Low fat spreadable emulsions

CSIC and Aarhus University have developed an emulsion with functionality and appearance similar to margarine and butter, but with lower fat content, spreadable at refrigerated and room temperature and which reduces fat digestibility, decreasing the effect of fat in the human organism. Besides, the emulsion increases its consistency in the stomach conditions, so a delay in gastric emptying and an increase in satiation are expected.

Industrial partners interested in developing and exploiting this technology under a patent license, are sought.

An offer for Patent Licensing

Decrease fat intake and increase satiety

Non digestible emulsions constitute an effective alternative to reduce fat availability by the human being and are an emerging strategy to control overweight, obesity and related illnesses.

The emulsion of the present invention does shown plastic properties similar to margarine and butter, and it is spreadable at refrigerated and room temperature. The emulsion’s initial fat content is lower than the one or conventional butter and margarines and increase its consistency at body temperature, so it decreases fat digestibility and slows down gastric emptying.

The emulsion can be used in applications whether a reduction in fat uptake, or an increase in satiety or both things together are required. The emulsion can be consumed as such, or as intermediate product in applications which required the employ of a fat with plastic properties.

Main innovations and advantages

- The emulsion possesses a double advantage: decreases the available fat during digestion, and enhances satiety.
- It is indicated to be consumed by the general population, or by specific groups, such as people with overweight and obesity.
- The emulsion can be consumed as such, like a traditional butter or margarine, as a part of a food, or as part or more complex food matrixes that required a fat with plastic properties, such as for example a spreadable chocolate and nut cream, among other applications.
- The emulsion can also be consumed as food supplement or pharmaceutical product.

Patent Status
Prioriy patent application filed suitable for international extension

For more information, please contact:
Maria J. Añon Marin
Institute of Agrochemistry and Food Technology
Spanish National Research Council (CSIC)
Tel.: +34 963900022
E-mail: utc@iata.csic.es

Jesper Keis Hansen
Business Development Manager
Aarhus University, Tech Trans Office
M +45 40865182 E-mail: jkh@au.dk