Cosmedix provides several essential vitamins, minerals, and phytonutrients needed to support healthy skin, hair and nails. Cosmedix provides betaine HCl, which helps to promote efficient digestion and assimilation of protein and minerals necessary for hair and nail health. It includes MSM, which provides a bioavailable source of sulfur, for connective tissue integrity. Saw palmetto is added to support normal levels of DHT, known to play a role in the thickness and health of hair. In addition, silica (from horsetail grass extract) is included for its collagen enhancing properties. Each serving (3 capsules) of Cosmedix contains 325 mg MSM, 100 mg betaine HCl and 240 mg saw palmetto. Added support from vitamin A, D3, folic acid, B12, biotin and selenium provide a full spectrum of skin, hair and nail support.

**Overview**

Healthy skin, hair and nails result from a variety of biological factors, including balanced nutrition and a healthy lifestyle. Collagen, the body's main structural protein, makes up 70% of the skin and is vital in helping to maintain the skin’s firmness, suppleness and elasticity, as well as the constant renewal of skin cells. Betaine HCl supports optimal protein breakdown, which allows for more efficient manufacturing of collagen, particularly during years of decreased collagen production. MSM provides a source of bioavailable sulfur, an integral nutrient in healthy skin and hair, which plays a key role in collagen regeneration. Together with saw palmetto, which promotes a healthy balance of hormones for optimal hair thickness and health, and key nutrients such as silica (from horsetail grass extract), biotin and vitamin A, Cosmedix provides a complete spectrum of support for healthy skin, hair and nails.

**Betaine HCl**

Betaine HCl is a natural substance found in foods such as beets, spinach and grains. It has been used for years to support digestion and absorption due to its ability to prime the acidity of the stomach and enhance digestion. Maintaining optimal acidity in the digestive tract is essential for the complete breakdown of proteins into amino acids. This is a crucial step, in the building of skin and hair proteins, such as collagen. Research also suggests that betaine supports cellular health. Betaine acts as a methyl donor, which supports healthy methionine, homocysteine, and hepatic fat metabolism. Betaine also functions as an osmolyte, supporting cellular integrity and protein balance during fluctuations in hydration and temperature.

**Saw Palmetto**

Saw palmetto (Serenoa repens) has been used historically to support hormone health, as it provides essential fatty acids and phytosterols. Studies have shown saw palmetto promotes hormonal balance via a number of mechanisms, including the inhibition of 5-a-reductase, an enzyme that converts testosterone to 5α-dihydrotestosterone (DHT). Excessive levels of DHT have been implicated in hair loss issues. A randomized, double-blind, placebo-controlled trial, which aimed to determine the effectiveness of botanically derived inhibitors of 5-alpha-reductase, found that saw palmetto improved androgen-sensitive hair follicle development in the study group. Saw palmetto also helps maintain hormonal...
balance by inhibiting the binding of androgens to receptors\textsuperscript{3} and promotes inflammatory balance by antagonizing the cyclo-oxygenase and lipoxygenase inflammatory pathways.\textsuperscript{9,10} Both of these factors are crucial for maintaining healthy skin.

MSM\textsuperscript{†}
Sulfur, the main ingredient in methylsulfonylmethane (MSM), is the third-most abundant element by weight in the body and plays a major role in maintaining joint and soft tissue health. Sulfur is important for the generation of connective tissues including hair, cartilage, and collagen in skin. Sulfur is also crucial for the production of amino acids, which are the building blocks of protein. Sulfur is required for the synthesis of glutathione, one of the most important antioxidants in the body. High levels of glutathione in the body have been shown to prevent damage caused by free radicals, thought to be the major cause of cellular aging.\textsuperscript{11} Studies have demonstrated that MSM is a potent antioxidant and helps modulate cytokine production to support a healthy cycle of inflammation.\textsuperscript{12,13}

Directions
3 capsules per day or as recommended by your health care professional.

Does Not Contain
Gluten, yeast, artificial colors and flavors.

Cautions
Do not consume this product if you are pregnant or nursing. Consult your physician for further information.

References