

PRODUCTION PROCESS OF PROBIOTIC BIOMASS FROM NON-SUPPLEMENTED MILK WHEY

Probiotic biomass from residual cheese whey..



BACKGROUND

Milk whey is a low value waste product from industry with high potential for use. It is rich in protein, lactose and fat content, making it an excellent substrate for microorganisms. Dietary supplements and probiotics are highly used in food and pharmaceutical industry giving it high value in the market.

TECHNOLOGY

A simple, scalable and low cost process that utilizes cheese whey to produce probiotic biomass by fermentation. The process consists in separating fat from cheese whey by skimming, retaining part of protein by ultrafiltration, and using the permeate (which contains lactose and protein) to produce probiotic biomass of *Lactobacillus casei* or any lactic acid bacteria by fermentation.

KEY BENEFITS

- Significant improvement of yield (g biomass/g substrate).
- Improvement in productivity (g biomass/L-hr).
- Decrease of process dead times.
- Improvement of product quality expressed in viable cells/g biomass.
- Potential derivation of secondary value products (protein, fat, lactic acid).

DEVELOPMENT STATUS

Technology Readiness Level: 5/9

INTELLECTUAL PROPERTY

Patent Number: **MX337009**

This technology is available for licensing. More opportunities on our website: <http://redottec.com>

