MARNYS®

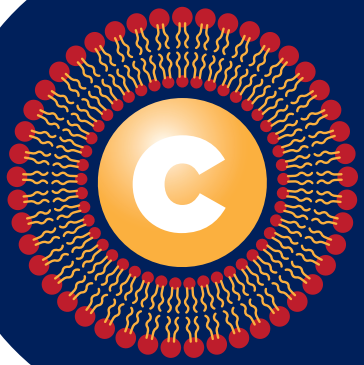
LIPOSOMAL TECHNOLOGY

- **Improves the stability of the active ingredient in the body**
- **Facilitates the absorption of active ingredients**

Thanks to their exclusive formulation, **liposomal food supplements provide a high bioavailability** and sustainability of blood **dosage levels of active ingredients.**

LIPOSOMES HISTORY

Liposomes were synthetically manufactured for the first time in England in 1961 by Alec D. Bangham, who discovered that **phospholipids combined with water form a sphere because one end of each molecule is soluble in fat, whereas the opposite end is insoluble in water.**



WHAT ARE **LIPOSOMES?**

- Liposomes are microscopic hollow spherical vesicles, composed of two layers of lipids (fatty acids).
- The main constituents of liposomes are phospholipids, which bear the characteristic of having one side soluble in fat and the other side soluble in water (amphipathic molecule).

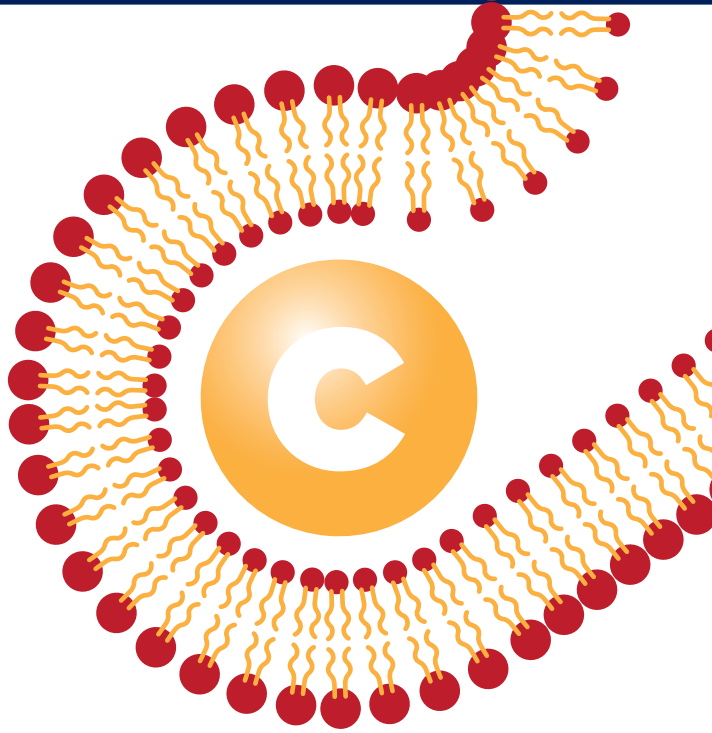
- This property of phospholipids gives liposomes unique characteristics such as self-sealing in aqueous mediums and makes them a perfect carrier system.

LIPOSOMAL TECHNOLOGY:

- **Ensures higher blood availability, prolonging its half-life**

  This is due to the fact that the phospholipids forming the liposomes allow absorption to take place in the intestine, protecting the formulation from the action of gastric acid

- **Allows the improvement of the active ingredient stability in our body**
- **Eases the absorption of the active ingredient in the intestine**
- **A significant advantage of the liposome is that it can incorporate and release two materials with different solubility simultaneously**



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