## [F-XBC BODY]

## **Product identity**

F-XBC Body is the ultimate treatment to achieve the perfect body. Each vial contains only the pure active ingredients, without any preservatives or other chemicals. It is acting on various mechanisms to reduce the orange peel aspect, stimulate lipolysis, drain and firm. Only acting on all these biological processes can lead to successful results in particular for cellulite. Vectorized hyaluronidase, artichoke and ginkgo biloba extracts eliminate the accumulated liquids charged with toxins leading to a volume and heavy leg sensation reduction. Vectorized lipase, organic silicon and caffeine are stimulating the adipocytes to release fat (lipolysis) while L-carnitine stimulates the cells to burn the released fatty acids. And to complete the process the melitotus is fortifying the blood vessels to avoid new cellulite accumulation, while hydrocotyle extract firms the skin to reduce flaccidity due to the volume reduction.

#### **Benefits**

- Helps to reduce the aspect of cellulite.
- Reduces water retention.
- Eliminates toxins and reduces leg pain.
- Fights against accumulated fat deposits.
- Firms the skin.
- Stimulates the fat burning by the cells.
- Fortifies the blood vessels & microcirculation.



## **Active ingredients**

- Vectorized lipase & hyaluronidase.
- Caffeine.
- Organic silicon.
- L-carnitine & taurine.
- Ginkgo biloba, cynara, melilotus & hydrocotyle extract.

## Formulation specificities

- Sterilized.
- No paraben, alcohol, fragrance, animal origin ingredients, colouring and silicone.
- Non-animal tested.

#### **User indications**

- Topical application.
- Skin needling.
- Needle-free mesotherapy.
- Iontophoresis.
- Electroporation.
- Meso.

# Counter indications:

- No more than 1 vial per session.
- Hypersensitivity to caffeine.
- Heart desease and other revelant desease.
- Consult document on body treatment.

# Meso protocol:

Depth: 1 to 10 mm.

Quantity per point: 0.03 up to 0.15 cc. Technique: Nappage, Point per point.

Needle: 30G.

#### Can be mixed with:

50% F-SILORG (for orange peel skin).

Injections remain under the full responsibility of the practitioner. The manufacturer or distributor can not be held liable for any kind and in any cases of damages caused to third parties, or adverse effects. The products are dully registered as topical use only.

## About XBC system

#### Presentation:

With the influence of fashion and media, consumers are searching for the miracle solution to have the perfectly sculpted body figure. Our recently developed "XS contour" system addresses that demand with curative and preventative slimming ingredients targeting the adipocytes (fat cell storage). the synergy of proline, caffeine and enzymes treats existing cellulite by simultaneously restricting and eliminating fat storage in the adipocytes through the inhibition of free fatty acid production and lipolysis stimulation. The fat storing capability of adipocytes is decreased allowing cellulite reduction in just a month.

Within the skin layers, adipocytes are located in the hypodermis (Figure 1: cellulite). In the body, adipocytes are responsible for the synthesis and storage of fat, which is necessary for maintaining proper energy balance, mobilizing energy sources in response to hormonal stimulations and commanding changes by signal secretions. These cells influence body functions such as metabolism, temperature regulation, etc. However, enlarged adipocytes appear as non-aesthetic cellulite. When food is ingested, it is converted into energy to meet the body's current demand. Any excess undergoes lipogenesis where the triglyceridesare broken down into free fatty acids to enter the adipose tissue where eventually it reforms into triglycerides again to be stored in the adipocytes (Figure 2: cycle of fat).

90 % of women after puberty suffer from stubborn cellulite and accumulated fat whatever their weight, whereas men are less affected. This fact can be explained by the specificities of the adipose tissue of women's thighs and buttocks which contains more fat and is differently structured than in men. Cellulite is characterized by an "orange peel" skin and results from the hypertrophy of adipocytes. Because of their enlargement, these fat cells compress the wrap (connective tissue) that contains them. The bigger the adipocytes are, the more the wrap deforms and hardens, leading to a deficient blood and lymph microcirculation (Figure 1: cellulite). Cellulite is a description rather than a physical object. Its existence as a real disorder has been questioned, and the prevailing medical opinion is that it is merely the "normal condition of many women". One cosmetic company has noted its historical place in industrialised societies as an "inappropriate term used by women to describe curves which they judge to be too plump and not very aesthetic".

Synonyms include: adiposis edematosa, dermopanniculosis deformans, status protrusus cutis, and gynoid lipodystrophy. Descriptive names for cellulite include orange peel syndrome, and cottage cheese skin.

The causes of cellulite involve changes in metabolism physiology and dieting too hard or too much, such as gender-specific dimorphic skin architecture, alteration of connective tissue structure, hormonal factors, genetic factors, the microcirculatory system, the extracellular matrix, and subtle inflammatory alterations.

Hormonal factors: hormones play a dominant role in the formation of cellulite. Estrogen may be the important hormone to initiate and aggravate cellulite. However, there has been no reliable clinical evidence to support such a claim. Other hormones, including insulin, the catecholamines adrenaline and noradrenaline, thyroid hormones, and prolactin, are all believed to participate in the development of cellulite.

Genetic factors: there is a genetic element in individual susceptibility to cellulite. Researchers led by Dr. Enzo Emanuele have traced the genetic component of cellulite to particular polymorphisms in the angiotensin converting enzyme (ACE) and hypoxia-inducible factor 1A (HIF1a) genes.

Predisposing factors: several factors have been shown to affect the development of cellulite. Gender, race, biotype, distribution of subcutaneous fat, and predisposition to lymphatic and circulatory insufficiency have all been shown to contribute to cellulite.

Diet: improving one's diet, combined with exercise, can improve the appearance of cellulite.

Lifestyle: a high stress lifestyle will cause an increase in the level of catecholamines, which have also been associated with the evolution of cellulite.

Skin aging and cellulite: with age, cellulite becomes more visible because the number of adipocytes increases and from the age of 40, skin gets thinner by 1 % every year because the proteins responsible for the skin's elasticity, collagen and elastin, are reduced.

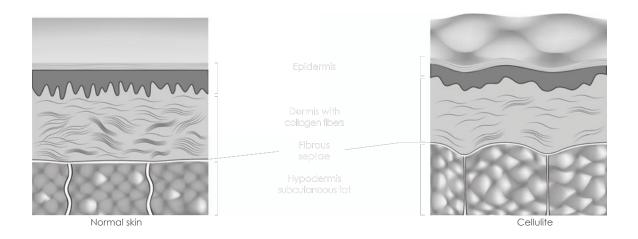
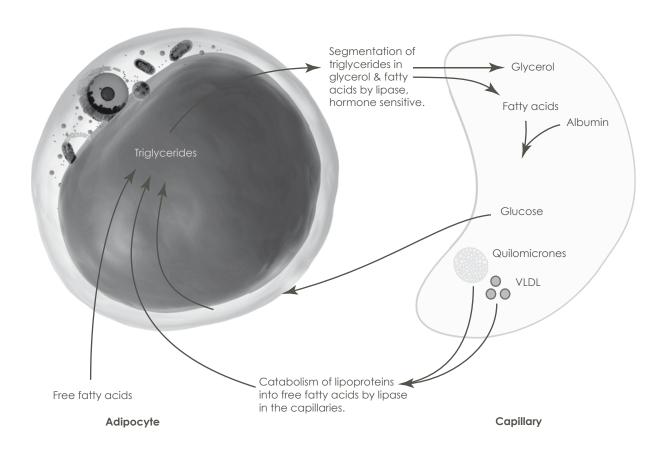


Figure 1: cellulite.



Transport of lipids between fat cells and capillaries. Lipids are transported under the form of quilomicrones and lipoproteins of low density (VLDL) into the blood flow. The lipase is an enzyme naturally produced by the fat cells that hydrolyses the lipids in free fatty acids and glycerol. The fatty acids are esterified in triglycerides once into the fat cells. When they are needed, the triglycerides are hydrolyzed by the hormone sensitive lipase into fatty acids and glycerol. Once in the capillary they are bounded by albumin. Glucose can also be transported into the fat cells to produce lipids.

Figure 2: cycle of fat.

XBC combines 3 main active substances in synergy with natural extracts (melilot, artichoke, hydrocotyle), carnitine and taurine for a multi-targeted anti-cellulite and slimming activity:

## Vectorized caffeine (Cyclodextrin, Caffeine):

Promotes the fat breakdown by activating the cell metabolism and by inhibiting phosphodiesterase enzyme activity. It has also an anti-inflammatory activity.

#### Vectorized Lipase (Maltodextrin, Lipase):

Acts specifically on triglycerides hydrolysis (split the ester bond between glycerol and fatty acids, releasing free fatty acids), thus reducing adipose storages (Figure 2: cycle of fat).

#### Vectorized Hyaluronidase (Cyclodextrin, Hyaluronidase):

Exerts its specific activity of hydrolysis on hyaluronic acid, one of the main glucosaminoglycans which, with its high water binding capacity, causes water retention, typical of cellulite pathology.

## Levels of activity:

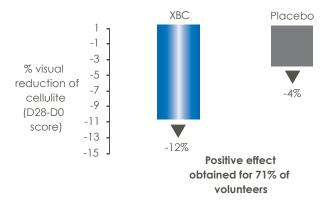
- Avoids the free fatty acids to enter into the adipocytes.
- Activates the lipolysis (expulsion of the free fatty acids).
- Transforms the liberated free fatty acids in energy.
- Reduce inflammation.
- Activates the cell metabolism.
- Reduces water retention.
- Cytostimulation and oxygenation (the products contain oxygenation factor).

## Clinical results:

# In vivo improvement of cellulite.

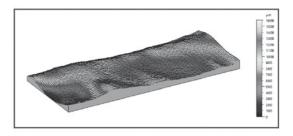
For in vivo efficacy, clinical tests show that there was a statistically visual improvement of the cellulite and reduction in the orange peel effect after only one month of treatment. The efficacy of XS contour has been tested against a placebo to cancel the massage effect during one month of treatment on the thighs of 19 volunteers. There was a positive effect obtained for 71% of the volunteers (Figure 3: in vivo tests for visual improvement on cellulite).

## Dermatological scoring:



# Thigh print:

Before treatment (D0):



XS contour: surface is smoothed



Figure 3: in vivo tests for visual improvement on cellulite.