

ABOUT SKIN LIGHTENING

Understanding hyperpigmentation is key to a successful depigmenting regimen. Hyperpigmentation refers to darkened areas of skin such as sun spots, age spots, freckles, cholasma, and scarring due to acne and/or other skin trauma. Hyperpigmented areas are created by melanocytes (skin cells that produce melanin). These cells are responsible for determining the color of your skin, hair and eyes. Some of these melanocytes can hyper-produce (create too much melanin), this melanin does not darken until it undergoes an enzymatic reaction with an enzyme called tyrosinase. Various lightening agents are available which inhibit the activity of the tyrosinase enzyme, thereby reducing the number and saturation of hyperpigmented cells.

There has been considerable advancement in the research community within the past 5 years in regard to skin lightening (depigmenting) agents. Although depigmenting agents have come a long way, skin lightening is one of the most difficult changes to affect in the skin. Diligence and patience are a must for a successful skin lightening regimen. **It can take several weeks or months before the catecholase activity of tyrosinase may be reduced to the point that visible lightening of the pigmented areas is obvious.** Topical skin lighteners, when used in conjunction with peeling agents (*our BHA Solution 2% or 5% or Pumpkin Enzyme Peel*) and sunscreen (*our Facial Sunscreen Lotion SPF30 or SPF50*) can and do work over time to lighten hyperpigmented skin.

Our **PhytoNutriv™ Lightening Serum** has been designed to act as an alternative to 2% or 4% Hydroquinone formulas for the treatment of facial and hand hyperpigmentation. Hydroquinone has been found to be cytotoxic (kills skin cells) and has been banned from cosmetic formulations in several countries due to its carcinogenic properties. Our **PhytoNutriv™ Lightening Serum** does NOT contain Hydroquinone. It lightens skin through a combination of Kojic Acid, Arbutin, and natural, plant-derived pigmentation suppressors such as Licorice Root, Mulberry and Bearberry. This formula combines these active ingredients in safe, yet high concentrations and with a transdermal delivery system so they easily penetrate the epidermis and are absorbed deeply in the skin.

See the microscopic In-Vitro results below. Melanocytes were stained and then tracked over a 90 day period of treatment:



Key Benefits:

- Non-hydroquinone formula
- Provides gradual & uniform skin lightening
- Can be safely used over extended periods of time (months or even years)
- Provides extended suppression after hyperpigmentation treatments
- Contains high levels of tyrosinase inhibitors
- Utilizes safe ingredients help produce low-irritation skin lightening