

Get Soothing Relief & Speed Up Recovery



Indications

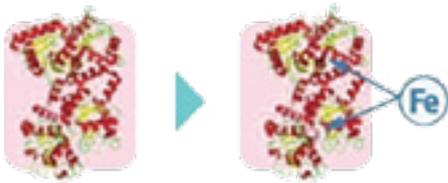
- Hematomas
- Dyschromia resulting from hematomas
- Ecchymosis, postoperative ecchymosis
- Post blepharoplasty
- Post sclerotherapy
- Prevention of iron-dependent venous ulcers
- Varicose ulcers
- CVI (chronic venous insufficiency) dyschromia & phlebostatic ulcers
- Post-laser therapy
- Non-ablative post laser treatments, epilation and vascular lasers
- Abrasion
- Burns
- Skin fissures
- Scarring of wounds
- Postoperative wounds
- Pressure sores

What is Bruise-eze[®]?

This is a liposomal lactoferrin cream that accelerates the natural healing process of hematoma and ecchymosis resolution. Furthermore, it prevents and treats dyschromia following skin trauma or injury. It has iron-chelating, anti-inflammatory, re-healing, bacteriostatic, antibiofilm and anti-oxidant activities (Figure 1).

1 Iron-Chelating Activity

Lactoferrin is an iron chelating glycoprotein that even in the acidic environment of inflamed tissue, has an affinity for iron 260 times greater than that of transferrin.



2 Anti-Inflammatory Activities

Lactoferrin decreases edema by modulating the migration, maturation and cell functions involved in the inflammatory process.



3 Re-Healing Activity

Lactoferrin significantly promotes proliferation of keratinocytes and their migration, essential factors for the epithelialization of damaged tissue.



4 Bacteriostatic Activity

Lactoferrin, by chelating iron, prevents replication of bacteria that use iron, such as pabulum.



5 Antibiofilm Activities

Lactoferrin has been shown to inhibit biofilm formation and disrupt existing biofilms.



6 Antioxidant Activity

Indirect: Lactoferrin chelates the iron that is the catalyst of free radical formation reactions.

Direct: Lactoferrin binds to free radicals and acts as “Sacrificial Scavenger for reactive oxygen species”.



Figure 1. Activities of lactoferrin

How does it work?

Subsequent discoloration secondary to hematoma or ecchymosis is due to accumulation of iron in the skin. Through lipid technology, lactoferrin is embedded inside liposomes, bipolar phospholipid spherical vesicles that are hollow inside (Figure 3). This allows better penetration into the skin, hence greater bioavailability, allowing the release of the lactoferrin in the right place.

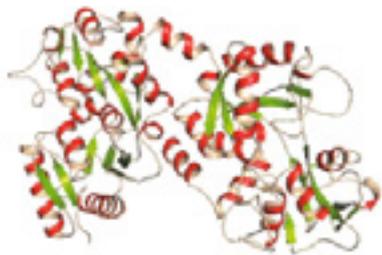


Figure 2. Structure of lactoferrin

Why lactoferrin?

Lactoferrin is a monomeric glycoprotein of the transferrin family (Figure 2) with an affinity for iron and has 2 iron-binding domains. It is a natural molecule synthesised by epithelial cells and secreted in the mucous membranes. It is a key component in the body's first line of defense, since it acts as an iron chelator, capturing heavy metals and thus avoiding the toxicity problems derived from their accumulation.

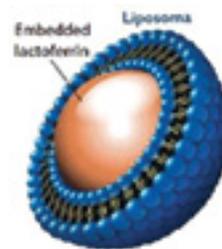


Figure 3. Liposomal lactoferrin

Clinically Proven

Liposomal lactoferrin was found to reduce discoloration post blepharoplasty by 31.5% after applying liposomal lactoferrin to the skin wound for 1 week versus 11.1% without application of liposomal lactoferrin¹(Figure 4a). Another study² showed that the discoloration and edema were reduced significantly when liposomal lactoferrin was applied in acute cases of cutaneous dyschromia and hypotrophy (Figure 4b). Furthermore, it was demonstrated in long-term application in chronic cases with equal effectiveness (Figure 4c). Not limited to post blepharoplasty, cutaneous dyschromia and hypotrophy, liposomal lactoferrin was able to speed up the healing process of ulcers whereby hemosiderinic dyschromia was lightened with concomitant reduction of edema and pain³ (Figure 4d).



Figure 4a. Post blepharoplasty. Left eye treated with liposomal lactoferrin and no treatment on right eye.



Figure 4b. Acute case of cutaneous dyschromia and hypotrophy of the lower limb. Full resolution in 72 hours and suspension of liposomal lactoferrin treatment.



Figure 4c. Chronic case of cutaneous dyschromia and hypotrophy. Partial recovery after two months of liposomal lactoferrin treatment.

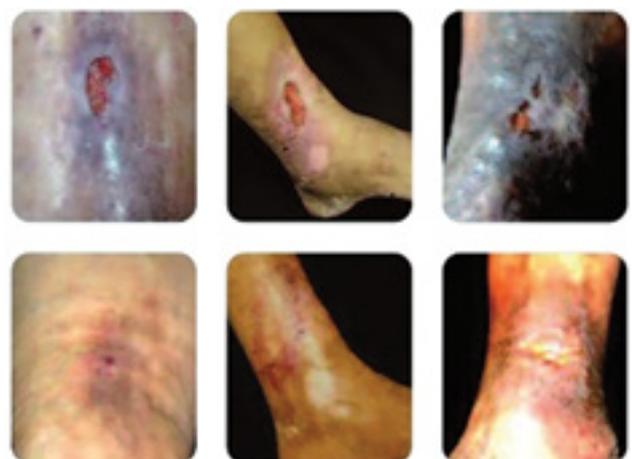


Figure 4d. Treatment of ulcers with liposomal lactoferrin for 6 months.

1. Martinez Grau, G., Lopez, M., Gomez, MC. (Dept. of Orbital & Ocular Plastics, Brill Pharma, S.L.) Use of Liposomal Lactoferrin in Post-Blepharoplasty Hematoma. In: XXIX SECPOO (Spanish Society of Ocular and Orbital Plastic Surgeons) Congress; 5-7 June 2019; Barcelona.

2. Musso, A., Aloesio, R., & Caponi, R. (2015). Use of a topical preparation based on lactoferrin to manage acute and chronic cutaneous dyschromia and hypotrophy. *Acta Vulnologica*, 13(2), 77-89.

3. Brizzio, E., Castro, M., Narbaitz, M., Borda, N., Carbia, C., Correa, L., Mengarelli, R., Merelli, A., Brizzio, V., Sosa, M., Biancardi, B., & Lazarowski, A. (2012). Ulcerated hemosiderinic dyschromia and iron deposits within lower limbs treated with a topical application of biological chelator. *Vein and Lymphatics*, 1:e6.

Products



Bruise-eze® 2.B

(5 x 5mL sterile single use applicators)

Intended for topical management of deep secondary-healing wounds, such as:

- Pressure sores
- Deep leg ulcers
- Cavity wounds
- Excisions
- Post-operative wound dehiscence (splitting)
- Light burns
- Abrasions
- Fissures
- Scarring of wounds
- Post-ablative laser treatments

It is also suitable for the indications listed for Bruise-eze® Cream and Bruise-eze® Airless.



Bruise-eze® Cream

(30mL tube)

Intended for the treatment of alterations of the dermal-epidermal tissue, such as:

- Bruises
- Haematomas
- Dyschromia resulting from: bruises, haematomas, ecchymosis, post-operative ecchymosis
- Post sclerotherapy hemosiderinic dyschromia
- CVI (Chronic Venous Insufficiency) dyschromia
- Prevention of iron-dependent venous ulcers
- Post non-ablative laser treatment, such as epilation and vascular lasers



Bruise-eze® Airless

(30mL bottle)

Airless pump dispenser. Avoids the danger of external contamination.

Best for:

- Bruises
- Haematomas
- Dyschromia resulting from: bruises, haematomas, ecchymosis, post-operative ecchymosis
- Post sclerotherapy hemosiderinic dyschromia
- CVI (Chronic Venous Insufficiency) dyschromia
- Prevention of iron-dependent venous ulcers
- Post non-ablative laser treatment, such as epilation and vascular lasers

Precaution for use: Do not use Bruise-eze® Cream and Bruise-eze® Airless on open wounds. The simultaneous use of creams and/or similar on the same anatomical part may preclude the efficacy and the safety of the product. In pregnant and lactating women, and in children (under 3), it is advisable to consult a doctor before use.

Contraindications: Known hypersensitivity to components.

Instructions for use: Bruise-eze® cream - Apply twice a day until symptoms disappear. Bruise-eze® 2.B - Before each application of Bruise-eze® 2.B cleanse the area with physiological saline. The quantity and number of applications depend on the clinical conditions of the lesions and the absorption time of the cream. However, two applications per day are recommended.

Storage: Store the package at temperature not exceeding 25°C, away from light and heat source.

Warning: For external use only. The use, especially if prolonged, could lead to sensitization. Should this occur, discontinue use.

What are doctors saying about liposomal lactoferrin?

“.....These results suggest that liposomal lactoferrin may act more effectively than conventional lactoferrin..... Consequently, we propose that liposomal lactoferrin could be a novel active component useful for the preventive and therapeutic treatment of inflammatory diseases”

(Ishikado, A, Imanaka, H., Takeuchi, T, Harada E, Makino T, 2005)

“Kelador (Liposomal Lactoferrin cream) accelerates tissue repair thanks to the chelating action of lactoferrin, and therefore is indicated for the treatment of hematomas”

(Dr Martinez Grau, 2018)