YOUTH COMPLEX® STUDY

fibroblast induction study

IMPROVEMENT IN COLLAGEN SYNTHESIS

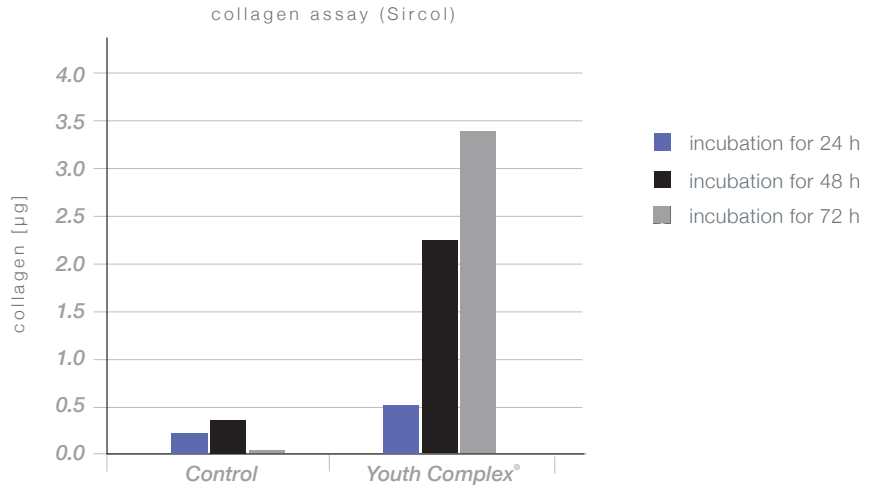
STUDY OBJECTIVE The ability of YOUTH COMPLEX® to induce collagen synthesis by human fibroblasts was evaluated.

STUDY DESIGN Careful scientific methods were used including controls. Conclusions were obtained by valid statistical analysis. Human fibroblasts were used and were exposed to various concentrations of the product varying between 0.06 percent and 2 percent to determine if YOUTH COMPLEX® caused fibroblasts to synthesize collagen.

SIGNIFICANCE OF STUDY Collagen is a primary structural component of the human dermis. It is responsible for resilience and elasticity of the skin. Fibroblasts are cells within the skin responsible for producing collagen. Collagen synthesis occurs throughout life to repair collagen damaged by aging and to build new, healthy cellular structures. With aging, collagen synthesis becomes impaired both by primary photodamage of existing collagen ultrastructure and secondary damage to the fibroblasts' ability to produce new healthy collagen. This causes wrinkling and sagging. With aging, the collagen content of the skin decreases about 1 percent per year. By the age of 60, we make less than half of the functional collagen than we made in youth. Therefore, products that improve collagen synthesis are of great interest in improving skin health and appearance.

RESULTS AND CONCLUSIONS
YOUTH COMPLEX® significantly improved the ability of human fibroblasts to synthesize collagen.

EFFECTS ON COLLAGEN SYNTHESIS USING YOUTH COMPLEX®



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