damage is so severe that

hypopigmentation will occur. This

is when the

Ever wonder why a brown spot suddenly appears on the surface of your skin? It wasn't there yesterday, or was it? Long before sun spots or "age" spots appear on the surface of the skin, the damage has occurred many years prior. These spots are formed by "melanin", a protein found in the skin. Melanin is produced by melanocytes (cells in the deeper layers of the skin that produce pigment) and are the skin's defence mechanism. Melanin is designed to protect the skin cells below, by adsorbing and blocking the sun's harmful UV rays by tanning, a reaction to sun exposure. In truth the consequence of a tan is that the skin has been injured to some degree. The more sun exposure your skin receives the darker the pigment becomes. During sun exposure the melanocytes bond together to create a protective shield. Melanin also determines skin and hair colour or pigment.

Do you think all skin types are protected from the UV rays? Not necessarily. UV rays damage DNA cells in the skin causing further collapse of its protective shield, the melanin, regardless of the colour of one's skin. In younger skin, melanocytes can repair DNA damage, yet over time and repeated attacks from the UV rays, this shield will become less and less efficient in defending the cells below. The production of melanin will decrease and will breakdown causing pigment distribution to be scattered, resulting in visible spots of various shape, size and colour. The reduction of melanin pigmentation will translate into a reduced natural protection of skin against UV rays. Some sun

melanocytes can no longer repair and reproduce leaving white spots or non-pigmented areas on the surface of the skin.

What happens next is what you cannot see on the surface of the skin until the later years...aging of the skin. With the loss of melanin protection, the dermis being the deeper layers of the skin will be under attack. Cellular structure disorganization will cause collagen and elastin production to slow down resulting in loss of elasticity, loss of firmness and loss of suppleness leaving your skin looking lifeless, dull and wrinkled. A tanned skin may look sexy when you're young, however, sun worshippers beware...the epidermis will eventually thin revealing the disorganized melanocytes appearing before your eyes like polka-dots!

HOW TO PROTECT, PREVENT AND REVERSE HYPERPIGMENTATION

- . There are scientific products on the market today that have high performing ingredients that will fight oxidative stress, brighten dark spots, promote natural skin protection and help maintain the right balance of the skin. Ask a skin care professional to analyse your skin and suggest the best skin care line for your skin type.
- . Use an SPF year-round, SPF 20- in the winter months and SPF 30+
- . Avoid the sun from 10:00 AM to 4:00 PM when the sun rays are strongest.
- · Avoid "baking in the sun" (overexposure) especially in the beginning of swimsuit season.
- Wear protective clothing and a hat or stay in the shade especially those with sensitive skin.
- · Drink lots of water (fluids) to remain hydrated.
- . Help your body protect itself, eat more fresh vegetables and berries; this will increase your antioxidant levels which helps with melanin production naturally.

. If sun damage is already visible, there are Photo-Therapy facials for hyperpigmentation reduction. A natural, non-invasive approach in reducing uneven pigment. The LED light penetrates through the skin to heal, correct, repair and improve the skin tone. Costs:

administered in a cure depending on severity of pigment, three times weekly in a series of 10 treatments (\$550 approx.) over a five week period is suggested. Maintenance consists of 1 session per month (\$65). To remove surface melanin and allow better treatment and product penetration,

Photo-Therapy treatments of the face, hands or body must be

a 1 sweep Microdermabrasion is required with your first session (\$40 - 45 min.) Sun protection is strongly recommended.

summer, those dots can become permanent...protect your skin from the sun!

Consider this when you wear that "polka-dot bikini" this

