

## L-tug technology– disruption of lipid folding for Cooking Oils and Fats

#### Faster, more economic and healthier cooking

## Technology

L-tug is a new class of molecules that can disrupt folding and increase the size of lipid droplets or fat globules, which results in changes of their physical and utilisation properties:

- reduction of viscosity and density
- increase of spreadbility, permeability and fluidity
- increase in greasing and lubrication properties
- reduction of freezing and melting time
- increase in hydrophobicity and gas solubility
- increase in thermal conductivity
- acceleration in heating and cooling time
- acceleration of cooking time, which saves time and cost
- reduction of decomposition of thermo-sensitive, health beneficial nutrients and vitamins in the finished cooked meal
- cooking healthier food with increased nutritional value

# Applications

The application of this technology does not involve any chemical modifications of lipids. L-tug molecules are safe for humans, animals, plants, soil and water. These molecules are thermoresistant, retain their properties in baking, frying or boiling, and they are fully biodegradable.

## **IP** Protection

L-tug technology patent application was filed 7 February 2018.

Lycotec is now looking to license L-tug technology to the Oils and Fats industry.

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

### L-tug Accelerates Cooking Time



Time to cook chicken breast with L-tug oil (red) and control oil (blue)

#### L-tug Reduces Heat Decomposition of Thermosensitive Vitamins

Percentage of vitamins remaining intact (yellow field) in cooked fish Vitamin D3 - top charts; Vitamin B12 - bottom charts

