

les nouvelles  
*esthétique* & Spa  
AMERICAN EDITION

LNE & Spa—the magazine for skin care and spa professionals October 2009 \$7.50



---

# skin | treating acne, naturally

by Jennifer Linder, M.D.

---

**M**ANY OF THE BEST AND most effective drugs were originally sourced from plants. Mother Nature offers us amazing options for treating many skin conditions, and acne is no exception. Regardless of whether natural ingredients really offer different treatment outcomes from those that are bioengineered in a lab, many clinicians and patients alike are seeking acne treatment options that are based on ingredients found in nature.

There are four main causes of acne: increased keratinization within the follicle, increased sebum production, proliferation of *P. acnes* bacteria and inflammation. Identifying products that contain a selection of naturally derived ingredients that address one or several causes of the acne disease pathway can lead to healthy and even skin.

## Controlling cellular buildup, sebum

The buildup of excess cells in the follicles can be effectively addressed with at home treatments using products that contain natural clay. Clay draws impurities from the pores and rids the skin of impaction. By normalizing the cell buildup it is possible to reduce comedone formation, bacterial proliferation and breakouts. Ideally, weekly home treatments should incorporate not only clay, but also ingredients that offer anti-inflammatory and antioxidant benefits, such as polyphenol-rich wine extracts that provide impressive free radical quenching action.

The quantity of sebum produced in the skin is due largely to the con-

version of testosterone to dihydrotestosterone (DHT) in the follicles by the enzyme 5-alpha reductase. Increased DHT is directly linked to higher sebum production. Grain and castor bean-derived azelaic acid occupies the receptor sites in the follicles blocking the conversion and therefore maintaining balanced sebum levels.

Many products designed to treat acne promote themselves as being "oil free." While logical, studies have



---

There are many botanical oils that offer antibacterial and anti-inflammatory action.

---

shown that the surface oils of those fighting acne exhibit a deficiency in important essential fatty acids (EFA), especially gamma linoleic acid. It is this deficiency that triggers the skin to produce more pore-clogging sebum with oleic acid, an irritating combination that leads to inflammation and impactions. Using products with evening primrose, borage, wheat germ and grape seed oils—which are rich in omega-3 and omega-6 fatty acids—will naturally increase EFA levels and create a healthy skin surface with reduced sebum and breakouts.

## Botanicals: inflammation, bacteria

There are many botanical oils that offer antibacterial and anti-inflammatory action to effectively control the other two main causes of acne breakouts. *Salix alba* (white willow) bark, *calen-*

*dula officinalis* (marigold) flower oil and *epilobium angustifolium* (willowherb) extract fight inflammation, while *melaleuca alternifolia* (tea tree) leaf oil and *citrus grandis* (grapefruit) peel oil fight bacterial proliferation.

Although there are numerous effective ingredients and therapies that are developed in a lab, nature continues to provide excellent options to eradicate many skin conditions. Acne patients who desire natural alternatives can find great success, if the multiple causes of this disease are addressed simultaneously. In the end, the smartest approach to skin care is to use best in class ingredients, whatever their source. ■

*Jennifer Linder, M.D., is a board-certified dermatologist, a fellowship-trained Mohs surgeon and a biomedical engineer and chemist. Dr. Linder is chief scientist for PCA Skin.*