

## Results of a Clinical Study on D-LAB's OPC

Effectiveness of a dietary supplement made of pine bark for depigmentation.

### ► INTRODUCTION

• D-LAB's Radiance Complex is a revolutionary blend of carefully selected active ingredients which lighten/illuminate/unify the skin. Its main active ingredient is Cosmythic®, a French Maritime Pine Bark Extract (FMPBE) with a high content of OPC (Oligomères ProCyanidoliques) a particularly active type of polyphenol.

• The extraction and purification processes use state of the art French nutraceutical technology to extract 1 kg of Cosmythic® from 1 ton of ethically grown French maritime bark from the shores of the Atlantic.

• The efficacy of Cosmythic® against various parameters of skin aging has been proven through a clinical study. The study was conducted according to the standards of pharmaceutical research at the DermScan research center in Bangkok, Thailand and was published in NutraFoods Magazing (2014).

### ► I. CLINICALLY PROVEN EFFECTS OF COSMYTHIC®

#### I.A Characteristics of the study

- Subjects : conducted on 34 women, all over the age of 45-years-old
- Study type : Double blind randomized study vs. Placebo
- Length : 2 x 28 days (D28 and D56)

- Location : DermScan Research Center, Thailand
- Dosage : 2 x 50 mg/day of Cosmythic

#### I.B Study results

Results of D28	Results of D56
<ul style="list-style-type: none"> <li>• Spots became lighter/less red</li> <li>• Firmer skin and fewer wrinkles</li> </ul>	<ul style="list-style-type: none"> <li>• Spots became increasingly light</li> <li>• Better elasticity of the skin</li> <li>• Decreased hyperpigmentation</li> </ul>

#### I.C Proven efficacy

- Cosmythic® is effective starting as early as 28 days.
- Cosmythic® inhibits melanogenesis and depigmentation for a uniformly colored skin.
- Cosmythic® makes the skin appear younger and more even by lessening dark spots.
- Cosmythic® protects elastin and collagen fibers to improve the firmness and elasticity of the skin.
- Cosmythic® reduces the number and depth of wrinkles.

#### I.D Available statistics

- Cosmythic® reduces pigmentation of the skin by 7.5% after 56 days of treatment.
- Cosmythic® helps to reduce the intensity of dark spots by 6.6% by D28 and 12.5% by D56.
- Cosmythic® improves skin firmness by 8.2% after 28 days of treatment.
- Cosmythic® reduces the number of wrinkles

by 15% after 28 days of treatment.

- Cosmythic® reduces the depth and number of wrinkles by 7% after 28 days of treatment.

## I.E Material and methods

One of the major advantages of the study was the use of peak technology to record changes occurring to the subjects in minute detail:

- CM700d spectrophotometer: used to evaluate skin tone through 3 color wavelength and convert it to a digital code showing even the **smallest variation in pigmentation**.
- Skin Image Analyser® (SIA®): used to make a skin-print, which is studied with the software QuantiRides® to assess the number and depth of **furrows and wrinkles**.
- SEM 575 Cutometer®: used to study the **biomechanical properties** of the skin by recording variations in elasticity using a vacuum system with measurements obtained through optical prisms.

## ► II. MECHANISMS OF COSMYTHIC

### II.A Lightening/bleaching effect: Protection against free radicals

- The **lightening effect** obtained through FMPBE supplementation has been shown in various studies to be linked to the protection against **free radicals** [4].
- UV radiation is a major source of reactive oxygen species leading to oxidative stress, inflammation and pigmentary disorders, **FMPBE works to counteract UV-induced damage**.
- It non-competitively **inhibits** xanthine oxidase, a major generator of **free radicals** [3].
- FMPBE **prevents** the release of pro-inflammatory mediators regulated by **oxidative stress**.

### II.B Firming and anti-wrinkle effects:

#### Protection of the connective tissue

- The firming and anti-wrinkle effects measured from the 28 days of supplementation are linked to the **FMPBE anti-inflammatory properties** and its ability to inhibit enzymes and their degrading connective tissue structures (hyaluronidase, elastase, collagenase, gelatinase) [6].
- It could be also linked to the **enhancing action** of pine OPCs on vitamin C's synthesis of collagen [2].

## ► III. CONCLUSION

- Safe & Innovative: these results prove that FMPBE supplementation can be considered a **safe** and highly **innovative** approach to **skin-whitening** and **anti-ageing treatments**.
- Effective: The levels of efficacy obtained through the use of Cosmythic® **were comparable to or better than** the results that could be achieved with **topical cosmetics**.
- Safe : In the conditions of the study, Cosmythic® showed no **side effects**.
- Fast & Easy: Effective as early as 28 days at **1 capsule/ day of Radiance Complex**.
- Works with Others: As it **supports the skin from the inside out**, it would ideally be used in **conjunction** with topical cosmetics for a more active effect.

## ► III. REFERENCES

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