

COSMECEUTICAL CRITIQUE

Argan Oil

Argan oil is derived from the fruit of the *Argania spinosa* tree, which is native to the arid climate of southwestern Morocco, where the preponderance of research on the herb is conducted. Once prevalent in North Africa, the *A. spinosa* tree is presently grown only in Morocco, and although it is the second most common tree species there, it is considered endangered, so its oil, which is labor intensive to obtain, is becoming somewhat rare (J. Ethnopharmacol. 1999;67:7-14; SÖFW Journal 2005; 131:35-46).

Argan oil has been used for traditional purposes, including as a medicine, for several centuries (Pharmacol. Res. 2006;54:1-5). Dubbed “liquid gold,” the vitamin E-rich argan oil is highly sought after.

The oil has a reputation for imparting antiaging effects to the skin and ameliorating conditions such as acne, eczema, psoriasis, wrinkles, and xerosis (New York Times Nov. 18, 2007: <http://travel.nytimes.com/2007/11/18/travel/tmagazine/14get-sourcing-caps.html>).

There is a paucity of research on this botanical compound, but the preponderance of recent investigations has focused on the cardiovascular benefits of virgin argan oil consumption. Specifically, antiatherogenic, cholesterol-lowering, antiproliferative, and antioxidant benefits have been observed (Ann. Nutr. Metab. 2005;49:196-201; Nutr. Metab. Cardiovasc. Dis. 2005;15:352-60; Evid. Based Complement. Alternat. Med. 2006;3:317-27; Cancer Invest. 2006;24:588-92; Cancer Detect. Prev. 2007;31:64-9).

Given argan oil's abundant supply of fatty acids, phenolic constituents, squalene, sterols, and tocopherols, it is also thought to be an important factor in enhancing the anticancer effects of the Mo-

roccan diet (Eur. J. Cancer Prev. 2003;12:67-75).

Lipid-Lowering Action

The majority of published research on argan oil has been performed in Morocco by Anas Drissi and his colleagues. They recently studied the effects of regular consumption of the oil on the lipid profile and antioxidant status of 96 healthy Moroccan subjects (62 regular consumers and 34 nonconsumers), of whom 76 were women and 20 were men (Clin. Nutr. 2004;23:1159-66).

The researchers found that plasma LDL cholesterol levels were lower in the participants who regularly consumed virgin argan oil, compared with nonconsumers. The diets of the argan oil consumers contained higher levels of polyunsaturated fats.

The researchers also investigated the in vitro effects of the tocopherols, sterols, and polyphenols in the herbal extract on LDL peroxidation, and found that the argon oil consumers had lower plasma lipoperoxides, a higher molar ratio of α -tocopherol to total cholesterol, and a higher concentration of α -tocopherol, compared with nonconsumers. LDL oxidation was similar in the two groups, despite the fact that consumers had higher plasma antioxidant concentrations and lower lipoperoxide levels.

The investigators concluded that their findings clearly established that regular consumption of virgin argan oil confers antioxidant and cholesterol-lowering activity, suggesting the viability of this natural extract as a dietary adjunct for lowering the risk of cardiovascular events.

Sebum-Reducing Action

More recently, a topical application for ar-



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gan oil has been deemed viable. Hristo Dobrev of Medical University Plovdiv (Bulgaria) assessed the efficacy of a cream for controlling sebum. The cream was composed of saw palmetto extract, sesame seeds, and argan oil, and was studied in 20 healthy volunteers—16 with oily facial skin and 4 with combination facial skin. During the winter months (January and February), participants applied the formulation to the face twice daily for a period of 4 weeks (J. Cosmet. Dermatol. 2007;6:113-8).

The volunteers were assessed clinically and by instrumental measurement before and after the study period. Questionnaires were completed by the participants to provide a subjective evaluation of efficacy, tolerance, and cosmetic qualities. Objective measurements were made using a photometric device (Sebumeter), sebum collector foils (Sebifix), a Visioscope camera, and surface evaluation of the living skin software.

Results indicated that all of the volunteers tolerated the product. In 95% of the participants, a visible sebum-regulating efficacy was observed. In addition, clinical evaluation scores and casual sebum levels declined significantly after 1 month of treatment. The researcher concluded that this argan oil-containing formulation was efficacious in mitigating greasiness and ameliorating the appearance of oily facial skin.

Liquid Gold in Morocco

Although argan oil might qualify as the latest flavor-of-the-month in terms of so-called miracle ingredients in the beauty industry, it is actually quite popular in France. For years, English and French tourists have been known to return with argan oil from vacations in Morocco (New York Times, Nov. 18, 2007: <http://travel.nytimes.com/2007/11/18/travel/tmagazine/14get-sourcing-caps.html>).

It is worth noting that the cultivation and harnessing of this resource endemic to Morocco are now being fostered by the Moroccan government, which helps to

fund the argan cooperatives of Berber women who grind the *A. spinosa* fruits to extract the oil.

The government of Monaco is also offering support, and the United Nations Educational, Scientific and Cultural Organization has labeled the argan-growing region of Morocco, which comprises approximately 10,000 square miles, a biosphere reserve.

At the Store

Argan oil is the key ingredient in a line of products manufactured by Issahra Argan Cosmetics, and made available through Argan Body LLC. The product line includes Argan Oil (100% organic), Age Control Day Care (with argan oil), and Argan Creamy Milk Face Cleanser, among other products.

Argan oil is also included in the Super-skin Concentrate product by Liz Earle, Naturally Active Skincare, as well as in several formulations by Kaeline Argatherapie, available through Xandra Renouvelle. In addition, Laboratoires Serobiologiques, based in Pulnoy, France, has developed proprietary ingredients such as Arganyl, for antiaging indications, and Argatensyl, specifically to combat wrinkles.

Conclusion

The body of research on argan oil is notably scant. However, its traditional uses and inclusion in novel products (as one of the latest ingredients of the moment in the beauty industry) suggest that further investigations are warranted and likely to be forthcoming. Indeed, randomized controlled trials are necessary for establishing the actual benefits and dermatologic applications to be derived, if there are any, from this rare botanical. The little evidence that is available, however, does appear promising.

DR. BAUMANN is director of cosmetic dermatology at the University of Miami. To respond to this column, or to suggest topics for future columns, write to Dr. Baumann at our editorial offices via e-mail at sknews@elsevier.com.



BY LESLIE S. BAUMANN, M.D.



ABDELHAK SENNA/AFP/GETTY IMAGES

Moroccan women crush the nuts of the Argan tree to make oil. Dubbed “liquid gold,” the vitamin E-rich oil is highly sought after because it has a reputation for imparting antiaging effects to the skin and for ameliorating conditions such as acne, eczema, psoriasis, wrinkles, and xerosis.