

Naturally Restore the Health Benefits of Dairy Foods to their Green Grass Grazed Origin

Dairy Fats with Reduced Calorie Absorption for Weight and Blood Lipid Management

Easily digestible and absorbable fats are one of the main dietary factors behind overweight, obesity and other associated pathologic conditions.

Green grass grazed cows produce carotenoid rich milk, which has fat with a lower digestion, hence reduced calorie absorption rate than those fed with carotenoid depleted hay or cattle feed.

Technology

L-tug is a patented technology for controlled reintroduction of carotenoids into milk fat to naturally improve the health value of dairy products. This process results in an increase in size of the fat droplets, thus reducing their digestion rate and lipid calorie absorption. The products containing this Green-Grass dairy could be used for dietary management to control or improve weight and blood lipids.

This technology does not involve any chemical modifications of dairy lipids, and only involves controlled re-introduction of carotenoids, which are naturally present in green grass but not in hay or cattle feed. Carotenoids do not affect the taste and essential physical properties of the food products.

The lipids with reduced digestion are stable even after incorporation into different food or beverage matrixes, for example milk, creams, butter, ice cream or other dairy products. The properties are also preserved in fermented food products such as yogurts and cheeses, and are also thermoresistant to baking, cooking and boiling.

Applications and Regulatory Considerations

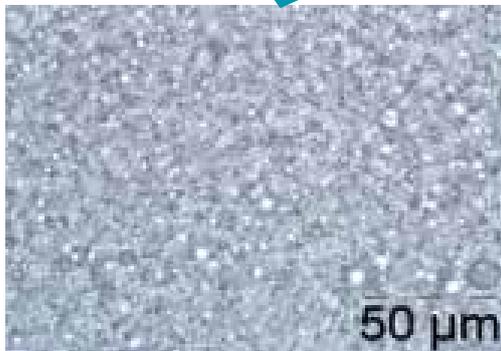
The efficacy of L-tug dairy in lipid management has been clinically validated.

- Health Claims for Weight and Blood Lipid Management qualify as Food for Special Medical Purposes. They do not need EFSA or FDA approval, or registration as Novel Food.
- Carotenoids used are safe for humans and animals.
- This is a platform technology which can be used for different food or beverage products that contain dairy lipids.
- L-tug can be applied at the final stage of the manufacturing process.

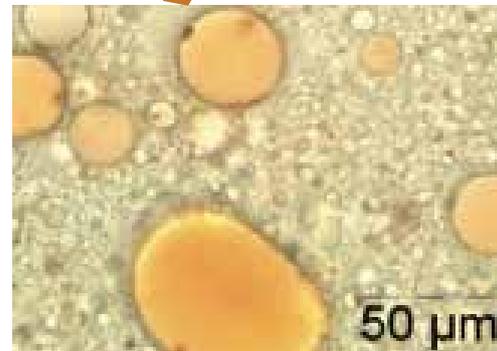
Dairy Butter

Control

Green Grass Fed



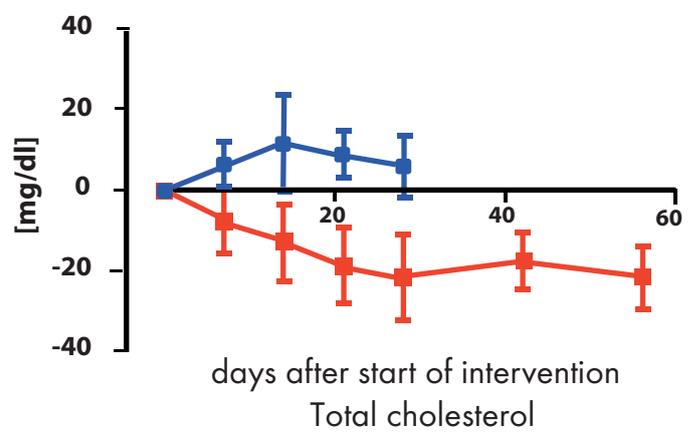
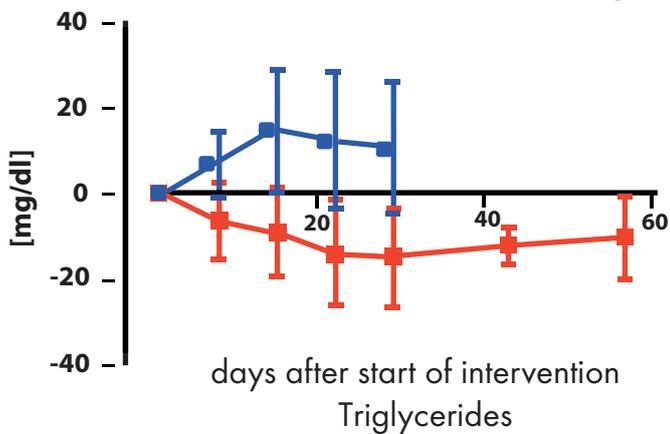
Control dairy butter



L-tug dairy butter

Introduction of Green Grass carotenoids of L-tug into fat globules of dairy butter enlarge their size
(light microscopy)

Clinical trial on daily ingestion of 30g dairy butter on elevated blood lipids
with L-tug (red) or without (blue)



Lycotec is now looking to partner with Food and Beverage industries to bring to the market Green Grass Grazed dairy products with improved health value.

For more information and enquiries please contact: info@lycotec.com
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