

SKIN FACTS

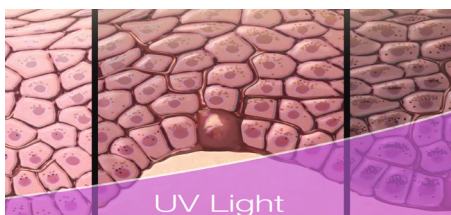
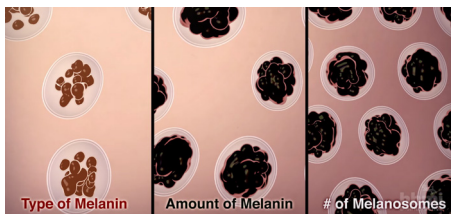
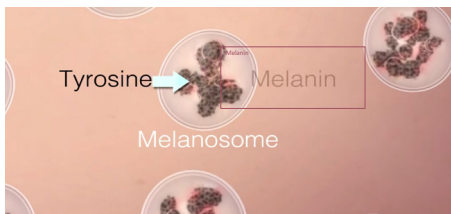
HOW DO WE GET OUR SKIN COLOUR

https://www.youtube.com/watch?v=VC0TL_YLm8

THE MELANOGENESIS

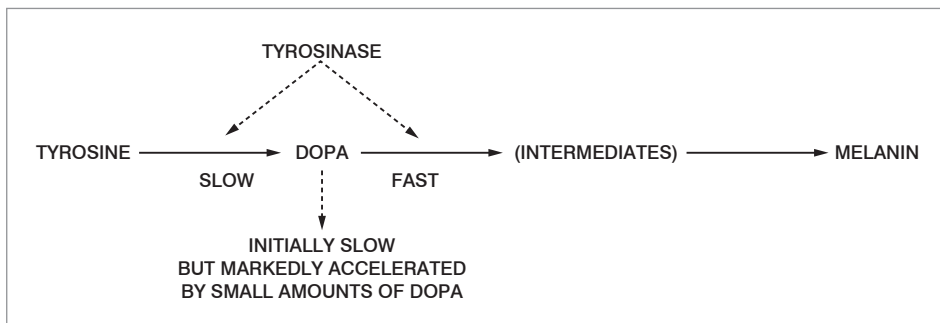
The pigmentation process, called **MELANOGENESIS**, or the process of **Melanin** production, begins in specific basal cells in the epidermis called **Melanocytes**. The substance Tyrosine is oxidized then polymerized into dark Melanin. The Melanin produced is carried out by granules called **Melanosomes** to the outermost skin cells **Keratinocytes** that constantly shed off skin and are replaced by new cells. Differences in skin outer color are due to the color of the **Melanin** produced, the amount of it, and how it ends up being distributed in the skin (number of melanosomes). These factors are hereditary. Other factors can influence the Melanogenesis such as Hormonal fluctuation, Skin aging & Sun exposure.

Melanin is produced through a multistage chemical process known as melanogenesis, where the oxidation of the amino acid tyrosine, is followed by polymerization. There are three basic types of melanin: eumelanin, pheomelanin, and neuromelanin.



SKIN DARKENING IS TRIGGERED BY:

- Genetic predisposition
- Hormonal fluctuation
- Skin aging
- Sun exposure



THE WHITENING PROCESS

Ingredients used to lighten the skin act on one of the stages of the darkening process to prevent it from happening:

- **UV filters** & sun blocks **stop the UVs** from entering the skin and enhancing the darkening process.
- Other ingredients, act directly by **hindering melanin production** hydroquinone, parsley extract flavonoids....
- Or indirectly by **inhibiting the tyrosinase**, responsible for melanin production. (Tyrosinase inhibitors: licorice extract, lactic acid, ascorbic acid or vitamin C.)
- **Exfoliating skin surface** leads to a lighter and more even skin tone
- **Anti-oxidant** substances **prevent tyrosine oxidation** as well as inflammatory aging processes into the cells that produce brown spots. (Vitamin B3 niacinamide, olive leaf extract Oleuropein, Boldo tree Bark extract Lumiskin.)



ABOUT HYDROQUINONE

Cosmetic skin-lightening products containing hydroquinone are often referred to as “bleaching creams”. Hydroquinone has been banned in KSA, Japan, the European Union, and Australia. In USA, Any skin-lightening products containing hydroquinone would only be available with a doctor's prescription.

- **Skin Irritation:** Hydroquinone should not be used on skin that is dry, chapped, sunburned or already irritated, nor should it be applied to an open wound.
- **Sun Sensitivity:** Hydroquinone makes your skin more sensitive to the sun's damaging ultraviolet rays.
- **Cancer Causing:** Studies in rodents show «some evidence» that hydroquinone may act as a carcinogen chemical.
- **Ochronosis:** Hydroquinone also has been linked with the medical condition known as ochronosis in which the skin becomes dark and thick with Dome-shaped yellowish spots and grayish-brown spots even in persons who have used hydroquinone-containing cosmetics for a short time.
- Some studies also report **abnormal function of the Adrenal Glands**.

