

Skin Health Care Cosmetics



Contents

1. Brand Story of Benia III
2. Set Composition of Benia III
3. Expected effects of Benia III
4. Instruction of Benia III
5. Main components of Benia III
6. Features of Benia III
7. Characteristics of each Benia III
8. Experienced effects of Benia III

I. Brand Story



One day in 2009 when Bendu-381, functional material for anti-allergic rhinitis, had been tried for clinical test in general hospital, a doctor told us as below.

“ I discovered even their hives as well as rhinitis to be cleared and their skin to be improved in patients who had been taking Bendu-381”.

Since Then, we started the research to apply to cosmetics with confidence that it can improve your skin if we can deliver Bendu-381 well into the skin. In addition, we considered that it is essential to make essential fatty acids, main components of skin cell membrane, to be absorbed into the skin.

These ideas have let us developed “Fermented Oil” and, it has a lot of free essential fatty acids which have been formed from vegetable oil through our creative BCRF technology.

As fermented oil can be absorbed into the skin easily, it is very helpful for skin health.

From ancient time, lotus flower blooming in the pond has been known as a symbol of beauty.

We have maximized its effect by enriching lotus flower extract full of flavonoids through micro-housing fermentation technology.

Benia III is a **Skin Health Care Cosmetic** that has been developed under full coordination with by Ben’s Lab research center & the department of Life-Science of Suwon Univ. based on the belief that you can keep the skin healthy if you can penetrate functional ingredients deeply into the skin, which is required for the skin health.

II. BENIA III Set



베니아III Bioactive Essential Skin
바이오엑티브 에센셜 스킨



베니아III Bioactive Moisturizing Oil
바이오엑티브 모이스처라이징 오일

Benia III Bioactive Essential Skin

Bioactive Essential Skin soothes sensitive and damaged skins and supplies moisture to dry skins.

Benia III Bioactive Moisturizing Oil

Fermented vegetable oils keep the moisture instantly and supply nutrients not on the skin surface but into the deep skin to form the protective healthy layer.

Benia III C Powder

- C powder is a complex of vitamin C, EGCG, Licorice extract powder.
- C powder is effective to prevent skin aging and to firm the skin by tightening pores.
- C powder is also helpful for whitening and softening of skin with its powerful antioxidant effect.



베니아III C Powder
베니아 C 파우더



베니아III Bioactive Refreshing Cream
바이오엑티브 리프레싱 크림

Benia III Bioactive Refreshing Cream

Bioactive Refreshing Cream is multi-functional cream to take care of overall skin troubles such as dryness, low elasticity and too sensitive skin etc.

III. BENIA III Expected effects

Underlying
skin health
care

Skin
protection
&
Antioxidant
function

Skin
soothing

High
moisturi-
zing

Anti-
wrinkle
&
whitening

Pore
tightening
& skin
firming

1. Control skin troubles

- Soothing & protection for sensitive skin
- Removing free radicals by antioxidant function of Patented material (Bendu-381)

2. High moisturization

Protection of moist evaporation by forming oily layer on the skin surface with 3 kinds of fermented vegetable oils

3. Skin refreshing

Effect of skin refreshing by fermented lotus flower extract.

4. Anti-wrinkle and whitening

Anti-wrinkle and whitening effect of Adenosine and Niacinamide.

5. Pore tightening & skin firming

Whitening, antioxidant, pore tightening and skin firming of vitamine C, EGCG, and licorice extract

IV. Instruction of Benia III

How to use BENIA III

1. Apply Benia Skin after washing.
2. Spread 1~3 drops of Benia Oil after Benia Skin
3. After taking out (about 10mg~50mg) of C powder, add the cream and mix well.(See photos below)
4. Spread the mixed cream on the face and massage it gently.



Take out of C powder a little bit. Too much powder may not be soluble in cream



Add cream suitably.



Mix C Powder with cream well on the back of the hand.



Apply the mixture of powder and cream on your face and massage gently.

V. Three main components of BENIA III

1. Fermented lotus flower extract

- ▶ Saccharomyces/Nelumbo Nucifera Ferment Extract Filtrate by Micro-housing Tech.

2. Fermented Oil

- ▶ Patent application : 10-2014-0007260
"Fermented vegetable oils with high contents of free essential unsaturated fatty acids and manufacturing method for them"

3. BENDU-381

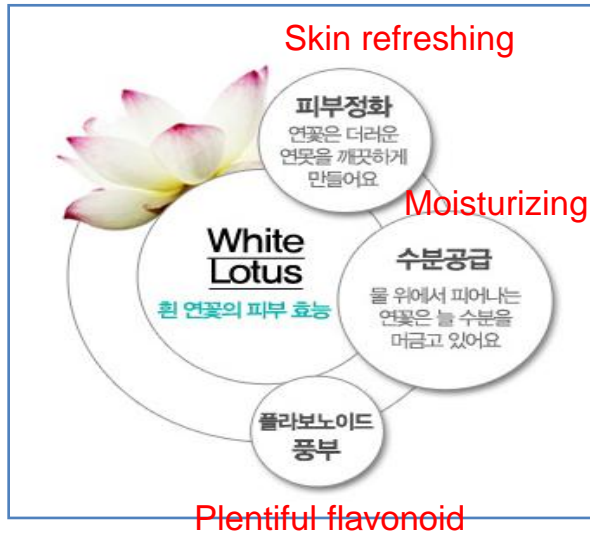
- ▶ Certified material from KFDA : No. 2009-16
Effective claim: "Effective for the sensitive nose (symptoms of nose urtication, sneezing, nasal discharge)
- ▶ Patent : No. 10-0834850
"A composition comprising complex crude drug extracts showing anti-allergic rhinitis, anti-atopic dermatitis and anti-asthma activity"

V. Three main components of BENIA III

1. Fermented Lotus Flower Extract

- ▶ **Features of F. Lotus Flower Extract and Micro-housing Fermentation Tech.**
- ▶ **In Vivo & Vitro Data**
 - Skin Moisture Capacity
 - Trans-epidermal Water Loss (TEWL)
 - MTT Assay
 - Procollagen Type I measured by ELISA (Anti-Wrinkle Effect)
 - Tyrosinase Inhibition Activity (Whitening Effect)
 - Melanogenesis Inhibition Assay (Whitening Effect)

Main components : Fermented Lotus Flower Extract



✓ Because lotus blooms pure and beautiful flowers even in the dirty pond, lotus has been called as a symbol of skin refreshing. Lotus flower extract which is fermented by micro-housing technology changes the skin much purer and cleaner than ever.

✓ Lotus flower extract contains plenty of anthocyanins, flavonoids, vitamins and etc.

Their effective ingredients beneficial for skin have been increased through fermentation process.

✓ In addition, their molecular size has been reduced and as a result, the speed of absorption into the skin has been increased by fermentation.

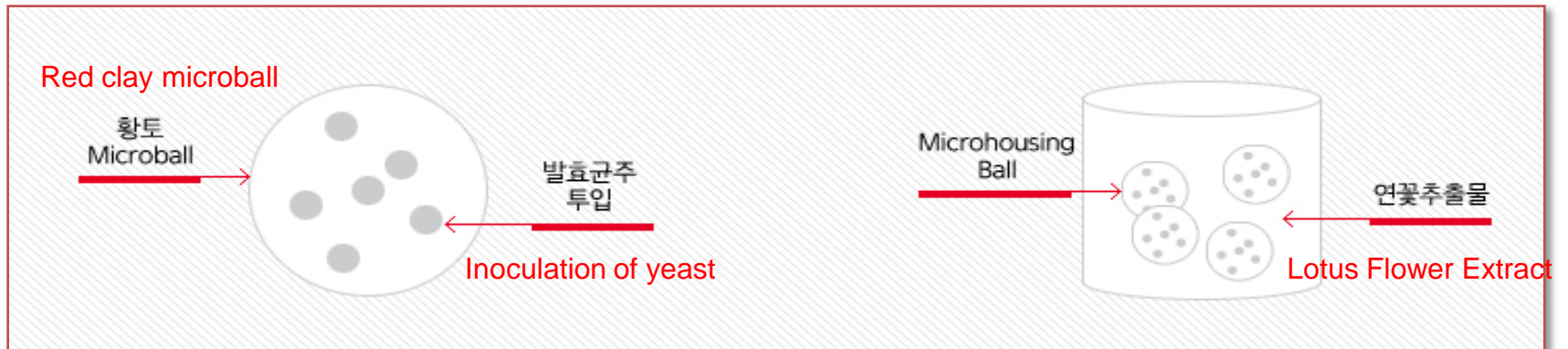
✓ Its affinity with skin has been improved a lot by our fermentation process.

Micro-housing Fermentation Technology ?

Micro-housing Fermentation Tech. is the most advanced technology which is able to maximize the effects of the active components, create pure ferment filtrates and minimize the uneasy smell of fermentation by just allowing the metabolic activity only in the micro-house for yeast cells.

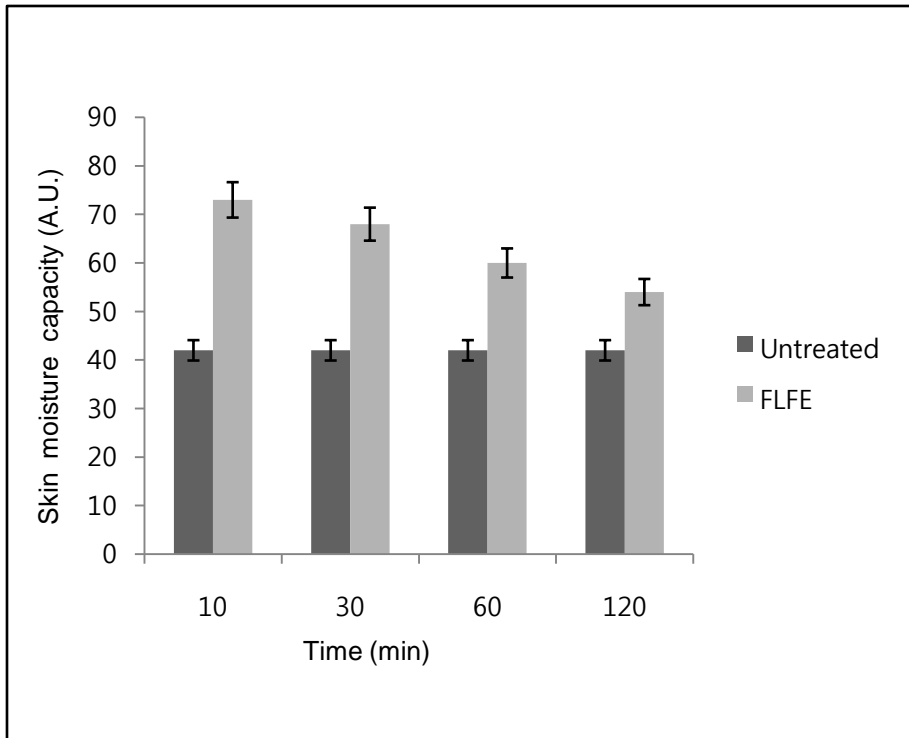
This technology may be considered the cutting edge of Skin Health Science which delivers valuable gifts of the nature into the skin deeply.

Micro-housing Fermentation Process

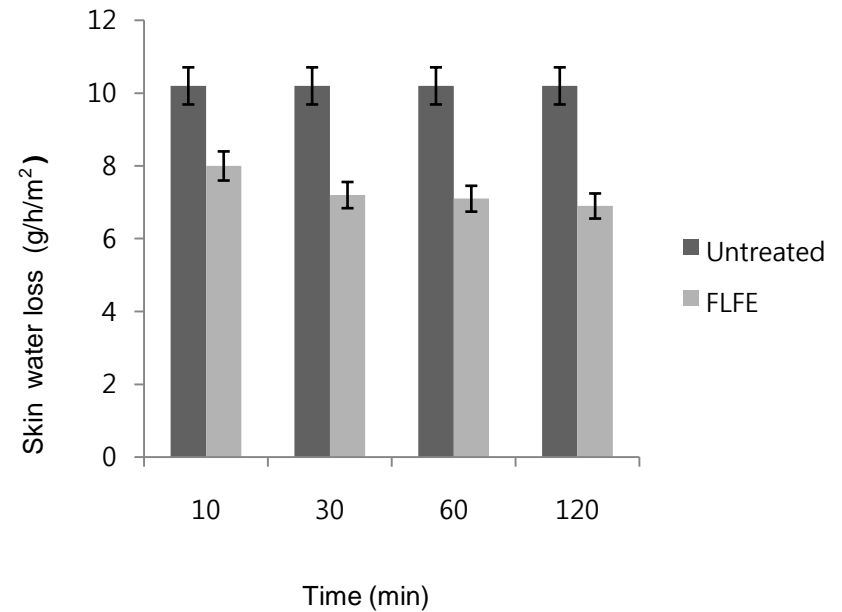


Main components : Fermented Lotus Flower Extract

Skin moisture capacity



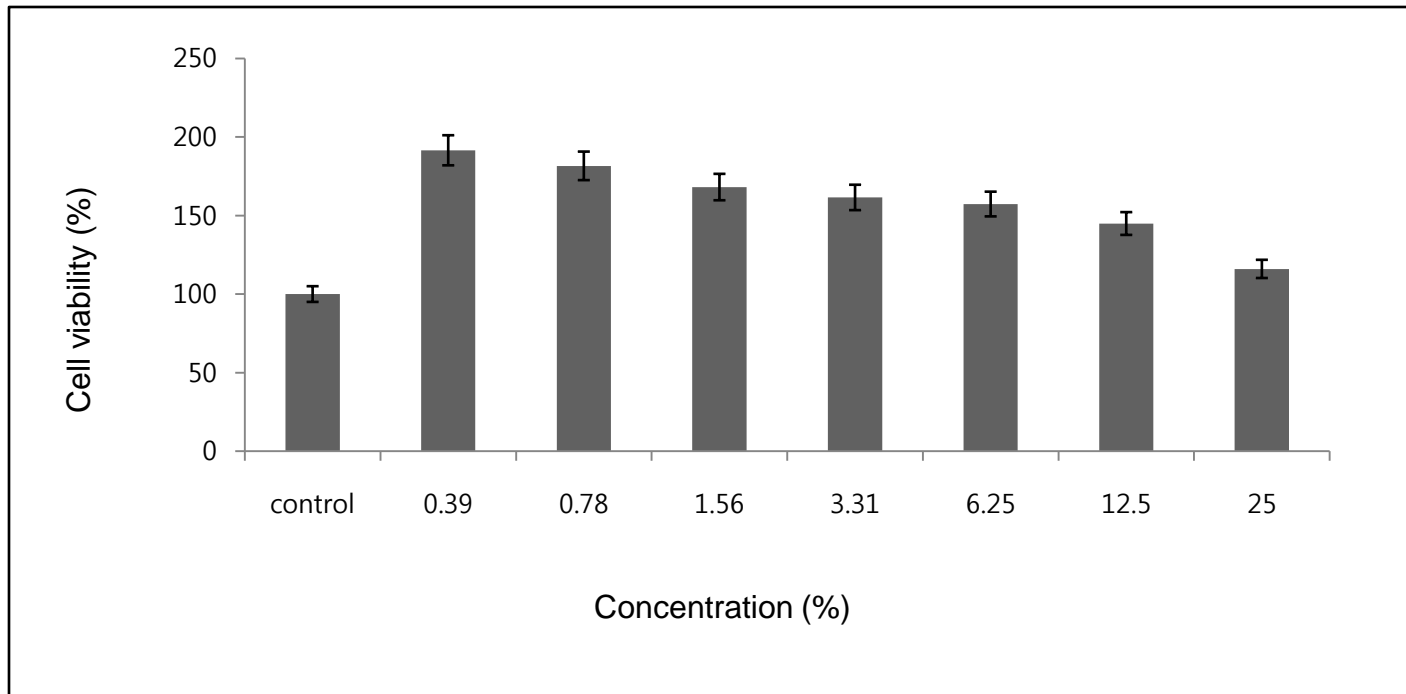
Trans-epidermal water loss, TEWL



Fermented Lotus Flower Extract has an excellent moisturizing effect and makes the skin not to be dry.

The particle size of Fermented Lotus Flower Extract produced by Double Micro-housing Fermentation Tech. becomes smaller to be delivered into skin quickly.

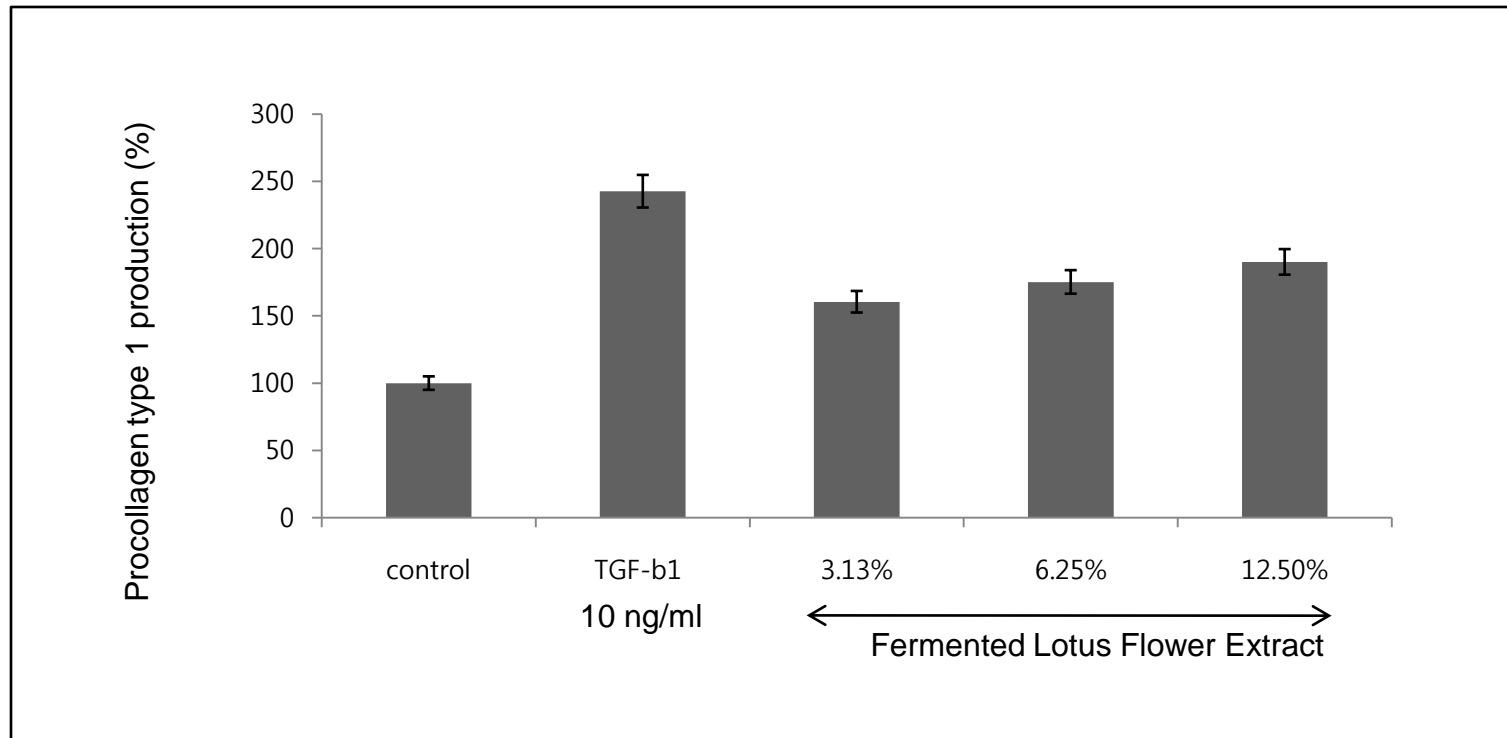
MTT ASSAY



Fermented Lotus Flower Extract shows very low cytotoxicity. (No cytotoxicity up to 25%)

Cell line : 3T3 (Human Fibroblast Cell)

Procollagen Type I measured by ELISA (Anti-wrinkle effect)



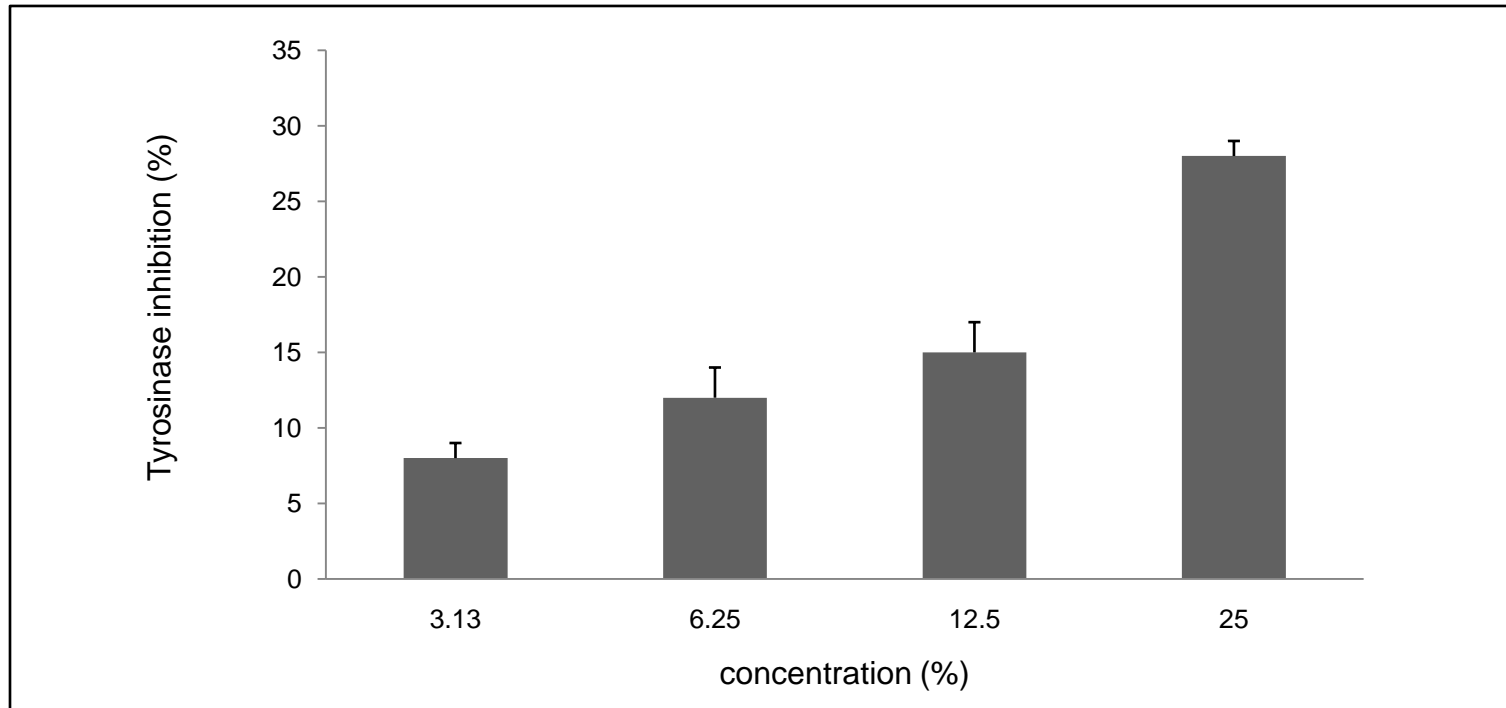
Wrinkle is occurred by the breakdown of Extracellular Matrix (ECM) which fills up the space between cells.

Procollagen is a precursor of collagen one of the main components of ECM.

Fermented lotus flower extract shows increased production of procollagen Type I in a concentration-dependent manner.

Cell line : 3T3 (Human fibroblast), Positive control : TGF- β 1 (10 ng/ml)

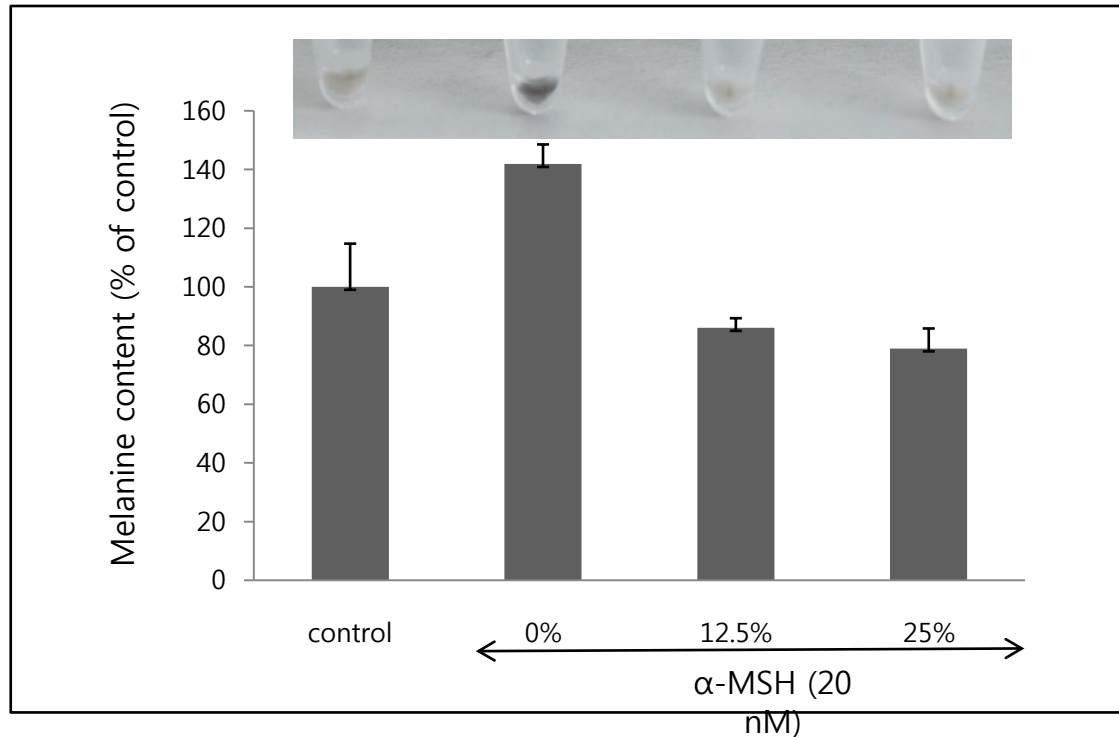
Tyrosinase inhibition activity (Whitening effect)



Tyrosinase is an enzyme catalyzing the production of melanin.

Fermented Lotus Flower Extract inhibits the activity of tyrosinase in a concentration-dependent manner.

Melanogenesis inhibition assay (Whitening effect)



Fermented lotus flower extract inhibits the activity of melanogenesis in a concentration-dependent manner.

Cell line : B16F10 (Melanocyte)

α -MSH : Melanocyte stimulating hormone

V. Three main components of **BENIA III**

2. Fermented Oil

- Description of Fermented Oil
- Analysis of HPLC Chromatography of BCRF Fermentation Technology
- What is FEFA (Free Essential Fatty Acids) ?

Fermented Oil

Camellia Japonica oil, Borage oil, Moringa oil have essential fatty acids such as gamma-linolenic acid, linoleic acid, oleic acid and nutrients of vitamin A, B, E, etc.

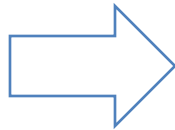
Even if these oils are applied just as they are, they are very good for skin.

But if these oil are fermented, they can have reduced molecular size and free essential fatty acids and as a result, they are helpful for regeneration of skin cell membrane.

Even anyone with oily skin may feel fresh texture because fermented oil is not sticky

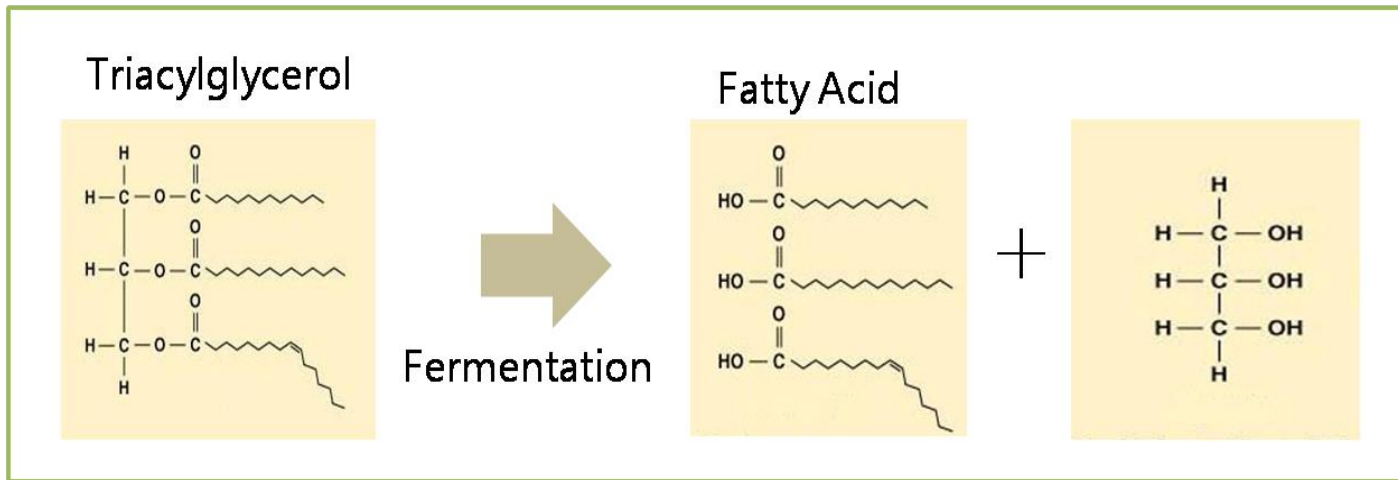


Applied more than usual to check the absorption of Benia Oil



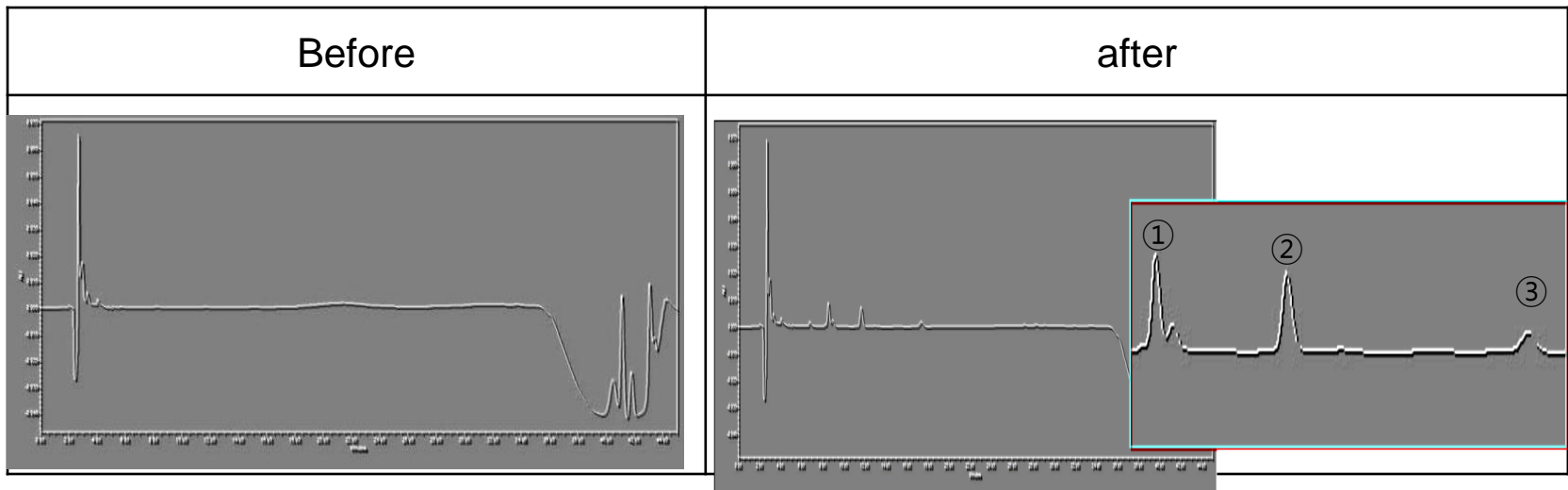
After 2~3 min, Benia oil is already absorbed. Your skin is not sticky but moist.

Fermented Oil



Free fatty acids formed from Triacylglycerol by BCRF fermentation process have been separated by HPLC.

1. Free γ linolenic acid (GLA)
2. Free Linoleic acid (LA)
3. Free Oleic acid (OA)



Fermented Oil

■ What is FEFA (Free Essential Fatty Acids), skin regeneration membrane components ?

► To keep skin healthy, epidermis to prevent evaporation of moisture from skin cell membrane should be healthy. Here what is needed is exactly essential fatty acids. Essential fatty acids keep the health of the cell, promote metabolic process, and transform themselves into bioactive substances such as hormones

► Cell membrane of epidermis consists of a great deal of essential fatty acids. If unsaturated essential fatty acids are insufficient, skin troubles such as dryness, nail cracking, dandruff, seborrheic dermatitis, hair loss etc. will take place.

Skin cells generated from the basal layer of epidermis keep changing into corneous cells on a cycle of about 4 weeks (Keratinization process). In this process, insufficient essential fatty acids may cause poor formation of cell membrane, resulting in skin troubles and inflammation

► If you apply just vegetable oil containing essential fatty acids on the skin, molecular form of triacylglycerol may not allow oil to be absorbed into the skin but may make only a coating oily layer, therefore effects of improvement for the skin can be limited.

► Because Fermented oil has more reduced molecular size and a lot of essential free fatty acids, they can be used rapidly as raw material for ceramide, intercellular lipid in corneum, and cell membrane.

Conclusively fermented oil is helpful for the regeneration of skin cell membrane and elasticity.

V. Three main components of BENIA III

3. Guava leaf extract and mixture (Bendu-381)

- Functional effect of Bendu-381
- Inhibition effect against degranulation of Bendu-381
- Operation mechanism of Bendu-381

Main component : BENDU-381 (Guava leaf extract and mixture)

■ BENDU-381 (Guava leaf extract and mixture) was approved as functional material for allergic rhinitis by KFDA first in Korea. BENDU-381 was recognized the following functional effects by KFDA in 2009.

Effective claim : “ Helpful for improvement of nasal symptom (itching, sneezing, snivel caused by allergic reaction)”

국내	수입
○	

제 2009 - 16 호

건강기능식품 기능성 원료 인정서

대표자 : 이 승 숙
 업 소 명 : (주)벤스랩
 소 재 지 : 경기도 화성시 봉담읍 와우리 산 2-2 수원대학교 첨단과학기술원 1102호
 원 료 명 : 구아바잎추출물 등 복합물(BENDU381)

수 출 국 : 수출국 제조회사명 :
 수출국 제조회사 소재지 :

건강기능식품 기능성 원료 인정에 관한 규정 제10조의 규정에 의하여 건강기능식품의 기능성 원료로 인정합니다.

2009 년 2 월 일

식품의약품안전청장 인

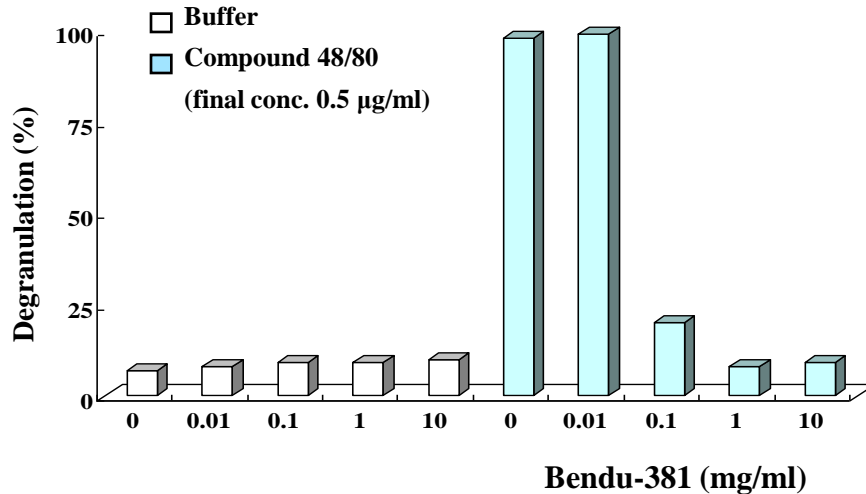
* 붙임서류
 1. 원료명
 2. 제조기준(원재료, 제조방법, 기능성분(또는 지표성분), 규격)
 3. 제품의요건(기능성 내용, 일일 섭취량, 섭취 시 주의사항, 기타사항)

[붙임]

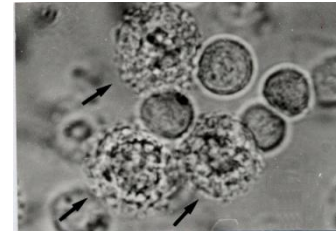
(인정번호 : 제2009 - 16호)

구 분		인정내용
제조기준	원료명	구아바잎추출물 등 복합물
	원재료	구아바잎, 녹차잎, 장미꽃잎
	제조방법	
	지표성분	1) Ellagic acid 함량(mg/g) : 2.5~3.7 2) EGCG 함량(mg/g) : 100.0~150.0 3) Gallic acid 함량(mg/g) : 2.2~3.2
제품의요건	제조사 유의사항 (유해물질 규격 등)	1) 색상 : 황갈색 분말 2) 납(mg/kg) : 2.0 이하 3) 총비소(mg/kg) : 2.0 이하 4) 카드뮴(mg/kg) : 1.0 이하 5) 총수은(mg/kg) : 1.0 이하 6) 카페인(mg/kg) : 15,000 이하 7) 대장균군 : 음성
	기능성내용	“과민반응에 의한 코 상태(코 가려움, 재채기, 콧물) 개선에 도움을 줄 수 있음”(기타기능 II)
	일일 섭취량	“구아바잎추출물 등 복합물”로서 800 mg/일
	섭취 시 주의사항	
	기타 사항	

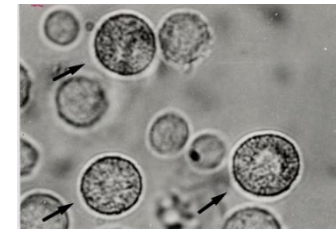
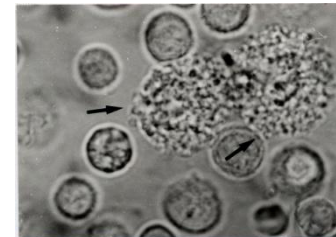
Effect of inhibiting degranulation by Bendu-381



→When Bendu-381 is added at the concentration of higher than 100ppm, it can inhibit degranulation of mast cells by compound 48/80.

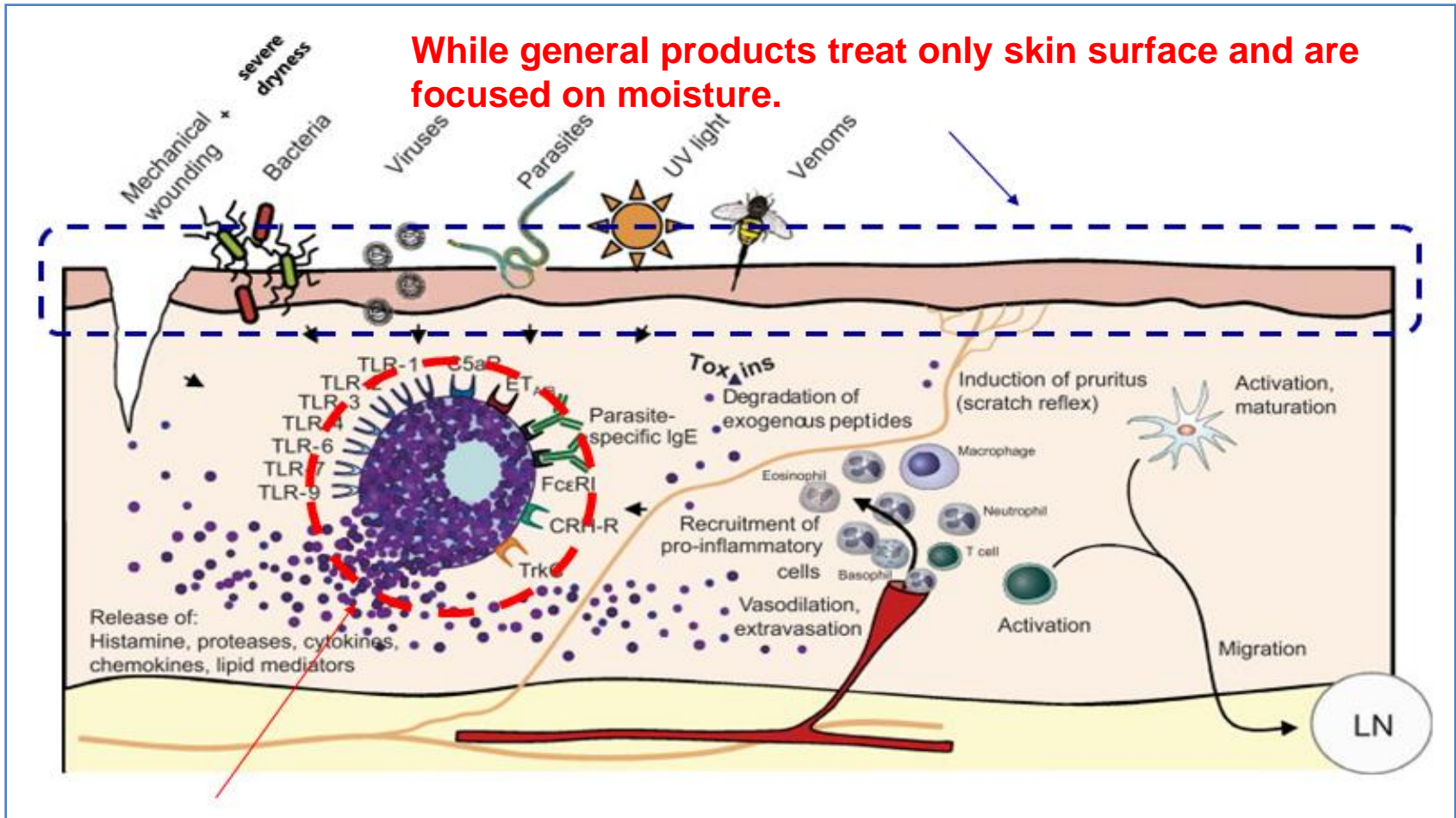


Degranulation of Mast cells induced by Compound 48/80



Compound 48/80
+ Bendu-381 solution
(0.1mg/ml)

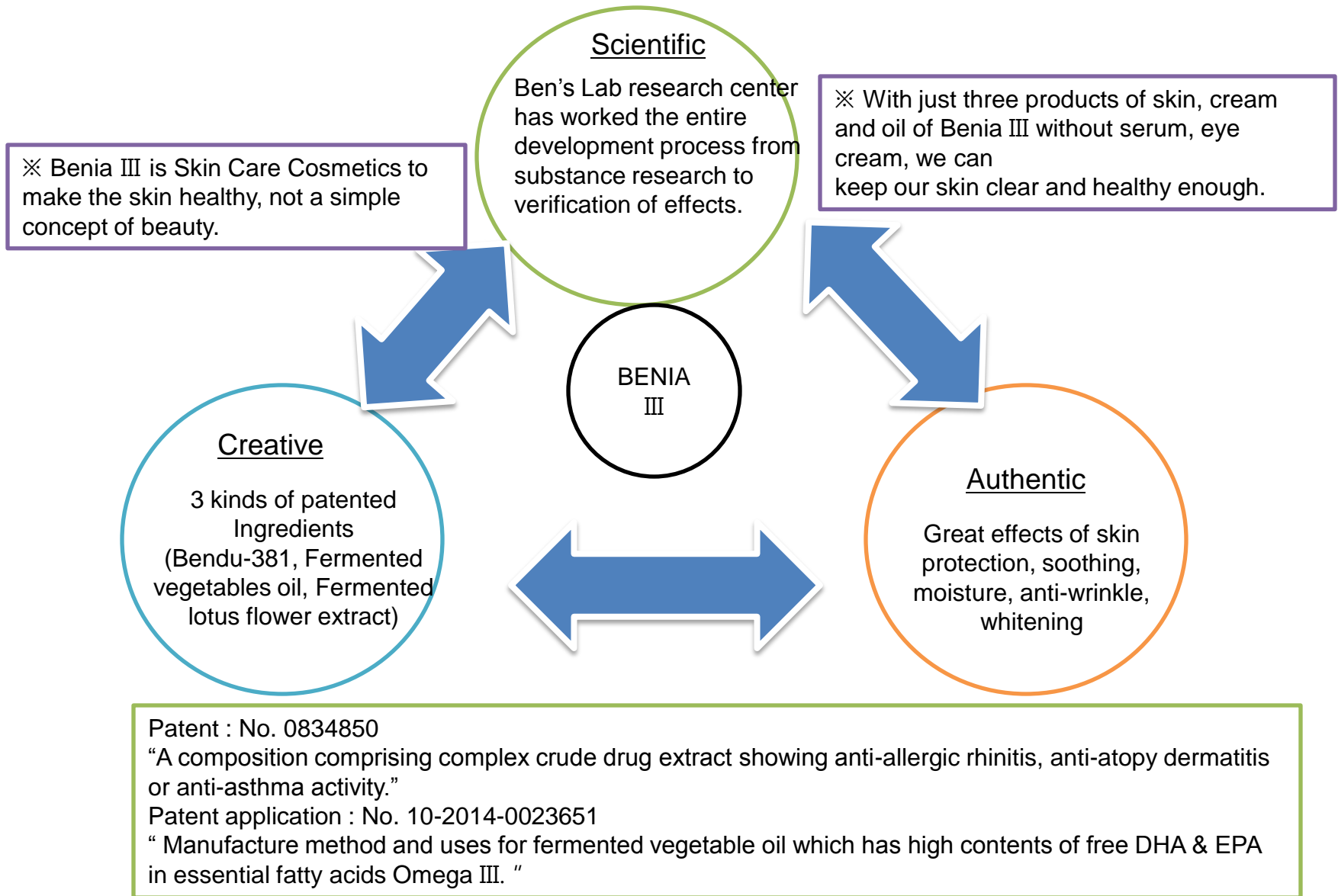




Bendu-381 inhibits degranulation of mast cell which is the main cause of atopy and skin trouble.

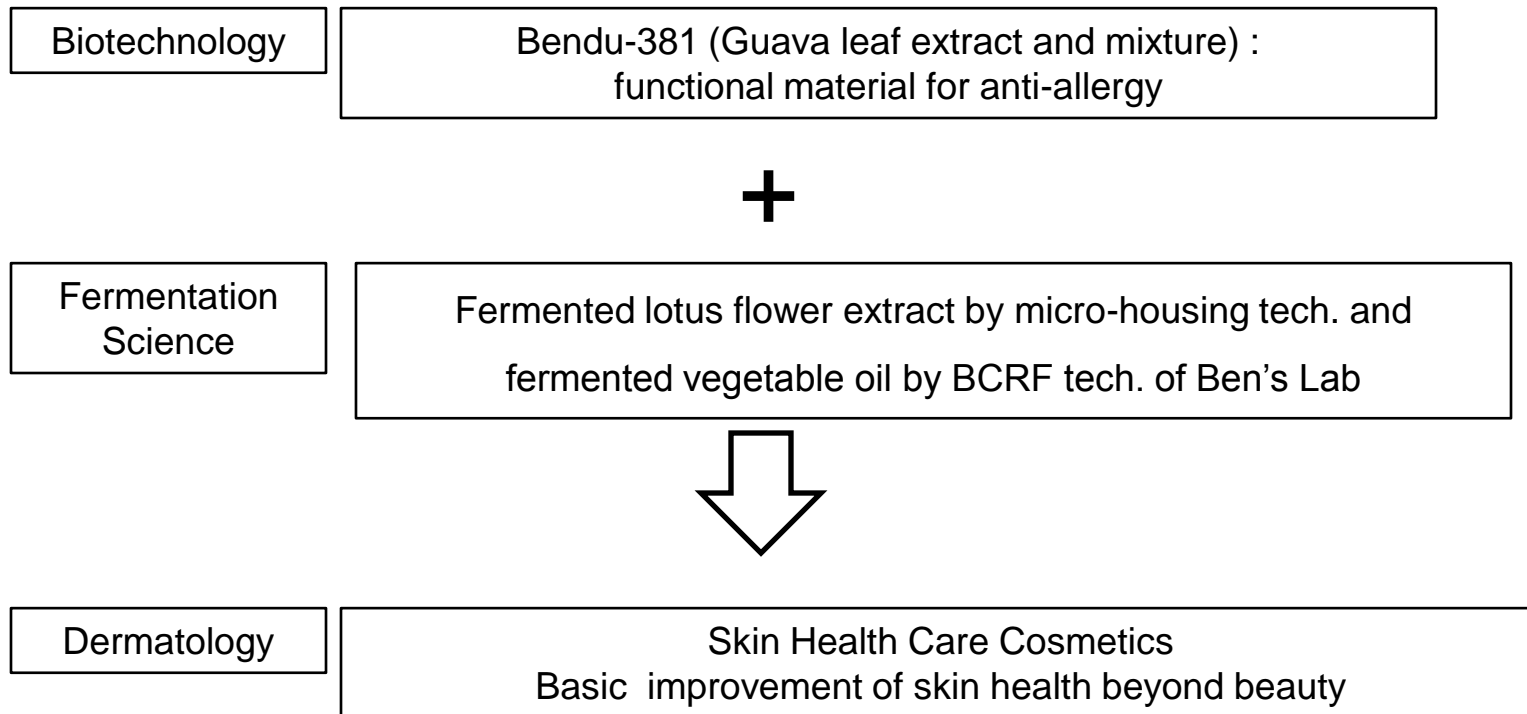
VI. Features of Benia III

The features of Benia III



The features of Benia III

Benia III is a noble dermatological product that biotechnology and traditional fermentation science have been incorporated to create.



VII. Product features of Benia III

VII . Product feature : Benia III Skin

Benia III Bioactive Essential Skin



Skin purification, Moisturization , Anti-oxidant

- Skin Health Care Moisturizer to make the skin healthy fundamentally by high moisturization
- Soothing effect and care for causes of sensitive and damaged skin.
- Flavonoids of lotus flower which are strengthened by fermenting lotus flower extract through micro-housing make the skin pure, clear and shine .
- Patented composition Bendu-381 has the effects of protecting and soothing the skin and remove free radicals by excellent anti-oxidant ability and provide elasticity to skin.

[Main ingredient]

Saccharomyces / Nelumbo Nucifera Ferment Extract Filtrate, Psidium Guajava Leaf Extract, Camellia Sinensis Leaf Extract, Rosa Centifolia Flower Extract, Betaine

[Volume] 150ml

VII . Product feature : Benia III Oil

Benia III Bioactive Moisturizing Oil



Moisturization, Skin protection

- Protective coating for skin moisture
- Natural vegetable oil containing gamma-linolenic acid, linoleic acid and oleic acid which are main components of skin cell membrane.
- Helpful for soothing of skin troubles, forming skin protective layer and keeping the skin healthy.

[Main ingredient]

Joboba Seed Oil, Saccharomyces/Camelia Japonica Seed Oil/Glycerin Ferment Filtrate, Saccharomyces/Moringa Oleifera Seed Oil/Glycerin/Ferment Filtrate, Saccharomyces / Borago Officinalis Seed Oil/Glycerin/Ferment Filtrate, Lavender Oil

[Volume] 32ml

VII . Product feature : Benia C Powder

Benia III C Powder



베니아III C Powder
베니아 C 파우더

Pore tightening, Strengthening the skin shine

As Benia C powder is complex composition of vitamin C, EGCG, licorice extract powder, it is helpful to strengthen the skin elasticity and shine through removing of free radicals, pore tightening by excellent anti-oxidant.

[Main Components]

Ascorbic acid, Epigallocatechin, Licorice Root Extract

[Volume] 10g

VII . Product feature : Benia Cream

Bioactive Refreshing Cream

Anti-wrinkle, Whitening



베니아III Bioactive Refreshing Cream

바이오엑티브 리후레싱 크림

[Multi-functional cosmetics for anti-wrinkle & whitening]

- Skin whitening, anti-wrinkle,
- Skin Health Care Cream to make the skin healthy fundamentally by sensitive skin care, anti-oxidant, soothing, moisturization.

[Function] Anti-wrinkle, Whitening

[Ingredient] Adenosine, Niacinamide

[Main Components]

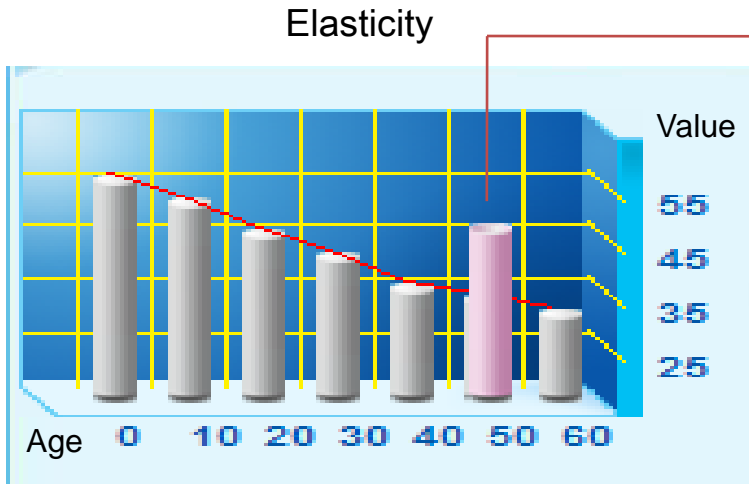
Adenosine, Niacinamide, Shea Butter, Phytosphingosine, Saccharomyces/Camelia Japonica Seed Oil/Glycerin Ferment Filtrate, Saccharomyces/Moringa Oleifera Seed Oil/Glycerin/Ferment Filtrate, Saccharomyces / Borago Officinalis Seed Oil/Glycerin/Ferment Filtrate, Argania Sponosa Kernel Oil

[Volume] 48ml

VIII. Experienced Effect of Benia III

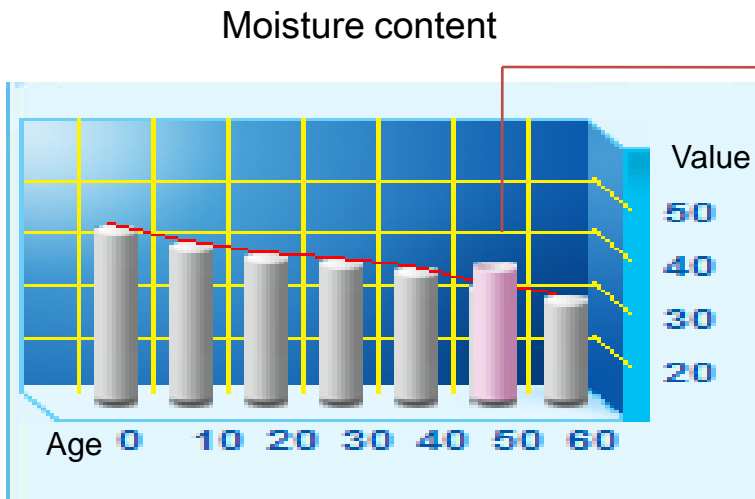
VIII. Experienced effect

User : Women in 50s, applying Benia III for 4 weeks



Value : Measured value for 50s female is close to the average of 20s female

Despite the age of 50, show elasticity close to nearly 20s



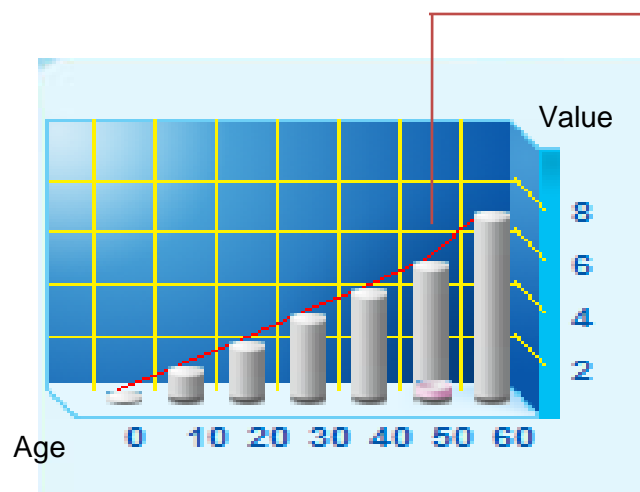
Value : Measured value for 50s female is close to the average 35 of 20s female

Despite the age of 50, show moisture content close to nearly 20s

VIII. Experienced effect

User : Women in 50s, applying Benia III for 4 weeks

Pore size



The pore size of 50s was significantly reduced.

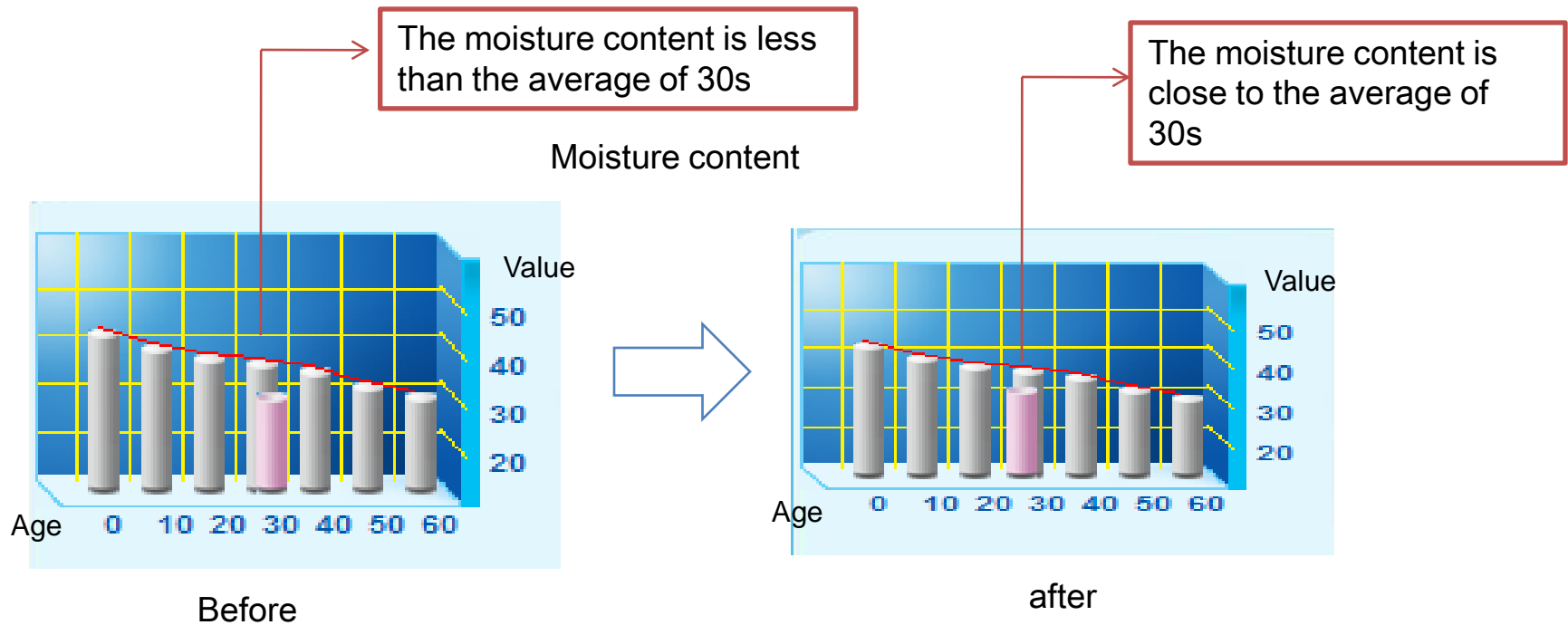
Skin Tone



Dark skin tone have been changed into bright skin tone.

VIII. Experienced effect

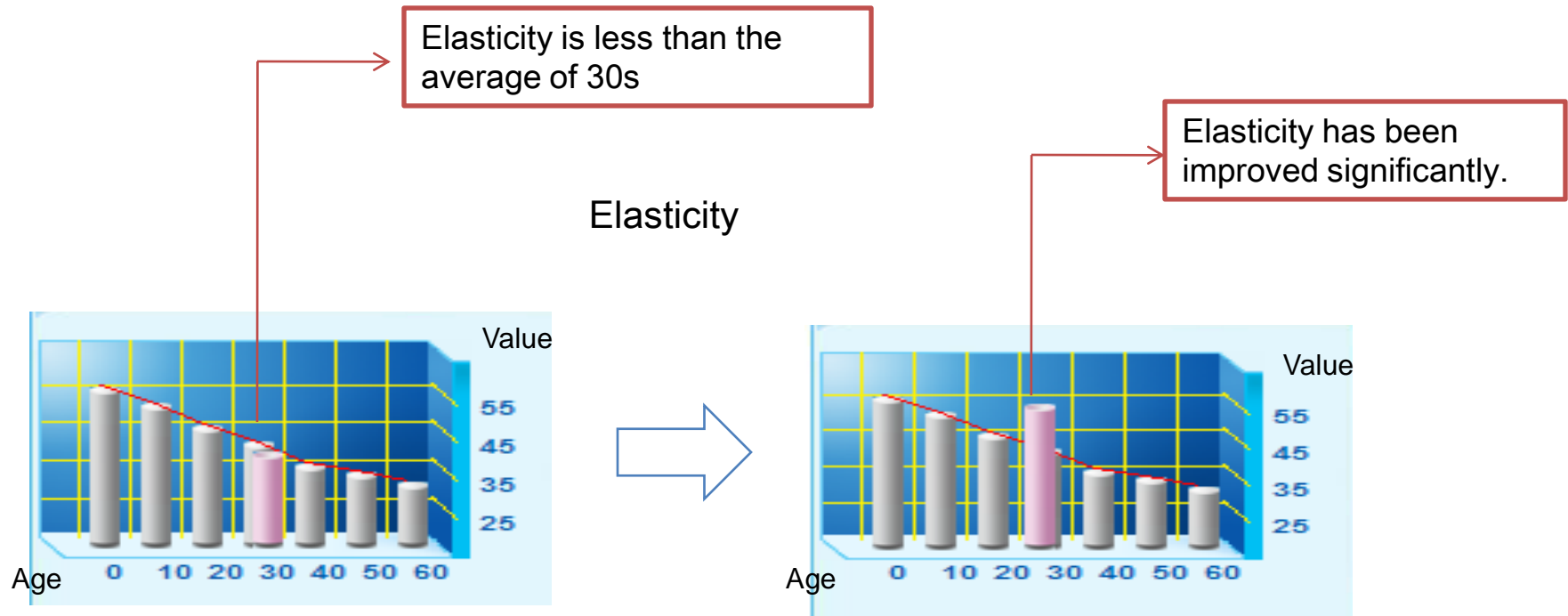
User : Women in 30s, applying Benia III for 4 weeks



Level one step up from dry skin to normal

VIII. Experienced effect

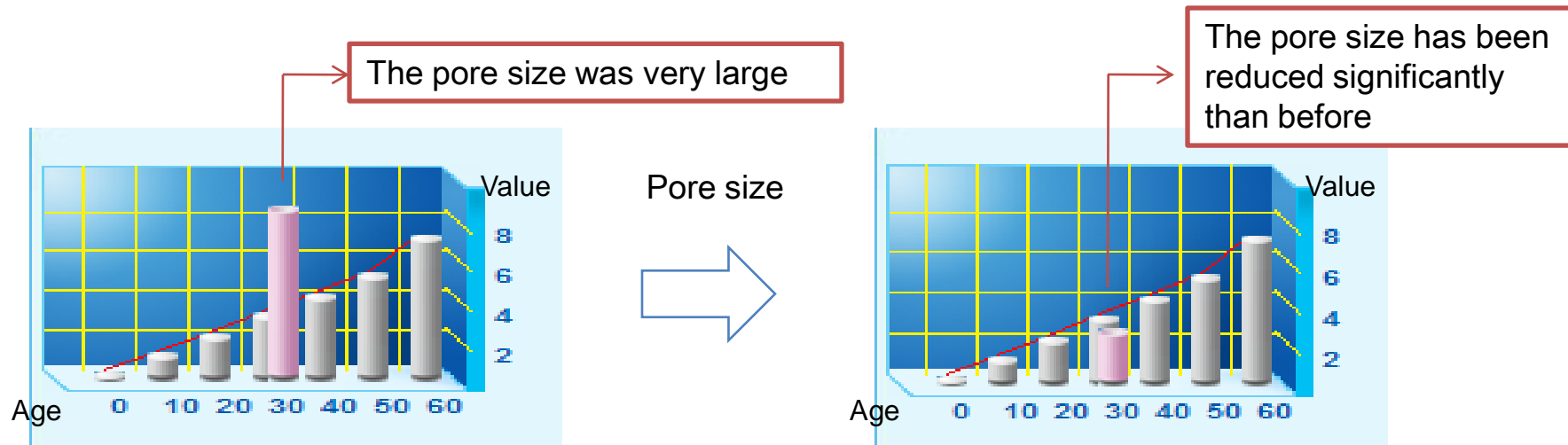
User : Women in 30s, applying Benia III for 4 weeks



Elasticity has been improved with a very large scale.

VIII. Experienced effect

User : Women in 30s, applying Benia III for 4 weeks



The pore size has been reduced significantly than before



Dark skin tone has been changed into bright skin tone.

Skin Health Care Cosmetics



Thank You