

## Invitro Study: Effect of Ingredients in Hylunia's Beyond Complex C

The study was performed to determine the effect of Glycosaminoglycans including Hyaluronic Acid, Heparan Sulfate, Keratan Sulfate, Dermatan and Chondroitin Sulfate on the skin. The skin specimens were stained with fluorescent dye and an increase in the component was assessed using fluorescent photography. A control specimen was used to compare the changes. The photography was performed at 0 day, 4 days, 8 days and 12 days. Specimens were taken from subjects at different ages ( 5 years, 27 years, 48 years and 70 years ) and compared with the Glycoaminoglycan content of the skin specimen treated with Hylunia's Beyond Complex C at 4 days, 8 days, and 12 days.

It can be seen from the attached comparative fluorescent photographs that the intensity and brightness of the specimens treated with Hylunia's Beyond Complex C increased significantly. After treatment photographs of skin treated with Beyond Complex C were comparable to a 5 year old's skin content of Hyaluronic Acid, Heparan Sulfate, Keratan Sulfate, Dermatan and Chondroitin Sulfate indicating that Hylunia's Beyond Complex C is helping collagen synthesis.

### Production of Fibroblasts and Glycosaminoglycans via Heparan Sulfate Stimulation by Beyond Complex C

Heparan Sulfate, located at the basal membrane contains growth factors which stimulate fibroblast production. Heparan Sulfate is lost as early as the thirties. Fibroblasts are very important for cell renewal. Beyond Complex C stimulates Heparan Sulfate production. Thus, bringing back new cells to the dermis and epidermis for younger looking skin.

