THE RENUVION® DIFFERENCE



CONTENTS

P2:
INTRODUCTION

P3:
TECHNOLOGY

P4-P5:
SAFETY & EFFICACY

P6:
RESULTS

P7:
SPEED

P8:
VERSATILITY

P9:
VALUE

P10:
CONCLUSION

P11:
LEARN FROM OUR EXPERTS

P12:
DISCLAIMERS

THE RENUVION DIFFERENCE

WHAT MAKES RENUVION SO UNIQUE?

Join us as we dive into the science behind Renuvion, a technology that is not only changing the way physicians practice, but also redefining the standards of patient care.

In an era where the standard of care relies on precision and durable results, Renuvion stands at the forefront of innovation, offering physicians an unparalleled tool to address one of the most persistent challenges in cosmetic and plastic surgery: loose skin.

We've developed this guide to share the key components of revolutionary technology that is Reshaping What's Possible® for physicians and the lives of their patients. This book will explore the ins and outs of Renuvion, including clinical applications, safety and efficacy, transformative results, and the science behind it all.

Renuvion's groundbreaking technology allows physicians to go beneath the surface to address the problem of loose skin directly at the source. By combining the power of helium plasma and proprietary radiofrequency energy, Renuvion delivers controlled, precise heating to the subdermal layers, promoting soft subcutaneous tissue contraction and ultimately improving the appearance of loose skin.

Through detailed case studies, expert insights, and the science behind our technology, we aim to illustrate how Renuvion is reshaping the possibilities in medical aesthetics and beyond.



BRINGING THE HEAT:
HELIUM PLASMA TECHNOLOGY EXPLAINED

Renuvion's advanced technology leverages higher temperatures for superior tissue contraction.[2-7]

HERE'S HOW!

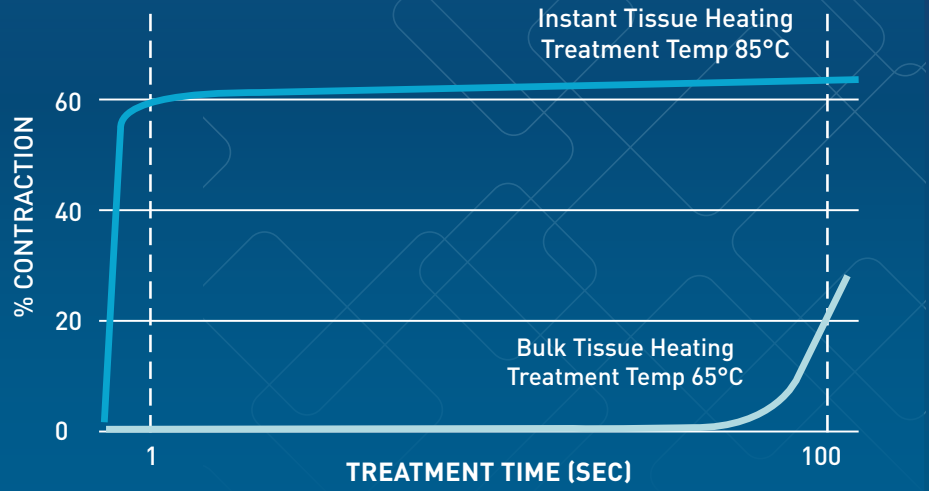
Collagen predictably contracts when exposed to heat, with higher temperatures resulting in greater and faster tissue contraction. Effective subdermal tissue contraction requires heating to at least 65°C, a benchmark standard radiofrequency devices struggle to consistently achieve.

THIS IS WHERE RENUVION FITS IN.

Optimal tissue contraction occurs at around 85°C, but most standard radiofrequency devices can't reach this temperature quickly without risking an unsafe rise in skin temperature. Renuvion overcomes this limitation by safely heating tissue to 85°C, ensuring optimal contraction and shorter procedure times. The device heats the tissue just long enough to maximize collagen contraction, then cools back to baseline in under a second. This rapid heating and cooling cycle allows for efficient and effective treatment with reduced application time.

LET'S BREAK IT DOWN.

INSTANT TISSUE HEATING			VS	BULK TISSUE HEATING		
85°C vs. 70°C	50% MORE CONTRACTION	1,000x FASTER		85°C vs. 65°C	50% MORE CONTRACTION	3,500x FASTER



IN OTHER WORDS, WHEN TREATING TISSUE AT 85°C YOU ACHIEVE **50% MORE** COLLAGEN CONTRACTION

~3,500 TIMES FASTER

WHEN COMPARED TO A TREATMENT TEMP OF 65°C

~1,000 TIMES FASTER

WHEN COMPARED TO A TREATMENT TEMP OF 70°C

NO NEED TO SURPASS 85°C — OUR PROVEN MOA SHOW US THAT 85°C IS THE HIGHEST TEMPERATURE NEEDED TO REACH MAXIMUM TISSUE CONTRACTION.

SAFETY & EFFICACY:
THE PROOF IS IN THE DATA

SAFETY FIRST:

When it comes down to it, safety is in our DNA.

We believe in **safety by design,** not by relying on alarms. Unlike other bulk heaters that require system alarms due to technological limitations, Renuvion ensures minimal surface temperature increase—no more than **4°C**—eliminating the need for cumbersome external monitoring. Our proprietary RF energy efficiently delivers full power, even to tissues with high resistance.[7,8]

According to a Renuvion Physician Survey, **79%** of Renuvion users who had switched from bipolar RF-based devices reported that Renuvion offered superior safety and reduced risk of complications.[9] In addition, a retrospective study of **450 patients** revealed a statistically significant reduction in adverse events, including burns, hematomas, hypertrophic scars, and seromas, in those treated with Renuvion compared to bipolar RF.[10]

Overall, Renuvion's rapid heating and near-instant cooling enable shorter activation times, reducing heat diffusion to the skin and enhancing safety.



79%

Renuvion users reported that Renuvion offered superior safety and reduced risk of complications.



450

450 patients revealed a notable reduction in adverse events, including burns, hematomas, hypertrophic scars, and seromas, in those treated with Renuvion compared to bipolar RF.

PROVEN EFFICACY:

Because Renuvion can achieve optimal tissue contraction by reaching temperatures of 85°C with rapid heating and near-instantaneous cooling, this results with minimal heat diffusion to the skin, shorter activation times and effective, visible real-time contraction. One can even see the contraction occur on the table.

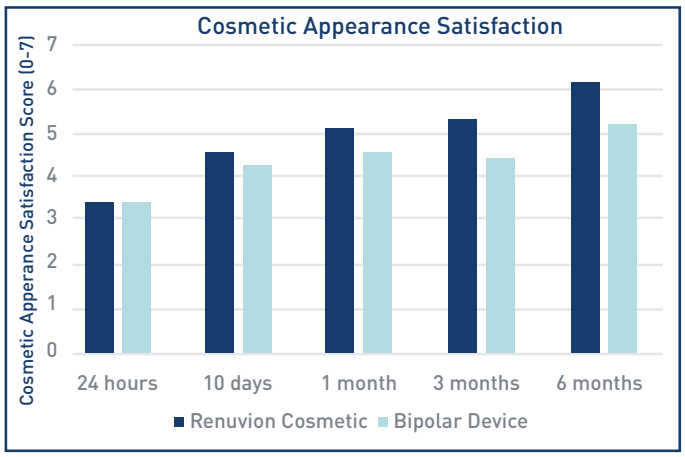
In addition to the survey results regarding safety, 79% of users also found Renuvion outperformed other bipolar devices in delivering results within two weeks.

79% of users also found Renuvion

OUTPERFORMED

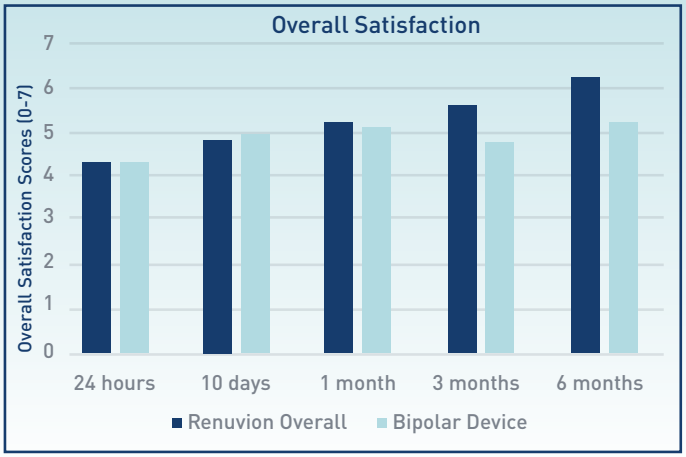
other bipolar devices in delivering results

WITHIN 2 WEEKS



"HIGHER OVERALL SATISFACTION"

Renuvion's proven efficacy doesn't stop there. In a head-to-head comparison covered in the white paper, "Helium Plasma Versus Radiofrequency for Energy-Enhanced Liposuction: A Prospective Single-Blind Pilot Study", it showed significantly higher overall satisfaction for areas treated with Renuvion at both 3 and 6 months post-treatment compared to other bipolar devices on the market.[11]



*study limitations include a small sample size of 10

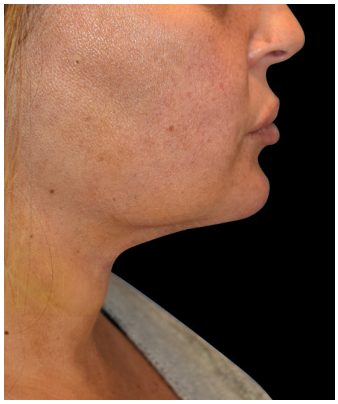
RESULTS THAT SPEAK FOR THEMSELVES:

Renuvion's proven mechanism of action provides physicians with an advanced tool to elevate body contouring results. By leveraging its unique technology, Renuvion enables more precise and effective treatments, allowing doctors to achieve superior outcomes for their patients. This innovative approach not only enhances the quality of results but also sets a new standard in the field of body contouring.

See for yourself.



Before



1 Week Post-Op

Patient: 40-year-old female
Procedure Type: Liposuction & Renuvion
Amount of Fat Removed: 40cc
Photos courtesy of Richard Zeff, MD



Before



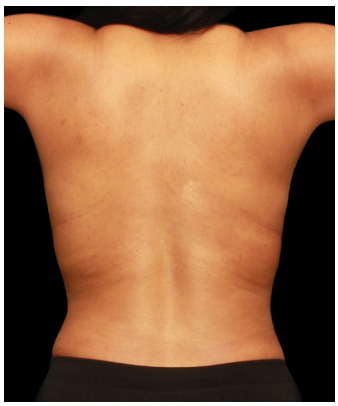
2 Years Post-Op*

Patient: 40-year-old, mother of two
Procedure Type: Liposuction & Renuvion
Amount of Fat Removed: 150cc
Photos courtesy of Vaishali Doolabh, MD

*No change in weight, diet or exercise.



Before



2½ Months Post-Op

Patient: 33-year-old female
Procedure Type: Liposuction & Renuvion
Amount of Fat Removed: 1750cc
Photos courtesy of J. Kevin Duplechain, MD



Before



6 Weeks Post-Op*

Patient: 22-year-old female
Procedure Type: Liposuction & Renuvion
Amount of Fat Removed: 1800cc
Photos courtesy of Emil Kohan, MD

*Patient also had fat transfer to buttocks

SPEED:
LIGHTNING FAST TECHNOLOGY

Time is valuable and we believe in efficiency.

In Dr. Neinstein's book chapter, "Advances in Skin Tightening with Liposculpture," Renuvion is highlighted for it's impressive speed per treatment area, requiring only 12 minutes for the abdomen, 7 minutes for the thighs or arms, and just 5 minutes for the neck. These quick treatment times enhance efficiency and patient outcomes in clinical settings.[12]



Dr. Ryan Neinstein



50%

Treatment times for areas treated with Renuvion are 50% shorter compared to other methods.

There's more – In Dr. Kluska's white paper, "Helium Plasma Versus Radiofrequency for Energy-Enhanced Liposuction: A Prospective Single-Blind Pilot Study", we found that treatment times for areas treated with Renuvion are 50% shorter compared to other methods. This significant reduction in procedure duration yet again demonstrates Renuvion's efficiency.

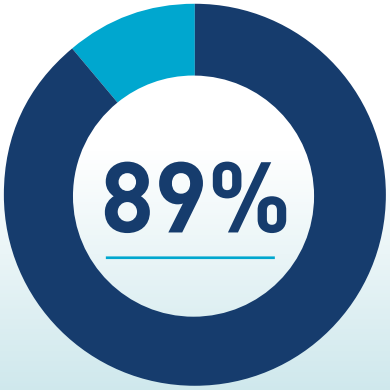


Dr. Michael Kluska

87%

of respondents agreed that Renuvion allows for faster application times compared with other energy devices.





Taking it back to 2019, we conducted a Renuvion Physician Survey, discovering 87% of respondents agreed that Renuvion allows for faster application times compared with other energy devices. In fact, 89% of respondents rated Renuvion higher in the "Speed of application" category compared to other bipolar RF-based devices available.[11]

VERSATILITY:
IT DOESN'T GET BETTER THAN THIS

Let's talk handpieces.

We offer a variety of handpieces with different lengths and diameters to treat patients from head to toe.



These handpieces are designed to treat multiple tissue planes, providing versatility in the operating room. Using our proprietary RF energy, distinct from standard RF energy, we have built a legacy of creating unique waveforms for enhanced results.

PROVEN ROI:
THE VALUE OF RENUVION

Time to talk numbers.



Dr. Paul Ruff

In a case study with Dr. Paul G. Ruff, we identified an additional $1 million in revenue within the first 16 months of adopting Renuvion technology. This growth was directly attributed to Renuvion, as its innovative features and effective promotion attracted new patients to the practice. Notably, there was a 40% increase in new patient leads and a 25% increase in interactions with existing patients, highlighting the technology's impact on the practice's growth.[13]

ADDITIONAL

$1MIL REVENUE

WITHIN THE FIRST 16 MONTHS OF ADOPTING RENUVION



Dr. Kyle Song



40% INCREASE IN NEW PATIENT LEADS

25% INCREASE IN INTERACTIONS WITH EXISTING PATIENTS[13]

19.3% ROI

Similarly, in a case study with Dr. Kyle Song, the initial investment in Renuvion was quickly **recouped after just 27 procedures.** With an average collection of **$3,074.63** per case, ranging from **$500 to $7,460,** the average net profit per case was **$2,632.41.** This resulted in a remarkable **19.3% return on investment** within six months, demonstrating the financial viability and rapid payback of integrating Renuvion into the practice.[14]

AVERAGE COLLECTION PER CASE



CONCLUSION

Renuvion offers a unique combination of safety, efficacy, versatility, speed, and value. With a low complication rate and unparalleled thermal characteristics, it ensures patient safety while delivering transformative results. Its versatility allows it to replace multiple devices, ensuring it is always in use rather than collecting dust in your closet. We can't forget about speed. Renuvion operates faster than alternative technologies, enhancing efficiency. Lastly, the proven return on investment and its ability to attract new patients make it a valuable addition to any practice.

SAFETY

Low complication rate, thermal characteristics unlike any other technology

EFFICACY

Allows me to give my patients better results

VERSATILITY

Replaces multiple other devices with one box/doesn't spend time in the closet

SPEED

It's faster than alternative technologies

VALUE

Proven ROI, brings patients in the door



renuvion®

LEARN FROM THE EXPERTS

Renuvion users, renowned for their expertise, present a series of insightful webinars that offer practical tips, innovative techniques, and in-depth discussions on the latest advancements. Whether you're looking to refine your skills or stay updated with industry trends, these webinars provide an invaluable opportunity to learn directly from the experts. Don't miss out on the chance to elevate your practice—explore the available Renuvion webinars today!



Renuvion: Streamlining Your Practice with Ease

Dr. Ali Saalabian

Didactic and Live Submental and Neck Case Observation

Dr. Nathaniel Villanueva

Disclaimer: Subdermal Coagulation Technique Presentation has been updated after this presentation, available on Renuvion University.

Weight Loss Revolution & the Renuvion Solution

Dr. Johnny Franco

Apyx® MEDICAL

DISCLAIMERS

Not all indications are approved in all markets; check with your local sales representative for further information.

The Renuvion APR Handpiece is intended to be used with compatible electrosurgical generators for the subcutaneous delivery of radiofrequency energy and/or helium plasma to coagulate soft tissue and facilitate tissue contraction, including following liposuction, to improve the appearance of skin laxity in aesthetic procedures.

As with any aesthetic procedure, individual results may vary. As with all energy devices there are inherent risks associated with its use. Risk associated with the use of the Renuvion APR may include: helium embolism into the surgical site due to inadvertent introduction into the venous or arterial blood supply system, unintended burns (deep or superficial), pneumothorax, temporary or permanent nerve injury, ischemia, fibrosis, infection, pain, discomfort, gas buildup resulting in temporary and transient crepitus or pain, bleeding, hematoma, seroma, subcutaneous induration, pigmentation changes, increased healing time, scarring, asymmetry and/ or unacceptable cosmetic result. Please see the instructions for use for more detailed information.

REFERENCES:

1. Product indications: https://apyxmedical.com/patient-renuvion-au/
2. Feldman LS, et al. (eds). The SAGES Manual on the fundamental use of surgical energy (FUSE), ISBN 978-1-4614-2073-6
3. Chen SS, Wright NT, Humphrey JD. Heat-induced changes in the mechanics of a collagenous tissue: Isothermal free shrinkage Journal of Bio mechanical Engineering 1997:109:372-378
4. McDonald MB. Conductive Keratoplasty: A radiofrequency-based Technique for the correction of Hyperopia Trans Am Ophthalmol Soc 2005;103:512-536
5. Chen SS, Humphrey JD. Heat-induced changes in the mechanics of a collagenous tissue: Pseudoelastic behavior at 37o C.J Biomech 1998;31:211-216
6. Wright NT, Humphrey JD. Denaturation of collagen during heating: An irreversible rate process. Annu Rev Biomed Eng;2002;4:109-128
7. Masghati S, Pedroso J, Gultierrez M, Stockwell E, Volker W, Howard DL. Comparative Thermal Effects of J-Plasma, Monopolar, Argon, and Laser Electrosurgery in a porcine Tissue Model. Surgical Technology International, 2019; 34:1-5 PMID: 30825320
8. Duncan DI and Roman S. Helium plasma subdermal tissue contraction method of action. Biomed J Sci & Tech Res 31(2)-2020. BJSTR. MS.ID.005075
9. 2019 Physician Survey Data on file
10. Kluska, Michael DO, FAACS, FACOS; Deal, R. Chad MD, FAACS; Summers, Kyle DO; Chang, Steven MD. A Retrospective Review Comparing Renuvion Helium Plasma Radiofrequency with BodyTite Bipolar Radiofrequency after Liposuction or Body Contouring. Plastic & Reconstructive Surgery-Global Open 12(8):p e6024, August 2024. | DOI: 10.1097/GOX.0000000000006024
11. Kluska M, Nasseri S, Bobrovnikov V. Helium Plasma Versus Radiofrequency for Energy-Enhanced Liposuction: A Prospective Single-Blind Pilot Study. Chattanooga, TN; 2020.
12. Neinstein R, Funderburk CD. Advances in Skin Tightening with Liposculpture: Plasma Technology Versus Radiofrequency. Advances in Cosmetic Surgery, Volume 3, Issue 1, 2020, Pages 173-188, ISSN 2542-4327, ISBN 9780323778282. https://doi.org/10.1016/j.yacs.2020.01.012.
13. Ruff, Paul G. "The Value of Renuvion: A Case Study with Paul G. Ruff IV, M.D." Apyx Medical, 2019. Value Case Studies. Case Study. https://physicians.renuvion.com/wp-content/uploads/2023/04/Value-Case-Study-Dr.-Ruff-MM-0209.00.pdf
14. Song, Kyle. "The Value of Renuvion: A Case Study with Kyle Song, M.D. and South Coast Plastic Surgery." Apyx Medical, 2019. Value Case Studies. Case Study. https://physicians.renuvion.com/wp-content/uploads/2023/04/Value-Case-Study-Dr.-Song-MM-0210.00.pdf

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