimicrobial essential oil extracted from *Coleus forskohlii*. Another, US Patent No. 6653327 for Tetrahydrocurcuminoids, is for skin lightening and protection against UVB rays. One of the company’s latest international patents (ZA2007/0694) covers use of Boswellin to manage hyperproliferative dermatological conditions.

A Global Presence

Sabinsa has 1,100 employees throughout the world, including more than 120 PhDs in research. More than 900 employees are based in India. The corporate office and R&D center is located in Bangalore, with seven manufacturing facilities scattered throughout India, including Kunigal, Hyderabad, Nelamangala and Dobaspet. Sabinsa’s biotechnology operations are based in Nelamangala, where the company uses fermentation techniques to develop an array of active ingredients for pharmaceuticals and nutritional products.

“Here, we adapted the Gac fruit (*Momordica cochinchinensis*) from Vietnam for lycopene production for the first time in India,” noted Dr. Majeed. “It has 70 times more lycopene than tomato.”

Gac is also rich in beta-carotene and other carotenoids.

The site’s supercritical fluid extraction (SCFE) unit relies on carbon dioxide to create a wide range of products, including spice oils and oleoresins; flavors and fragrances derived from essential oils; herbal extracts; and food colors and preservatives.

In the US, Sabinsa operates out its New Jersey headquarters, but the company also has a contract manufacturing facility located in Payson, UT that caters to blending, granulation, pre-mixes, capsules, tablets and bi-layer tablets, and serves as a distribution center for Sabinsa ingredients. And more opportunities lie ahead.

“We just purchased a warehouse in Japan and are looking at a facility near Tokyo in 2017,” said Dr. Majeed.

Other Opportunities

Raw material production, distribution and sales represent the bulk of Sabinsa’s business, but the company has interests in other areas, too, including real estate and corporate security. Most interesting to Happi’s audience was the 2010 start-up of SamiDirect, a direct selling business in the health, wellness and beauty industry. The company’s best-selling product is Curcumin C3 Complex, but LactoSpore is gaining in popularity as consumers around the world begin to understand the importance of gut health. Last year, SamiDirect entered Bangladesh and this year, the brand is expanding into Dubai, with future openings in Indonesia, Thailand and the Philippines.

In personal care, SamiDirect launched the Johara brand (named after Dr. Majeed’s granddaughter), in 2014, and today the Johara line includes skin, sun, body and oral care products, as well as color cosmetics. Top selling products include a body-firming anti-cellulite cream that contains ForsLean CG, Boswellin and other actives.

As Sabinsa expands into new regions, new markets and new ingredients, the company is preparing for an initial public offering sometime within the next two or three years.

“It will enable us to purchase even more land and enter new markets such as South America,” explained Dr. Majeed, who insisted that even with an IPO, he will remain in control of the company.

But no matter what direction Sabinsa heads, Dr. Majeed remains true to his roots—literally. He is a firm believer in the power of turmeric, *Coleus forskohlii* and other natural ingredients that are backed by efficacy studies.

“I was the first to bring standardized Ayurveda to America,” he recalled. “We will always combine traditional knowledge with modern science to create truly effective ingredients and finished products.” ●



Harvest is still months away, but turmeric roots are already turning their characteristic golden color.