

Silky Touch Silky Lifting **Ultra 10**



**3/10 MHz, 1/3MHz Dual
Frequency Crossing Technology**

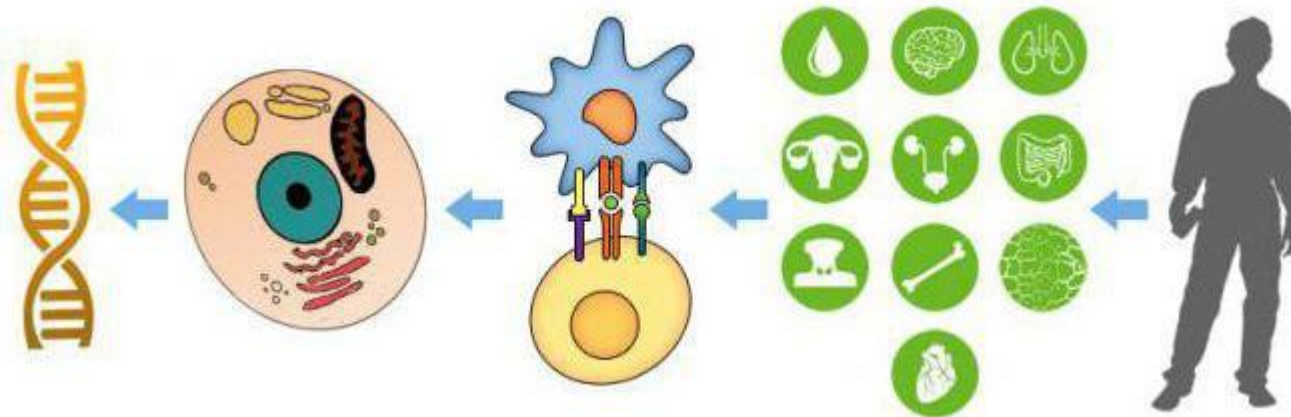
**4Mhz RF for prompt wrinkle
removing effect**

Golden Silky Touch Silky Lifting

What is Ultra 10?

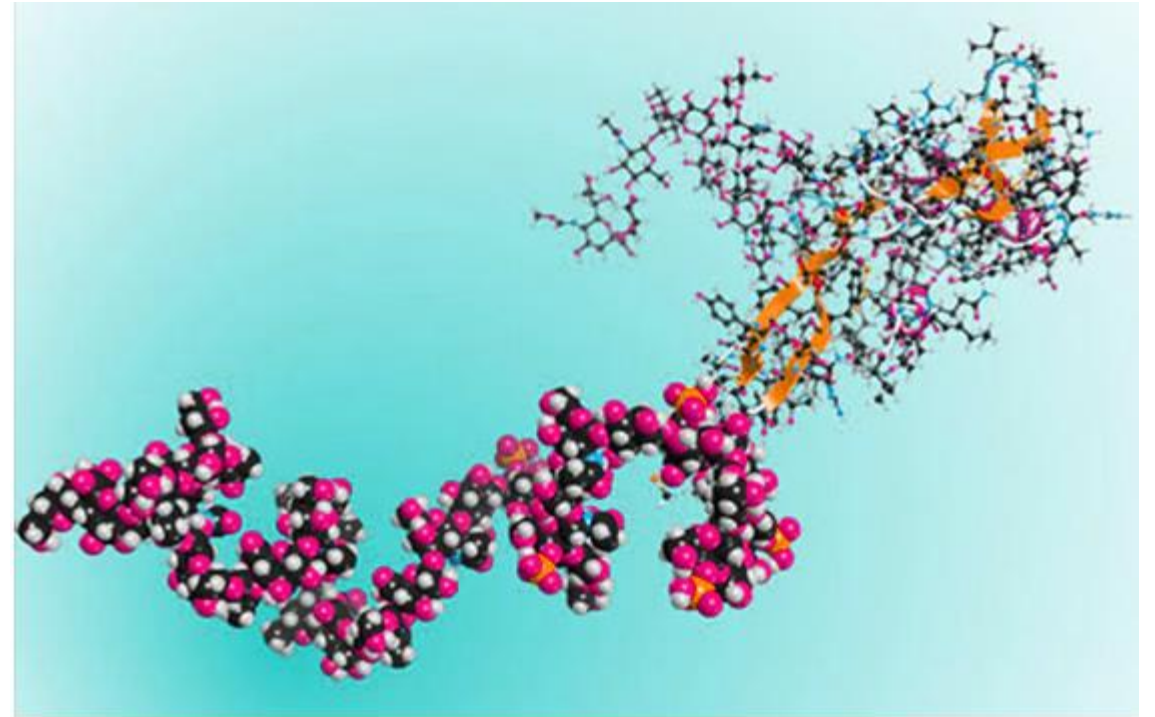
ULTRA 10 is BIO-STIMULATOR

**Stimulates your Biosystem using 10MHz & Dual Frequency
Cross Irradiating ULTRASOUND**



Biopolymer

Biopolymers are polymers that occur in nature.
Carbohydrates and **proteins**, for example, are biopolymers.



Skin aging - Damage of Biopolymer

Skin aging is the damage caused by accumulation of biopolymer what can't be divided any more.

And as human being getting older, the cell ability is lower to recover this damage.



Skin aging - Damage of Biopolymer

Damage of biopolymer – it is caused by various type of physical and chemical cause like diverse type of light irradiation, heat response and toxin etc.

It is knee related

- Unstable **protein**
- Wrong **protein** rearrangement
- **Protein** folding
- Control of regulatory **protein**



**Prevent Damage of Biopolymer and rapidly recover this damage
for ANTI AGING**

PROTEIN CONTROL

Prevent Damage of Biopolymer

CELL ACTIVATION

Rapidly recover this damage



ULTRA 10 IS ABLE TO BOTH ACTIONS

Silky Touch Silky Lifting **Ultra 10**

ULTRA 10 effectively work for both factors

**Save time and
energy by
solving two
things at the
same time
with only one
device**



Silky Touch Silky Lifting **Ultra 10**

ULTRA 10

FOR

INNER
BEAUTY

It is not
just for
skin
surface



Special Positioning with its Special Technology

10

MHz 10million times vibration per sec
inside of skin

Dual Frequencies Ultrasound Cross irradiates

3/10MHz, 1/3MHz

3/10MHz, 1/3MHz

Strong Points

11 Different Preset Programs

Simple Touch to select application

Simple rubbing way

Required short time training and good result is guaranteed regardless operator

Prompt wrinkle removing care

4MHz RF installed what can shows prompt wrinkle removing

Safe enough to care

No side effect found at all

No Pain with Slim Heat Feeling

Accepted as comfortable treatment as wish to take it to all persons

Ultra High Speed 10MHz Ultrasound effect



**F1 car speed: 100 km in only 10 sec.
Speed: 3m / S²**



Strong Energy Supply

**Ultra High Speed Vibration
stimulate cell without skin damage
and irritation**

**No anesthesia required
a slim heat 40 ~ 45°**

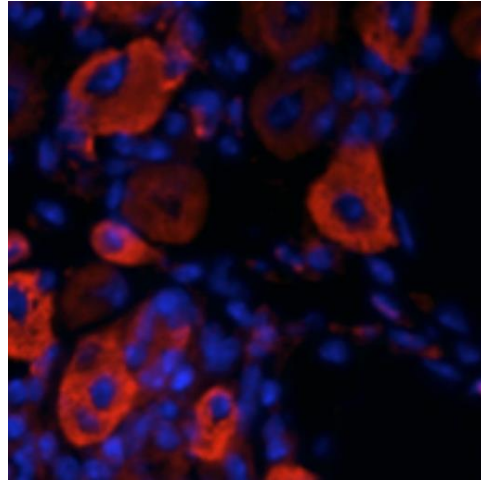
Ultra 10 Speed: 7,250,000m / S²

POWERFUL CELL ACTIVATOR ULTRA 10

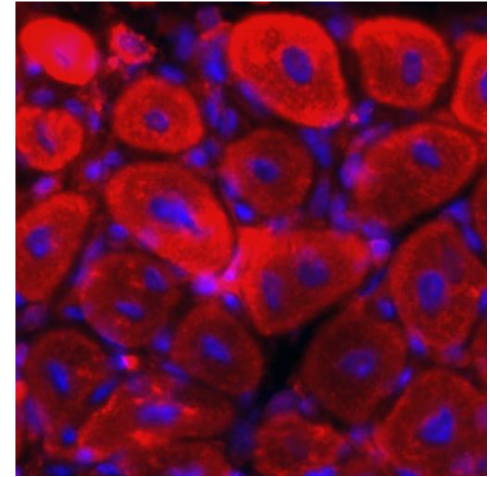
APPLY HIGH
CONCENTRATED
ULTRASOUND
VIBRATION
ENERGY



AGING CELL
: slow movement



Activate Cell Movement
: Like Young Cell



10MHz Ultrasound CELL Massage effect

The 10MHz high frequency wave width is only 1.8nm, smaller than the 5nm thickness of the cell membrane, so it can stimulate the smallest particles inside of cells without pain.

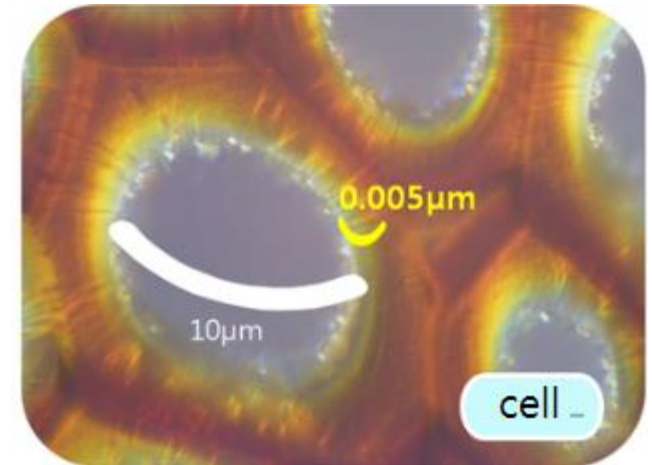
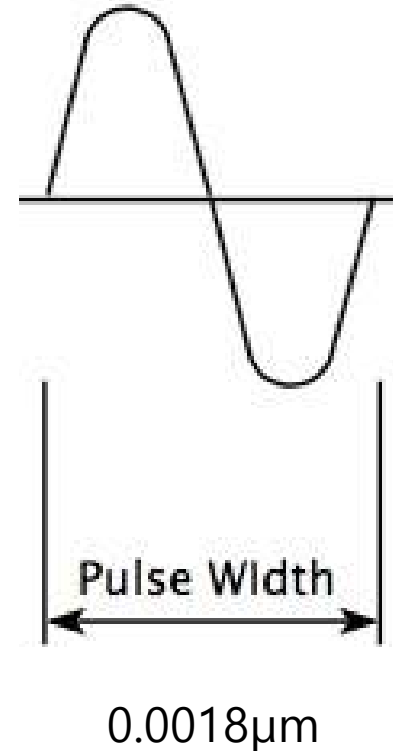
It **increases cytokine, which stimulates fibroblasts to synthesize collagen.**

Cell diameter: $10\mu\text{m}$
Width of Membrane: $0.005\mu\text{m}$
10MHz pulse width: $0.0018\mu\text{m}$



CELL ACTIVATION & CELL REGENERATION

Stimulate smallest particles inside of cells



Increases cytokine, which stimulates fibroblasts to synthesize collagen.

Cytokine is generated



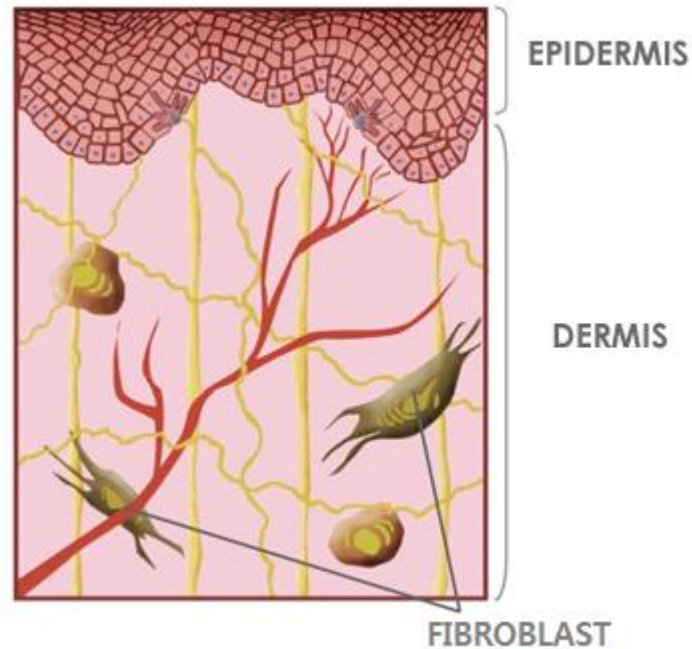
Stimulate fibroblast



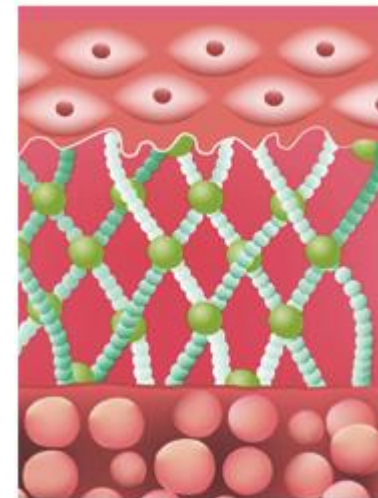
Synthesize collagen



Contraction



- Generate Neo Collagen



**Gradual Lifting effect is continued for around 3 ~6 months
AFTER ULTRA 10 TREATMENT**

Dual Frequencies Ultrasound Cross irradiates 3/10MHz, 1/3MHz

The Dual Frequency Ultrasound Cross irradiates up to 500 times a second.



Its makes special pressure difference



Both frequencies in one program gives stronger effect than a single frequency irradiate



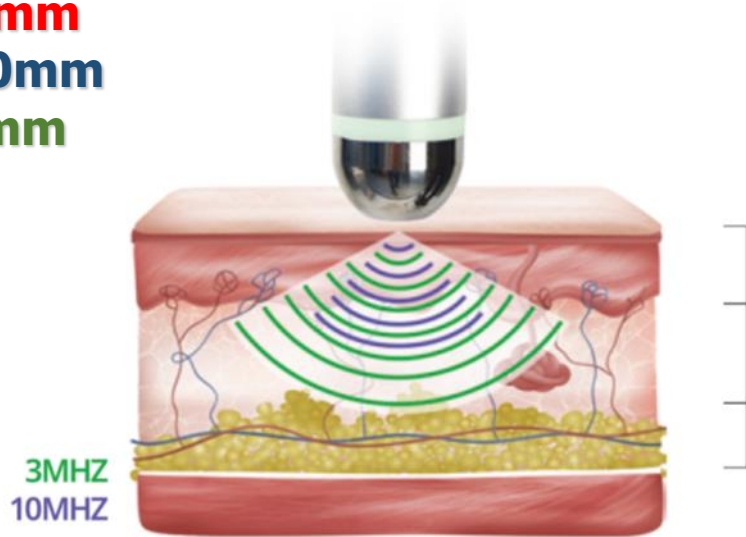
Powerfully activates small particles inside the cell

Dual Frequencies Ultrasound Cross irradiates

Full of skin are **fully, gently, and delicately massaged** with three frequencies. The vibration effect depth is different for each frequency, from 3mm to 30mm, means that **all parts of the skin are reached by the sonic massage**.

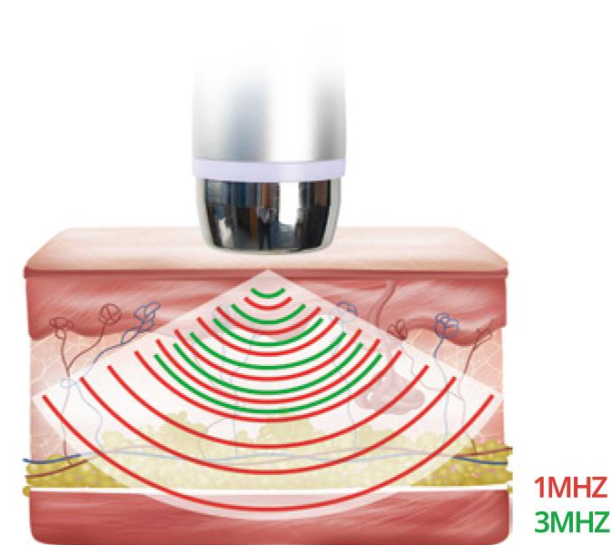
3/10MHz

10MHz- 3mm
3MHz – 10mm
1MHz-30mm



Penetration depth
focusing on the upper skin layer and dermis
3mm to 10mm

1/3MHz



Focusing on deep dermis
10mm to 30mm

3/10MHz Control 3 main factors for Skin Aging

Decrease MMPs

MMPs (Matrix metalloproteinases): remove and clean damaged areas

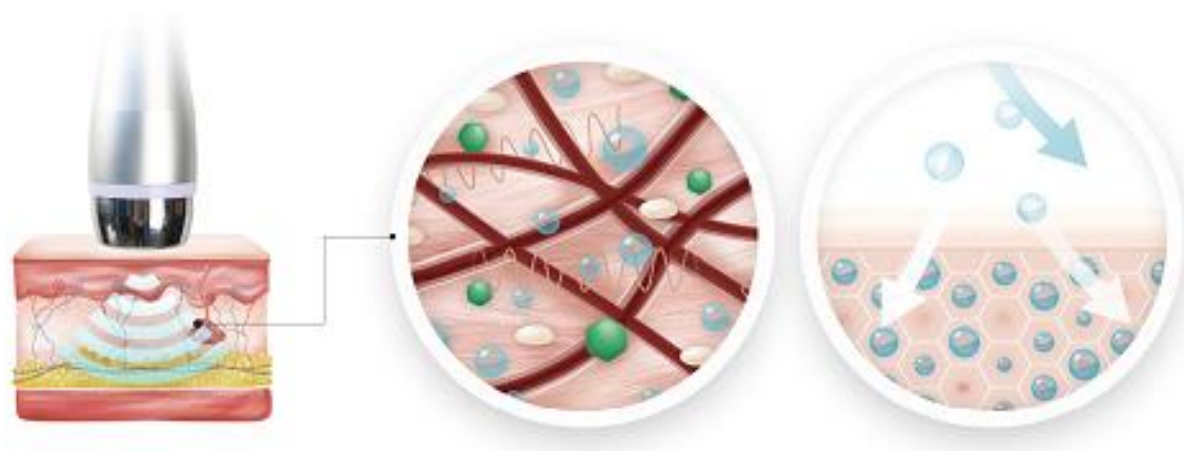
Increase HSPs

HSPs (Heat Shock Proteins): generate new cells at the site prepared by MMPs

Increase GAGs

GAGs (Glycosaminoglycans): attract water to supply moisture to the skin that acts as a lubricant or shock absorber and cement for rebuilding

- Increase –  GAGs  HSPs
- Decrease –  MMPs



MMPs works like Excavator demolish protein, Collagen etc.



HSPs works like constructing building in skin



GAGs works like cement for building



Research indicates that **inhibiting or suppressing elevated MMP enzymes down to normal levels (i.e. levels seen in young adults)** should be a part of **optimal skin rejuvenation strategy**, especially in older individuals.



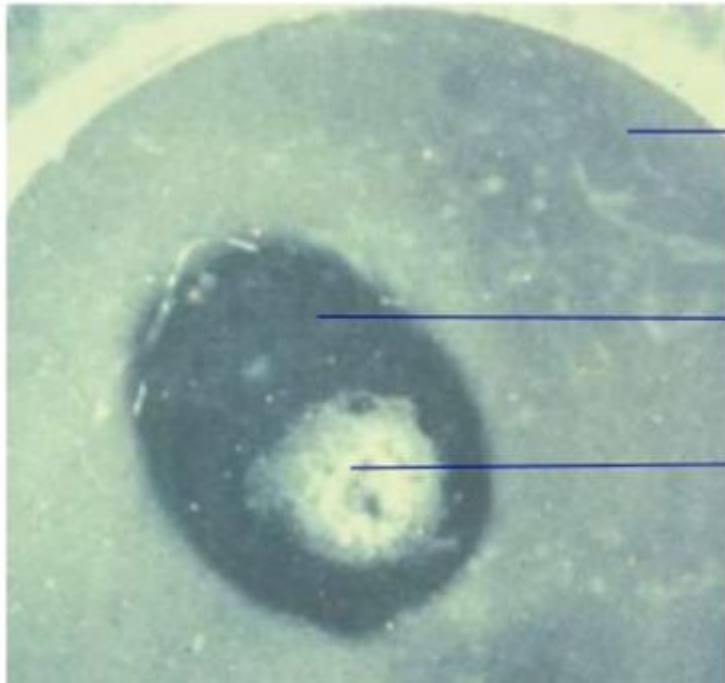
Proteolytic enzymes, Proteases

Collagenases: Destroys collagen and **C**reates wrinkles

Gelatinases: Destroys gelatin and **C**reates wrinkles

Discovery of MMPs

MMPs were discovered, in 1962, by Jerome Gross while studying **the degradation of triple-helical collagen** during the metamorphosis of a tadpole tail.



Collagen gel

Area of clearing

Tad pole tail

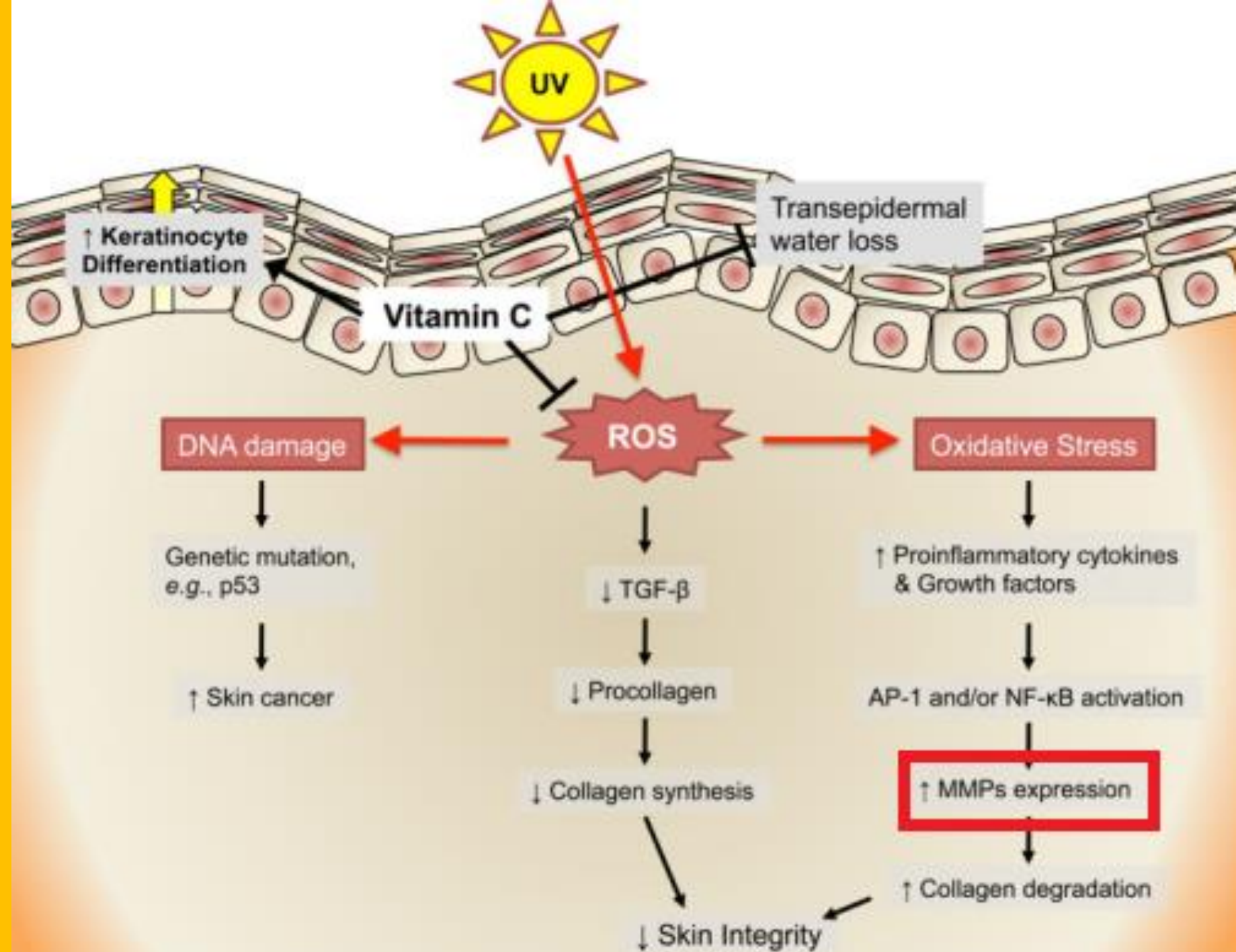


MMPs

- Enzymes whose function is to **break down other proteins** into recyclable fragments
- Enzymes involved in **degradation of proteins** are called as proteases or proteolytic enzymes
- Contribute to the **breakdown of collagen** while **inhibiting new collagen formation**.
- MMP enzymes target key structural skin matrix proteins
- MMP levels tend to increase in the **course of normal aging**. **Additionally, inflammation, irritation and environmental factors may also elevate MMP levels.**
- **MMP-3** may contribute to **vein wall weakness and varicose vein formation** via **excessive degradation of collagen III.**
- **MMP Plays a significant role in weakening the ECM components (elastin, collagen, fibronectin and proteoglycans)**

MMPs

Matrix Metalloproteinases (MMPs) are enzymes activated by UV exposure or inflammation.



MMP enzymes target key structural skin matrix proteins

MMPs contribute to the breakdown of collagen while inhibiting new collagen formation.

MMPS KEY TARGETS

Name	Alternative name	Selected substrates (key targets)
MMP-1	Matrix collagenase (fibroblast collagenase)	<u>Collagens I, II, III, VII and X</u>
MMP-2	Gelatinase A	<u>Gelatins, Collagens I, IV, VII and XI, Fibronectin, Laminin, Elastin</u>
MMP-3	Stromelysin 1	<u>Aggrecan, Gelatin, Fibronectin, Laminin, Collagens III, IV, IX and X</u>
MMP-7	Matrilysin	<u>Aggrecan, Fibronectin</u>
MMP-8	Neutrophil collagenase	<u>Collagens I, II, III, Link protein, Aggrecan</u>
MMP-9	Gelatinase B	<u>Gelatins, Collagens IV, V and XIV</u> Aggrecan, Elastin
MMP-10	Stromelysin 2	Aggrecan
MMP-11	Stromelysin 3	<u>Fibronectin</u>
MMP-12	Metalloelastase (Macrophage)	<u>Elastin</u>
MMP-13	Collagenase 3	<u>Collagens I, II, III</u>
MMP-14	(membrane type)	<u>Collagens I, II and III, Laminin</u>
MMP-18	Collagenase 4	<u>Collagens I</u>

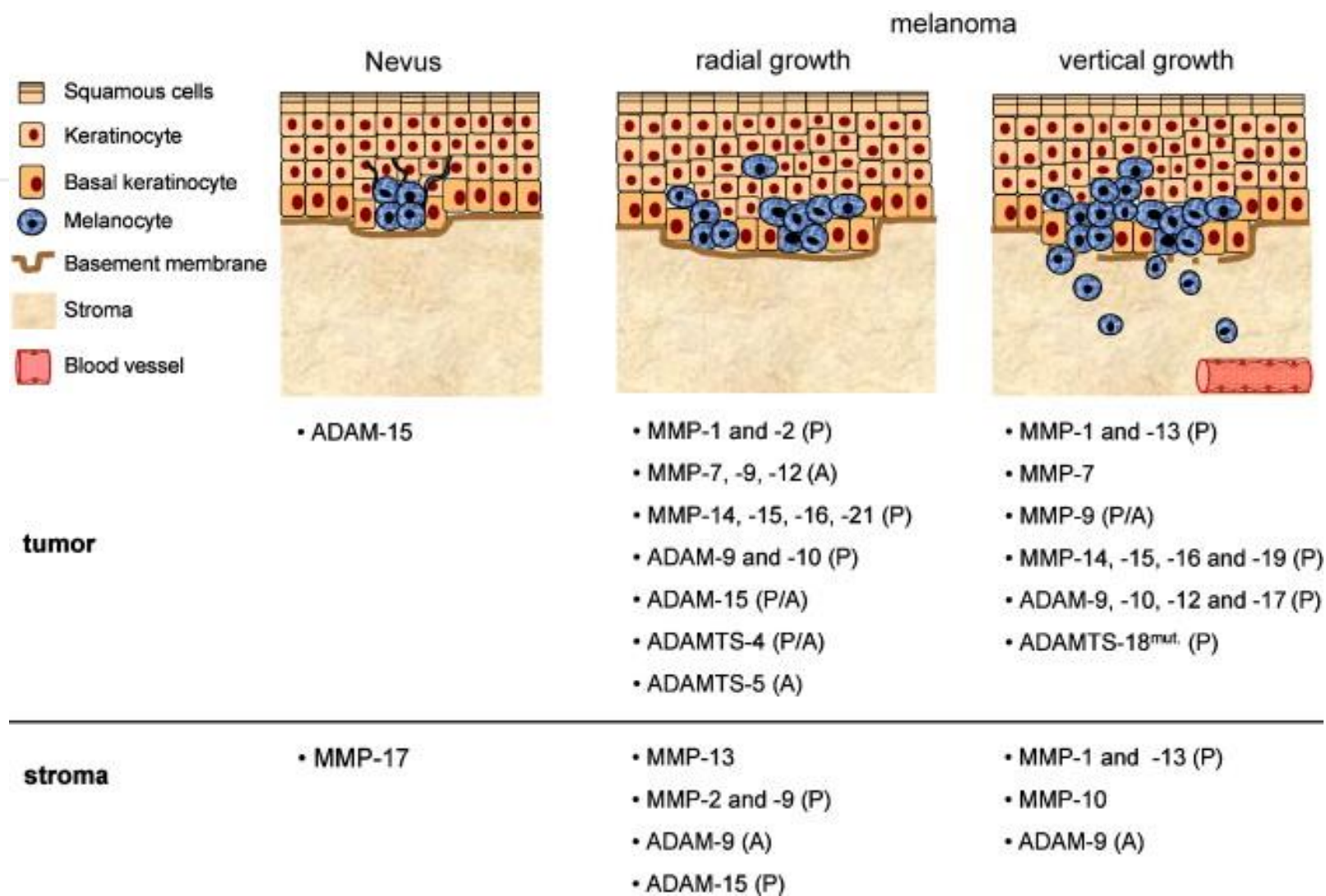
Mini Review

Metalloproteinases in melanoma

Nives Moro, Cornelia Mauch, Paola Zigrino  

 [Show more](#)

<https://doi.org/10.1016/j.ejcb.2014.01.002>



ULTRA 10 DECREASE MMPs Level



What is HSPs?

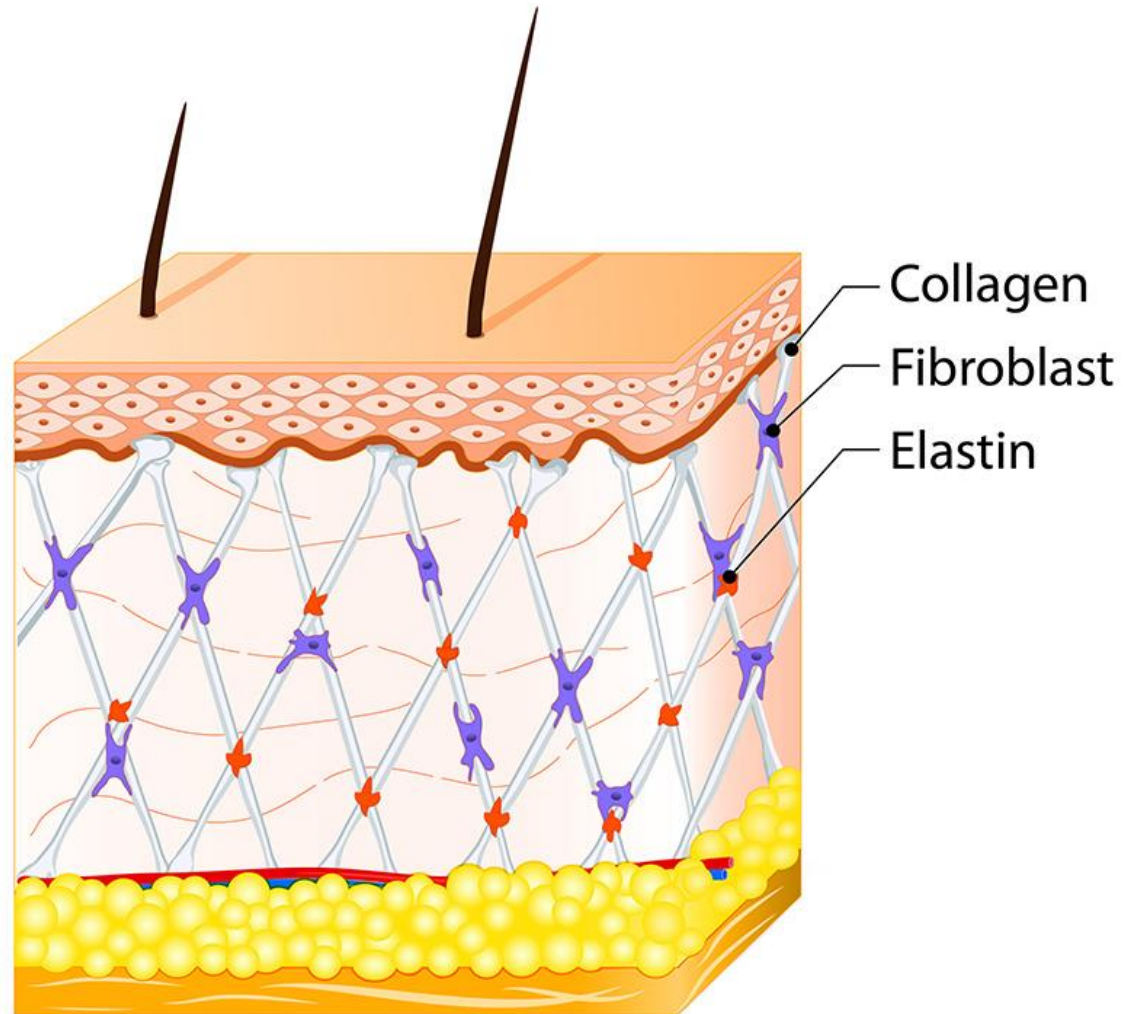
Heat shock proteins (HSP's) are a family of proteins which are created by cells during stressful situations.

These proteins can protect the cells from situations that would normally be lethal.

HSPs prevent Cell Death

HSPs may help prevent diabetes

HSPs generate new cells



HSPs – Heat Shock Proteins

Heat Shock Proteins role is proteostasis

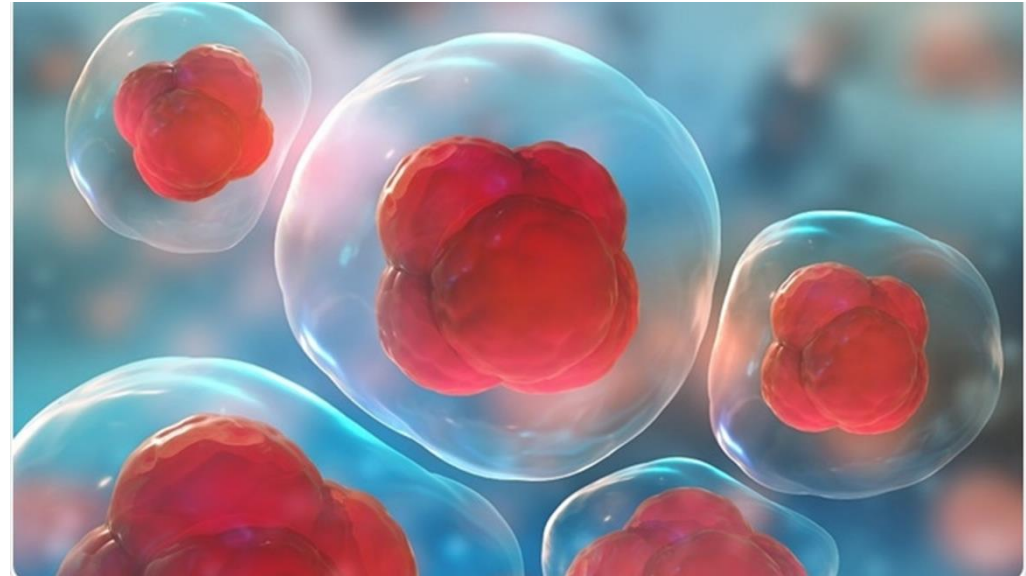
* Proteostasis – Homeostasis of Protein

Homeostasis is keeping steady state so vital phenomenon normally occur



HSPs production declines with age

- **Protein damage** increased by aging is related with HSPs decrease and it brings the partial loss of Protein quality.
- It is found that decrease of HSPs vitality in muscle, nervous tissue, liver of aged.
- For example aged liver can't produce enough HSPs so it can't act against toxin in liver.
- Cells in young animals rapidly alter levels of HSPs.
- Older animals lose the ability to induce HSPs
 - Observed in yeast, worms, flies, and mouse and human cell lines.



Ways that HSP Levels increase

Exercise -> Muscle contraction -> lead HSPs production



Ways that HSP Levels increase

Life Stressors

- Infection
- Inflammation
- UV
- Exposure of the cell toxin
- Starvation
- Water deprivation

But cause of



Ways that HSP Levels increase

Ultrasound induce HSPs vitalization

1MHz

Ultrasound irradiation -> HSPs vitalization **isn't found at all**

3MHz

Ultrasound irradiation -> 24 Hours later, around **9 times**
HSP72 increase



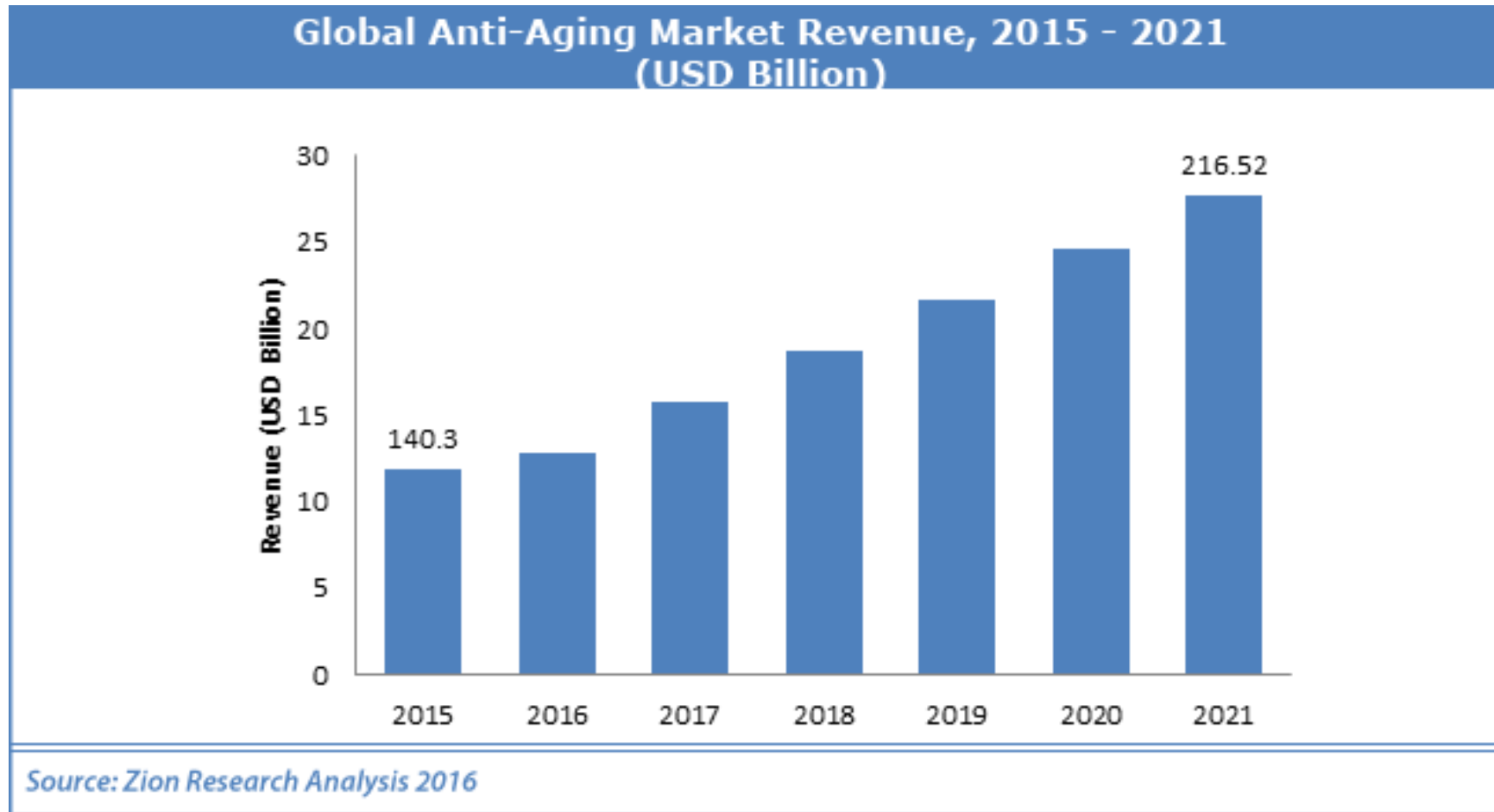
10

Ultrasound irradiation -> 24 Hours later, around **18 times**
HSP72 increase

MHz

HSPs for Antiaging

HSPs is accepted as very important factor for anti-aging market.



Variety usage for ULTRA 10 by increasing HSPs effect

Inflammation, bruise level be lowered by increasing HSPs

- **Very great for pre and post treatment like thread lifting, laser, plastic surgeries etc.**
- **Effective for Acne care, Swelling, Sedation**



10MHz Ultrasound effect



HSPs vitalization with **Ultrasound 10MHz**

long term intensive and lasting effect

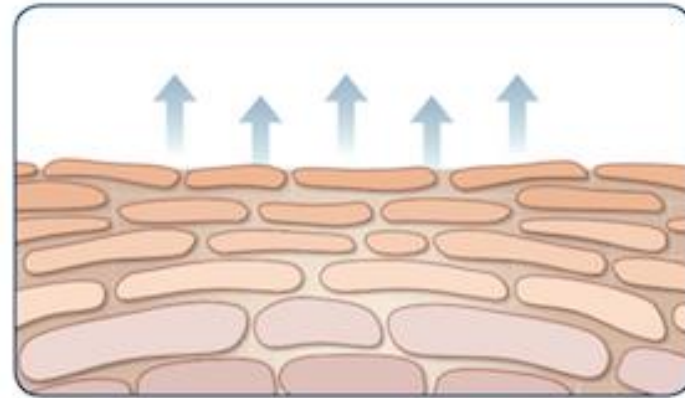
ULTRA 10 increase HSPs Level



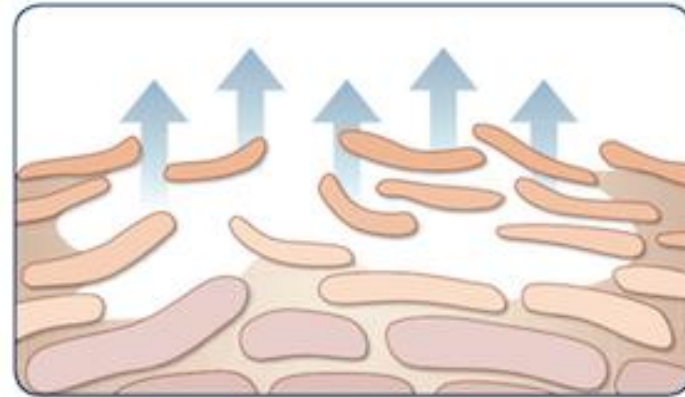
Dry skin looks older



Moisture is main factor for skin beauty, health and aging



Healthy skin, showing normal moisture loss



Dry skin, showing increased moisture loss

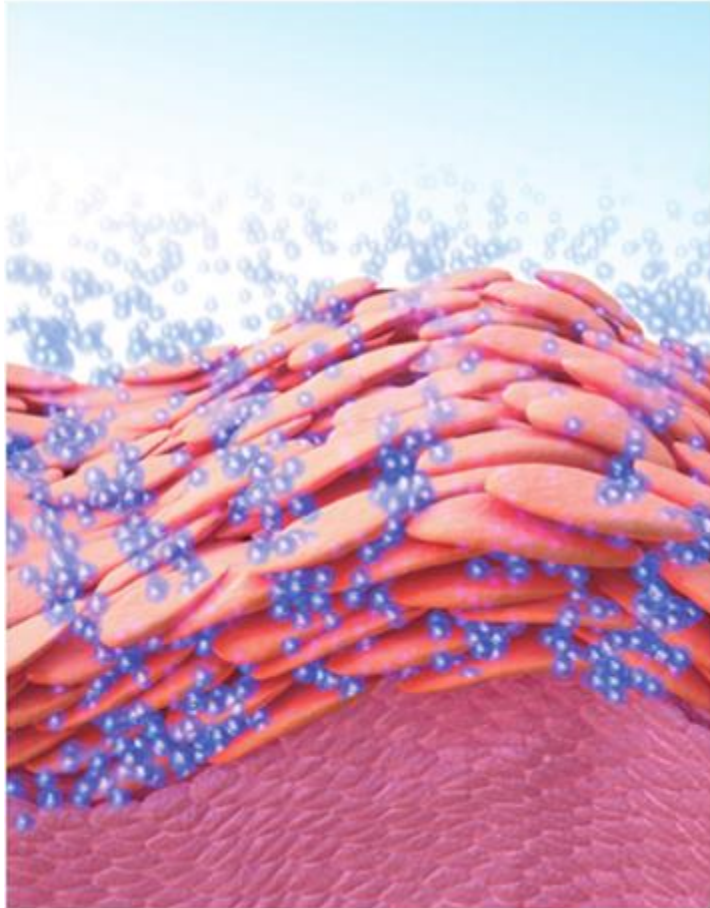
- ▶ biological ageing
- ▶ climate/weather conditions
- ▶ hormonal changes
- ▶ genetic predisposition
- ▶ illness
- ▶ medical treatment
- ▶ nutrition
- ▶ hygiene habits

Skin Hydration

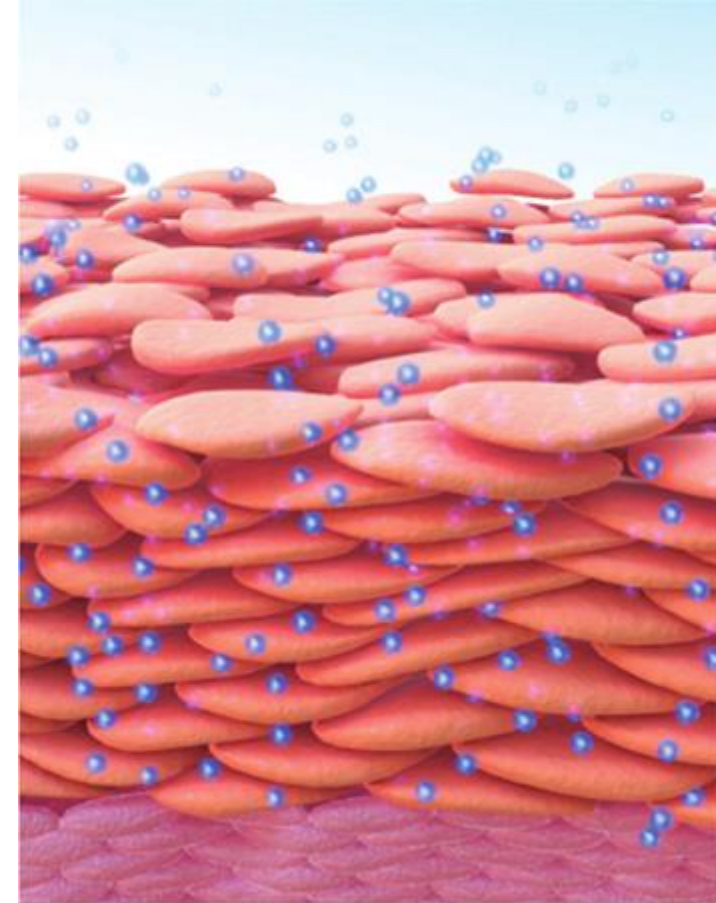
Hydration can help to plump the skin and help it look younger



GAGS decrease by aging



Aging

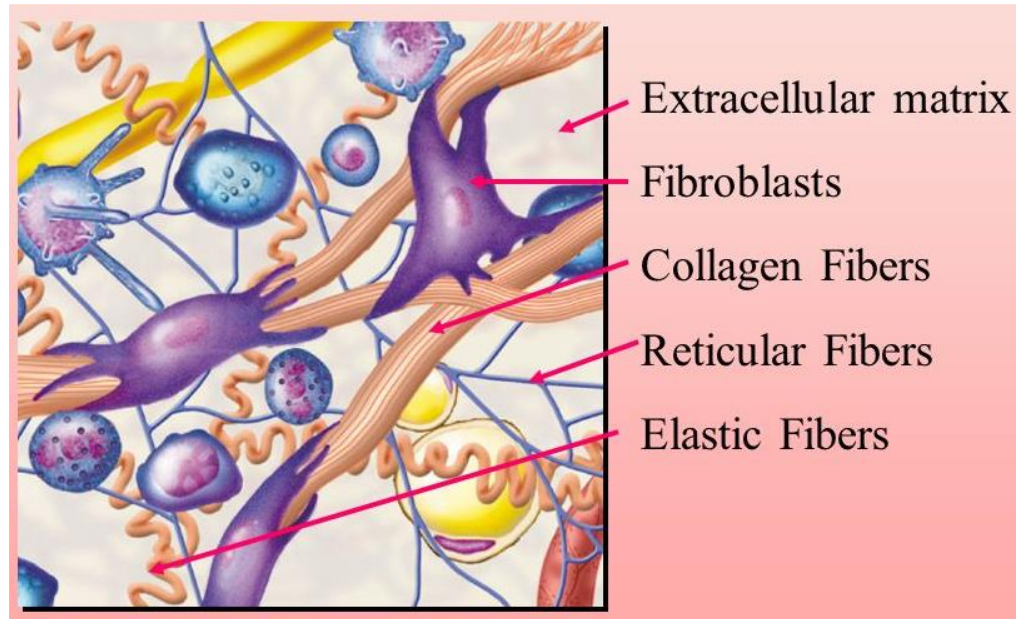


Young skin: equal distribution of GAG especially GAG level is high in stratum corneum -> Moist SKIN

Aged skin: unequal distribution of GAG especially GAG level lowered in stratum corneum -> Dry SKIN

GAGS functions for anti-aging

- GAGs have been shown in many studies to be effective in **anti-aging formulas**.
- By **supporting and enhancing the connective tissue matrix**, it helps with **anti-aging** as well as **wound healing**.



<connective tissue matrix>

- The extracellular matrix involves collagen and since **GAGs help rebuild that, they help repair collagen** and **maintain the structure of the skin**.

GAGS

Glycosaminoglycans (GAGs) Glycosaminoglycans, known as GAGs, are polysaccharides that exist naturally in the dermis of the skin as natural moisture factors that bind **nearly 1000 times their weight in water**. The most commonly known **GAGs are hyaluronic acid**.



Way to increase Hyaluronic acid



Hyaluronic acid filler



Hyaluronic acid for Injector
for Moisture Luminant skin

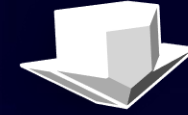


Hyaluronic acid pill

3/10MHz Ultrasound effect



10MHz NANO CELL MASSAGE EFFECT



Increase and relocate Hyaluronic acid

Evenly distribute enough GAGs inside of tissue, induce moisture balance so it keep skin moisturized by arranging of moisture all over of skin layer

ULTRA 10 increase GAGs Level



Body CARE – 3/1MHz

Ultrasound waves that **penetrate** the adipose tissue and produce temperature and pressure changes between adipocytes

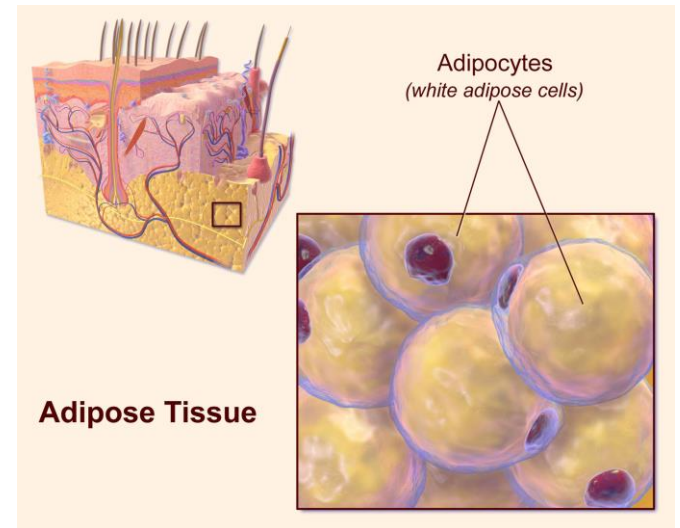


The ultrasound waves can increase the **blood flow** to the treated area -> Increase Oxygen what burns fat



Stimulate **cell metabolism** and **break down body fats** faster -> Facilitating effective drainage

1MHz/3MHz dual frequencies **high energy move muscle** -> Tightening effect



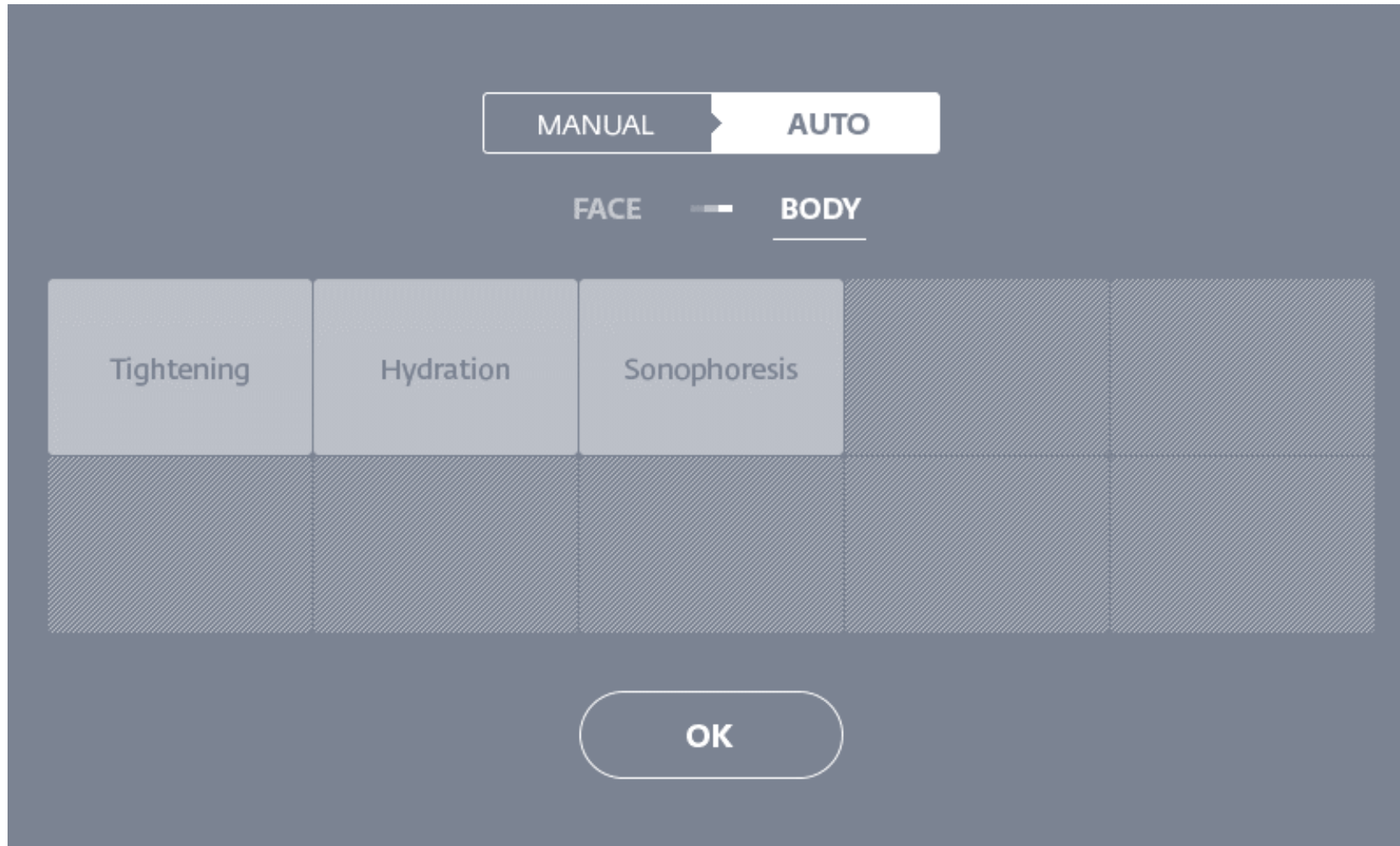
FACE CARE

8 kinds of FACE CARE program is presented



BODY CARE

3 kinds of BODY CARE program is presented



4MHz RF care – wrinkle focused

4MHz high frequency generate diathermy heat in a short time

Electrode is designed for safe and convenient treatment for high sensitive narrow area like upper and lower eyelid, crow's feet

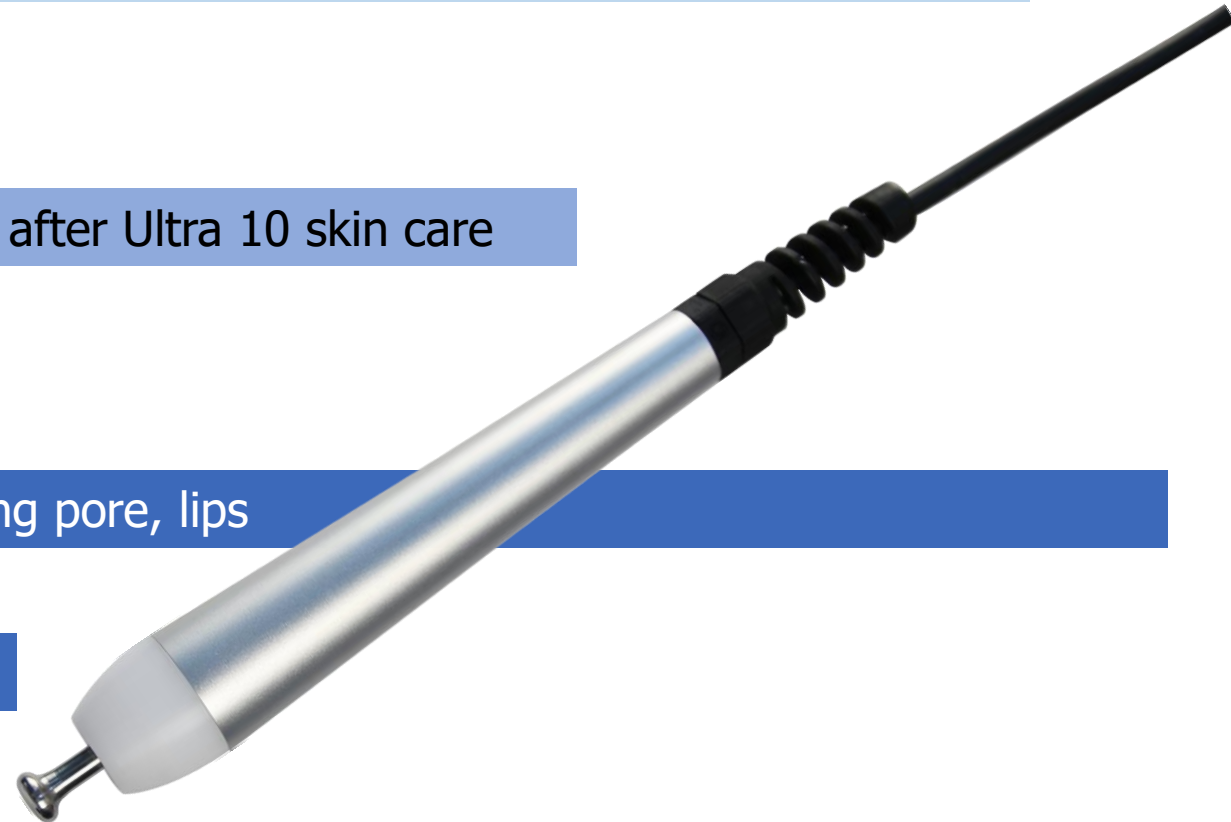
There is no limit of shot, Handpiece can be reusable

Powerful Synergy effect by treating 10 to 20 min. treatment after Ultra 10 skin care

Prompt elasticity increasing, wrinkle reducing effect

Treatment area: focusing on around of eyes, perioral, sagging pore, lips

Economical



Silky Touch Silky Lifting **Ultra 10**

How 4MHz RF works for wrinkle removing?



Old and disarranged collagen in dermis make wrinkle on the skin



4MHz High Frequency RF very extremely quickly increase heat to 39°C to 45°C



1'st Prompt skin firm effect
2'nd New Collagen and Elastin are generate

4MHz – Pelleve

Pelleve from Cynosure (developed by Ellman)

End user price – around USD40,000

Hand Piece(USD450 ~ USD500 – 10 persons) is consumable – Hand Piece life is depleted while energy is flowing to the skin

Operating cost – USD1,400 to USD2,000 for 3 sessions



Simple Rubbing type – Simple Operating



Ultra 10 Before & After

After 8 sessions



50 years old Women

Ultra 10 Before & After

After 8 sessions



50 years old Women

Ultra 10 Before & After

After 6 sessions



52 years old Women

Ultra 10 Before & After

After 6 sessions



52 years old Women

Ultra 10 Before & After

After 5 sessions



51 years old man