

Prevent Unwanted Age Spots with Noni!

Throughout the world since ancient times, women have been admired for young, healthy, bright skin. But time and excessive sun exposure lead to premature skin aging. That's why finding safe and healthy allies in our quest for beautiful skin is so important.

And now we know that topically applied noni fruit may be an important guard against premature skin aging.

Indeed, the same powerful antioxidants and anti-inflammatory compounds found in noni fruit and seeds that are so good for your cells are also beneficial for the skin. These antioxidants help retard the aging process of the skin cells; anti-inflammatory agents are great for reducing redness, roughness and chapped skin; and the emollients in noni actually help to make skin smoother.

Users Tell Us

Helps with the Pain of Psoriasis

Very few people understand the pain and suffering my psoriasis causes but your lotion brings immediate relief and promotes healthy skin growth. Even better is the fact that your product is completely organic—a breath of fresh air in the world of chemicals and synthetics we are currently living in. Thank you for creating this product and keep up the good work."

—M.L., New York, New York

Eliminates Age Spots

"My skin looks 20 years younger! Hi, I live in Hawaii and I first found out about your noni lavender lotion at the Made in Hawaii Festival in Honolulu. I've been using it for about eight years now. I'm 78 and my skin looks like I'm about 58. It's smooth and clear, and all those liver and age spots are all gone. My skin used to tear easily and bleed, but now it's real soft and pliable, I really like it. And using the Noni Fruit Leather and IcyHeat Lavender Noni Lotion, I was able to get rid of my arthritis in my elbow. So, I'm really grateful for your products. Thanks a lot and mahalo."

—Lopaka Goodlow, Honolulu, Hawaii

And with more and more studies showing the powerful benefits of this South Seas treasure, no wonder noni soaps and lotions are now being used by dermatologists to take care of the skin.

NONI SHOWS PROMISES FOR STOPPING HYPERPIGMENTATION

Discoloration of the skin—excessive pigmentation and those horrid brown spots—is a sign of premature aging. New research shows that noni can definitely help.

The color of human skin and hair is determined by a number of factors. Biosynthesis of the melanin pigment, called melanogenesis, is the most important factor. Tyrosinase is one of the key enzymes in the melanin biosynthetic pathway. However, excessive sun exposure and aging can lead to abnormal tyrosinase expression. When this occurs, the abnormal deposition of the melanin pigment causes hyperpigmentary disorders including freckles and age spots.

The fruit, roots, bark and leaves of noni have long been used throughout Polynesia as a folk medicine to address many diseases, including hypertension and diabetes. But since the South Seas islanders are so strongly exposed to the sun, wind and ocean, fortunately that noni has also been beneficial for preventing sun and environmental damage—and as it turns out, ancient wisdom is validated by modern science.

In Japan, researchers at the Faculty of Pharmacy at Kinki University in Osaka studied the effects of *Morinda citrifolia* (noni) extract and its constituents

PHOTO: SEALIGHT STUDIOS

Noni fruit from
Hawaiian Organic
Noni LLC, Kauai.



on their ability to inhibit the processes that cause age spots. They specifically examined whether noni extracts could inhibit the peptide called α -melanocyte-stimulating hormone (α -MSH) that regulates melanogenesis via tyrosinase activity.

To do so, these researchers used cultured murine B16 melanoma cells. In their 2012 study, published in the *Biological & Pharmaceutical Bulletin*, researchers focused on noni seeds (although the active chemical constituents of the seeds are also found in the fruit and leaves). The ethanolic extract of noni seeds "showed significant inhibition of melanogenesis with no effect on cell proliferation." Two lignans (3,3'-bisdemethylpinosresinol and americanin A) "were most potent.... Tyrosinase activity was inhibited significantly by treatment with the lignans."

In a second study published in 2010 in the *Journal of Oleo Science*, researchers at the College of Science and Technology at Nihon University in Tokyo, Japan, discovered that 13 newly discovered com-

pounds from noni fruit “exhibited marked inhibitory effects with 34 to 49 percent reduction of melanin content” and “no or almost no toxicity to the cells.”

In the July 2009 issue of the *Journal of Natural Medicines*, a 50 percent ethanolic extract (MCS-ext) from seeds of *Morinda citrifolia* showed potent *in vitro* inhibition of tyrosinase and elastase (an enzyme that breaks down skin collagen). Further research revealed ursolic acid had tremendous elastase inhibitory activity. Noni is a rich source of ursolic acid.

Several other compounds found in noni, including 3,3'-bisdemethylpinoresinol, americanin A and quercetin, were discovered to have both tyrosinase inhibitory and free radical scavenging activities, helping to reduce both hyperpigmentation and sunburn-related inflammation.

Americanin A and quercetin also showed superoxide dismutase (SOD)-like activity, which is great for the skin, since SOD is one of the key antioxidants.

One of the first scientific confirmations of the wisdom of the South Seas islanders, however, came in 2005 from the *Journal of Medicinal Food*. Researchers from Coreana Skin Science Research Center in Cheonan, Republic of Korea, noted that they found that *Morinda citrifolia* fruit extract up-regulated biosynthesis of type I collagen and glycosaminoglycans. This means that noni has a rejuvenating, beneficial effect on cells' ability to produce basic building blocks of healthy skin. Researchers discovered a plant chemical belonging to the anthraquinone family was responsible for this

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effect. “It was revealed that anthraquinone showed significantly increased elaboration of procollagen type I C-terminal peptide and glycosaminoglycans and reduced expression of the collagenase matrix metalloproteinase 1 dose-dependently in human dermal fibroblasts.” In other words, noni fruit promotes rebuilding skin tissue while simultaneously stopping brown spots and freckles.

The mention of metalloproteinase 1 is important. Although the name sounds intimidating, what is important to note is that in aging and skin conditions, these enzymes become even more active and break down skin collagen, which is made of protein strands. Thus, noni not only upregulates but bal-



ances and seems to be an intuitive healer.

The researchers conducted a trial using a nano-emulsion containing anthraquinone. This emulsion predominantly increased the dermal type I procollagen. “These results suggest that anthraquinone derived from noni extract is a good candidate for use as a new anti-wrinkle agent due to its strong induction of biosynthetic activity of extracellular matrix components.”

In the July 2009 issue of the *Journal of Natural Foods*, a study showed that noni is highly protective against sunburn-induced redness. Indeed, damaged skin heals faster and often with little or no scarring with noni. Many people prefer applying either a bandage or plaster to a skin condition for deep healing. These are available from Hawaiian Health Ohana and known as BioBandages. You can also use noni fruit leather as a transdermal bandage.

That noni is excellent for repairing the skin was shown in September 2009 in the journal *Evidence Based Complementary and Alternative Medicine* by a team of researchers from the Faculty of Medical Sciences at the University of the West Indies in St. Augustine, Trinidad.

“*Morinda citrifolia* (noni) is one of the most important traditional Polynesian medicinal plants,” they write. In their study, noni resulted in a 71 percent reduction in the affected area when compared with controls, which exhibited 57 percent. The granulation tissue weight

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and hydroxyproline content were also increased significantly with noni. Again, noni is a cellular nourisher, as shown by enhanced hydroxyproline content, another key indicator of the healing process. ■



Resources

This summer we recommend that you pack some Lavender Noni Lotion from Hawaiian Organic Noni LLC with your beach bag or outdoor gear and that you apply it liberally both during the day and after sun exposure. Lavender Noni Lotion can be used with your favorite sunscreen. The skin formula is available at health food stores and wherever healthy foods are sold. Derived from freshly processed raw whole food noni, each retains every bit of the phytochemical power that people are seeking from noni. No other noni delivers this way. Also visit www.real-noni.com. Call toll-free 888-882-NONI (888-882-6664) or 877-417-7674.

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