



skin 2 skin™

What do hormones have to do with your skin? By Dr. Ted Quigley

Your skin is the largest organ of your body, and it reflects your overall health. During a woman's reproductive years, her natural estrogen helps maintain a healthy, firm, protective layer as a living partition separating her body's contents from her environment. One's skin is the first line of defense against ultraviolet radiation from the sun, from nature's elements like the air and wind and from other environmental negatives like cigarette smoke, bacteria and viruses, etc. However, following menopause and the decline in estrogen blood levels, the skin tends to become thinner, drier, flakier; it begins to sag, droop, wrinkle and bruise more easily. Also, following menopause, the skin is less elastic and is slower to heal. Since a 1941 study on the subject, thin transparent skin in postmenopausal women over age 60, has shown to be associated with osteoporosis. With all this bad news, there is a positive light at the end of the proverbial tunnel and that is that both topical and systemic estrogen therapy appears to protect postmenopausal women's skin from aging.

The skin's thin outer-most layer is primarily made of keratinocytes, cells that produce keratin, a strong fibrous protein and melanocytes, which produces melanin, the skin's pigment or coloring. The deeper bulkier layer, the dermis, is comprised primarily of connective tissue and blood vessels. Over 95% of the connective tissue is comprised of collagen, which plumps up the skin and makes it resilient along with elastin fibers, which makes the skin elastic and pliable. There are both estrogen and testosterone receptors in both of these skin layers. Estrogen increases the hydroscopic qualities and reduces the adhesions of collagen fibers in the connective tissues but as a woman ages the hyaluronic acid levels decline. Within 5 years of menopause, 20 to 30% of the collagen within the skin is depleted and the skin thickness, measured radiologically, decreases 2% annually for the next 20 years. These reductions appear to result primarily from a decrease in estrogen levels. The increase in the skin collagen content after six months of estrogen therapy depends on the collagen content at the start of the treatment and the years since menopause are a better indication of skin condition than chronological age.

The five major ways estrogen hormone therapy benefits the skin are:

- 1) Estrogen limits the skin collagen loss.
- 2) Estrogen maintains skin thickness.
- 3) Estrogen improves skin elasticity and firmness.
- 4) Estrogen increases skin moisture.
- 5) Estrogen decreases wrinkle depth and reduces pore size.

The first National Health and Nutritional Examination Survey (NHANES) reported that postmenopausal women using estrogen had 32% fewer wrinkles and were 24% less likely to have dry skin. French and Austrian studies have both indicated that six months use of an estrogen facial cream reduced or completely eliminated wrinkles. A Yale double-blind placebo-controlled study has indicated fewer wrinkles with oral estrogen use, compared to the placebo. It appears that the reduction of wrinkles and the increase in facial dermal collagen with estrogen is seen regardless of whether the estrogen is taken orally or via patch or cream. The benefits of Estrogen in preventing wrinkles or increasing collagen can be profound but studies have shown that positive results are less obvious in chronic smokers, women who have had excessive sun exposure and women who have a genetic predisposition to skin aging. Furthermore, women, especially young women, who are denied hormone replacement after undergoing a surgical menopause, are especially vulnerable to advanced skin aging.

There are additional steps or products a person can take to prevent or treat wrinkles:

- 1) Thoroughly clean your skin once a day if your skin is dry and twice a day if your skin is oily.
- 2) Close off your pores with either cold water or a skin toner after cleaning.
- 3) Use exfoliates - a washcloth, fruit acids, glycolic acids etc, to rid yourself of dead skin and renew fresh skin.
- 4) Remove makeup before going to bed each night.
- 5) Use a daily sunscreen with an SPF of 30 or more if you are exposed to the sun, especially during prime time hours (between 10 a.m. to 4 p.m.). Personally I prefer to get my daily sunlight before 8 a.m. or after 4 p.m.
- 6) Take a daily antioxidant such as vitamins C & E, Ester-C and Alpha Lipoic Acid.
- 7) Use DMAE or Tretinoin - the active ingredient of Retin-A and Renova are used to reverse sun-damaged skin, lighten sunspots and remove fine wrinkles.
- 8) Take Co-enzyme Q-10 which is an anti-oxidant that is used to help protect against free radical damage.
- 9) Begin a quality, anti-aging skin care system and stay with the program. Skin 2 Skin™ is the only one I know that is all plant based and has the maximum concentrations of peptides, vitamins and certified organic extracts. You will see real results quickly and your skin will be healthier, radiant and best of all younger looking.

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