

cellpod<sup>®</sup>  
Galvanic  
LED  
Booster



cellpod is a beauty device brand by Ecowell, designed to make aesthetic care easily accessible at home.



It's different when cellpod makes it

cellpod is the beauty device brand of Ecowell Co., Ltd. a research-oriented company specializing in skin technology. We have developed technologies to address customers' skin concerns through systematic research and innovation led by various experts with doctoral degrees.

With our expertise and technological prowess, we not only offer solutions under the cellpod brand but also provide customized solutions for industry partners to implement their own specialized beauty devices.

Through collaboration with industry partners, we aim to grow together and provide optimized skincare solutions to a broader range of customers.

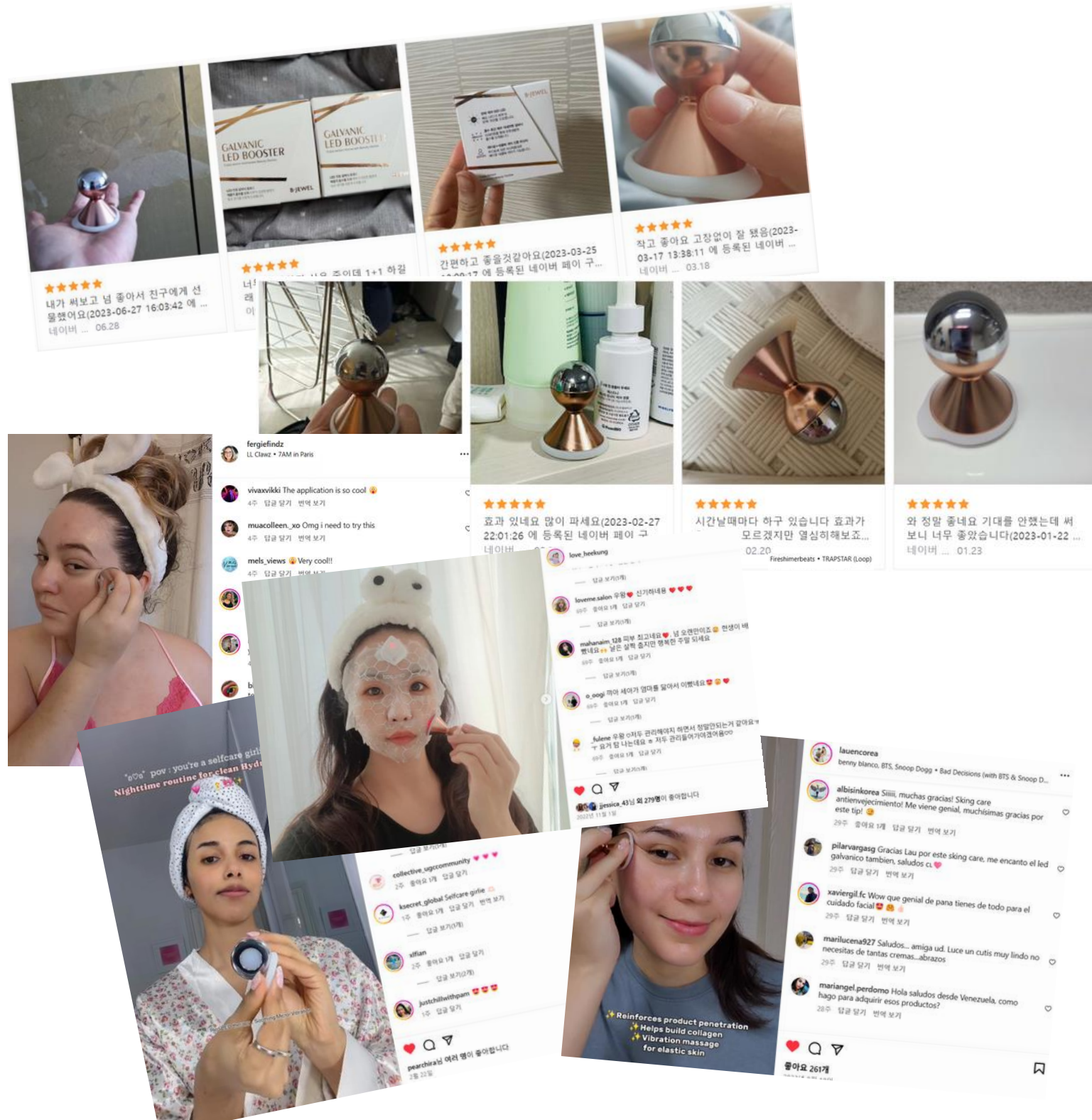




# For Those Who

- ✓ Individuals who have not seen results from professional facial care.
- ✓ Those with sensitive skin struggling to use various cosmetics.
- ✓ Individuals looking to easily manage their skin at home.
- ✓ Those in search of a user-friendly microcurrent device.
- ✓ Anyone desiring convenient skin care without professional treatment.
- ✓ Those wanting to maintain their skin care routine while traveling.

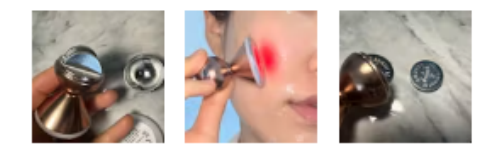
# Internationally recognized smart Kbeauty device



★★★★★  
Ellakim Verified

Verified by Judge.me 02/23/2024

My skin has gotten a lot better  
After using this, my skin got very moist. It's a product that increases the absorption of ampoules. It's really good



★★★★★  
Kenzie Verified

Love! Sooo Good and relaxing!

★★★★★  
GlamamamaB Verified

Superb results

I have been really impressed with this Galvanic LED Booster. It's easy and makes a real difference when I use it daily. It's comfortable to use and I like the visible results that I see.



**The Galvanic LED Booster aids in enhancing skin absorption and brightening the complexion. It is easy to apply to the face and neck, offering a comfortable 3-minute use. A downside is its reliance on non-rechargeable batteries, yet it remains overall effective.**

★★★★★  
Pattil Verified

Relaxing

This Galvanic LED Booster beauty device feels amazing on my skin. It helps your skincare products absorb better and it helps to revive & brighten the skin. It is very easy to use, apply an adequate amount of serum or cream on your skin and gently glide the device across your skin. This device can be used on the face (avoiding eyelids), neck & decollete. I use it for about 3 minutes at a time and it is very relaxing. The only con I have for this product is that it does take button cell batteries (not a deal breaker). I would prefer it to be rechargeable. Overall, this is a nice little, powerful device!



**This product is designed for use with serum to provide a soothing massage, offering users ease into relaxation. It's efficient, easy to use, and enhances skin elasticity. Users love this product and plan to continue using it.**

★★★★★  
S. Verified

Relaxes Me!

I have been using this with my serums for my night routine. Every time i am finished I am so relaxed that i fall fast asleep! For someone who suffers from insomnia this has been the best thing ever!  
This is very easy to use, i wish it had more power but it works great and my skin looks like it is starting to plump up. I will continue using this in my routine i am loving it.

★★★★★  
J. Verified

Works great and portable!

I have both Galvanic LED devices, this one is great for on the go! So easy to use and you can use any of your favorite products and make them more

01/30/2024

01/24/2024

01/16/2024

01/11/2024

01/08/2024



# 4-in-1 Skincare Solution

Galvanic, Near-Infrared (NIR),  
Micro-Vibration, RED LED



## Up to 6 Times Increased Absorption of Active Ingredients



### Galvanic

Boosting the Penetration  
of Active Ingredients in  
Essence



### Micro-Vibration

Enhancement of Skin Blood  
Circulation and Improvement  
of Lymphatic Drainage



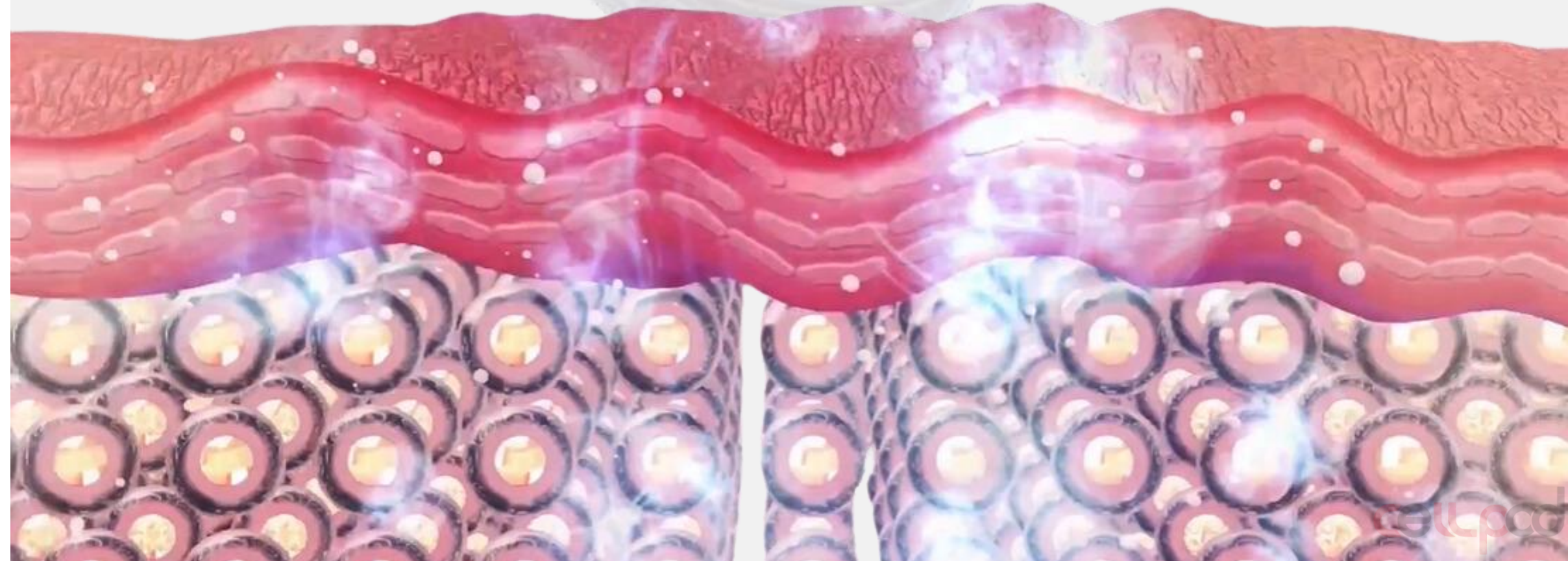
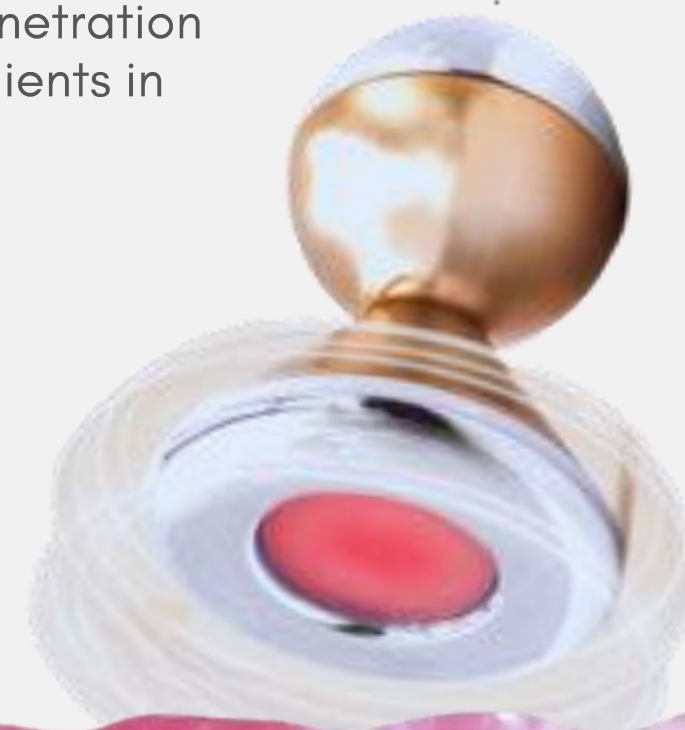
### Red LED

Collagen-Boosting  
Red Light Source  
(630~660 nm)



### Near-Infrared

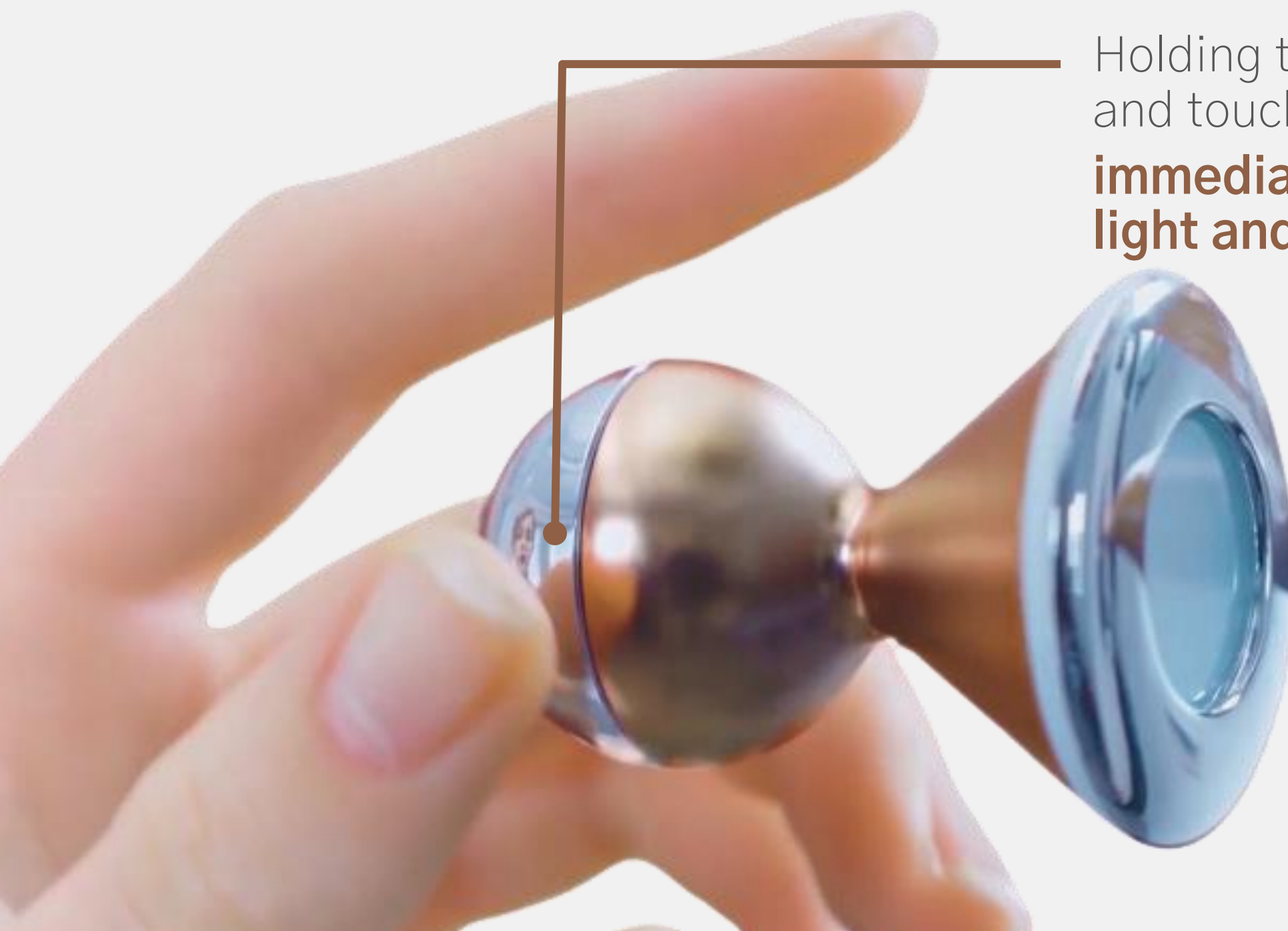
Warmth-Induced  
Regeneration Enhancement  
(850 nm)



# COMPACT & SMART CARE

A compact size that easily fits in one hand, offering ultimate convenience. (51mm\*38mm)

Delivers Galvanic, LED, and Micro-Vibration technologies instantly upon skin contact for rejuvenation.



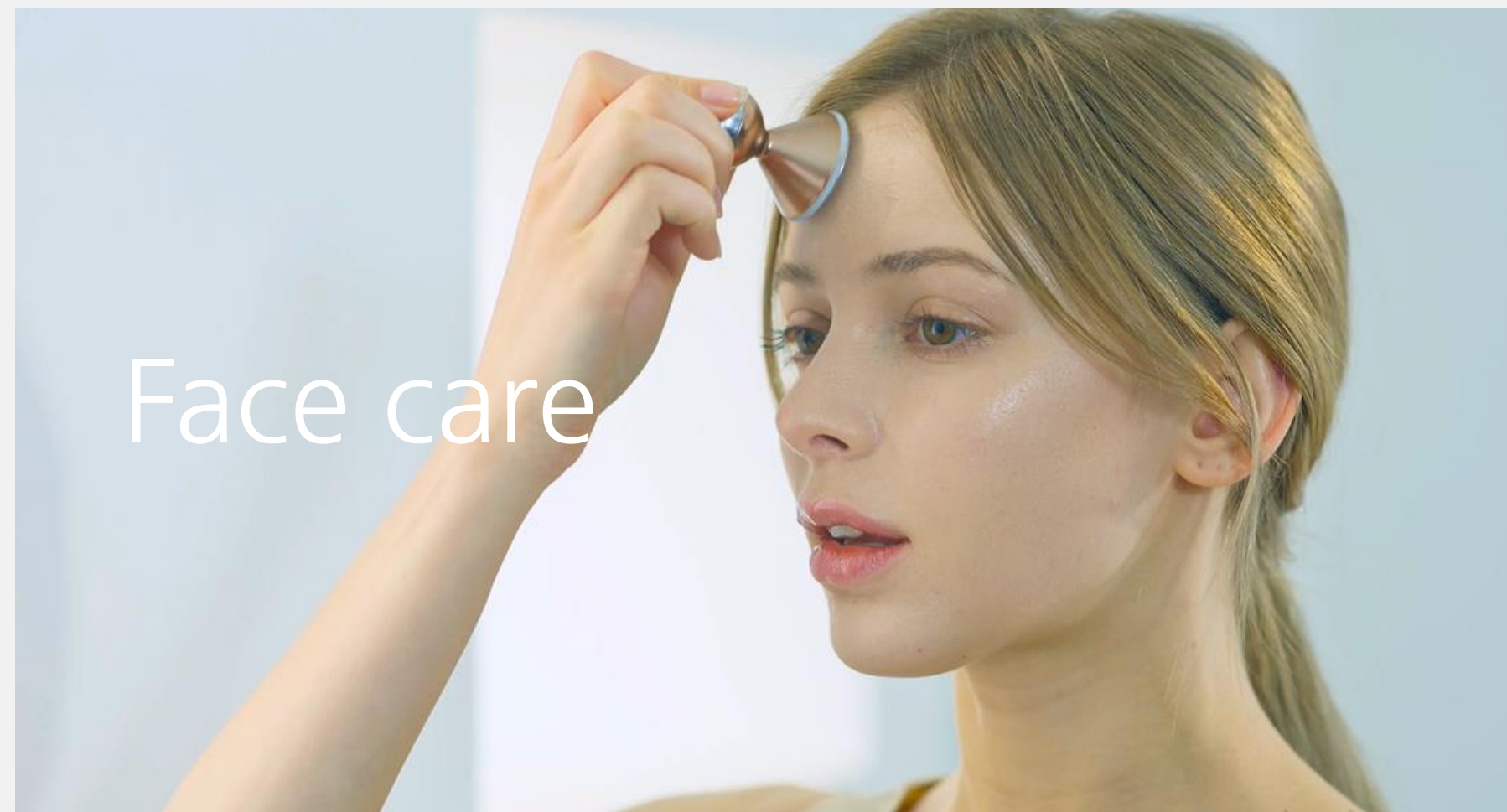
Holding the skin contact electrode  
and touching it to the skin

**immediately activates the LED  
light and begins operation.**



# ALL-AROUND SKINCARE

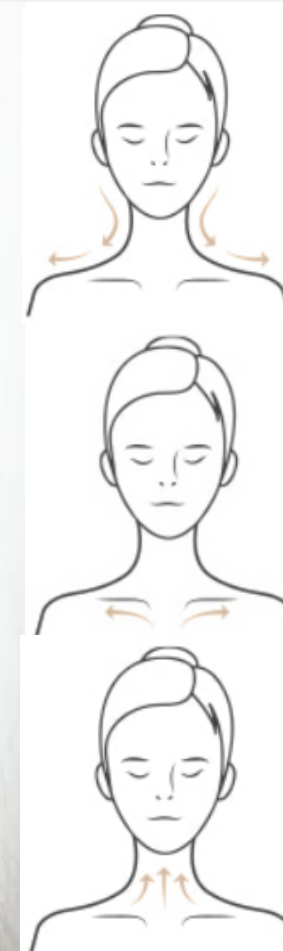
Simple application to any area instantly provides comprehensive, all-around skincare.



Face care



Neck care



# VITAMIN C-INFUSED SKINCARE PRODUCTS + GALVANIC

- 원 저 -

대한피부과학회지 2001;39(12) : 1356-1363

## 기미에서 glycolic acid 화학박피술과 비타민 C 이온영동법의 치료 효과에 대한 비교 연구

연세대학교 의과대학 피부과학교실, 숙명여자대학교 약학대학\*

김 산 · 오승열\* · 이승현

=Abstract=

### Comparative Study of Glycolic Acid Peeling vs. Vitamin C-iontophoresis in Melasma

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Sookmyung Women's University, College of Pharmacy\* Seoul, Korea

**Background :** Glycolic acid has become popular and could provide an alternative choice to the current depigmenting agent. Vitamin C has been known as strong reducing agent and is supposed to retard synthesis of melanin pigment. Iontophoresis is emerging technologies capable of enhancing drug penetration through stratum corneum. Iontophoretic drug delivery may be easier following the chemical enhancer pretreatment

**Objective :** We evaluated the efficacy of vitamin C-iontophoresis and glycolic acid peeling for melasma.

**Methods :** 34 patients with facial melasma were treated with 30% glycolic acid peeling or vitamin C-iontophoresis or 30% glycolic acid peeling combined with vitamin C-iontophoresis. The treatment was performed weekly for a period of 12 weeks. Iontophoresis was performed for 6 minutes under a constant direct current of 0.3-1.0 mA/cm<sup>2</sup>. The exposure time for glycolic acid were 2 minutes. Before and after 12 weeks treatment, the state of melasma was documented using by the modified version of Melasma Area and Severity Index(mMASI) and Mexameter MX16®.

We also measured vitamin C2-phosphate flux by in vitro iontophoresor and HPLC assay.

**Results :** The mean scores of both mMASI and Mexameter MX16® after 12-week treatment were lower than those of baseline in all groups( $p < 0.05$ ).

Increasing vitamin C2-Phosphate concentration and increasing current density correlated with larger flux, and the flux in the first 40 minutes of the experiment appeared to be constantly larger than the steady-state flux during the period of the rest of the experiment, regardless of the current density. Pretreatment by peeling with glycolic acid did not significantly affect the vitamin C2-Phosphate flux through normal skin *in vitro*.

**Conclusion :** Pretreatment by peeling with glycolic acid did not have a major impact on the vitamin C2-Phosphate flux in melasma patient. (Korean J Dermatol 2001;39(12) : 1356-1363)

**Key Words :** Melasma, Glycolic acid peeling, Vitamin C-iontophoresis, Vitamin C2-Phosphate flux

### 서 론

기미는 햇빛 노출부위에 생기는 후천성 과색소침착을 특징으로 하는 질환으로 아직까지 확실한 치료방법은 확립되지 않은 상태다. 현재 이용되는 치료에는 표백 크림,

<접수 2001년 11월 14일>

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영동세브란스병원 피부과

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3. 기미환자의 치료그룹간 비교에서 glycolic acid 화학박피술과 비타민-C 이온영동법 병용이 치료전후 값차이 평균값이 가장 크게 나타났으나 통계학적으로 유의하지 않았다( $p > 0.05$ )(Table 2).

4. 정상 인체표피에서 시험관내 비타민-C 이온영동법과 HPLC를 이용한 Vitamin C2-phosphate의 경표피 투과속도 측정에서 Vitamin C2-Phosphate의 농도가 증가할수록, 전류세기가 클수록 경표피 투과속도가 증가하였고, 모든 전류세기에서 실험 시작 초반 40분동안의 경표피 투과속도가 그 이후의 steady-state 투과속도보다 크게 나타났다(Fig. 3.4).

5. Glycolic acid 전처리 유무는 Vitamin C2-Phosphate의 경표피 투과속도 변화에 큰 영향을 미치지 못하였다(Fig 5).

As the concentration of vitamin increased, along with higher current intensity, the transdermal penetration rate also increased.



# RESEARCH PAPER ON THE EFFICACY OF KEY FEATURES

## GALVANIC THERAPY

After 8 weeks, the iontophoresis group showed superior improvements in pore tightening, skin elasticity, moisture replenishment, wrinkles, and melanin levels.

## RED LED

LEDs with a 660nm wavelength are safe and effective for collagen enhancement.

## VIBRATING MASSAGE

In the massage process, higher levels of proteins such as decorin, fibrillin, tropoelastin, and procollagen-1 were induced.

## NIR (NEAR INFRARED)

Combination therapy results showed that 630nm and 850nm LED exhibited excellent ability to induce collagen production.

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DOI: 10.1111/jocd.14702

ORIGINAL ARTICLE

### Efficacy of handheld iontophoresis device in enhancing transdermal vitamin C delivery: A split-face clinical trial

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Department of Dermatology, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand

**Abstract**  
**Background:** The stratum corneum of the epidermis is the principal barrier in topical drug delivery. Currently, iontophoresis is incorporated in dermatology management to increase transdermal drug delivery.  
**Objective:** To evaluate the efficacy and safety of handheld iontophoresis device in enhancing transdermal vitamin C delivery.  
**Methods:** This was a prospective split-face clinical trial with a total of 24 subjects, who presented with photoaging skin. All subjects were treated with the handheld iontophoresis device on the left side of their face, twice a week for 8 weeks. Primary outcomes were the improvement in pore tightening and skin hydration. Evaluations were done at baseline, 2-, 4-, 6-, and 8-week follow-up. Subjects' self-improvement scores and adverse reactions were also recorded.  
**Results:** Out of 24 subjects, 17 (70.8%) completed the study protocol. Pore tightening in the iontophoresis group had significant improvement at 2- and 8-week follow-up when compared to the baseline ( $p = 0.019$  and  $0.026$ ). Skin hydration on the iontophoresis group improved significantly at 4-week follow-up when compared to the baseline ( $p = 0.024$ ). In the iontophoresis group, an image of the skin captured using Visioscan® showed improvement of skin texture and pore tightening at 8-week follow-up. Majority of the subjects in the iontophoresis group scored good improvement at 2-, 4-, and 6-week follow-up (41.7%, 29.2%, and 45.8%) when compared to the baseline. No adverse reactions were recorded.  
**Conclusion:** The handheld iontophoresis device is safe and can be used as an adjunctive home treatment in enhancing transdermal vitamin C delivery.

Source: Yan, Chadakan & Ng, Janice. (2022). Efficacy of handheld iontophoresis device in enhancing transdermal vitamin C delivery: A split-face clinical trial. *Journal of Cosmetic Dermatology*, 21. 10.1111/jocd.14702.

ORIGINAL ARTICLE

### Regulation of Skin Collagen Metabolism *In Vitro* Using a Pulsed 660 nm LED Light Source: Clinical Correlation with a Single-Blinded Study

Daniel Barolet<sup>1,2</sup>, Charles J. Roberge<sup>3</sup>, François A. Auger<sup>3,4</sup>, Annie Boucher<sup>1</sup> and Lucie Germain<sup>3,4</sup>

It has been reported that skin aging is associated with a downregulation in collagen synthesis and an elevation in matrix metalloproteinase (MMP) expression. This study investigated the potential of light-emitting diode (LED) treatments with a 660 nm sequentially pulsed illumination formula in the photobiomodulation of these molecules. Histological and biochemical changes were first evaluated in a tissue-engineered Human Reconstructed Skin (HRS) model after 11 sham or LED light treatments. LED effects were then assessed in aged-photoaged individuals in a split-face single-blinded study. Results yielded a mean percent difference between LED-treated and non-LED-treated HRS of 31% in levels of type-I procollagen and of -18% in MMP-1. No histological changes were observed. Furthermore, profilometry quantification revealed that more than 90% of individuals showed a reduction in rhytid depth and surface roughness, and, via a blinded clinical assessment, that 87% experienced a reduction in the Fitzpatrick wrinkling severity score after 12 LED treatments. No adverse events or downtime were reported. Our study showed that LED therapy reversed collagen downregulation and MMP-1 upregulation. This could explain the improvements in skin appearance observed in LED-treated individuals. These findings suggest that LED at 660 nm is a safe and effective collagen-enhancement strategy.

**Introduction**  
Skin aging, intrinsic and extrinsic, is associated with morphological changes, including rhytids, furrows, and telangiectasia (Kang et al., 2001; Fisher et al., 2002). It has been reported that collagen synthesis is reduced and interstitial matrix metalloproteinases (MMP-1), the collagenase involved in normal turnover of skin collagen, are upregulated in aged skin (Fligiel et al., 2003; Fisher et al., 2008; Zanani et al., 2004). Hence, a possible strategy for treating and preventing clinical manifestations of skin aging is the restoration of collagen deficiency by the induction of new collagen synthesis and reduction of MMP-1. It has been shown that light-emitting diode (LED) therapy, a nonthermal noninvasive treatment, can trigger natural intracellular photobiological reactions (Karu and Kolyakov, 2005; Kanu et al., 2005a, b; Hamblin and Demidova, 2006; Barolet, 2008). A number of clinical studies provide evidence of the effectiveness of LED therapy in photorejuvenation using a variety of LED light sources (Weiss et al., 2004; Bhat et al., 2005; Russell et al., 2005; Weiss et al., 2005; Goldberg et al., 2006; Baez and Reilly, 2007; Lee et al., 2007). An improvement in skin appearance in aged-photoaged individuals has been documented after full-face or split-face serial treatments with yellow (590 nm), red (630, 633 nm), or red in combination with infrared (830 nm) light based on profilometry quantification, clinical assessment of digital photographs, and patient reported outcomes. A correlation of clinical effects with further analysis for basic mechanisms was examined in two of these studies. In Weiss et al. (2005),

Source: Regulation of Skin Collagen Metabolism *In Vitro* Using a Pulsed 660nm LED Light Source: Clinical Correlation with a Single-Blinded Study (Daniel Barolet, Charles J. Roberge, François A. Auger, Annie Boucher and Lucie Germain)

ORIGINAL ARTICLE

### Application of 630-nm and 850-nm Light-emitting Diodes and Microcurrent to Accelerate Collagen and Elastin Deposition in Porcine Skin

Tae-Rin Kwon<sup>1</sup>, Dong Wook Moon<sup>1</sup>, Jungwook Kim<sup>1</sup>, Hyoung Jun Kim<sup>1</sup>, Seong Jae Lee<sup>1</sup>, Yunhee Han<sup>1</sup>, Hee Won Dan<sup>1</sup>, Sang Hoon Chi<sup>1</sup>, Hwan Mo Seong<sup>1</sup>, Hee Jung Kim<sup>2</sup>, Guei-Sam Lim<sup>2</sup>, Jungkwan Lee<sup>1</sup>

**Background and Objectives**  
Skin aging is reportedly associated with regulation in collagen and elastin synthesis. This study investigated the potential of combining light-emitting diode (LED) treatments using a 630-nm and 850-nm LED with simultaneous microcurrent application.

**Materials and Methods**  
The dorsal skin of female pigs was treated with a home-use device. We examined the treatment effects using photography, thermocamera, microscopic pathology, and histological examination to determine the mechanism of action, efficacy, and safety of the procedure. A histological observation was performed using hematoxylin and eosin, Masson's trichrome, Victoria blue, and immunohistochemical staining. We also used the Sircol soluble collagen and elastin assay kit to measure the amounts of collagen and elastin in the porcine back skin tissue after 2 and 6 weeks.

**Results**  
Evaluation by visual inspection and devices showed no skin damage or heat-induced injury at the treatment site. Histological staining revealed that accurate treatment of the targeted dermis layer effectively enhanced collagen and elastin deposition. Collagen type I, a protein defined by immunohistochemical staining, was overexpressed in the early stages of weeks 2 and 6. Combined therapy findings showed the superior capability of the 630-nm and 850-nm LED procedures to induce collagen; in contrast, elastin induction was more pronounced after microcurrent treatments.

**Conclusion**  
The home-use LED device, comprising a combination of 630-nm and 850-nm LEDs and microcurrent, is safe and can be used as an adjunctive treatment for self-administered facial rejuvenation.

Source: Effects of a skin-massaging device on the ex vivo expression of human dermis proteins and in vivo facial wrinkles Elisa Caberlotto, Laetitia Ruiz, Zane Miller, Mickael Poletti, Lauri Tadlock

RESEARCH ARTICLE

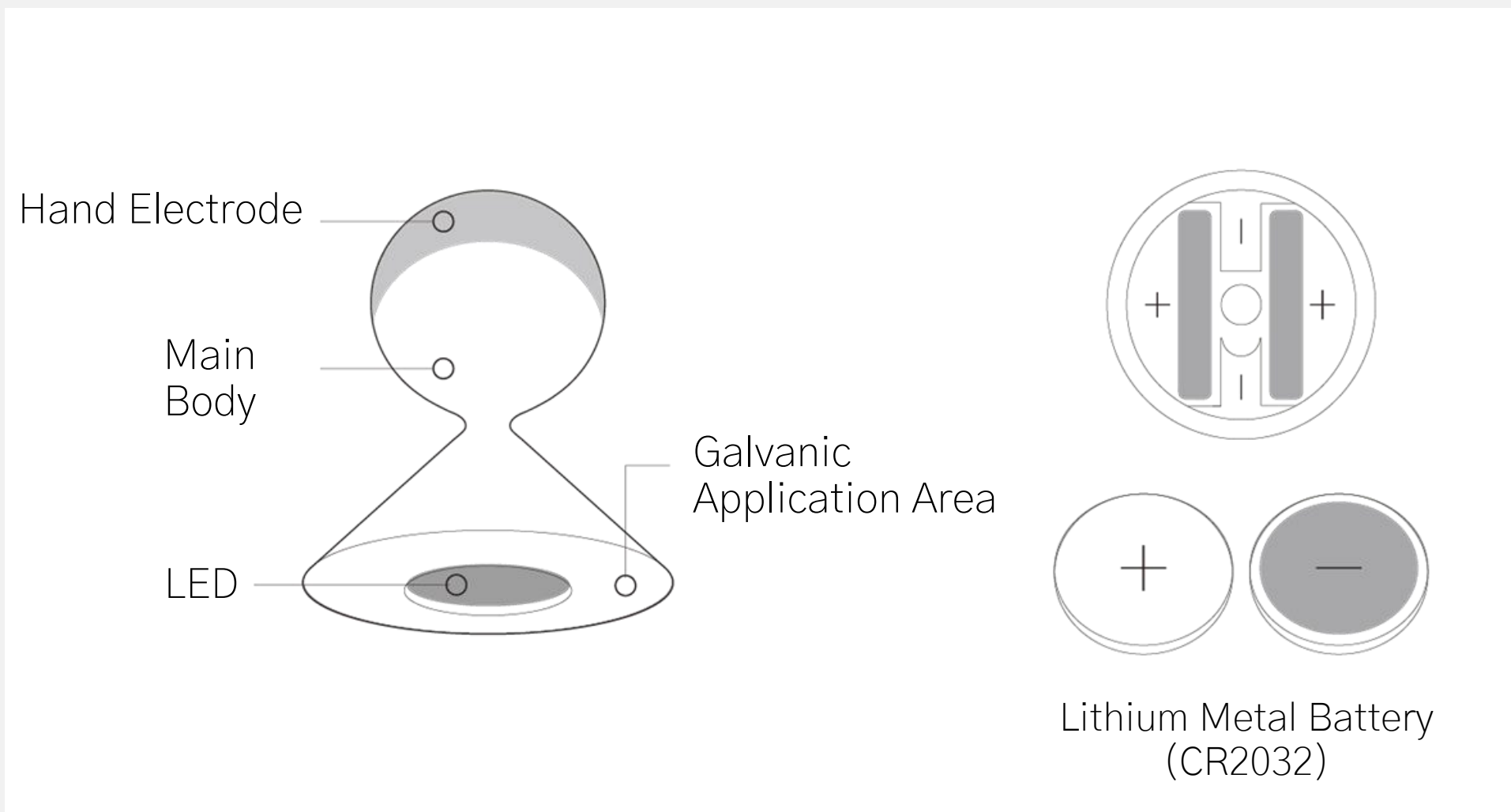
### Effects of a skin-massaging device on the ex vivo expression of human dermis proteins and in vivo facial wrinkles

Elisa Caberlotto<sup>1\*</sup>, Laetitia Ruiz<sup>2</sup>, Zane Miller<sup>3</sup>, Mickael Poletti<sup>3</sup>, Lauri Tadlock<sup>3</sup>

**Abstract**  
Mechanical and geometrical cues influence cell behaviour. At the tissue level, almost all organs exhibit immediate mechanical responsiveness, in particular by increasing their stiffness in direct proportion to an applied mechanical stress. It was recently shown in cultured-cell models, in particular with fibroblasts, that the frequency of the applied stress is a fundamental stimulating parameter. However, the influence of the stimulus frequency at the tissue level has remained elusive. Using a device to deliver an oscillating torque that generates cyclic strain at different frequencies, we studied the effect(s) of mild skin massage in an ex vivo model and in vivo. Skin explants were maintained ex vivo for 10 days and massaged twice daily for one minute at various frequencies within the range of 65–85 Hz. Biopsies were analysed at D0, D5 and D10 and processed for immuno-histological staining specific to various dermal proteins. As compared to untreated skin explants, the massaging procedure clearly led to higher rates of expression, in particular for decorin, fibrillin, tropoelastin, and procollagen-1. The mechanical stimulus thus evoked an anti-aging response. Strikingly, the expression was found to depend on the stimulus frequency with maximum expression at 75Hz. We then tested whether this mechanical stimulus had an anti-aging effect in vivo. Twenty Caucasian women (aged 65-75y) applied a commercial anti-aging cream to the face and neck, followed by daily treatments using the anti-aging massage device for 8 weeks. A control group of twenty-two women, with similar ages to the first group, applied the cream alone. At W0, W4 and W8, a blinded evaluator assessed the global facial wrinkles, skin texture, lip area, cheek wrinkles, neck sagging and neck texture using a clinical grading scale. We found that combining the massaging device with a skin anti-aging formulation amplified the beneficial effects of the cream.

Source: Application of 630-nm and 850-nm Light-emitting Diodes and Microcurrent to Accelerate Collagen and Elastin Deposition in Porcine Skin

# HOW TO REPLACE THE BATTERY



- 1** Twist the cap counter-clockwise to detach it from the body.
- 2** Remove the old battery, then insert the new one according to the "+" and "-" marks engraved on the body.
- 3** Twist the cap clockwise to reattach it to the body.
- 4** Do not disassemble the body other than for battery replacement, as it may cause damage.

# Galvanic LED Booster

## REBORN UNDER YOUR BRAND

**Manufactured as OEM/ODM and distributed and sold under your own brand**

Customization options are tailored to your brand, including the printing of your brand logo, modification of product and packaging colors, and other brand-aligned customizations.

For more information, please contact the Ecowell Sales Department via phone, email, or by inquiring through our website.

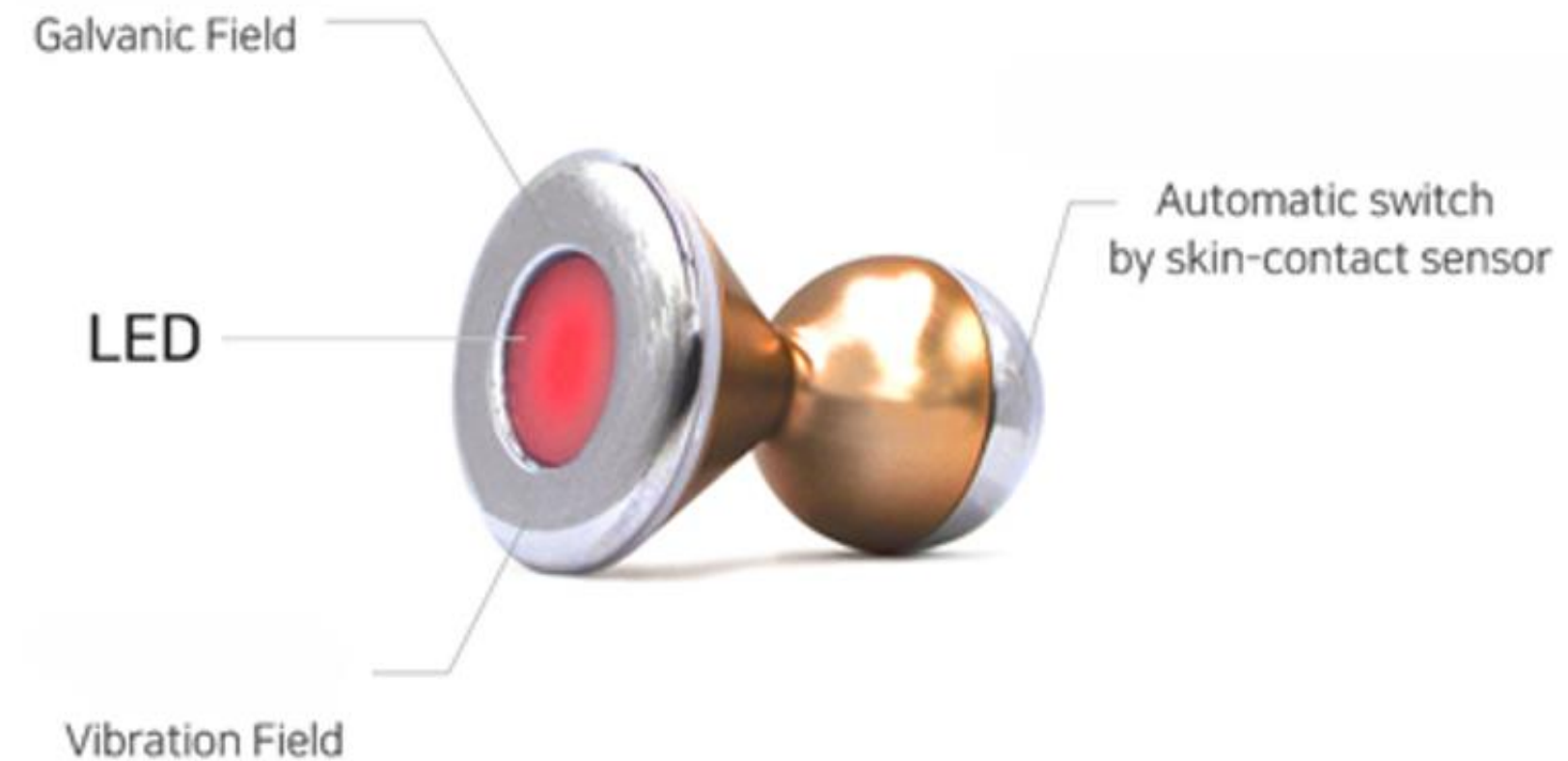
EMAIL: [sales@ecowell.co.kr](mailto:sales@ecowell.co.kr)

Homepage: [ecowell.co.kr](http://ecowell.co.kr)



# PRODUCT SPECIFICATIONS

Model Name	MACOSMT019SK
KC Certification	R-R-smM-MACOSMT0195K
Number Equipment Name	LED Skin Booster
Rated Voltage/Power	3.0 V (CR2032) 235 mAh x 2 ea
Vibration Frequency	208 ± 10% Hz
Continuous Use Time	120 Mins
Size (L x D) / Weight	51 x 38 mm / 13.5 g
Materia	ABS, Chrome Plating
Manufacturer / Country	Ecowell Co., Ltd. / South Korea



# FAQ

**Q. Where is the vibration operation switch?**

A. This product operates without a separate switch. It activates when you hold the grounding part with your hand and the galvanic applicator touches the skin.

**Q. The product keeps operating and won't stop.**

A. Please clean any remaining serum or cream off the device after use. If the issue persists even after thorough cleaning, contact the customer service center.

**Q. Can I use cosmetics other than mask packs?**

A. You can use general ampoules, serums, or essences. However, for the best galvanic effect, it's recommended to use ionizable ingredients found in water-soluble ampoules.