



PhytoSpherix™ Hair

Plant-based glycogen for hair longevity



PhytoSpherix™ provides plant-derived glycogen that boosts the natural energy supply of hair follicles, increasing ATP production, supporting follicle vitality, and promoting denser, stronger, faster-growing hair.

The issue

Glycogen is the natural energy storage within hair follicles, providing cells with the energy they need for vitality and growth. Through the Cori cycle, which has recently been discovered in hair follicles, used glucose (lactate) can be recycled and converted back into its storage form, glycogen. Age, stress, and nutritional deficiencies reduce the energy metabolism and glycogen reserves of hair follicles, resulting in lower ATP levels, premature shift into the telogen phase, reduced hair density, and slower hair growth.

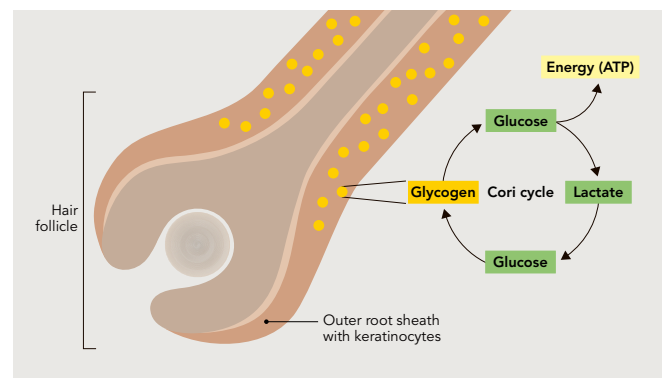
The solution

PhytoSpherix™ is a plant-based alternative to the more commonly used animal-derived glycogen. It is chemically identical to the glycogen found in animal cells but it is produced and stored in a special variety of non-GMO sweet corn. PhytoSpherix™ helps reinforce the natural energy supply of hair follicles, supporting strong, thriving hair. This targeted energy boost fuels optimal growth, greater density, and visibly revitalized hair, perfectly matching the hair longevity trend.

The benefits

PhytoSpherix™ replenishes follicular glycogen stores, enhances ATP production, energizes keratinocytes, supports the internal Cori cycle of the hair follicles, and optimizes the biological processes that drive hair growth.

- Boosts hair with energy
- Increases hair follicle growth rate
- Improves hair density and hair growth speed
- For fuller, denser hair



Source

Sweet corn is one of the very few plants which is able to produce glycogen as an energy source. This phyto-glycogen can be isolated out of the corn through multiple purification steps. This results in PhytoSpherix™: a unique pure phyto-glycogen for cosmetic applications from a non-GMO, sustainable and vegan source.

INCI (EU/PCPC) Declaration: Glycogen (COSMOS approved *).

Liquid version available (COSMOS approved*).

* Raw material certified by ECOCERT GREENLIFE in accordance with the COSMOS Standard available at www.cosmos-standard.org

Study results

Improved Hair Follicle Growth Rate

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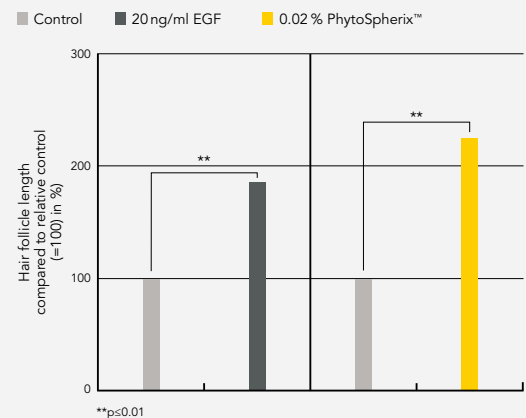


Material: Human hair follicles (anagen phase) extracted from a male donor

Test compound/ treatment: Follicles were cultured on plates in the presence or absence (control) of 0.02% PhytoSpherix™ for 7 days. Reference substance: 20 ng/ml epidermal growth factor (EGF)

Parameters: Hair follicle length (microscope)

- Hair follicles treated with 0.02% PhytoSpherix™ grew +123% longer compared to the control; effect comparable to EGF
- PhytoSpherix™ delivers a glycogen energy boost to hair



Increased Hair Density & Growth Speed/Visibly Fuller Hair

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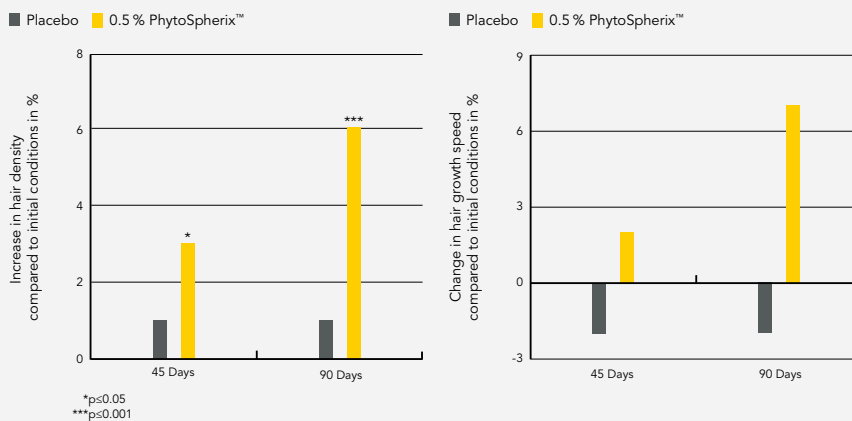


Volunteers: 39 (f/m, 50–64 y) with diverse hair types and different scalp types. Inclusion criterion: menopause for female volunteers.

Test compound/ treatment: Daily application of a scalp serum with 0.5% PhytoSpherix™ or placebo (control) in the evening for 90 days

Parameters: Hair density, hair growth speed (TrichoScan®), anagen/telogen (A/T) ratio (trichogram) and images of the volunteers' top of head

- Hair density significantly increased by 3% after 45 days and by 6% after 90 days
- Hair growth speed showed a clear improvement after 45 days and 90 days
- Compared to initial conditions, the A/T ratio increased by 38% after 45 days and by 26% after 90 days
- Visible hair growth effect in the pictures taken
- PhytoSpherix™ supports a fuller, more beautiful hair appearance



In Addition

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Increase in ATP Production: PhytoSpherix™ increased ATP production in human keratinocytes by 33% after 2 hours and by 49% after 24 hours. By supplying glycogen as an energy source, it boosts cellular energy levels to support processes like hair growth.

Recommended use level: 0.5%

Characteristics: Powder, water-soluble, without alcohol, without preservatives

Applications: Premium hair regrowth formulations, hair follicle energizers, hair longevity serums, advanced hair growth formulas, hair energy masks

Moreover: Unique phytoglycogen based on non-GMO sweet corn, patented production process, 100% natural origin

Benefits of PhytoSpherix™

- Boosts hair with energy
- Increases hair follicle growth rate
- Improves hair density and hair growth speed
- For fuller, denser hair