

# Cellulite Theory

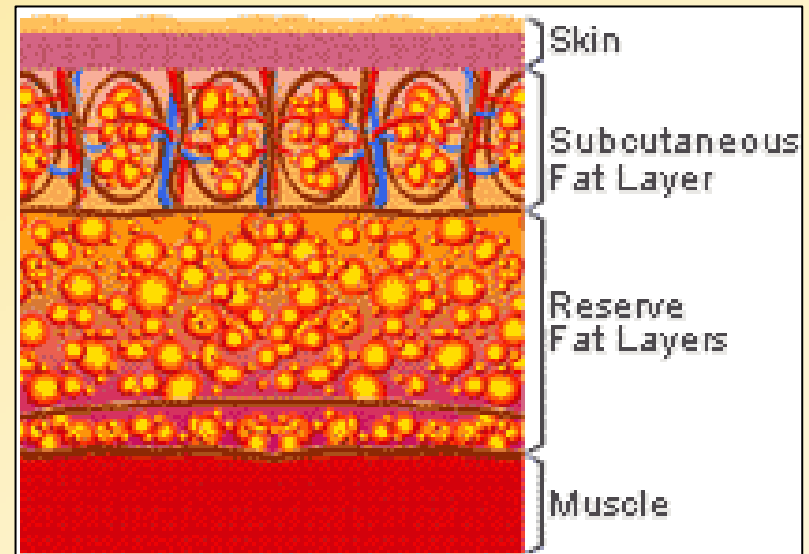
Understanding Cellulite...



# WHAT IS CELLULITE?

Cellulite is a term established in 1973 to describe a condition of the skin and subcutaneous tissue characterized by

- Microcirculation impairment
- Fluid retention
- Enlarged Fat cells (size & number)
- Alteration of connective tissue



# CHARACTERISTICS OF CELLULITE

- Occurs mainly in women (90% of woman after puberty).
- Occurs mainly in thighs, hips, and buttocks.
- Characterized by a “padded” or orange peel” skin appearance.



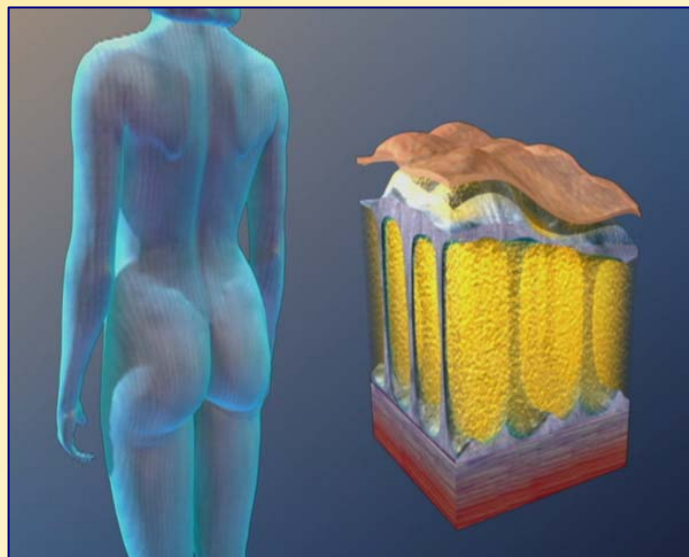
# CAUSES OF CELLULITE

- **Hormonal Changes Mainly Estrogen**
- **Diet (Mainly saturated fat)**
- **Impaired Circulation**
- **Lack of Exercise**
- **Medications**
- **Lack of Water Consumption**
- **Caffeine Consumption**
- **Genetics**

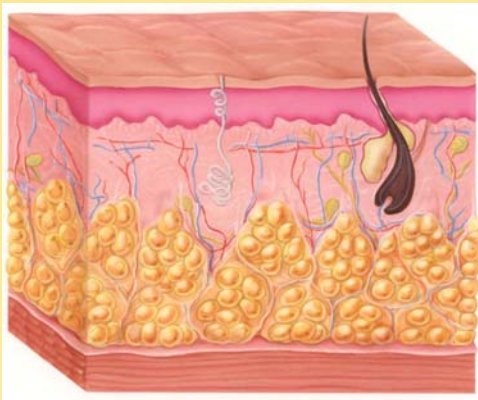


# CAUSES OF CELLULITE:

- These factors cause the fat cells in the subcutaneous fat layer to enlarge and stick together inside the pockets in which they are enclosed. The pockets are stretched upward while the fibers in-between the pockets are strained, circulation may be altered, while toxins and water can be trapped. The result is cellulite.



# UNHEALTHY TISSUE (cellulite ridden) vs. HEALTHY TISSUE



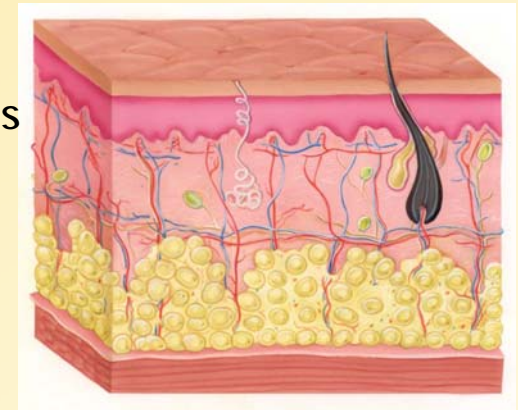
1-Skin

2-Fat Globules sub dermal/ sub cutaneous

3-Fibrous Tissue

4-Blood Supply

**Unhealthy tissue**



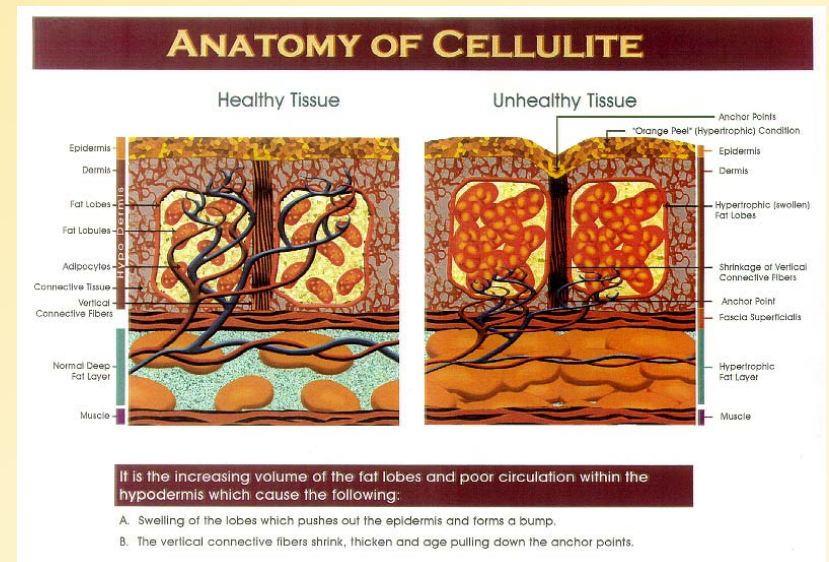
**Healthy tissue**

# ANATOMY OF CELLULITE

Subcutaneous tissue has two distinct layers: The Superficial Fatty layer and the Deep Membranous layer.

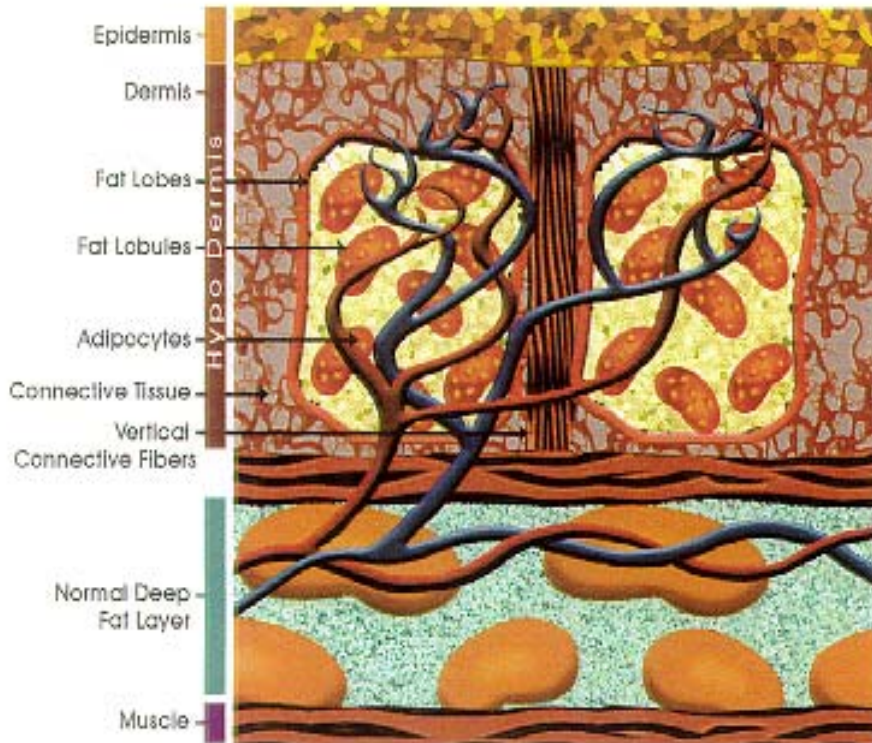
Each layer is separated by fascia that runs parallel to skin surface.

Fat lobules of superficial layer are smaller than deep layer and tightly packed within close-spaced septae.

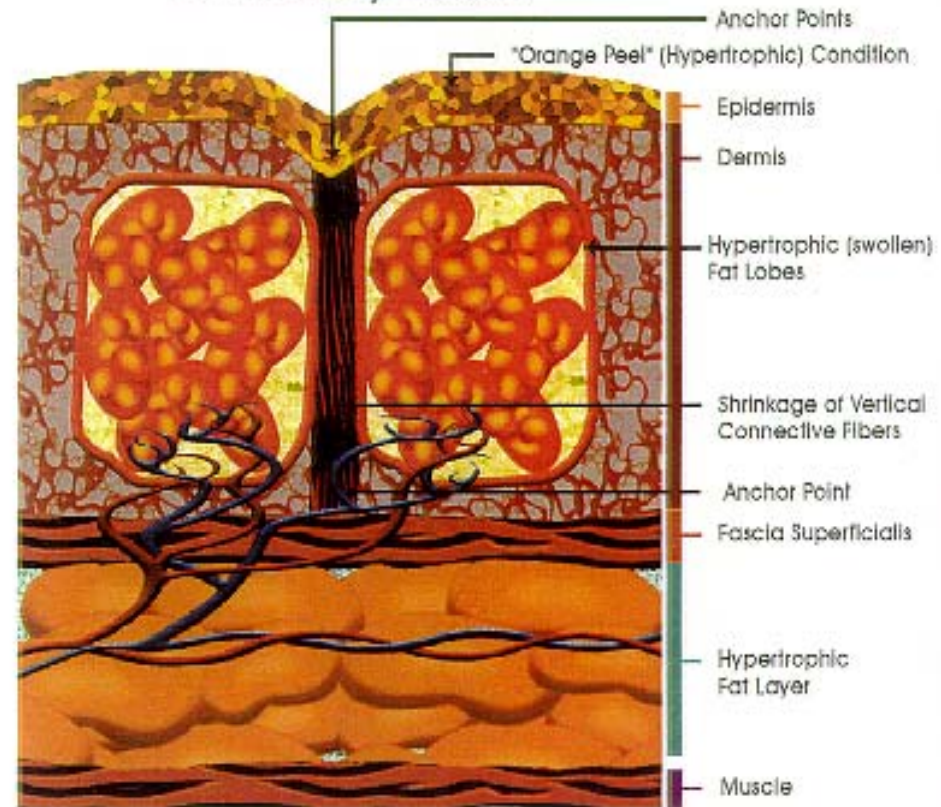


# ANATOMY OF CELLULITE

Healthy Tissue



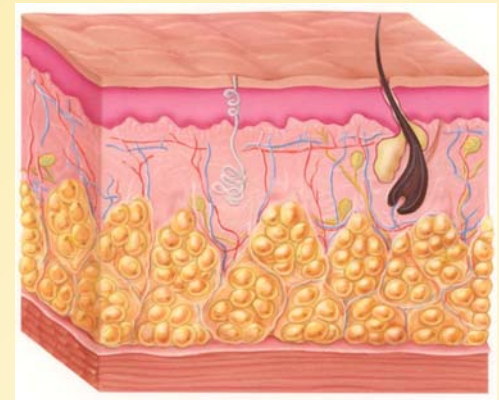
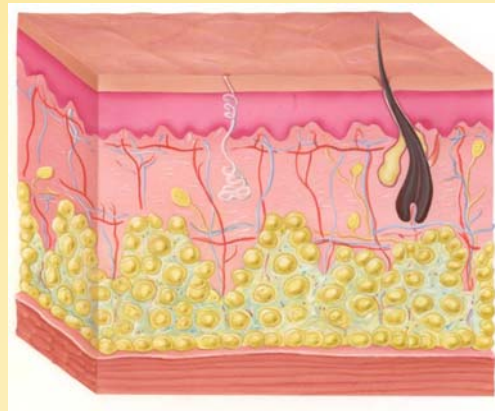
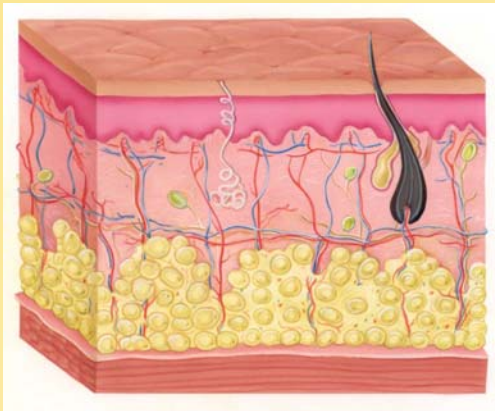
Unhealthy Tissue



It is the increasing volume of the fat lobes and poor circulation within the hypodermis which cause the following:

- Swelling of the lobes which pushes out the epidermis and forms a bump.
- The vertical connective fibers shrink, thicken and age pulling down the anchor points.

# CELLULITE FORMATION



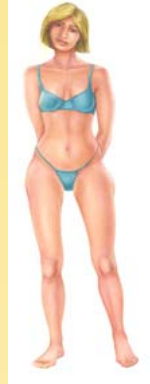
**NORMAL TISSUE**

**EDEMA FORMATION**

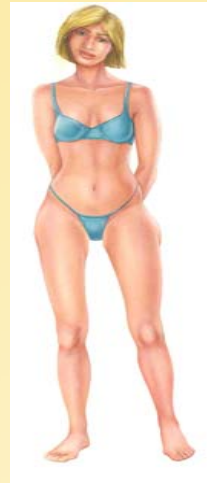
**FIBROSIS**

# TYPES OF CELLULITE

**COMPACT :**  
Dense to the touch.



**HARD:**  
grainy to the touch, adhered  
to the deep levels of the skin.



**SOFT:** spongy and  
floating tissue.



**EDEMATOUS:** viscous to  
the touch.



# DIAGNOSIS OF CELLULITE:

- In the pinch test, the Cause and Effect of Cellulite are more pronounced. The pinch test is the pinching of the skin in the thighs and buttocks area that creates a folding of the skin.



# STAGES OF CELLULITE

- **Stage 0:** No apparent visible alterations to the skin surface. When standing or lying down, skin is smooth. When the skin is pinched, you see only folds, but not cellulite.
- **Stage 1:** A visible alteration to the skin surface. Orange peel appearance of the skin becomes visible by the pinch test or muscular contraction. When standing or lying down, skin is still smooth. When the skin is pinched, you notice dimples.
- **Stage 2:** An orange peel appearance of the skin is evident to the naked eye, without the help of pinch test. While lying down, skin may be smooth looking, however, when standing, you see "orange peel skin or dimpling .
- **Stage 3:** Presence of the same alterations as described in stage II with raised areas and nodule appearance. Cellulite is seen clearly whether you are standing or laying down.



# PREVENTION OF CELLULITE

- **Exercise**
- **Technology**
- **Diet**
- **One of the most important keys is to eat organic food.**

## Anti-Cellulite Diet

- **Beans are high in fiber and protein.**
- **Bananas rich source of potassium, vitamin B6.**
- **Pineapple reduces fluid retention and is a good source of vitamin C.**



# PREVENTION AND CONTROL

- **Berries Antioxidant**
- **Watermelon, Pears, Avocado, Bran and Oat Cereals, Broccoli**
  - (Alpha Fatty Acid)
- **Onions, Citrus Fruit and Oily Fish**



# CELLULITE SIN FOOD

- Sugar causes collagen to harden and increase the appearance of cellulite.
- Sugar increases the free radical in the body by 140%
- Saturated Fat. Keep the SF% in your diet less than 25%.
- Caffeine, Alcohol, Refined Carbohydrate and Salty Food



# ANTI CELLULITE VITAMINS AND MINERALS

- Calcium and potassium help reduce fluid retention.
- Iodine stimulates the metabolism
- Magnesium reduces stress.
- Selenium improves the action of vitamin C,E.
- Sulfur reduces free radical damage
- Vitamin C helps increase the strength of the skin.



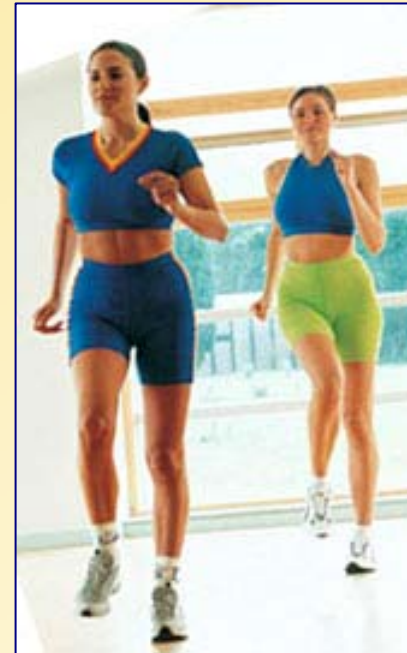
# ANTI CELLULITE VITAMINS AND MINERALS

- **Vitamin E improves circulation and is essential for healthy skin. Very potent antioxidant.**
- **Gamma Linoleic acid improves fat metabolism.**
- **Lycopene is a vital antioxidant.**



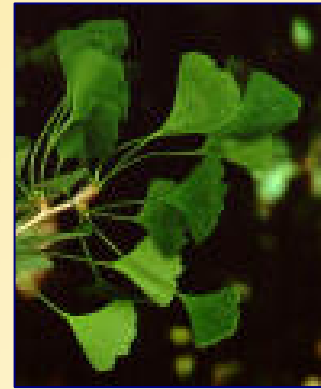
# EXERCISE

- Regular and long term exercise will help to smooth cellulite lumps.
- Increasing muscle mass leads to burning more calories.
- Improves the blood circulation to the skin.
- Increases the BMR which helps to soften the fatty tissue.



# SUPPLEMENTS

- **Antioxidant**
- **Multi Vitamin**
- **Ginkgo Biloba**
- **Green Tea**
- **Conjugated Linoleic Acid**
- **Diuretic Herb**



# The Dermosonic® Method . . .



# DERMOSONIC IS THE COMBINATION OF:

- ULTRASOUND



- N.I.S.T. (NON INVASIVE SUBDERMAL THERAPY)



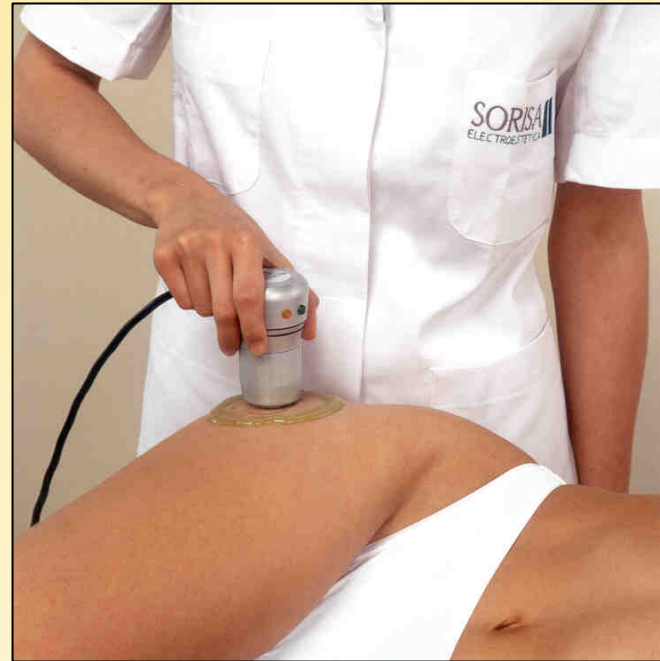
# WHAT IS ULTRASOUND

A non invasive technique that uses sound waves at a very high frequency (> 18,000 Hz) causing a mechanical vibration which is transmitted to the tissues.



# APPLICATION OF ULTRASOUND

Conducting gel must always be applied to the skin surface before applying ultrasound. Gel is used as a conducting element, to the sound waves generated.



# ULTRASOUND EMISSION PARAMETERS

## **EMISSION FREQUENCY:**

- 3 MHz (standard)
- 1 MHz (optional)

**1MHz ultrasound penetrates up to 12cm into tissue.**

**3MHz ultrasound penetrates about 4 cm into tissue.**

**Energy is absorbed by the various structures the ultrasound energy meets on its way through any given tissue area.**

# ULTRASOUND EMISSION PARAMETERS

## EMISSION MODE:

- Continuous
- Pulsed

## POWER DENSITY:

- Continuous:  $2 \text{ W/cm}^2$
- Pulsed:  $3 \text{ W/cm}^2$



**TIME:** According to each pre-set program or maximum 20 minutes. Pre-set programs may be modified longer or shorter if desired.

# CONTRAINDICATIONS OF ULTRASOUND

1. Metal implants
2. Cardiac pacemakers
3. Open lesions
4. Active infections
5. Undiagnosed lesions
6. Tumors
7. Pregnancy
8. Do not use ultrasound on or around the eyes or ears.



# N.I.S.T.<sup>tm</sup>

## Non-Invasive Subdermal Therapy



# IMMEDIATE EFFECTS OF THE N.I.S.T.™

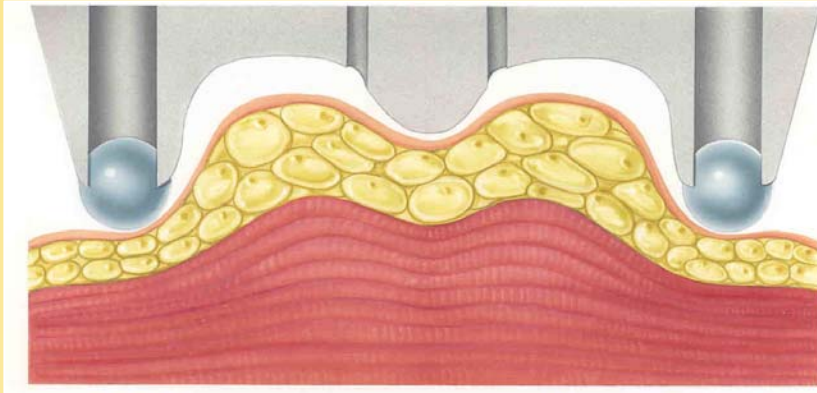
- Move fluid from the subcutaneous layers to the superficial layer of the skin.
- Exfoliate the skin.
- Temporarily reduce the appearance of cellulite.



# FOUR SIZES OF APPLICATION HEADS

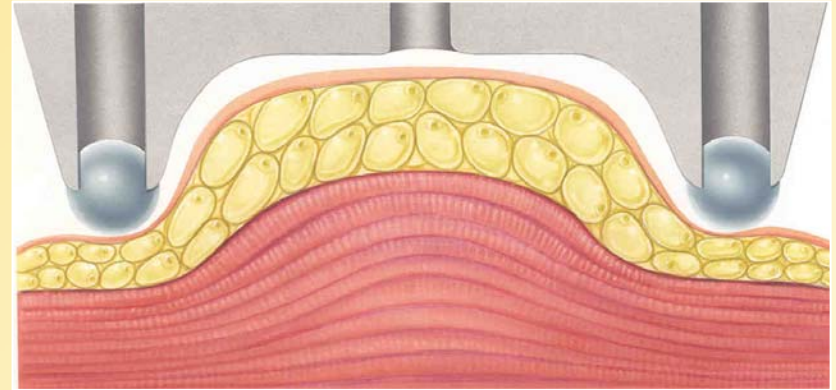
- Large
- Medium
- Small
- Facial

# TYPES OF APPLICATION HEADS



## LARGE HEAD

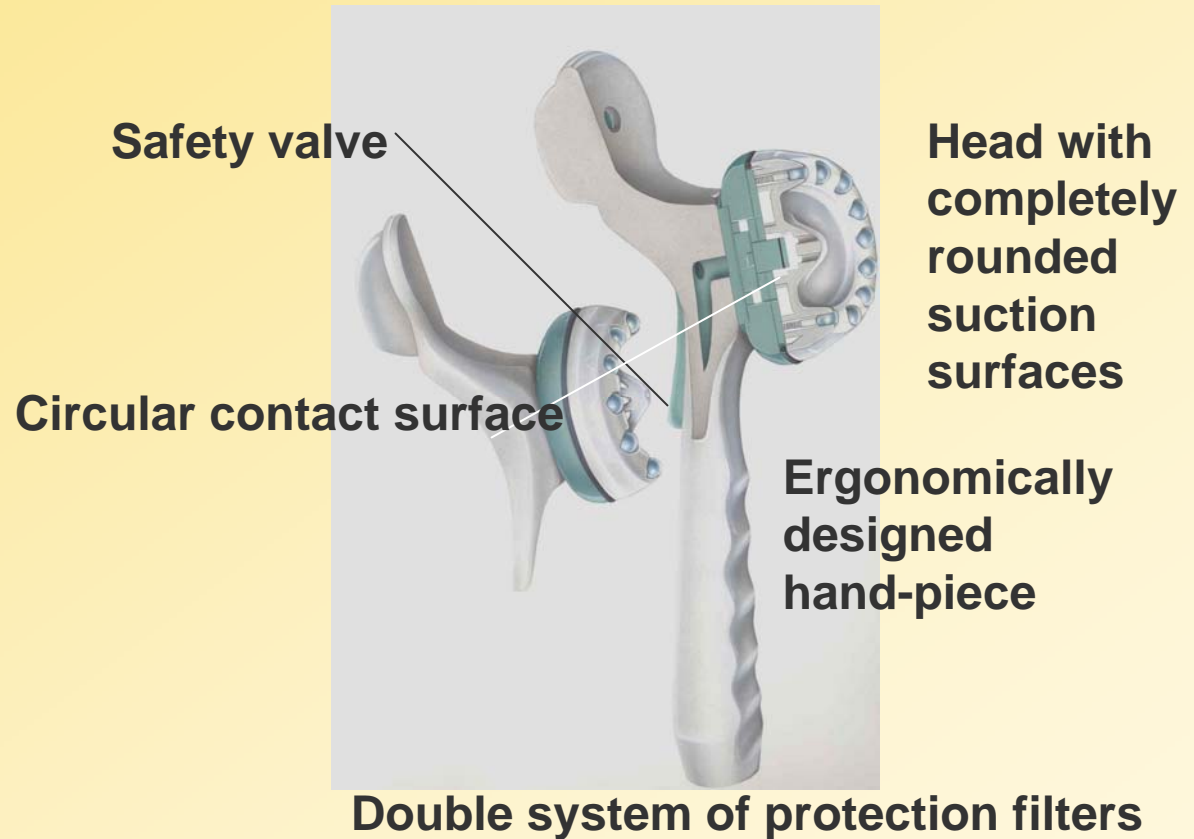
With protruberance to provide a double effect of tissue movement and activation.



## SMALL/ MEDIUM HEADS

Completely rounded suction surfaces provide gentle even suction.

# SPECIAL APPLICATION HEAD DESIGN



# SPECIAL HEAD DESIGN

- *Safety valve* to immediately interrupt suction
- *Circular contact surface* to provide 360° movement and complete tissue mobilization
- *Ergonomic handle* is light weight and easy to use



# SUCTION MODES

- Continuous
- Pulsed

# DERMOSONIC PROGRAMS 0-7 AND SUGGESTED USE

## Program

PROG. 0

PROG. 1

PROG. 2

PROG. 3

PROG. 4

PROG. 5

## Suggested Use

*Free Use* no pre sets

Soft Characteristics

Edematous Characteristics

Compact Characteristics

Hard Adipose Characteristics

Body Massage

# N.I.S.T. MANIPULATIONS

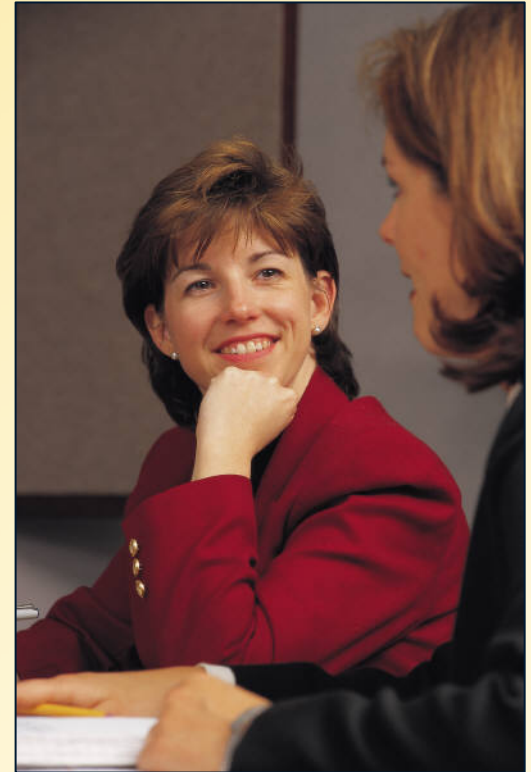
- LARGE “EIGHT”
- SMALL “EIGHT”
- LINEAR MOVEMENT
- CIRCULAR MOVEMENT
- ZIG-ZAG
- PERCUSSION-SUCTION
- VIBRATION MOVEMENT

# STEP BY STEP DERMOSONIC TREATMENT

1. Assess the cellulite stage.
2. Select the Ultrasound program.
3. Apply conducting gel.
4. Begin ultrasound.
5. Remove the conducting gel from body.
6. Select the N.I.S.T. program.
7. Begin the N.I.S.T. sensitivity test.
8. Start the N.I.S.T.
9. Repeat the sensitivity test with every change of application head.

# CONTRAINDICATIONS OF N.I.S.T.

- Vascular fragility
- Tumors
- Excessive obesity
- Pregnancy
- Uncontrolled hypertension
- Phlebitis and vascularistis
- Varicose veins
- Abdomen of pregnant women
- Patients on anticoagulant medication
- Patient with coagulant disorders
- Skin infections/ open lesions
- Hernias
- Diabetic patients
- Recent surgery (6 weeks)



# DERMOSONIC ACCESSORIES



# THANK YOU...

*Now on to the Demonstration*



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