

# Ultrasound body contouring- Ultraliposlim(URV)

## CAVITATION

BIO 2F CAVITY is a generator of cavitation stable waves for the treatment of the "panniculopatia adipose"; at the moment it is the most advanced instrument for the panniculus adiposus and cellulite; it represents the last technological evolution of the machines of this part of market at high technological level. Thanks to sophisticated control mechanism in retroaction of working parameters (pressure-acoustic speed spread, temperature and deviation from the point of maximum efficiency) it represents the best technological choice for adipocities lyses treatments. The basic working principle of BIO 2F CAVITY is the well-known physical phenomenon of cavitation. The ultrasonic waves (as all the sonorous waves) are constituted by expansion and compression cycles. The compression cycles exert a positive pressure on the fluid, bring the molecules nearer, while the expansion cycles exert a negative pressure that, vice-versa tend to move them away. During its expansion cycle a acoustic wave of adequate intensity may generate a micro cavity. In a fluid like the biological one, some attractive forces that determinate the molecular cohesion. So if a cavity would be developed, it is necessary a negative high pressure together with an expansion cycle of a acoustic wave, that would be able to face the existent molecular cohesion.

In the low density tissue such as for example the adipose tissue, the molecular cohesion is reduced for the presence of cellular interstices and then they are enough negative pressures relatively low in order to define this phenomenon. So, when a tissue is subjected to a negative pressure of the expansion cycle of a acoustic wave, a negative pressure is created inside the liquids that produce a large amount of gas bubble that enlarge themselves until the decompression (or expansion) phase last. Then, an implosion follows with a consequent emission of collision's waves occurs. Then, cavitation results stable if it is constantly controlled in its emission's frequency in order to reduce, in any case the collateral thermal effects.

The final effect, the intense cellular fragmentation that produce the spread of the adipocities liquid matrix (fat acids) in the intracellular spaces, where when they get in touch with interstitial fluids and the infiltration solution produce a stable emulsion. Often, in the cases of less density in the tissues the cavitation phenomenon is particularly intense until induce the composition of free radicals and the denaturization of lipoprotein's component of the adipocitary membrane.

These last biological effects are translated into a lipolytic action that will partially continue also after the end of the cavitation treatment. Then it is useful the body shaping and lymphatic drainage through vacuum-endodermic massage of treated area with Derma vacuum and Multi RF to eliminate the liquid and oily part of destructed adipocytes.

## RF

Bipolar RF and Tripollar RF technology offers new scientific development in cellulite treatment, body sculpting, anti-aging and skin tightening. It involves applying electromagnetic (non-ionizing) waves to the body in order to return physiological processes that have slowed down to normal. These waves carry heat and energy deep into the skin creating an endothermic effect that has a positive effect on the lymphatic and vascular systems and on the adipose-connective structures.

## VAC UUM

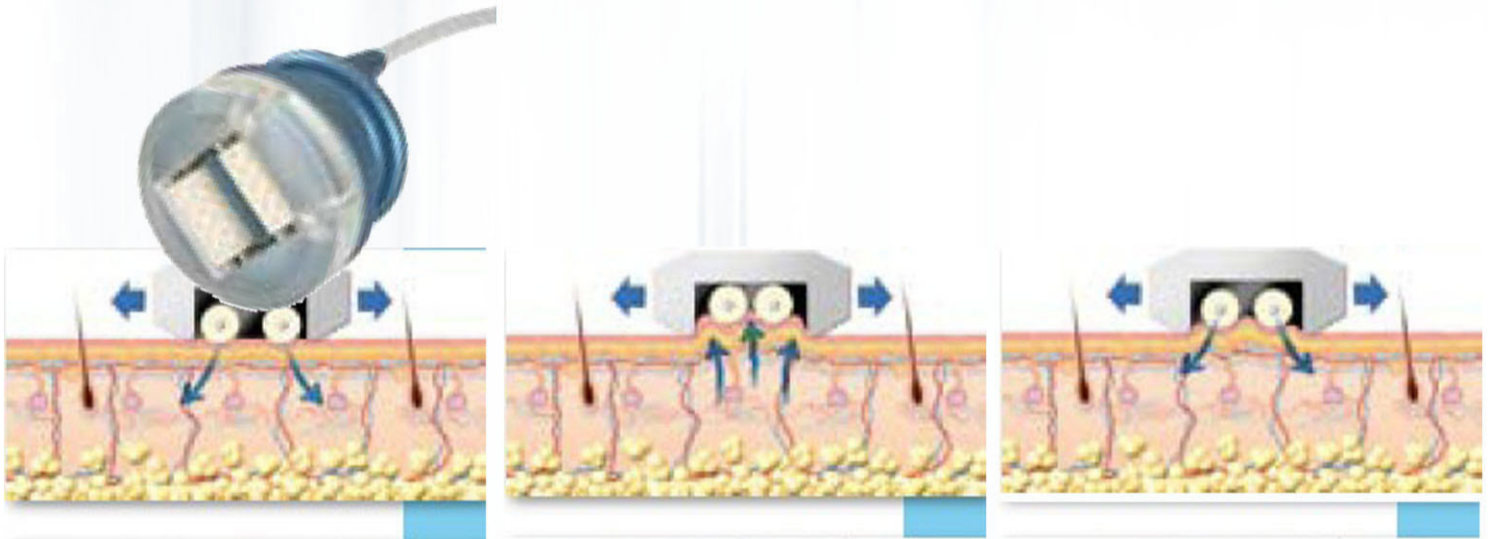
Derma VAC massage increases oxygenated blood flow and nutrition, as well as encouraging the removal of liquids carrying waste and stimulating the metabolic activity of cellular elements.

Effects on the body

- reduces flaccid tissue
- reduces cellulite-based flaws
- increases secretion in the adipose system thereby reducing fat pockets
- accelerates lipolysis
- reduces oedemas and recent stretch marks
- increases tissue oxygenation



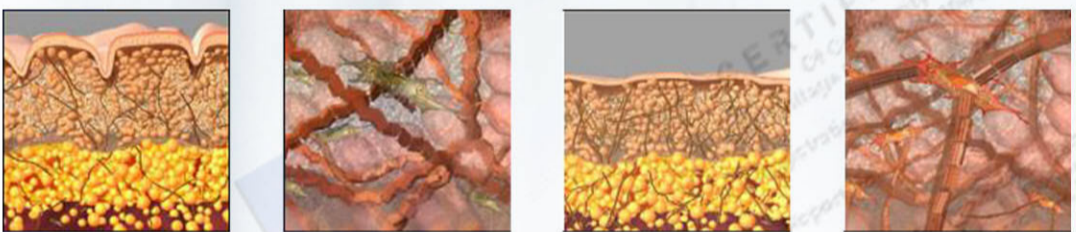
**VAC UUM**



**Touch screen**



**Immediate Results: Collagen fibers contract—Tightening the treated skin**



Wrinkled skin before treatment

Heating contracts existing Collagen

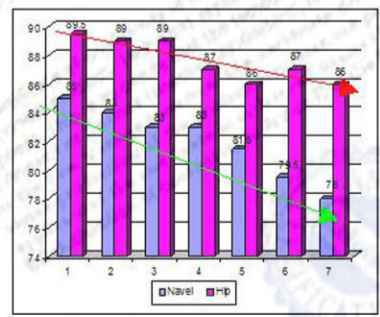
Contracting Collagen and newly produced Collagen tighten skin

stimulates Fibroblasts' additional Collagen production

**Long Term Results: Increased Fibroblasts' metabolism increases Collagen deposits "locking" the skin in its tighter form**

**Long Term Results**

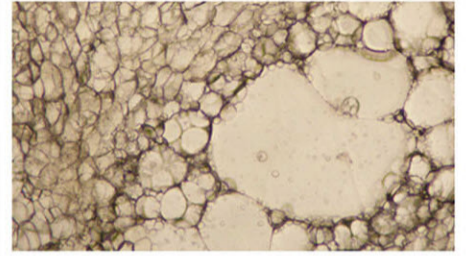
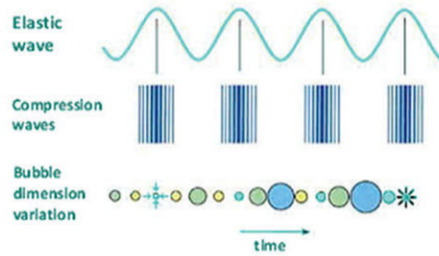
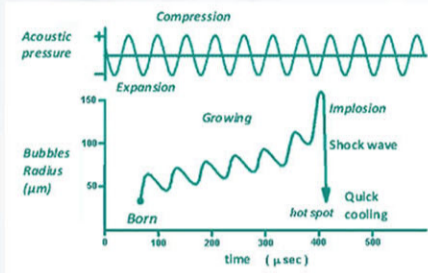
Tummy and thigh Skin Tightening & Fat Reduction in 7 treatments  
 Client 32 years of age, 1 year post-pregnancy  
 Reduction of 7 cm in tummy circumference  
 Reduction of 3.5 cm in hip circumference (7cm below navel)



Regd. 15.10.2007  
 CE

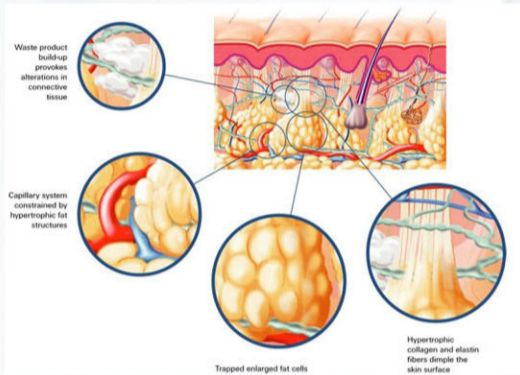
EMC

## CAVITATION WORKING THEORY

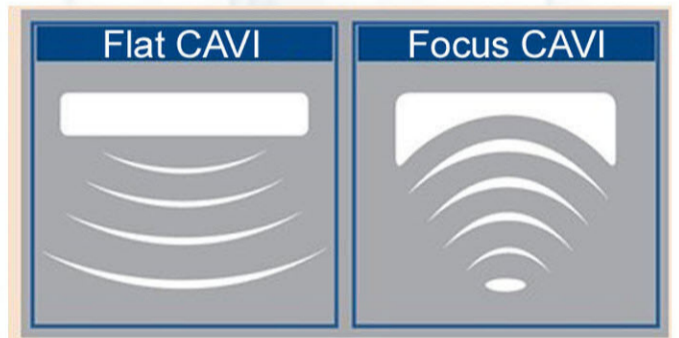


The increasing of the fat tissue crumbling zone

## How the cellulite Cause?



## Flat CAVI / Focus CAVI



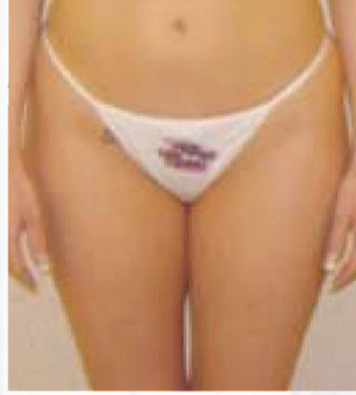
## Before and After



Before



After treatments



Before



After treatments

### Main technical specifications

CAVITATION Frequency	35KHZ to 47KHZ
CAVITATION Power	Max 5w/cm2
CAVITATION Hand Pieces diameter	50mm
Power supply	AC 110V -230V 50/60Hz;
RF Polar	Bipolar and Tripolar
RF Frequency	6MH
RF Maximum power density	35Watt
RF Hand piece No.	4 Pieces,
Duration of the treatment	Adjustable from 5 to 30 minutes by steps of 5 minutes
RF Power	Max 280J±10%
VAC UUM	Flow Max 2.0L/S ; MAX-102Kpa
Display	7 Inch Color Touch Screen
Dimensions	
Weight	
Certification	CE Class I