

LACTOBAR

Functional Milk Protein
especially designed for
Protein Bars



Enjoy our movie about
PROTEIN
ENRICHMENT

The market for protein bars is one of the fastest growing segments in the sports nutrition. The convenience makes them attractive as a protein source for both athletes and people looking for a healthy snack. They can be taken and consumed anywhere and fit perfectly with today's 'on-the-go' lifestyle. Protein bars are popular with endurance athletes and also support as a nutritional supplement the muscle growth of strength athletes.



LACTOPROT
functionality from milk

www.lactoprot.de

LACTOBAR

LACTOBAR is a milk protein especially designed for protein bars. It can easily be used as protein source, in recipes with dosages up to 30 % protein or even more. The special formula protects against drying out during storage, an undesirable feature too often found in many protein bars. The bars produced with **LACTOBAR** remain pleasantly chewable during storage for the whole shelf life of the product.

Shelf Life

No significant differences in texture and taste have been detected using **LACTOBAR** in ready-to-eat bars after a real-time shelf life testing period of 12 months, the typical best before date for a protein bar in cool and dry conditions. We do recommend performing shelf life tests for your specific recipe, which may include other sensitive ingredients.

EXAMPLE FORMULATION

protein content up to 45% in protein mass

LACTOBAR 90 makes the right balance between softness and chewiness, no addition of other milk protein ingredients needed.

Ingredients	Base Recipe (%)
Lactobar 90	20 - 50
Glycerol	18 – 23
Syrup (Maltitol/Sugar/etc.)	10 – 15
Vegetable Fat	10 – 15
Collagen Hydrolysate	1 – 3
Salt	0.1 – 0.4
Acid	0 – 0.5
Colourant(s)	0 – 0.5
Flavour(s)	0 – 0.5
Flavouring ingredients (Cocoa Crisps, Biscuits, Strawberries)	0 – 5

LACTOBAR 91 makes consistency soft, does not firm with the time.

Ingredients	Base Recipe (%)
Lactobar 91	15 – 30
Lactomin 90/90-E	5 – 20
Glycerol	18 – 23
Syrup (Maltitol/Sugar/etc.)	10 – 15
Vegetable Fat	10 – 15
Collagen Hydrolysate	1 – 3
Salt	0.1 – 0.4
Citric Acid	0 – 0.5
Colourant(s)	0 – 0.5
Flavour(s)	0 – 0.5
Flavouring ingredients (Cocoa Crisps, Biscuits, Strawberries)	0 – 5

KEY BENEFITS *

- Soy-free
- No added Sugar
- Low Sugars
- Gluten-free
- High Protein
- Low Fat
- No Sugar Alcohols
- High content of essential amino acids and branched-chain amino acids (BCAA)
- PDCAAS score above 90%

Processing (manual production)

Weigh the dry ingredients and blend them. Weigh liquid ingredients (if needed, melted) and blend them. Knead all components in a homogeneous mass and spread it into a baking tray. If needed, coat with chocolate or add other ingredients. For influencing the texture collagen or other additives can be used.



- STICKY CHEWY**
Gets too hard with time, sticks to the teeth (with WPI)
- LACTOBAR 90**
the right balance between chewiness and softness
- LACTOBAR 91**
makes consistency soft, does not firm with the time
- BREAKY / SANDY**
(with calcium caseinate)
- BREAKY / BRITTLE**
Difficult to bind, gets brittle with the time (with MPC 85)

* Claims have to be proven for compliance with local legislation