AT THE EXHALE SPA on Manhattan’s Central Park South, aesthetician Livia Fagaras shines a bright light on my face, pinches, prods, and finally proclaims that my skin “has potential.” While I mumble apologies about being a dermatological underachiever, she attaches an electrode on my back under my shoulder that’s connected to the ultrasound machine by her side. Flashbacks of surgery ensue, and I have to remind myself that I am here for beautification, not hospitalization. The Ultrasonic Facial (price: $200), after all, is supposed to help my skin rejuvenate, renew, and otherwise radiate. Faguras’s soft voice and gentle touch banish any trepidation as she begins to exfoliate my face with a blade that uses high-speed oscillations powered by ultrasound waves to loosen dead skin cells. (Think ticklish electrical currents, not switch blades.) After performing an extraction and a lymphatic drainage massage, she smooths on an antioxidant serum, reattaches the electrode, and runs a mushroom-shaped ultrasound wand over my face for precisely seven minutes (deemed optimal by the sonic wizards). “The sound waves break the serum into nanoparticles to help it penetrate the skin deeper,” she says. I feel only a mild warming, and the next day my skin is still glowing.

Welcome to the new sonic beauty boom. Since ultrasound was first harnessed, a world of possibilities has opened up, from seeing under the sea to seeing inside the womb. Of course, it was only a matter of time before the beauty industry started dreaming up ways to apply the technology, which uses sound waves above the limit of human hearing. Let’s be honest, seeing inside the body is nice, but seeing fewer lines on our faces? Now we’re talking real breakthrough. In 2004, the first Clarisonic cleansing brush went on the market, and a mini-revolution was launched. Powered by ultrasound, the brush oscillates at more than 300 impulses per second, cleaning and exfoliating the skin without pulling. (Interestingly, the faster the waves, the gentler the treatment.) It got the blessing of dermatologists, and women everywhere became instant converts. Ultrasound beauty treatments are now going to the next level, and those mighty little sound waves are taking aim at everything from love handles to frazzled hair.

For a (far) more extreme version of the sonic facial, there’s Ultherapy (price: $2,000-$6,000). The in-office treatment uses focused ultrasound waves to heat deep layers of skin tissue, stimulating collagen production while bypassing the skin’s surface. The result is a subtle but visible tightening (no one would mistake it for a surgical face-lift) with no downtime. (Yes, there was a bit of redness for a few hours, but nothing I couldn’t pass off as a post-workout glow.) The procedure, which allows a doctor to look at the target area on a screen while aiming the waves, was cleared by the FDA for lifting and tightening the brow area in 2009, and recently got the go-ahead for the neck and chin. Now it’s being studied for the treatment of wrinkles around the lips. “It is the best noninvasive tightening device available,” says dermatologist Fredric Brandt, a pioneer in the field. Because it takes time for new collagen to develop, results can take two to three months to see, but the lifting effect (a tighter jaw!) lasts at least a year. Robert Anolik, a dermatologist who uses Ultherapy at the Laser & Skin Surgery Center of New York, recommends it for women with mild-to-moderate skin laxity. “It can put off the need for surgery or even eradicate it in some cases,” Anolik says. A word of warning: Even with a mega-numbing cream and hospital-grade painkillers, the procedure isn’t for the faint of heart. The sensation as the hand piece moved over my face was, frankly, way beyond mere pinpricks. Nevertheless, the results
Liposonix, which has been available in Europe for several years (perhaps don’t get fat?), has recently been cleared for use in the U.S.

(did I mention a tighter jaw?) were terrific, and, as in childbirth, the pain is quickly forgotten in the afterglow.

Ultrasound is one of the newest weapons in tightening below the neck as well. Liposonix (price: $1,200–$2,000), which has been available in Europe for several years (perhaps this is the real reason Frenchwomen don’t get fat?), recently received FDA clearance for use in the U.S. to reduce body fat. The noninvasive procedure uses ultrasound waves to target, heat, and ultimately destroy fat cells, which are then safely processed through the lymphatic system and excreted from the body. Because fat cells take a while to die (it figures), results can take two to three months to see, but the fat reduction is permanent. “This isn’t meant as a weight loss treatment and won’t remove the amount of fat that liposuction would want, but you can go down one to two dress sizes,” says dermatologist Bruce Katz of New York’s Juva Skin & Laser Center. Katz uses Liposonix to remove stubborn pockets of fat from the stomach, love handles, inner and outer thighs, upper arms, and even bra bulges in otherwise fit women. “We map out the area to be treated, spray it with water, then apply the transducer that conducts the energy,” he explains. “Liposonix allows us to sculpt each area and blend the fat so there are no lumps. That gives us better aesthetic results than other treatments.” Liposonix requires just a single one-hour session, and there are no side effects other than the chance of redness and slight bruising or swelling. It’s possible to do three or four areas per session, no anesthesia is required, and while it’s not pain-free, the mild stinging and warmth are manageable.

New at-home treatments utilizing ultrasound technology are also hitting the market. Now that Clarisonic has forever changed how we clean our face, they are moving on to conquer our feet. The Clarisonic Pedi Foot Transformation System ($199) comes with two attachments that are powered by high-speed sonic oscillations. There’s a textured metal disk for serious sloughing twice a week and a brush for daily exfoliation; together they promise skin that’s 10 times smoother than is possible with manual buffing. As a serial apologist to pedicurists, I immediately became addicted to the textured metal smoothing disk, which is not unlike running an electric sander over cracked heels and calluses. I force myself to switch to the much milder brush for daily upkeep, which, when used with the accompanying exfoliating scrub, does a good job on flaking skin. The kit also includes a shea butter balm and a peel solution with lactic and glycolic acids to speed up the smoothing process.

Sloughing is definitely not the way to go when it comes to your mouth. The Emmi-dent Ultrasonic Toothbrush ($189) produces up to 84 million gentle oscillations per minute, eliminating the need for scrubbing. Other than a light vibration, you barely feel it, making it perfect for sensitive teeth or gums. (It’s hard to resist the urge to brush manually at first, though you quickly get used to being a sonic slacker.) The manufacturer claims that sonic waves “kill and implode bacteria” and that a special toothpaste used with the brush creates deep-cleansing “nano bubbles.” (“Nano,” it seems, is the beauty world’s new black.) Rinsing removes the debris; all that’s left is an almost slippery-clean sensation. Dentist Jack Ringer, president of the American Academy of Cosmetic Dentistry, is a fan of the technology. “Studies have shown that sonic brushes can be more effective at removing plaque buildup with less risk of overbrushing,” he says. Still, “nothing is as effective in cleaning between the teeth as mechanical flossing.” That may be about to change, however. The just launched Flossolution 500 ($99.99) is the only sonic-powered machine that’s designed strictly for flossing. Set on one of three power levels, the vibrating floss makes a loud whirring sound as you move it between your teeth. (The wand has a padded Bite Bumper as well as a patented Flossguard so that the floss can’t get too close and injure your gums, what dentists refer to as “flossing trauma.”) Depending on your point of view, the buzzing will either be satisfying (it’s working) or remind you of a dentist’s drill (get me out of here!).

It was inevitable that hair would also come under sonic attack. Longtime Hollywood stylist José Eber has introduced the Therapy RX Moisture Boosting Tool ($200), which uses a combination of infrared and antimicrobial technologies with ultrasonic vibrations to help conditioners penetrate deep into the shaft of damp hair. Though it looks like a flat iron, the gizmo doesn’t heat up, dry, or straighten hair. In fact, it’s difficult to tell that it’s working at all—consider it an act of faith. Luckily, you can treat an entire head of hair in 10 minutes before drying. Miami stylist Jonathon Levi Powell (a favorite of models) says, “When hair is damaged the cuticle cracks, making it lose proteins and moisture.” The Therapy RX breaks conditioners into nanoparticles and pushes them into the hair (it’s safe for color- or keratin-treated tresses). “It’s like applying a moisturizer before makeup,” says Powell, who recommends using it twice a week before styling as usual. For more intense conditioning, the White Devil—a salon treatment ($125 and up) that has just landed on America’s shores after being launched in Europe—works much the same way as Eber’s Therapy RX, although the stylist can adjust the strength of the ultrasound and the infrared waves according to the degree of hair damage. Ron Cardillo Sr., president of She by So.Cap USA, the company behind the White Devil, says, “It works well on hair that is badly damaged from overbleaching or is simply dull and frizzy.” After shampooing and towel-cring, the stylist applies conditioner and runs the device over small sections of hair three to five times. The process takes about an hour, and should be repeated every four to six weeks. “The molecules in the hair and in the conditioner are excited by the ultrasound waves, allowing the conditioner to penetrate the cortex of the hair shaft, where it is sealed inside rather than just sitting on the surface,” he says. “The result is stronger, shinier hair that reflects light.”

Nanoparticles and excited molecules, indeed. Alas, it appears that one of the only things the ultrasound cannot do is make my hair grow—yet. ■

“This article is an exact reprint of the original featured in the November 2013 issue of Harper’s Bazaar; no details have been removed. The view of the author and statements from physicians quoted in the article are that of each individual. Refer to the Ultherapy® System Indications for Use for the FDA-cleared indications at Ultherapy.com/1FU. 1002440A