



The Science of beauty

with *Carina Franck*

QA



Hyperpigmentation

Many people suffer from hyperpigmentation and the environmental stress of our modern lifestyle has caused a tremendous increase in the prevalence of this condition. Carina Franck talks to us about the challenge of hyperpigmentation, the causes of it and how best to fight it.

What is Hyperpigmentation?

Hyperpigmentation is discoloration of the skin in certain areas, whereby the skin area appears darker than normal. It often appears on the cheek area (seen as butterfly marks) and/or on the forehead as well as in the neck area just below the jawline. This skin condition occurs when the melanin (the brown pigment responsible for coloring the skin) is over stimulated, due to external or internal stimulation which is triggered by sun exposure (UV rays). Although, it is most common in middle age and beyond, we are seeing it more and more in younger clients. 'Age spots' on the hands are an example of hyperpigmentation, but these dark discolorations can occur on any part of the body including face, neck, arms hands and legs.

What are the Different Types of Hyperpigmentation?

Lentigo/Lentigenes

These are freckles. Lentigo means one freckle, lentigenes are multiple freckles.

Solar Lentigenes

Widely known as 'sun spots,' 'age spots' and 'liver spots,' solar lentigenes are freckles caused by sun exposure.

Melasma

Also known, chloasma or the 'pregnancy mask,'

Melasma is caused by hormonal changes (high estrogen levels) due to pregnancy and is characterized by splotchy, pigmented areas usually on the face (except the eye area).

What Causes Hyperpigmentation?

Hyperpigmentation is the result of either of two occurrences:

- (1) **an abnormally high concentration of melanocytes produce melanin or**
- (2) **when melanocytes are hyperactive.**

The root cause of excess melanin production can be attributed to internal factors like hormonal changes and/or to external factors such as excessive exposure to sun, skin injury or even emotional stress.

Hyperpigmentation has also been shown to be a side effect of certain hormone treatments, chemotherapy drugs, antibiotics and anti-malaria pills. It can also indicate more serious medical conditions, such as autoimmune and gastrointestinal diseases, metabolic disorders and vitamin deficiencies.

Photo-contact dermatitis caused by henna and tattooing dyes can result in residual hyperpigmentation.

But let's look at the main causes...

Hyperpigmentation from Sun Exposure.

One of the primary functions of melanin production in your skin is to protect you from UV rays from the sun. A 'tan' is the prime example of your body's melanin response to the sun.

When your skin is exposed to the sun repeatedly, you experience an over-production of melanin causing an uneven coloring of the skin. This is the body's way of saying "get out the sun!" Once the cycle of pigment over-production has started, it

can be difficult to stop and there is no quick-fix to reverse the damage.

Hyper-pigmentation (Melasma or Chloasma) from Hormones

The second most frequent cause of hyper-pigmentation is due to hormonal changes, during pregnancy or various stages of menopause and may be a result of oral contraceptive pills. Hormone shifts trigger the melanin cells to go into over-drive. Studies have shown that almost 90% of pregnant women experience this 'pregnancy mask'. And that is without spending large amounts of time in the sun. If you have hormone related pigmentation problems, sun exposure will intensify the situation making the discoloration more visible.

Post-Inflammatory Hyperpigmentation (PIH)

The third most common cause of pigmentation is a direct result of some type of injury to the skin. Your body's response to injury is inflammation, which you often cannot see, as it is underneath the epidermis. This inflammation triggers melanin production. As the injury or trauma then heals, it leaves a flat area of discoloration behind. This is a common condition among acne sufferers, but can also be caused by the following:

- Insect bites or itchy rashes
- Abrasions or cuts
- Over-exposure to heat
- Hair waxing
- Improperly performed laser treatments
- Post Acne Scarring
- Products with high concentration of perfume
- Cosmetic products with high concentration of actives causing overstimulation

Is there a cure for hyperpigmentation?

Unfortunately there is no immediate 'cure', but there are natural ways to treat this skin condition

effectively. We do offer a Phyto-Effective Skin Brightening Treatment in our Kalahari Spa Range of Professional and Retail products that, if used consistently, can help to lighten and brighten the skin naturally.

What is the difference between acne scars and hyperpigmentation?

It can be difficult to distinguish between these, but generally if a mark that developed from an acne lesion does not fade or disappear after 6 – 12 months, then it can be classified as a scar. Post-Inflammatory Hyper Pigmentation (PIH) will respond to treatment and will eventually fade..

How can one best PREVENT Hyperpigmentation?

Your number one weapon in the fight against hyperpigmentation is a good quality sunblock available in our Kalahari Spa Retail Range of products. I advise a broad spectrum sunblock with an SPF of at least 30. **Kalahari's Facial SPF 40 Sun Protection** is an ideal, light textured, fast absorbing sunscreen for year round use. In addition, wear hats or use an umbrella to protect your face from sun exposure as well as wear UV protected sports clothing when regularly exposed to the sun.

*Darker skin tones should avoid laser treatment and **NEVER** pick at pimples or cysts!*

What are some of the ingredients used to TREAT hyperpigmentation?

Many skin lightning products use Hydroquinone, as the key active ingredient. Recent studies have shown some negative side effects to this chemical so we have seen a move to more natural plant-based ingredients. Some of the newer ingredients being used in topical applications for hyperpigmentation include:

Alpha Arbutin

Extracted from bearberries, this natural ingredient mimics the behavior of Hydroquinone without exposing the dermis to the risk of rebound hyperpigmentation.



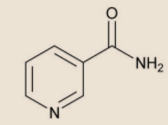
Liquorice Extract

Contains the phyto-effective ingredient, Glabridin, which acts to depigment, or lighten the skin while blocking the enzyme that causes damaged skin to darken.



Niacinimide

A form of vitamin B3 that prevents additional pigment surfacing to the epidermis.



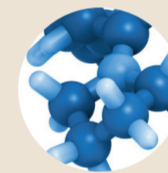
Mulberry Extract

Mulberry is an active component and inhibit tyrosinase activity as well as inhibit effects on tyrosinase activity and on melanin formation in melan-a cells. This compound also exhibited superoxide scavenging activity that is involved in the protection against auto-oxidation. Highly effective as a lightening ingredient.



Oligopeptide-34: Advances in Skin Brightening

Oligopeptide-34 is indeed the most effective, non-hydroquinone skin whitener. It is a small protein molecule (also known as a peptide) consisting of 13 amino acids strung together to create a highly efficient and active molecule that addresses melanin formation.



Oligopeptide-34 decreases melanin synthesis and tyrosinase activity in melanocytes, and it decreases the transfer of melanosomes to new keratinocyte cells.

kalahari™
ancient desert secrets
by *Carina Franck*

What do you recommend for treatment of hyperpigmentation?

Although it is one of the most common skin conditions, hyperpigmentation can be difficult to treat and often leads to a negative impact on a person's psychological well-being. This is why, I have put a lot of time into researching and developing Phyto-Effective Treatments that work to control and treated unwanted pigment.

One thing to keep in mind is that these treatments don't work overnight. It takes time, and therefore patience, to get results.

The first step is regular exfoliation with our Kalahari Spa Range:

Enzyme Face Buff

The blend of natural fruit and vegetable enzymes removes the surface skin cells with pigment (melanin) leaving your skin perfectly prepared for maximum penetration and absorption of our Phyto-Effective Skin Brightening Skincare Products.

Phyto-Bright Serum

Our highly concentrated Phyto-Bright Serum targets the darker discoloration areas of hyper-pigmentation effectively, breaking down the melanin and inhibiting transfer of melanosomes into the top layer of skin. Witch Hazel and Elder Tree phyto-extracts lighten and brighten uneven skin tone while Alpha Arbutin lightens skin tone and increases overall luminosity.

HYPERPIGMENTED SKIN CELLS

