

## Novel Textures for Liquid-Based Food Products (Yissum)

**code:** 23-2006-807

[Amos Nussinovitch](#), HUJI, Faculty of Agricultural, Food and Environmental Quality Sciences, Biochemistry, Food Science and Nutrition

[Assaf Zeira](#)

### Texturization of food products by freeze-thawing technique

|                          |   |
|--------------------------|---|
| <b>Category</b>          | Food and Nutrition, Processes, Dairy                  |
| <b>Development Stage</b> | Proof of concept established                          |
| <b>Patent Status</b>     | Patent application filed                              |
| <b>Market Size</b>       | \$3.5 billion U.S. market for yogurt products in 2005 |

### Highlights

- Uses novel freeze-thawing processing technique to attain specific texture
- Answers continuing food industry need to provide desirable texture for food products manufactured from edible fluids
- Texturization method for dairy industry for yogurts, puddings, non-acid milk products, milk beverages and other fluids

### Our Innovation

Simple procedure using milk and water-soluble polymers is passed through a controlled freeze-thawing cycle to obtain yogurt-like consistency, without the presence of lactic acid bacteria.

### Key Features

- Rapid texturization process
- Can add pro-biotic micro-organisms, fruit pieces, or other liquids to basic product
- Product can be kept frozen indefinitely; shelf-life begins only after thawing
- Maintains product stability

### Development Milestones

- Scaling up obligatory before use in industrial environment
- Looking for partner for industrial trials

### The Opportunity

- Rapidly expanding food industry demands innovative products that provide specific textures during processing and preparing
- Potential to create novel textures as possible replacement for fat content in yogurts, puddings, and other milk products
- Potential for novel liquid-based fruit products using the freeze-thawing technique

**Contact for more information:**

Michal Levy , VP Head of Bus. Dev. Agri-Tech, Vet. & Environment, +972-2-6586635

---

Yissum Research Development Company of the Hebrew University of Jerusalem  
Hi-Tech Park, Edmond J. Safra Campus, Givat-Ram, Jerusalem P.O. Box 39135, Jerusalem 91390  
Israel Telephone: 972-2-658-6688, Fax: 972-2-658-6689