

## Technical specifications

### • *Drenalip 75270*

|                  |   |
|------------------|---|
| PROPERTIES       | Prevents and treats cellulite together with its associated phenomenon. It also diminishes the local fat deposits.                         |
| ACTIVE MOLECULES | Astragalus root (flavonoids)<br>Butcher's broom rhizome (ruscogenin)<br>Lemon peel (hesperidin and naringin)<br>Goldenrod flowers (rutin) |
| APPEARANCE       | Liquid<br>Grey-brown colour   |
| SOLUBILITY       | Soluble in aqueous solutions  |
| RECOMMENDED DOSE | 2 – 3%  |

## Formulation

### • *Anticellulite gel*

|   | INCI                            | %     |       |
|---|---------------------------------|-------|-------|
| A | Acrylates/C10-30 Alkyl Acrylate | 0.55  |       |
|   | Crosspolymer                    |       |       |
|   | Preservative                    |       | 0.30  |
|   | Aqua (Water)                    |       | 35.25 |
|   | Disodium EDTA                   | 0.10  |       |
| B | Glycerin                        | 5.00  |       |
|   | Aqua (Water)                    | 50.00 |       |
| C | Triethanolamine (99%)           | 0.10  |       |
|   | Aqua (Water)                    | 0.10  |       |
| D | <b>DRENALIP™</b>                | 3.00  |       |
|   | Oleth-20                        | 0.80  |       |
|   | Parfum (Fragrance)              | 0.30  |       |
|   | Aqua (Water)                    | 3.00  |       |
|   | Preservative                    | 0.50  |       |
| E | Triethanolamine (99%)           | 0.40  |       |
|   | Aqua (Water)                    | 0.40  |       |
| F | Sodium chloride                 | 0.20  |       |

## *Drenalip*

Standardized natural complex for cellulite prevention and treatment



*Slimming*

## Drenalip

DRENALIP™ is a complex based on four vegetal origin ingredients, Astragalus, Butcher's broom, Lemon and Goldenrod, to offer a cosmetic active ingredient effective in the treatment of cellulite.

### Features and benefits

Fat cells, or adipocytes, are located in the subcutaneous tissue and due to an excessive caloric intake, they store triglycerides. These adipocytes infiltrate the dermis and originate the skin surface irregularities.

Cellulite is also linked to poor functioning of the circulatory system. There is a loss in elasticity and tone of the vascular walls, together with an increase in capillary permeability. As a consequence, the outflow of liquid from the circulatory system is produced forming the edema.

**Drenalip acts at all levels:  
it is the global solution to cellulite.**

| Component       | Active principle        | Main action                                   |
|-----------------|-------------------------|---|
| Astragalus      | Flavonoids              | Lipolysis activator<br>Adipogenesis inhibitor |
| Butcher's broom | Ruscogenin              | Circulation activator                         |
| Lemon           | Naringin and hesperidin | Anti-edema: it reduces permeability           |
| Goldenrod       | Rutin                   | Anti-edema: it increases capillary resistance |

### Toxicological information

DRENALIP™ has been evaluated according to the available toxicological information, based on safety assays and bibliographical data. These data allow the conclusion that using this ingredient, under the normal conditions for the use of cosmetics and at the recommended concentrations, is free of risks.



Astragalus



Butcher's broom



Goldenrod

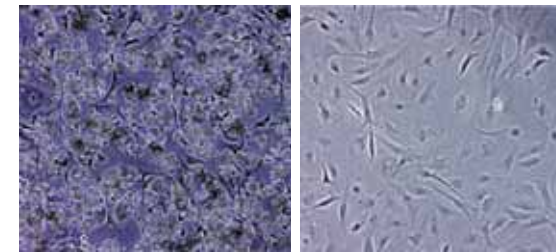


Lemon

## In Vitro

- Astragalus anti-adipogenic activity in adipocyte cultures after 8 days of incubation.  
Control culture (mature adipocytes) and with Astragalus (mainly pre-adipocytes, maturing process almost disappeared).
- Astragalus activity on triglycerides degradation in adipocyte culture.  
Measured by espectrophotometry after 2 hours of incubation (0.2% and 0.3% extract concentration).

### • Anti-adipogenic effect

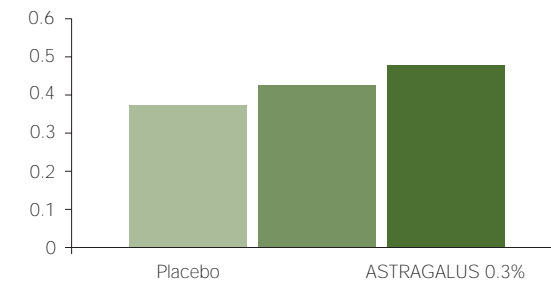


Control Culture

Culture with Astragalus

**110% Adipogenesis decrease**

### • Lipolytic activity



**32% Lipolysis increase**

### Cosmetic applications

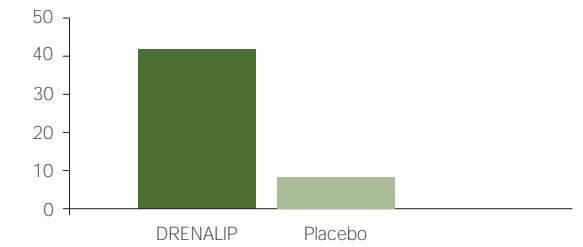
**Cellulite prevention and treatment**, as it avoids formation of new fat cells, reduces the existing adipocytes and enhances blood flow.

**Slimming effect**, as it also acts at a local level diminishing the already existing fat deposits.

## In vivo

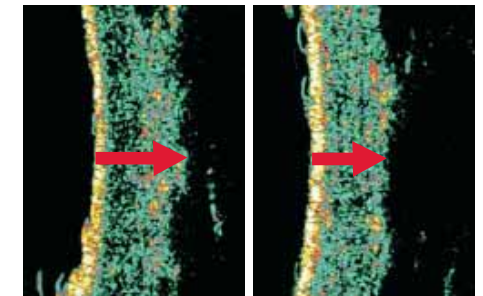
- 20 volunteers, 28 days
- Drenalip vs. Placebo, 2 applications per day
- D28 measure: blood flow, skin thickness (edema) and thigh perimeter

### • Laser Doppler flowmetry



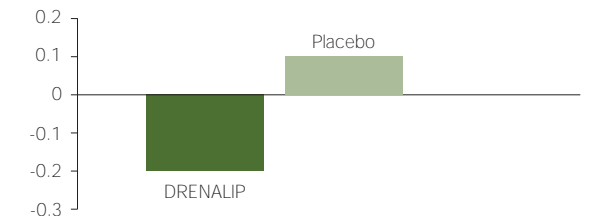
**36% Blood flow increase**

### • High resolution sonography



**0.01mm Edema decrease**

### • Centimetric value



**0.3cm thigh Perimeter decrease**

### Sensory test (self evaluation):

- 65% orange peel decrease
- 75% firmer and more toned skin
- 65% blood circulation improvement
- 55% anticellulite efficacy