

# TriActive™

## LaserDermology™ System

for Cellulite and Facial Treatments

### In the News



Refreshing Facial

Therapeutic Massaging

Smoothing Cellulite

Tightening Cellulite  
Increases  
Microcirculation

 **CYNOSURE™**  
Where art and science meet.



Inside Front Cover — Blank

# TriActive Cellulite Study Shows Positive Results

By Bob Kronemyer, Associate Editor

The TriActive system from Deka (Calenzano, Italy) is "without a doubt, a revolutionary system for the treatment of cellulite," according to Nicola Zerbinati, M.D., a dermatologist from Varese, Italy. This unique device combines the action of six near-infrared diode lasers, localized cooling and mechanical massage.

**"The TriActive guarantees** positive outcomes at low cost, with a limited number of sessions and no side effects," said Dr. Zerbinati, who was lead author of a study that treated ten patients with localized cellulite in their buttocks and thighs. Each patient underwent ten treatment sessions lasting 20 minutes each. "Treatment was administered three times a week," Dr. Zerbinati said. "By progressively massaging and stimulating the connective and adipose tissues, you can reactivate the biological waste elimination mechanisms and oxygenate the tissues, thus creating a realignment of the connective fabric. The three actions of the TriActive synergistically work to dramatically improve the unwanted aspects of the skin. They assure tonic, elastic and firm skin, plus remodel the body contours."

**"The three actions of the TriActive synergistically work to dramatically improve the unwanted aspects of the skin. They assure tonic, elastic and firm skin, plus remodel the body contours."**

Dr. Zerbinati noted a reduction in both cellulite and fluid retention. "Treatment was well tolerated by all the study patients. At the end of ten sessions, we observed a clinically evident reduction in the cellulite on the hips and thighs, a reduction in the area circumferences and the plicometry, and an increase in skin elasticity." Thermography was also assessed (showing the extent of cellulite and detecting problems in microcirculation). "In general, the thermographic picture of cellulite is known as 'mouchete' or 'leopard skin,'" Dr. Zerbinati explained. "Our study patients ended up with a homogeneous feel to their skin, instead of having 'leopard skin.' This finding underscores that the TriActive improves microcirculation."



Buttock before Tx



Buttock after one TriActive Tx

Photography of Dr. Zerbinati, M.D.

**Apart from these** objective results, patients were very satisfied with reduction in fluid retention and a reduced sensation of heaviness and swelling in their lower limbs. "Patients observed these benefits after only two to three sessions with the TriActive," Dr. Zerbinati observed. "Following treatment, patients noticed better skin tone and a reduction in the circumference of the areas treated." To date, Dr. Zerbinati has witnessed no side effects or contraindications.

Unlike traditional endermologie cellulite treatment, the TriActive is painless and many patients fall asleep because they feel so relaxed. Furthermore, the diode lasers of the system improve the texture of the skin. Many patients comment they feel that their skin is smoother and softer. Some physicians use the TriActive after liposuction, thereby decreasing the incidence of irregularities to almost 0%. The TriActive can also be used to smooth out areas immediately prior to liposuction. And a new facial handpiece for rejuvenation appears promising.

**"Cellulite affects almost** all females," Dr. Zerbinati said. "These patients are always searching for new, non-invasive treatments. The TriActive system is truly innovative and fits in extremely well with today's frenetic lifestyle. Sessions are relatively short and the beneficial effects can be observed after the first few sessions." ■



THE BUSINESS OF MEDICAL ESTHETICS

OFFICIAL PUBLICATION OF THE MEDICAL SPA SOCIETY

# MEDICAL SPA REPORT

JULY 2004

AN ADVANSTAR PUBLICATION



## Goodbye Cellulite

Cynosure, a Chelmsford, MA-based developer and manufacturer of cosmetic and medical lasers, received government clearance for the treatment of cellulite using its TriActive LaserDermology device. The device's triple-action treatment reduces the appearance of cellulite by combining mechanical massage, localized cooling, and deep laser stimulation. "The TriActive is used not only to tighten cellulite on the body, but also to tighten facial skin," says Michael Davin, president and CEO. "Patients can also combine TriActive treatments with other facial treatments, liposuction, and other procedures." (800) 886-2966; [www.cynosurelaser.com](http://www.cynosurelaser.com).

THE LATEST  
ANTI-AGING  
PROCEDURES

TECHNOLOGICAL  
ADVANCES

SKINCARE  
PRODUCT &  
EQUIPMENT  
ROUNDUP

SUCCESS  
STORIES

SPA  
BELLEMEADE  
EAST SETAUKET, NEW YORK

american spa  
SUPPLEMENT

Lasers arrived on the medical esthetic market nearly 30 years ago, but it wasn't until eight years ago that they really exploded on the scene, spurring a



Tri-Active from Cynosure is part low-energy diode laser and part mechanical massage.

boom in medical spas by replacing invasive procedures that require significant downtime with non-scarring, non-ablative treatments that can be done with little or no downtime.

"We can treat conditions that we couldn't treat previously without scarring," says Bruce Katz, M.D., founder of JUVA Skin & Laser Center and MediSpa, New York City, where laser treatments comprise 70% to 80% of the business. "Before lasers, removing tattoos, for instance, meant using dermabrasion, and we had to go very deep to get out the ink. Lasers use one wavelength to treat one color of ink, another wavelength to destroy another color, and it just explodes the pigment."

### New Uses

The spectrum of conditions lasers can treat continues to widen. Traditionally, they've been used to remove tattoos, unwanted hair, spider veins, hyperpigmentation, large pores and fine lines.

Now, lasers can also treat cellulite, vitiligo, stretch marks and acne with significant success. JUVA Skin & Laser Center and MediSpa now offers Cynosure's Tri-Active, which is part low-energy diode laser and part mechanical massage. According to Judith Bednatz, spokesperson for Chelmsford, Massachusetts-based Cynosure, the triple action of the Tri-Active laser combines six diode lasers with localized cooling and mechanical massage to smooth and tighten the skin.

So far, this new technology has borne "very good results," says Katz. "We've only treated two to three people and you have to do 8 to 10 treatments, but it seems to eradicate the problem."

PhotoMedex, Montgomeryville, Pennsylvania, has also made headway in skin conditions with the Excimer laser that treats psoriasis and vitiligo. "It's probably the only device that has proven to help restore pigment successfully and safely," says Katz.

More manufacturers are combining heads on one machine to target multiple conditions. Lumenis, with U.S. operations based in Santa Clara, California, has unveiled a new system with a diode laser, an Nd:YAG and an IPL (intense pulsed light) head. And the Cynosure TriStar offers three different lasers of different wavelengths: 595 nanometers to treat scars; 1064 nm to target leg veins; and 1320 nm, in combination with 595 nm, to treat acne and broken blood vessels. "This is one of the newest devices out there," says Katz. "The versatility makes this machine very attractive. Years ago, there was only one laser in the box. You had to have many lasers to accomplish many different things."

**Manufacturers are combining heads on one machine to target multiple conditions.**



Harper's  
**BAZAAR**  
 577  
**BEST  
 LOOKS**  
**SHOP  
 BUYS YOU  
 NEVER RECOGNIZE**  
**QUICK  
 STYLING**  
**SKINCARE  
 SECRETS**

MAY 2006 \$3.99 U.S. 05  
 74851 08390 1  
 HARPERSBAZAAR.COM

# Say Goodbye to Cellulite?

A new FDA-approved treatment promises to erase those dimples and ripples painlessly. Is this the long-awaited answer to our prayers? Karen Moline investigates

**C**ellulite often rears its dimply self during adolescence, as I discovered during the crucial year I turned 13. I already topped five feet ten, was hardly a couch potato and weighed 115 pounds at most. There was barely any meat on my string-bean frame, as my classmates never ceased to remind me, yet the few fat cells I did have managed to lump together underneath my behind.

As I learned early on, cellulite is an equal-opportunity offender, but that offers no consolation to the estimated 90 percent of all women afflicted. Most commonly, it appears on the backs of our legs, buttocks, hips and, less commonly, belly area, regardless of how much we weigh. Some sufferers rush to have liposuction, while others, like me, purchase the various wonder creams available in stores and online. Certain women swear these make a difference, but I have yet to find my miracle in a tube.

So you can understand why I begged my way into a test study for TriActive LaserDermology, a new FDA-approved cellulite treatment. The study would bring me to the MediSpa at the Juva Skin & Laser Center in Midtown Manhattan, a modest-looking spot tucked within Juva's state-of-the-art cosmetic facility. Until now, the only other FDA-approved course of action was Endermologie, a series of treatments done with a mechanical massage device that can have decent results but may leave skin bruised and sore. The biggest difference between the two systems? Lasers. These little beams of light have revolutionized everything from hair removal to eye surgery, and, lucky for me, the type of laser used in TriActive is totally painless, with no known side effects.

Still, my skepticism clearly showed on my face when I arrived for the initial appointment (the first of 16, scheduled twice a week). The doctor was encouraging and explained that TriActive works by reducing the fluid that surrounds the fat cells and results in bumpy skin. My outlook brightened until he directed me to strip down to my bra and a flimsy paper thong. Turns out, >



Even supermodels have to fight cellulite

STYLING: KIM

continued



## BEAUTY NEWS

I would have to be weighed, measured and photographed in various poses throughout the study. I guess there is a painful element to this procedure after all.

Halfway through my humbling photo shoot, I thought about what Mitchel Goldman, M.D., medical director and founder of La Jolla Spa MD, in La Jolla, California, had told me. Goldman, in conjunction with Cynosure, distributors of the TriActive system, conducted the earliest tests of the system during the FDA clinical trial, about two years ago. "Cellulite is what every woman is supposed to have," he explained. "It's basically a fat-storage mechanism so that when you become pregnant and breast-feed, you'll have adequate fat readily available. The honeycomb appearance occurs because fat in females is stored in little packets."

Cellulite happens when the bands of fibrous tissue that connect our muscles to our skin grow too tight and perfectly normal fat packets get compressed. Trapped in the tissue, the fat swells tremendously and the cells clump together. As we age, the connective tissue becomes less resilient, so cellulite can worsen. What causes it to plague some women more than others is not well understood. "The truth is, no one knows for sure what makes ordinary fat cells become enlarged fat globules," says Kathryn Frew, M.D., the Juvu dermatologist heading the study. "There is a hormonal component due to estrogen, as well as a genetic component, and these are certainly exacerbated by a sedentary lifestyle. Now we're starting to look at microcirculation. If there's an obstruction of lymphatic fluid flowing between the enlarged fat cells and the surrounding blood vessels and fibrous tissue, the result will be cellulite."

*It just might work,* I told myself as my first treatment began. "This is a bit cold," said the technician, as she clutched the wand at the tip of the hose, which contained a round, pulsating metal head. She turned on the laser, which caused the machine to beep annoyingly, and ran the head in slow circles on my belly and around my thighs. It wasn't just a little cold—it was freezing. But as I got used to the instrument's painless, rhythmic massage, trailing up and down my legs to improve lymphatic circulation, I found it extremely relaxing as I visualized the fat clumps being pushed out forevermore. After nearly 45 minutes, I rose from the table and ran straight to the loo, a sign that perhaps the lymphatic drainage was working.

The TriActive method performs in three ways. There is the actual laser, which doctors believe penetrates the clumped-up fat cells, minimizing them and improving microcirculation. Since TriActive doesn't penetrate deeply, as some other lasers do, there is no pain involved and you don't need to wear protective eyewear, as you would with hair-removal lasers. The head of the wand massages the skin to stimulate collagen production, toning and lymphatic drainage. It also cools the skin to stimulate microcirculation, which helps reduce the swollen fat cells.

After the 12th session, I was amazed to see a visible difference. Yes, I'd lost some weight from the stress of a hectic move, but the skin on the backs of my thighs and butt was tighter, trimmer

and noticeably smoother. Despite the hassle of twice-weekly appointments, I looked forward to the massage. I never saw a bruise, although I'm told women with sensitive skin might get a few small ones. After 16 sessions, I wasn't entirely cellulite-free, but the situation was about 50 percent better. Some women will see major improvement, as I did. Others will see partial to little or no change, particularly those who are already overweight, because the laser may not work as well on areas with large amounts of excess fat. At least 12 to 16 thirty-minute sessions once or twice a week are required for the fat cells to start deflating. After that, you need to go twice a month or at least monthly in perpetuity to keep the cells from reclumping.

For me, taking the time to undergo the regimen and seeing decent results were a spur to keep the weight off, work out harder and go for maintenance visits. Who knows how long the results will last? The machine is too new for us to know for certain. For some women, this could be the miracle they've been praying for; others may be less than impressed. "There will never be a cure for cellulite," says Goldman. Neither my bottom nor I have gone to medical school, but we sure hope the good doctor is wrong. ■

After the 12th session,  
I saw a visible difference....  
The skin on the backs of  
my thighs and butt was  
tighter, trimmer  
and smoother

The following locations offer the TriActive LaserDermology treatment: Juvu Skin & Laser Center MediSpa, NYC (15 sessions, \$1200; 212-688-5882); Cellulite Endermologie Center, NYC (Quick fix, \$150; 12 sessions, \$1500; 800-430-7545); La Jolla Spa MD, La Jolla, CA (\$100 per treatment; 858-459-6868).

## The Best New Cellulite Products



1. Clarins Total Body Lift, \$96.50, gloss.com.
2. Nivea Body Reshaping Treatment, \$12.99, niveausa.com.
3. Shiseido Body Creator Aromatic Firming Cream, \$55, Nordstrom; 800-7-BEAUTY.
4. L'Oréal Sublime Slim Night Anti-Cellulite + Smoothing Body Toning Gel, \$13.89, lorealparisusa.com

# GLAMOUR

APRIL 2005

## Your top 15 sex questions

Intimate answers about your body and his

HERE'S TO GUTSY WOMEN!  
The Glamour hero issue



### TriActive LaserDermology

**The promise:** It claims to reduce fluid retention and smooth skin by stimulating circulation (which helps keep connective tissue healthy).  
**The process:** The treatment, which is swept over trouble spots, combines a laser, cooling action and mechanical massager in one wand.  
**The bottom line:** Independent doctors have reported that women ended up with smoother skin and less dimpling. (Another high-tech treatment, VelaSmooth, is also getting notice, but it still needs FDA approval.) But you'll need two TriActive sessions a week—at about \$100 each—for eight weeks to see any results, and you may need as much as one follow-up treatment per month. (Interested in TriActive? Call 800-886-2966 to find an office near you. For VelaSmooth, call 866-259-6661.)

## 18 A F VICTIM'S REVENGE

Her beyond-belief courage

## Bra 911!

Must-see breast Dos & Don'ts

# HELP FOR EVERY WOMAN'S HAIR!

➔ Rip out these pictures and run to the salon



USA \$3.99  
CANADA \$4.99  
FOREIGN \$1.99  
www.glamour.com

# Solving the cellulite puzzle

Lifestyle measures, topical agents, systemic treatments, exercise combat 'normal physiological condition'

By **REBECCA BRYANT**  
STAFF CORRESPONDENT

**New York**—American dermatologists have been ignoring cellulite, but they need to start paying attention, says Mitchel Goldman, M.D., medical director of Dermatology/Cosmetic Laser Associates in La Jolla, Calif.



Dr. Goldman

Dr. Goldman says, "Patients are asking questions because the press is talking. If they can't go to a dermatologist for answers, where will they go?"

Last year, Dr. Goldman gave one of the first American Academy of Dermatology (AAD) lectures on the topic, but getting a slot on the program wasn't easy. The AAD public relations staff was on his side, but the conference committee balked, he says. He prevailed by making the case that:

All women have cellulite. Some treatments work; others are scams. Regardless, dermatologists need to know the difference. In addition, treatment of cellulite is a huge international business.

On the last point, Dr. Goldman adds, "Even in the middle of Estonia, Latvia, and El Salvador, you find pharmacies, selling treatments and creams. Suddenly, the U.S. cosmetic industry is realizing the profit potential."

## Defining, treating

One of only two dermatologists in the United States researching cellulite, Dr. Goldman describes the condition as a normal physiological condition in post-adolescent women. From an evolutionary perspective, fatter women have a better store of calories for pregnancy and lactation. Adipose tissue also helps with thermal insulation, support, and protection of organs.

When adipose deposits increase in the thighs and buttocks, the longitudinal fibers of connective fascia segregate it into channels. But perpendicular tissues remain fixed. This causes the skin to pucker or dimple. In primitive societies, cellulite was a sign of beauty. Today, it's a sign of being overweight and out of shape.

Treatment falls into four modalities:

lifestyle measures, topical agents, systemic agents and physical therapies. One of the most popular is mesotherapy. Featured often in magazines and television news programs, it involves direct injection of pharmacologic agents into the venous circulation, or local infiltration into the dermal-subcutaneous junction. In theory, the agents reduce cellulite through lipolysis of fat or reduction in the size of adipocytes.

"This has been going on for 10 years in South America," says Dr. Goldman. "There's no scientific evidence it works."

According to Dr. Goldman, cellulite can't be cured. However, the appearance can be improved. Patients want easy, inexpensive treatments that are slow to reverse.

For patients who don't need immediate results, Dr. Goldman recommends using a topical cream, possibly with occlusion, at a cost of approximately \$20 for several months of treatment. He has tested several creams, markets one himself, and says some work quite well.

In a recent double-blind, randomized study, Dr. Goldman evaluated the efficacy of a nightly cream on 17 women with moderate to severe cellulite. At the four-week endpoint, 76 percent of subjects reported an overall improvement in their condition. Dermatologist evaluators found improvement in 65 percent of treated legs with occlusion and 59 percent in treated legs without occlusion.

Creams take about a month to work. For patients seeking faster results, Dr. Goldman suggests a three-step program. It begins with ionithermie, which uses lotions to break down fatty deposits and release toxins, followed by galvanic and faradic stimulation. The result is a quick loss in inches around the thighs and hips,

improving the appearance of cellulite.

Next comes treatment with a Tri-Active laser (Cynosure). Manufactured by Cynosure of Chelmsford, Mass., the low-energy diode laser was designed to increase lymphatic drainage, tighten the skin, and increase superficial blood flow. (As with ionithermie, there are no published studies validating claims that Tri-Active improves cellulite.) The regimen is generally one to three treatments a week for a total of 10 to 15 treatments.

Step three is long-term use of a topical cream in combination with diet and exercise, according to Dr. Goldman. **DT**

WWW.ELLE.COM

BETTER  
SKIN,  
HAIR,  
SEX?  
THE NEW  
DRUG  
COCKTAIL

400+ PAGES!  
**SPRING  
FASHION  
GUIDE**

**SHOPPING  
WITH STYLE**

275  
**EDITOR'S  
PICKS**

**THE TOP 20  
PERFECT-SKIN  
SECRETS**

**PLUS:**  
SUPER STUDLY  
BEN STILLER,  
MUCHO MACHO  
WES CLARK

THE  
UNSTOPPABLE  
**PARIS  
HILTON**  
PUTS IT ON  
AT THE  
RITZ

## LASER SHOW

Many cellulite-reduction treatments have relied on smoke and mirrors rather than hard evidence. But a new option may offer the skeptical some hope: A study conducted at La Jolla Spa MD in California (and presented at January's American Academy of Cosmetic Surgery conference) found that 14 biweekly sessions of Tri-Active—a treatment combining Endermologie, the deep suction massage procedure that's FDA-approved for cellulite reduction, with a low-level laser—significantly minimizes the appearance of cellulite. "The laser works with the mechanical effects of Endermologie to help increase circulation in the area as well as enhance skin quality," says dermatologist Sarah Boyce, MD, who worked on the study. Waiting for Tri-Active to come to your town? Try the new Healing Garden Spa Therapy Active Anti-Cellulite Treatment, proven in double-blind studies (the industry standard) to reduce visible dimpling by 46 percent in four weeks.

**Smoothing agent:** Healing Garden Spa Therapy Active Anti-Cellulite Treatment



### BEAUTYNEWS

Prescriptions available at [www.pscrip.com](http://www.pscrip.com). Clinique available at [www.clinique.com](http://www.clinique.com). Frédéric Fekkai available at the New York boutique 212-585-3358. Cynosure Tri-Active Laser Dermatology available at the Cynosure Dermatology Center in New York, 212-880-6421. The Healing Garden available at [www.healinggarden.com](http://www.healinggarden.com).



KEYWORD  
CIN ADEL: ELLE  
MARCH 2004  
USA \$4.00  
CANADA \$4.95

God Bless America

# Woman's World

THE WOMAN'S WEEKLY

May 4,  
2004



## BREAKTHROUGH CELLULITE CURE

proven to shrink fat cells!

### Hot new cellulite cure!

**G**ot cellulite? You're certainly not alone! Nine out of 10 of us have at least a patch of that dimpled fat somewhere on our bodies through absolutely no fault of our own. "Nothing you did or didn't do caused it," explains Robert Pitera, M.D., of the Cellulite Endermologie Center in New York. "It's caused by a combination of heredity, female hormones and poor circulation, which cause connective fibers under the skin to lose elasticity and harden."

The result: skin tightens and can no longer expand normally. This squeezes fat cells through the fibers unevenly, causing a "honey-comb" of small lumps and bumps,

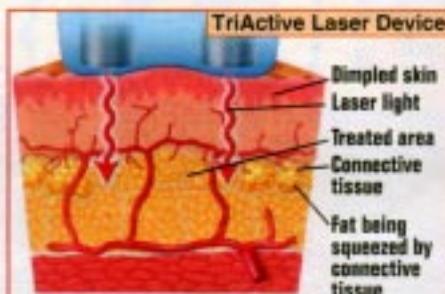
says Mitchell Goldman, M.D., medical director of La Jolla Spa in San Diego.

In the past, cellulite was notoriously impossible to get rid of. But not anymore! A brand-new, FDA-approved treatment, TriActive LaserDermology, can melt it away:

● **How does it work?**

The handheld TriActive device attacks cellulite three ways: low-energy laser light penetrates the skin, enhancing blood circulation and softening the connective tissue; deep-tissue massage stimulates blood flow and drainage; and a cooling effect shrinks fat cells and lessens swelling. The device also can be used to tighten facial and neck skin!

● **Is it really effective?** Clinical researchers report seeing up to a 40% reduction in cellulite after eight treatments. "Additional treatments reduce the cellulite even more," says Dr. Goldman.



TriActive LaserDermology works by softening the hardened bands of connective tissue under the skin that squeeze fat upward to form the dimpling in cellulite.

● **What does it feel like?**

Painless, says Dr. Goldman. "Many patients actually fall asleep during the treatment!"

● **Who are the best candidates?** Everyone! Doctors recommend six to 12 20-minute treatments over two to three months, followed by one treatment a month for upkeep.

● **How much does it cost?** From \$75 to \$150 per session. To find a local practitioner, call 877-222-6822 or log onto [www.cynosurelaser.com](http://www.cynosurelaser.com).

—Peg Verone

\*Smart ways to live well

MAY 05

# Prevention

Get a  
**SUMMER  
BODY**  
in 10 minutes  
a day

Carb Recipes that  
**Banish Belly Fat**

**7 MUST-HAVE  
NUTRIENTS**  
you're not getting

**CELLULITE  
BE GONE!**  
What Really Works



**THINK YOUR  
WAY THIN**  
10 Mind  
Tricks



■ **Cold-laser massage** The Tri-Active laser was approved by the FDA in January 2004 and is permitted to claim that it "temporarily reduces the appearance of cellulite." This device combines suction massage to increase lymphatic drainage, which filters fluid from cells; low-intensity diode heat to stimulate collagen production and tighten skin; and a cooling head to counter any burning sensation. "It's so painless you can fall asleep while it's being done," says Mitchel Goldman, MD, an associate professor of dermatology at the University of California, San Diego.

But that may depend on how deeply you sleep. One patient reported: "The feeling ranges from that of a pleasant, light massage to an uncomfortable, deep-tissue rubdown."

# MEDICAL SPA REPORT

MARCH 2005

## Subcision & Tri-Active Laser in the Treatment of Cellulite

By Bruce E. Katz, M.D.

Cellulite is one of the most distressing cosmetic problems for women, and until now, there have never been any effective treatments available. During the past two years, the Juva Skin & Laser Center and MediSpa in New York City has been evaluating a new surgical treatment and a laser technology for the treatment of cellulite.



Bruce E. Katz, M.D.

Developed in Brazil, subcision has been found to be effective for discrete localized areas of cellulite and has been performed successfully at Juva. Carried out under local anesthesia, a small Nokor needle is used to break up the fibrous bands producing the cottage-cheese appearance of the skin, and there is a very quick recovery time.

A recently completed study (published below) at Juva of the Tri-Active laser for more diffuse and extensive cellulite has found an 83 percent improvement in this condition after 12 to 16 biweekly treatments. The exciting aspect of this laser technology is that there is no downtime and patients can return to work immediately.

### The Efficacy of a Diode Laser with Contact Cooling and Suction (TriActive Laser) in the Treatment of Cellulite

(Presented at the 13th Congress of the European Academy of Dermatology and Venereology) Kathryn Frew, M.D., and Bruce Katz, M.D. Juva Skin & Laser Center, New York City

Background Cellulite is a major cosmetic concern for most women. According to the American Academy of Dermatology, "Almost all women who are not severely malnourished have cellulite."<sup>1</sup> Cellulite

treatment has become a significant revenue source in the aesthetic market.<sup>2</sup> The development of the Tri-Active System, a class-I (over-the-counter) device for the treatment of cellulite, expands the options for cellulite treatment.

Cellulite refers to lumpy deposits of fat under the skin, resulting in skin with an orange-peel appearance, typically on the thighs, hips, and buttocks. The current theory of cellulite development suggests that obstructions of vascular and lymphatic flow in the hypodermis (the layer of fat and connective tissue under the skin) cause the development of connective-tissue pockets between the skin and the basement membrane. These pockets then become filled with trapped fat, resulting in the dimpled appearance of the skin.

Various factors have been implicated in the formation of cellulite including genetics, hormonal influences, vascular health, and systemic disease, combined with lifestyle issues such as sedentary lifestyle, stress, and diet. While excessive weight contributes to the degree and appearance of cellulite, physically active women with a low percentage of body fat are subject to cellulite as well.

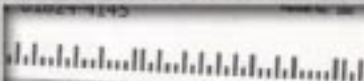
Based on this hypothesis, the Tri-Active system was developed to address the underlying components of cellulite. Tri-Active combines rhythmic suction massage, localized contact cooling, and low-level laser diodes with massage therapy-based techniques to promote micro-circulation and reduce inflammation<sup>3</sup>, resulting in a reduction in the appearance of cellulite. Studies have evaluated the effectiveness of the Tri-Active system for the treatment of cellulite<sup>4</sup>, proving its utility; however, the underlying contributions of cooling, dynamic suction massage, and low-level laser diodes have not been elucidated. The purpose of this study is to determine if there is a treatment benefit due to low-level diode lasers in the Tri-Active system.

Methods Ten female patients, ages 18 to 60, with moderate to severe cellulite bilaterally

were enrolled in the Tri-Active treatment study. Participants discontinued all other cellulite treatments one month prior to study protocol. All patients were treated bi-weekly for a total of 16 treatments. Half of the affected body areas were treated with the diode laser, contact cooling, and suction operational, per the standard Tri-Active treatment protocol, while the contralateral side was treated with contact cooling and suction operational, but with the laser diodes off throughout the course of treatment.

Digital photographs were taken prior to treatment, at treatments nine and 16, and one and three months post treatment to evaluate treatment efficacy. The photographs were evaluated by independent physician observers who were not involved with the study protocol. In addition, patients were surveyed to provide subjective evaluation of their treatment experience.

Results Ninety percent of the patients reported improvement, noting tighter, firmer, smoother, softer, less-dimpled skin and lifted buttocks. Eighty percent were satisfied with the treatments and would continue treatment. Patients found the treatment experience relaxing and noted improvement as early as the first treatment. Ninety percent would recommend the treatment. There was occasional mild bruising, but no significant side effects were reported. Seventy percent of the subjects exercised regularly during the course of the treatment. Ten percent continued on a pre-existing diet regimen. Independent physician observer evaluation of photos found an average of 83 percent improvement in cellulite with less dimpling, improved skin tone, and smoothness on the laser-treated side compared with an average of 17 percent improvement on the non-laser treated side. Improvements were maintained one month post treatment. Limb measurements showed no correlation with improvement in the appearance of cellulite.



ATEST  
ENDS  
BURN  
CARE  
L SPA  
NATIVE  
ACNE  
DUCTS  
MENT

# Bazaar

Harper's

FASHION  
PREVIEW

JUNE 2004

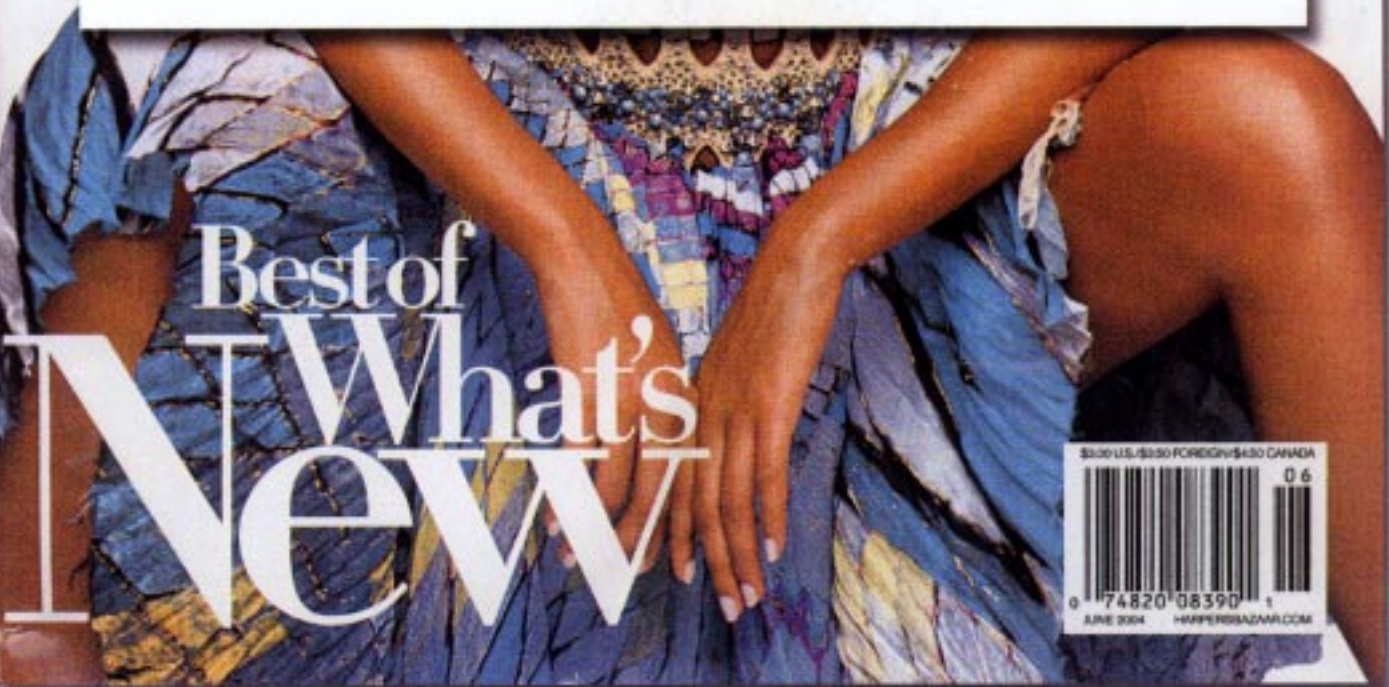
SEASON'S  
MUST-HAVES

## W HIGH-TECH HELP

**H** **N** **T** **B** **S**  
The FDA-approved **Tri-Active LaserDermology** "works by tightening the skin and stimulating collagen production so skin is thickened," says Sobel. Deep-tissue lasers, manual massage and shots of cooling air are all part of the treatment. "These three mechanisms work together to optimize results and make the connective bands more flexible," says Paulette Long, director of the **Cellulite Endermologie Center** (212-880-6421) in Manhattan. Maintenance treatments are recommended since results are not permanent. Fourteen sessions are needed, at about \$100 each.

S

CÉ  
ES



Best of  
New  
What's  
New

\$3.00 U.S./\$3.50 FOREIGN/\$4.50 CANADA

0 6



0 74820 08390 1

JUNE 2004 HARPER'SBAZAAR.COM

# allure

THE BEAUTY EXPERT

MAY 2005

**SPECIAL ISSUE!**

**GET  
THE  
BODY  
YOU  
WANT**

**Seductive  
Hair**

**Fight (**

**Per  
Ski  
Smooth**

USA \$2.99  
CANADA \$3.99  
FOREIGN \$3.99

61780

0 755514 3

**EXERCISING RELIGIOUSLY HAS GIVEN YOU IMPRESSIVE BICEPS, BUT YOUR DIMPLED THIGHS STILL NEED A MIRACLE.**

No magic potion will melt away cellulite, but taking certain vitamins and nutrients regularly may minimize it—especially if you act quickly. “The primary underlying problem with cellulite is small blood vessels within the skin that have been damaged,” says Howard Murad, associate clinical professor of dermatology at UCLA. “The dermis becomes weakened, and fat cells are able to migrate into that space.” In his new book, *The Cellulite Solution*, Murad outlines a diet packed with essential fatty acids, amino acids, glucosamine, and other nutrients that keep blood vessels and skin cells hydrated and impenetrable. He cautions against red meat, butter, and cheese, which can cause

inflammation in tissues, plus bloating-causing salt. After taking Murad’s supplements for eight weeks, subjects saw a 78 percent increase in skin firmness.

Not all doctors subscribe to a nutritional theory, though, and many see promise in new in-office cellulite treatments. Tri-Active, a new FDA-approved device, combines suction massage and diode lasers that shrink fat cells and loosen deep fibrous tissue to smooth puckering. “It’s the first technology I’ve seen that works for cellulite,” says Katz, who charges \$1,200 for 14 sessions. After six to eight treatments, most women start noticing improvements, and following the full course, Katz’s patients have stayed cellulite-free for up to eight months (he has only had the machine for that long).

Ionothermie—in which the skin is

coated with clay to help conduct electrical current to dimpled areas—makes that suction gizmo sound like a picnic. But despite the pins-and-needles discomfort, women are signing up. “One 60-minute treatment can remove an inch or two from your thighs,” says Mitchel Goldman, associate clinical professor of dermatology at the University of California in San Diego, who was one of the first to bring the French treatment to the United States four years ago. His patients often come in right before a beach party. Why the rush? “The cellulite comes back in a day or two.”

When all else fails—and it usually does—self-tanner succeeds in at least camouflaging the dimpling. “Cellulite looks worse when you’re white, white, white,” says Mary P. Lupo, assistant clinical professor of dermatology at Tulane Univer-

**HER TOP SECRET LOVE LIFE**



THE OPRAH  
MAGAZINE

# Body Confidence!

How to love  
the one you're in

## Famous Figures

- Jane Fonda
- Raquel Welch
- Iman ■ Farrah
- Cheryl Tiegs...

On having *the* hot body,  
and what life is like now

OUR 1ST ANNUAL  
**CHUTZPAH  
AWARDS**

10 women  
who'll take your  
breath away



DR. P  
SPECI  
SECRETS  
SEXUAL  
SECUR  
WOMI

### High-Tech Toys

**What they are:** Light-source treatments like **TriActive** (a suction-massage device with six diode lasers recently cleared by the FDA) and **VelaSmooth** (a handheld device combining radio frequency with infrared light and suction, currently being reviewed by the FDA). Electrode treatments like **Ionithermie** involve slathering the body in a clay mask and delivering light electrical currents to areas with cellulite.

**The promise:** TriActive promotes the shrinkage of fat cells and loosens deep fibrous tissue to minimize the appearance of cellulite, says Goldman. "VelaSmooth softens and rearranges the fat cells so they don't bulge in a dimpled pattern," says Neil Sadick, MD, clinical associate professor of dermatology at the Weill Medical College of Cornell University. These light source therapies typically require a minimum of eight to 15 treatments, followed by monthly maintenance. The clay and electrodes in Ionithermie help evaporate excess water in the skin.

**The bottom line:** The radio frequency and laser therapies are promising but still unproven. "At this point, we can't predict who will have a good result and who won't," says Donofrio. With the lasers, there is a slight risk of darkened pigmentation, mild burns, and redness that can last weeks or—in very rare cases—months. "I've seen treatments like Ionithermie shrink thighs by an inch in circumference," says Goldman. "But they don't work the same on everyone, and results don't last longer than a day or two."

**Cost:** TriActive, eight to 15 sessions at \$85 each. VelaSmooth requires eight sessions and, if FDA approved, will cost about \$100 to \$150 per treatment. Ionithermie, five to ten sessions at about \$125 each.

MAY 200



\$3.95 US/\$5.50 Canada/Fc

## Spa Rx: Cellulite Plight

Lots of spa hype, little scientific knowledge, and no magic bullet

By Aimee Lee Ball

*Luxury SpaFinder Magazine, January/February, 2005*

I happen to like cottage cheese. Makes a nice breakfast, spread on a whole wheat bagel, or with fruit for a light lunch. I just don't want it on my thighs.

Like almost every other woman not currently a Ford model, I've become familiar with cellulite--a word that didn't enter the common parlance in this country until about 30 years ago, coined, reputedly, by the owner of a New York skin-care spa. But the dimpled, puckered, waffled, cottage-cheesy skin that sets off an alarm at the approach of bathing-suit season is certainly not new: Just look at Renoir's *Grandes Baigneuses* or Manet's models having their *dejeuner sur l'herbe*. You'd think that something so venerable, so visible, and so vanity wounding would be understood by now.

Although cellulite is sometimes referred to by the mouth-filling and scientific-sounding name dermatomyoliposclerosis (der-ma-to-my-o-lip-o-scler-o-sis), the term does not exist in recognized medical references. It's thought that almost every woman over the age of 25 has at least a smattering of cellulite, generally on the hips, thighs, and buttocks, but no one knows for sure because neither the government nor any legitimate scientific authority keeps statistics about it.

Mine is not especially gruesome, and I don't stay up nights worrying about it, but, sure, I'd prefer that every square inch of me were smooth as glass--and I have a lot of company, judging by the ever growing smorgasbord of treatments that spas, especially day spas, are pushing now. There are wraps and massages and creams and gadgets and supplements and electric zaps, even footwear based on the sandals of the Masai people (sold at Bliss spas), who apparently don't get cellulite--all with enticing assertions that they eradicate the condition. Whether it's a promise of beauty or a profile on Match.com, I tend to believe that if something sounds too good to be true, it probably is, but let me get back to you about that.

Cellulite is fat, although one need not be overweight to be afflicted.

Theories abound about why fat takes this particularly disagreeable form--sluggish circulation or poor lymphatic drainage, hormonal changes or heredity, free radicals or environmental toxins. All this theorizing is unsubstantiated by any real science. The subject is not investigated at the National Institutes of Health (and I, for one, am relieved that our research dollars go to cancer and AIDS). We don't even understand why cellulite seems to be the fate of most women but few men. Any 'clinical studies' are small and financed at least in part by companies that stand to profit from favorable results. The cause remains elusive, according to Leroy Young, M.D., the chairman of the task force on emerging trends at the American Society for Aesthetic Plastic Surgery and arguably one of the best-informed people about cellulite.

"There's definitely a genetic tendency," says Dr. Young. "There's almost certainly some hormonal effect, but it's probably not the only factor. The best lab work shows that cellulite has something to do with the invasion of the deep layer of the dermis by fat." Histological evidence (meaning what is seen under a microscope) offers little support for "cures" that purport to release toxins or increase circulation--"although they sound good," says Dr. Young.

The lack of scientific explanation has led to a treatment free-for-all, rife with huckstering. Fraudulent advertising is the responsibility of the Federal Trade Commission, and over the past decade the commission has taken aim against claims made by a "passive motion table" marketed under the name Slender You, a wrapping system sold as European Body Concepts, underwear called Lipo Slim Briefs, and the Ultima II ProCollagen Body Complex made by the behemoth Revlon corporation. The FTC generally goes after big fish, which is why many snake-oil ads go unchallenged, and in 2003, it levied a \$12 million fine against Rexall Sundown, Inc., for false claims about Cellasene, an herbal anticellulite pill that had already racked up \$40 million in sales.

Every year, new technology is unleashed against cellulite, some with the limited approval of the Food and Drug Administration, which monitors the safety and efficacy of cosmetic products and devices. Any simple, low-risk product may be categorized as a Class One device, meaning the manufacturer need not submit a pre-market approval application. (That's why Johnson + Johnson can sell Band-Aids without conducting a multimillion-dollar study.) The Endermologie system of mechanical massage fits into this category: The FDA acknowledges that like a lot of other massagers, it can temporarily reduce the *appearance* of cellulite (italics mine). The Dermosonic ultrasound and the [Tri-Active laser](#) are in the same category. On the horizon is a new generation of electrical stimulation.

Some treatments require a plastic surgeon or dermatologist. Mesotherapy, for instance, involves the injection into the mesoderm (the skin's middle layer) of caffeine or phosphatidyl choline, one of the main components of lecithin and used in intravenous nutritional solutions.

Liposuction can actually make cellulite worse, creating more irregularities, according to Dr. Young. On the other hand, "injecting fat does theoretically have the possibility of smoothing things out, but not all the fat survives--there are certain areas of the body where it doesn't stay." To the degree that the law permits, the spa industry has embraced cellulite annihilation with the fervor of a televangelist. Day spas have been particularly avid because even semi-effective treatments usually require a regime of 6, 12, or even 20 sessions, with forever-after "maintenance"--not feasible at a destination or resort spa. Promotional copy often alludes to the transitory nature of results with catch phrases like "for a special occasion" and "pre-wedding" and "to fit into that little black dress on Saturday night." These treatments generally fall into one of three categories: lymphatic drainage, high-tech, and alternative medicine. I recently turned my thighs over to more than a dozen practitioners and procedures in New York and Los Angeles, then went back to the experts for an evaluation of the claims and caveats.

AIMEE LEE BALL is the co-author, with Liz Tilberis, of *No Time to Die* (Little, Brown), a memoir of the former *Harper's Bazaar* editor's life in fashion and battle with ovarian cancer.

To read more about cellulite treatments, pick up the January/February issue of *Luxury SpaFinder Magazine*.

Inside Back Cover — Blank



**Cynosure, Inc.**  
10 Elizabeth Drive  
Chelmsford, MA 01821  
800.886.2966  
[www.cynosurelaser.com](http://www.cynosurelaser.com)

 **CYNOSURE®**  
Where art and science meet.

 **CYNOSURESPA™**  
Where art and science meet.