

# The Cosmetic and Pharmacological Benefits of Equol

#### DESCRIPTION

The invention covers the method for delivery of equol (racemic or non-racemic) for both topical and oral applications where the skin or hair is ameliorated cosmetically or pharmacologically to enhance: skin integrity/repair, anti-photoaging and anti-skin aging, boosting extracellular matrix proteins (collagen and elastin), and diminish scalp hair loss and/or enhancing retention of scalp hair in male and female pattern baldness. Equol is an isoflavonoid or botanical active ingredient that has many cosmetic and dermatology applications.

### PROBLEM SOLVED

Many factors influence skin aging and scalp hair loss. Equol has exceptional properties that have been demonstrated in several peer-reviewed scientific publications describing its chemical, biochemical and molecular actions that provide an effective treatment for skin

**Stimulates** Collagen, Elastin & Inhibits AP-1 TIMP 1 to Protect Inhibits MMPs, & Neoplastic Cell against OS Elastase & Growth via ERRy 5α-Reductase to Protect against K Enzyme to os rotect against Protects DNA & Enhances Inhibits Nerve/Tissue **NFkappB** Repair to to J ROS **Guard against** os Inhibits Binds 5a-DHT & ERβ for Photo-Stimulates Nrf2 Inflammatory protection Response to to ↑ Antioxidants against OS that ↓ ROS J ROS

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aging, repair/restoration and scalp hair loss. The invention can be administered in multiple ways: topical (lotion, spray), oral (tablet, liquid, capsule), injectable, pharmacological. There are 3 current cosmetic formulas (1) moisturizing serum, (2) night complex and (3) foaming cleanser that contain equol that can be incorporated into a cosmetic line for immediate use without further planning/testing or logistical challenges. One hair formula for scalp hair retention/enhancement for male and female pattern baldness is also available.

### KEY ADVANTAGES

- » Acts as a powerful antioxidant and increases (Nrf2) detoxifying enzymes and other antioxidants
- » Stimulates collagen, elastin and decreases MMPs and fine and medium lines/wrinkles
- » Enhances skin integrity/repair/health by decreasing oxidative stress/inflammation
- » Demonstrates increased efficacy for topical and oral absorption (better than astaxanthin)
- » Effective in the prevention and treatment of scalp hair loss in men and women (after 3-6 months of treatment)

#### Offer: License Exclusive World Wide All Fields of Use

#### **APPLICATIONS**

This technology has many applications including: cosmetic, dermatology and aesthetics, and pharmacological to counteract chronological and photo-aging, and scalp hair loss in order to assist individuals to improve their appearance to feel better about themselves where events of aging, trauma or accident disrupt/impair their skin and hair health.

## IP Status: 3 US patents

3 US patents 1 Japanese patent 2 Australian patents Other patents pending



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