

UltraShape is the first and only non-invasive body contouring treatment to use proprietary pulsed focused ultrasound to immediately and comfortably destroy fat cells—and deliver noticeable results in two weeks.

UltraShape emits acoustic waves of focused ultrasound energy, which converge to target subcutaneous fat at a controlled depth. Unlike traditional ultrasound technology, UltraShape’s ultrasound energy is pulsed, allowing control over temperature elevation so that fat is destroyed instantly, selectively and mechanically rather than thermally.

## The UltraShape Transducer

The ceramic half-dome at the heart of the UltraShape handpiece is coated with silver and filled with a medium that matches the impedance of the human body.

When electrical voltage is applied to the silver coating, an electrical field is created within the ceramic. This causes an alteration in the ceramic thickness, which in turn creates pressure waves within the medium. These pressure waves are interpreted as sound waves, creating the ultrasound energy. (Figure 1)

When the interstitial fluid is subjected to these rapid alterations in pressure, bubbles are formed and then implode. This implosion can cause a mechanical breakdown of the fat cells—without harming the surrounding structures.

## Focused Ultrasound

Because the ceramic in the handpiece has a rounded shape, it delivers low energy at the surface that intensifies as it converges on a focal point. This focused energy is better able to target defined tissue—in this case, fat cells—at a controlled depth, while leaving adjacent structures (blood vessels, nerves, muscles) unharmed.

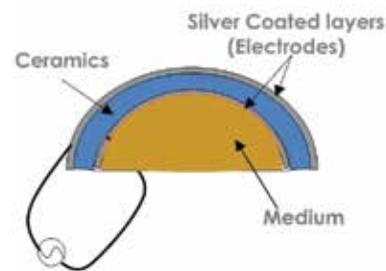
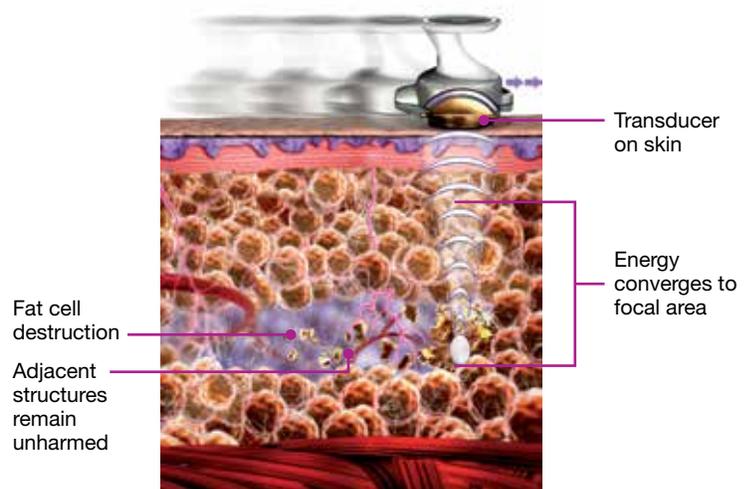


Figure 1



UltraShape Mechanism of Action

## Pulsed Delivery

UltraShape energy is delivered in bursts, so the heat that is generated can dissipate before the next pulse begins. This minimizes temperature increases on and around the targeted tissues.

Energy is then transformed into mechanical stresses that stay focused on one target—and only for the duration of the pulse. This enables UltraShape to selectively destroy fat cells, which are more susceptible to disruption, while more resistant structures remain intact.

## Fat Clearance

The most common concern regarding non-invasive fat reduction is what happens to the destroyed fat cells.

When the fat cell membrane is disrupted, the content (composed mainly of triglycerides) is dispersed into the interstitial fluid among the cells and transported to the liver.

The liver processes this fat the same way it processes fat that comes from digested food, by clearing it through the body's lymphatic, venous and immune systems.