

## Natural Moisturising Factors

One of the primary elements in keeping skin healthy is making sure the structure of the epidermis (outer layer of skin) is intact. That structure is defined and created by skin cells that are held together by the intercellular matrix.

The intercellular matrix is the "glue" or "mortar" between skin cells that keep them together. It helps prevent individual skin cells from losing water and creates the smooth, non-flaky appearance of healthy, intact skin.

The components that do this are often called natural moisturizing factors (NMFs) or ingredients that mimic the structure and function of healthy skin. While the oil and fat components of skin prevent evaporation and provide lubrication to the surface of skin, it is actually the intercellular matrix along with the skin's lipid content that gives skin a good deal of its surface texture and feel.

Skin Research and Technology, August 2000, pages 128&ndash;134; and Dermatologic Therapy, Volume 17, Supplement 1, 2004, pages 43-48).

Moreover, the skin's healing process is impaired. NMFs make up an expansive group of ingredients that include amino acids, ceramides, hyaluronic acid, cholesterol, fatty acids, triglycerides, phospholipids, glycosphingolipids, urea, linoleic acid, glycosaminoglycans, glycerin, mucopolysaccharide, and sodium PCA (pyrrolidone carboxylic acid). Ingredients that mimic the lipid content of skin are apricot oil, canola oil, coconut oil, corn oil, jojoba oil, jojoba wax, lanolin, lecithin, olive oil, safflower oil, sesame oil, shea butter, soybean oil, squalane, and sweet almond oil, which can all be extremely helpful for making dry skin look and feel better.

All of the skin's supporting NMFs and lipids are present in the intercellular structure of the epidermis, both between skin cells and in the lipid content on the surface of skin. When any of these ingredients are used in skin-care products, they appear to help stabilize and maintain this complex intercellular-skin matrix.

Although none of these very good NMFs and lipids can permanently affect or change skin, they are great at temporarily keeping depleted skin from feeling dry and uncomfortable. More important, all of these ingredients, and many more, can help support the intercellular area of the skin by keeping it intact.

This support helps prevent surface irritation from penetrating deeper into the skin, works to keep bacteria out, and aids the skin's immune/healing system. Selecting moisturizers of any kind with NMFs (whether they are labeled as being antiaging, antiwrinkle, serums, lotions, or sunscreens) allows your skin to do its job of repairing and regenerating itself without the impedances brought on when skin is suffering from dryness and excess irritation

(Sources: Clinical Geriatric Medicine, February 2002, pages 103-120; Progressive Lipid Research, January 2003, pages 1-36; Journal of the European Academy of Dermatology and Venereology, November 2002, pages 587-594; Contact Dermatitis, June 2002, pages 331-338; Journal of Investigative Dermatology, May 1996, pages 1096-1101; British Journal of Dermatology, November 1995, pages 679-685; Skin Pharmacology and Physiology, September-October 2004, pages 207-213; Free Radical Research, April 2002, pages 471&ndash;477; and Journal of Lipid Research, May 2002, pages 794&ndash;804).