

Hydrexelin

AN ESSENTIAL TOPICAL AGENT FOR MORE YOUTHFUL SKIN AND THE REVERSAL OF WRINKLES

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Topical application of Hydrexelin has been proven in clinical and experimental studies to slow and reverse the formation of crow's feet, facial fine lines and shallow wrinkles. In a sea of skin care products, most of which have never been properly tested to substantiate their true effectiveness, Hydrexelin stands out as one of the few natural substances that is proven in clinical trials to forestall and reverse the aging process, enabling users to often reverse the appearance of facial aging by 5-7 years in many cases.

WHAT IS HYDREXELIN?

Hydrexelin is composed of a repeating chain of two monosaccharides attached together (known as a disaccharide) that is hydrated at strategic points in the polysaccharide chain. The first monosaccharide of the repeating disaccharide chain is uronic acid and the second monosaccharide is N-acetylglucosamine. From a chemical stand point Hydrexelin is considered to be an encapsulated polyhydrated glycosaminoglycan of varying chain lengths, comprised of a repeating disaccharide chain that is hydrated at numerous locations and is encapsulated using a proprietary process involving second-generation liposomes.

As the basic repeating disaccharide units are synthesized via fermentation involving selected bacterial strains the Hydrexelin formulation is free from animal and non-animal based contaminants.

HOW HYDREXELIN AFFECTS CHANGE:

The scientific knowledge that supports the benefits of additional water molecules within the skin layers is not in question—the challenge has always been an effective method for delivery. This is where the properties of Hydrexelin are unique. The chemistry behind this topical compound allows Hydrexelin to penetrate to all skin layers (epidermis and dermis) while attracting water molecules to migrate from the blood stream into the skin, acting as a powerful humectant (*a re-hydrating skin agent*).

The key to how Hydrexelin has become an effective delivery method reside in the varied chain lengths of these encapsulated, repeating disaccharide chains—as noted in the sub-section above.

Hydrexelin contains a wide range of *chain lengths*— some large, some medium and some small. Being too big to penetrate the skin to any real depth, the larger chain lengths of Hydrexelin remain at or near the surface. They begin to trap water in this area of the skin, hydrating the superficial layers and producing instant smoothness to the skin's surface.

Meanwhile, medium and shorter chain lengths of Hydrexelin begin to work their way down to the lower levels of the skin that the larger chains cannot reach, to begin the hydration process in these deeper layers of the epidermis and the dermis.

The reason that the Hydrexelin formula can reach the varied skin layers, where other topical products fall short, is due to a second generation liposome encapsulation process. In other words, this proprietary process allows for efficient passage of the Hydrexelin molecules into the skin where effective re-hydration has its genesis.

The net affect of this process, enables Hydrexelin to give the surface of the skin a smooth, attractive appearance, while enabling the deeper layers to effectively trap water molecules, plumping up the skin. The collective effect on all skin layers, is a reversal of wrinkles and results in a more supple, resilient and toned look.

THE FUNCTION OF HYDREXELIN WITHIN THE SKIN:

Once there, Hydrexelin actually resides between skin cells and forms part of the cement substance that holds cells together, very similar to how mortar holds the bricks together in the structure of a house.

In addition to providing this structural support, Hydrexelin forms part of the permeable medium through which nutrients are allowed to pass into the developing skin cells. This enabler, helps ensure the efficient metabolism of these newly formed epidermal cells, as they migrate upward, renewing the skin's surface by taking their place on the front line.

On the surface of the skin, Hydrexelin acts as natural moisturizer. After the first application, most clients report that the surface of the skin feels smoother and silkier than they experienced, prior to the use of Hydrexelin.

In addition to the noticeable visual effects, its important to note the powerful antioxidant properties within Hydrexelin, that help to minimize free radical damage from UV-light, which also causes wrinkles, accelerated skin aging as well as skin cancer.

APPLYING HYDREXELIN TO THE SKIN TO SLOW AND REVERSE WRINKLES

Research studies have shown that when applied topically to the skin Hydrexelin holds up to 1,000 times its weight in water molecules within the skin layers. During the aging process, skin cells lose their ability to produce optimal amounts natural substances that hold moisture in the skin. This significantly contributes to skin aging, in that it leads to skin dehydration from the inside out, promotes thinning of the skin and facilitates wrinkle development. The result is more commonly referred to as fine lines, crow's feet and the tactile attribute of making the skin feel drier.

By age 50, it's estimated that we produce less than half of the natural skin humectants we did in our youth. This decline is a large reason for the decreased suppleness, reduced elasticity and loss of skin tone, and skin thinning we experience as we age.

With continued use, Hydrexelin has shown an ability to reverse fine lines and crow's feet wrinkles in both clinical trials and experimental studies. These results are often seen within the first two months of daily use. Dating back to 1998, studies were first carried out on hairless mice to test the penetration ability of Hydrexelin. After these studies proved successful an anti-aging placebo-controlled study was performed on healthy human volunteers, which demonstrated that Hydrexelin was capable of diminishing wrinkles, preventing wrinkles from forming, improving skin elasticity and restoring the structure and organization of the collagen protein within the dermis. This large clinical trial employed the use of before and after silicone impressions of facial wrinkles that were assessed for length and depth by computer analysis. After 56 days of continuous use there was a significant reduction in the length and depth of facial wrinkles (especially around the eyes) in the group using Hydrexelin twice daily, compared to the placebo group, as confirmed by computer analysis. Simply stated, Hydrexelin is proven to replenish the skin with the missing humectant agents it requires after age 20 in order to efficiently hold water in the skin and thereby, plump the skin back up to its more natural and youthful appearance, while providing other structural and physiological benefits to skin structure and skin health.

WHAT ARE THE CLINICAL APPLICATIONS OF HYDREXELIN?

The following are the applications for the use Hydrexelin based on the research cited above:

1. Everyone over 20 years of age should apply Hydrexelin to their face twice per day (morning and night) to slow the aging of their face and prevent dehydration and wrinkles that will otherwise occur on their face and neck.
2. To reduce existing fine lines and shallow wrinkles on the face
3. To reduce the appearance of existing crow's feet around the eyes
4. To enhance the moisturizing and hydration of the skin
5. To enhance skin smoothness and the elegant feel of the skin (an immediate effect)

CONCLUSION:

Hydrexelin acts as powerful humectant, binding water molecules, and holding up to 1,000 times its weight in moisture. This accounts for its amazing ability to keep the skin youthful, elastic and supple, and to fill in fine lines and superficial wrinkles, reversing the age appearance of the skin. In the aging process, skin cells reduce their ability to synthesize optimal amounts of humectant agents, which significantly contributes to skin aging. By age 50, individuals are estimated to have less than half of certain humectants they had in their youth.

Clinical and experimental studies show that the topical application of a Hydrexelin is able to deliver this agent throughout all skin layers, including the deepest layers of the dermis. This unique delivery system (encapsulated) combined with varying chain lengths of the Hydrexelin disaccharide ensures delivery of Hydrexelin to all skin layers.

Experimental and human clinical studies have demonstrated the effectiveness of Hydrexelin, showing significant objective and subjective age-reversal changes to the skin within 56 days of regular daily use, compared to placebo. A recent human study demonstrated that Hydrexelin has the ability to markedly reverse fine lines, crow's feet and shallow wrinkles within only two months of daily use.

Upon application, it immediately improves the smoothness and appearance of the skin, and with continued use, more significant and lasting anti-aging changes can be seen.

Hydrexelin is also an antioxidant, which helps prevent free radical damage to the skin from sunlight and other sources of ultra-violet light (e.g tanning beds)

In the context of skin health and anti-aging, Hydrexelin should be considered a conditionally-essential skin nutrient and should be viewed as an integral part of a skin anti-aging, anti-wrinkle and a natural moisturizing program. It should be applied morning and night for optimal results. Individuals concerned about anti-aging should begin using it daily by age 20.

References

1. Encapsulated Hyaluronic Acid: Anti-wrinkle Agent. Cosmetic Manufacturers Inc
2. Pugliese P. Physiology of the Skin II. Allured Publishing. 2001: 13-14
3. Agren UM, Tammi RH, Tammi MI. Reactive oxygen species contribute to epidermal hyaluronan catabolism in human skin organ culture. Free Radic Biol Med. 1997; 23, 7: 996-1001.
4. Shepard S, Becker H, Hartmann JX. Using hyaluronic acid to create a fetal-like environment in vitro. Ann Plast Surg. 1996; 36, 1: 65-9
5. Liguori V, Guillemin C, Pesce GF et al. Double-blind, randomized clinical study comparing hyaluronic acid cream to placebo in patients treated with radiotherapy. Radiother Oncol. 1997; 42, 2: 155-61

6. Trabucchi E, Pallotta S, Morin M et al. Low molecular weight hyaluronic acid prevents oxygen free radical damage to granulation tissue during wound healing. *Int J Tissue React.* 2002; 24, 2: 65-71
7. Brown TJ, Alcorn D, Fraser JR. Absorption of hyaluronan applied to the surface of intact skin. *J Invest Derm.* 1999; 113, 5: 740-6

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