

# **29** **NEXENTURY®**

## **Marine Pearl Hydrolysed HA**

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## Marine Pearl Hydrolysed HA (Research)



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### Introduction

Skin is the first business card in influencing human social-culture relationship. How we portrait externally is very important for self-accepting and for the social life. Unfortunately, aging is a natural phenomenon which everyone can't escaped and firstly affecting our appearance & confidence.

“From the age of 20s, our Collagen, Elastin and Hyaluronic Acid production levels decline by 2% each year” said by Assistant Professor Yamashiro Chiaki. This emphasize how vital we should constantly replenish our collagen and hyaluronic acid level within our skin in order to have a sparkling, stunning and healthy skin. Today, with the advanced Japan's technology, Marine Pearl Hydrolysed HA which is a combination of Hydrolysed Pearl, Hydrolysed Jellyfish Extract and Hyaluronic Acid has been introduced to the market.

#### 1. Aging & Photo-aging effect on skin.

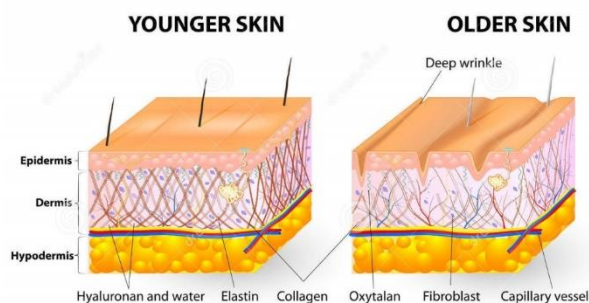


Figure 1: Structure difference between younger skin and older skin.

Aging skin gradually loses key components like collagen and hyaluronic acid. Ability of dealing with damaging free radicals from UV rays and intrinsic aging will decline. Progressively, skin support structure will lose due to breakdown of collagen and elastin. Smoothness, firmness and elasticity of the skin will deteriorate and formation of fine lines and wrinkles.

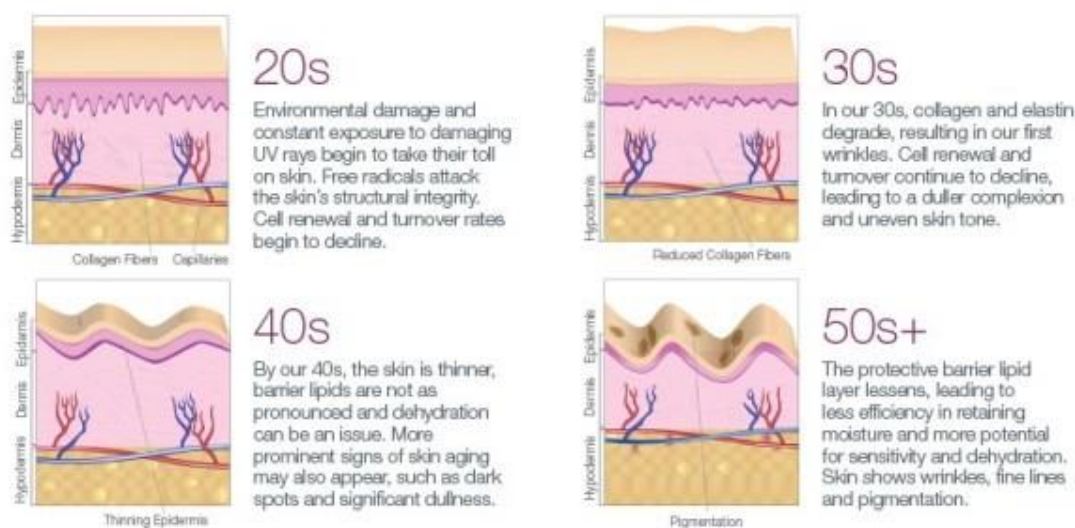


Figure 2: Mechanism of deterioration of skin structures by age group.

## 2. Marine Pearl Hydrolysed HA

With the utilization of marine biotechnology, research team extracted White South Sea Pearls produced by *Pinctada Maxima* species of pearl oyster harvested from Japan; marine collagen from immortal jellyfish, *Turritopsis Nutricula*; and Hyaluronic acid from Alaska Deep Sea fish. This formulation has been hydrolysed to the finest particle in order to penetrate into the deepest layer of the skin-dermis. These ingredients have been selected as they are believed clinically hydrates and retain moisture of the skin, encourage revitalization and renewal of tissue, exhibits powerful anti-oxidant and anti-aging agent and skin whitening properties by inhibiting melanin production. Research team carried out a clinical study to examine the effects of Marine Pearl Hydrolysed HA on facial skin of healthy woman aged 30-65 by randomised, placebo-controlled and double-blind trial.

### Details

500 subjects from different ethnics ranged from 30-65 years old, healthy, non-smoking and were not using other nutritional supplements were enrolled into this study. All subjects completed the study and no adverse events associated with the product were recorded.

Subjects were allocated into two different groups, aged 30-40 years old and 41-65 years old. All subjects of different skin types were treated subcutaneously with 3ml of Marine Pearl Hydrolysed HA at different wrinkle parts over their face.

## Results

From raw eyes observation, the facial wrinkles of both age groups improved. The facial skin becomes smooth & soft. Average degree of enhancement showed between 50-90% visibly improve facial skin firmness, reduce the appearance of fine lines & wrinkles, anti-aging effect, enhance facial skin elasticity and whitening in skin tone compared between pre and post treatment.

For the ages of 50-65years old subjects with poorer facial skin quality, also have shown a 50- 80% improvement in facial complexion, has achieved significant smooth & softening effect. After second time of subcutaneous treatment, 95% of the facial wrinkles & fine lines improved drastically. Their skin firmness and skin tone also visibly boosted.



**Before**



**After 1<sup>st</sup>  
treatment  
(14<sup>th</sup> day)**



**After 2<sup>nd</sup>  
treatment  
(28<sup>th</sup> day)**





**Before**

**After 1<sup>st</sup> treatment  
(14<sup>th</sup> day)**

The properties of the skin on the face were assessed using a non-invasive instrumentation. All assessments were carried out at weeks 0, 3, 6, 9 and 12. The assessments were for skin hydration, skin elasticity and skin surface micro-topography. Overall, there was significant improvements in facial skin hydration, tone, elasticity and depletion in wrinkles resulting a more youthful and sparkling appearance.

***Anti-wrinkle properties***

Skin roughness is considered one of the main indicators of wrinkle depth. To assess wrinkle depth, silicone rubber replicas were taken from the face at the beginning of the study and at 3, 6, 9 and 12 weeks, and analysed at each time point using the Visioline equipment. The values were automatically calculated for each replica by the image analysis software.

Over 12 weeks, both of the groups taking the Marine Pearl Hydrolysed HA experienced statistically significant reduction in average wrinkle depth.

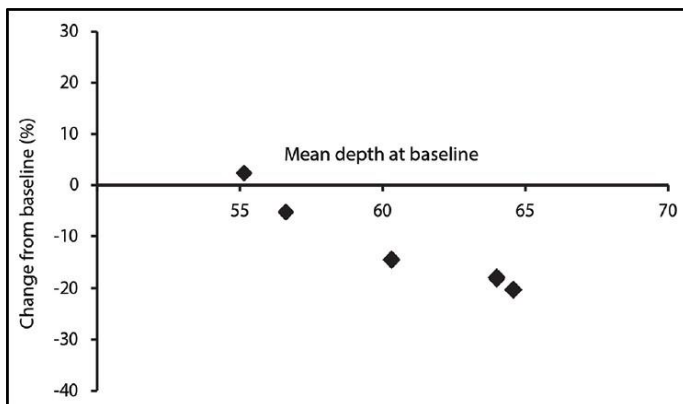


Figure 8: The greater the reduction in depth, the shallower the wrinkle.

### **Elasticity**

Skin elasticity was measured using Courage and Khazaka Cutometer (probe aperture size 8 mm) at week 0 and week 3, 6, 9, and 12. Five measurements were taken from face. In both of the groups who taking Marine Pearl Hydrolysed HA, a gradually increase in elasticity was observed. This suggests the Marine Pearl Hydrolysed HA is beneficial on the elastin network.

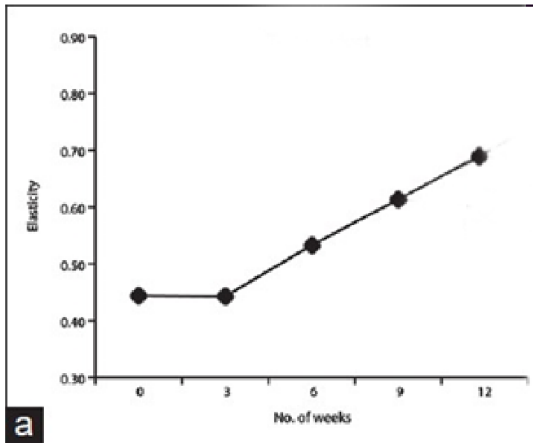


Figure 9: Elasticity of the skin increase constantly from week 3 to week 12.

### **Skin hydration**

Skin hydration was also measured using Courage and Khazaka Corneometer at week 3, 6, 9 and 12 weeks. Four measurements were taken from the face. The average value was collected and used in subsequent analysis. After 12 weeks, there was a significant increase in both of the age groups who taking Marine Pearl Hydrolysed HA.

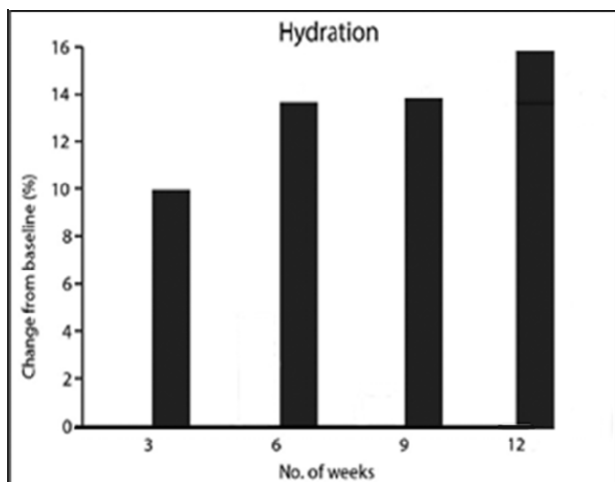


Figure 10: Hydration of the skin increases from baseline over 12 weeks.

## Conclusion

As summarized for this study, an obvious improvement in skin elasticity, anti-wrinkle and anti-aging, skin tone and hydration was observed. Over 12 weeks of measurement, there are constant depletion in wrinkle depth and constant rise in skin elasticity and hydration.

Marine Pearl Hydrolysed HA is one of the research and development of PHRIBIO-TECH SDN BHD with Japan's research professionals. The most commendable achievements of this study is, with our effort, what used to be regarded as impossible had come true, where we have proven able to help aging wrinkled people miraculously get beautiful facial complexion. In 2014, after the success of research and development, PHRIBIO-TECH SDN BHD finally launched it into market in 2019.



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**Before**



**After 1<sup>st</sup> treatment  
(14<sup>th</sup> day)**