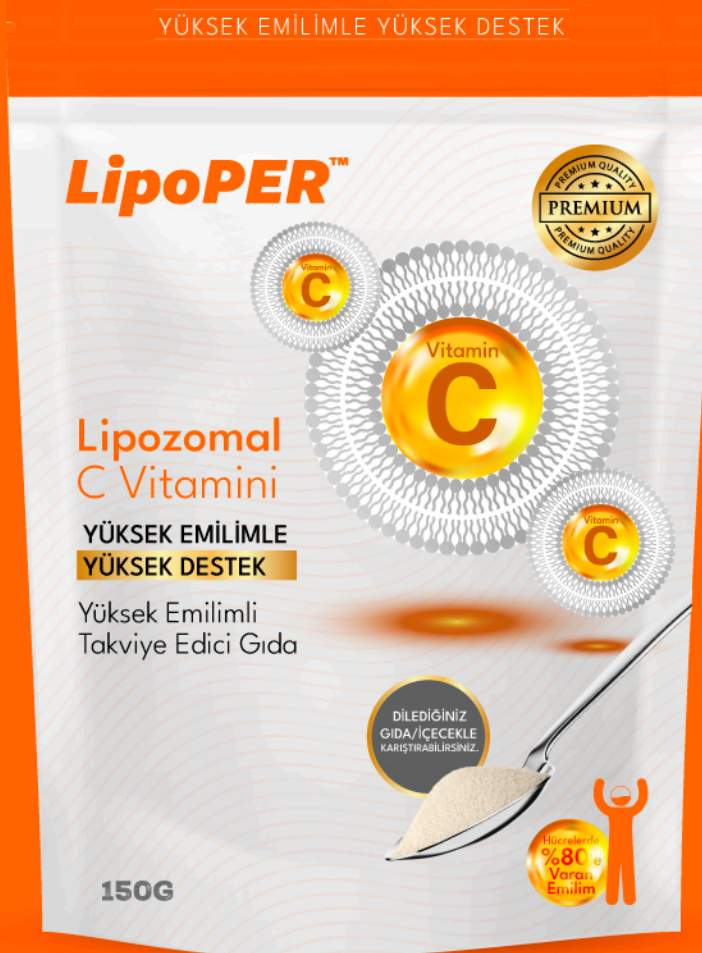


LipoPER™

START EACH DAY STRONG!



Liposomal Vitamin C

HIGH ABSORPTION
FOR MAXIMUM
SUPPORT



LipoPER™

LipoPer Liposomal Vitamin C

Powdered Dietary Supplement

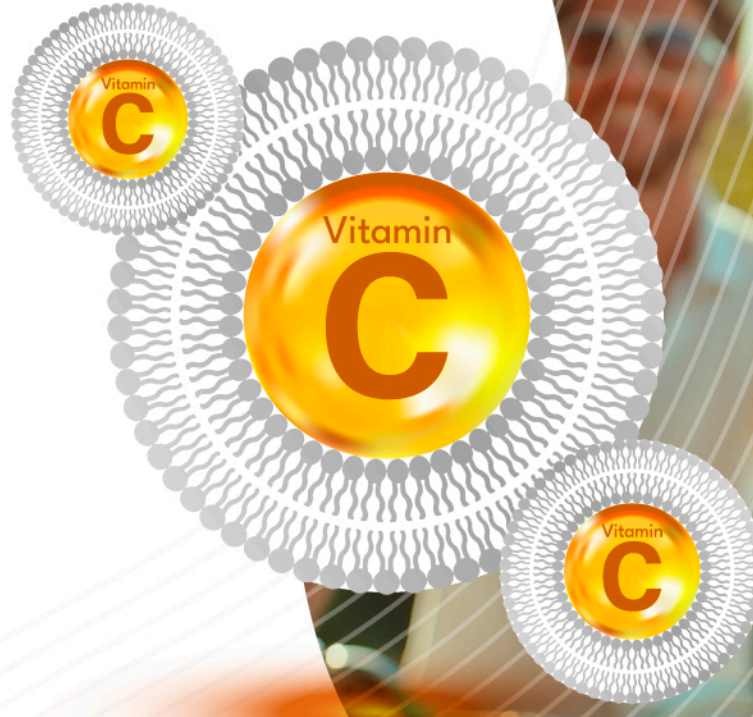
HIGH ABSORPTION FOR MAXIMUM SUPPORT

LipoPer Liposomal Vitamin C offers a body **absorption rate of 80-85%**, providing significantly higher absorption than traditional vitamin C products, **all thanks to a high-tech and patented formula.**

Designed for use by both adults and children, LipoPer Liposomal Vitamin C promises to meet the entire family's vitamin C needs in a single package. In its powder form, it provides a more practical and bioavailable alternative compared to other liposomal vitamin C products.



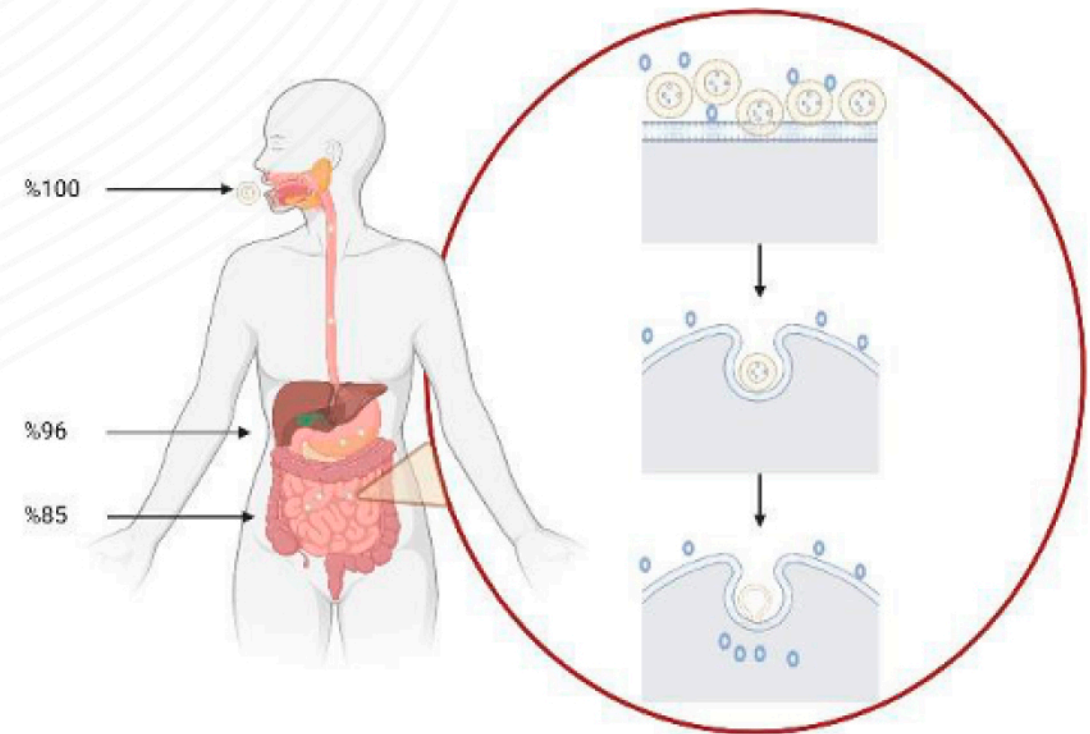
LipoPer Liposomal Vitamin C promises significantly enhanced bioavailability and superior absorption compared to traditional vitamin C supplements. Studies show that liposomal vitamin C is protected within a nano-sized liposomal sphere, safeguarding it from external factors. Additionally, the liposomal structure closely resembles the phospholipid structure in human cells, enabling easy transfer from the bloodstream to the cells². Digestion simulations have demonstrated an **absorption rate of 80-85%** for liposomal vitamin C.



The Superior Form of Vitamin C: LipoPer Liposomal Vitamin C

Studies on the increasingly popular vitamin C reveal that conventional liquid and capsule formulations are highly sensitive to external factors like temperature, pH (stomach acidity), and light. Consequently, the amount of traditional vitamin C reaching the small intestine and cells is only about 10-30% of the recommended daily dose¹, meaning that 70-90% of traditional oral vitamin C in capsules, powders, and liquids is expelled from the body without being utilized.

Liposomal structures, on the other hand, are nano-sized carriers that can deliver fat- and water-soluble molecules directly to target cells from the bloodstream. Thanks to their protective layer, they significantly enhance the amount of vitamin C the body can actually use. Combining liposome technology with vitamin C results in a product that offers the highest quality and absorption capacity of this vital nutrient.



Practical and Delicious for the Whole Family

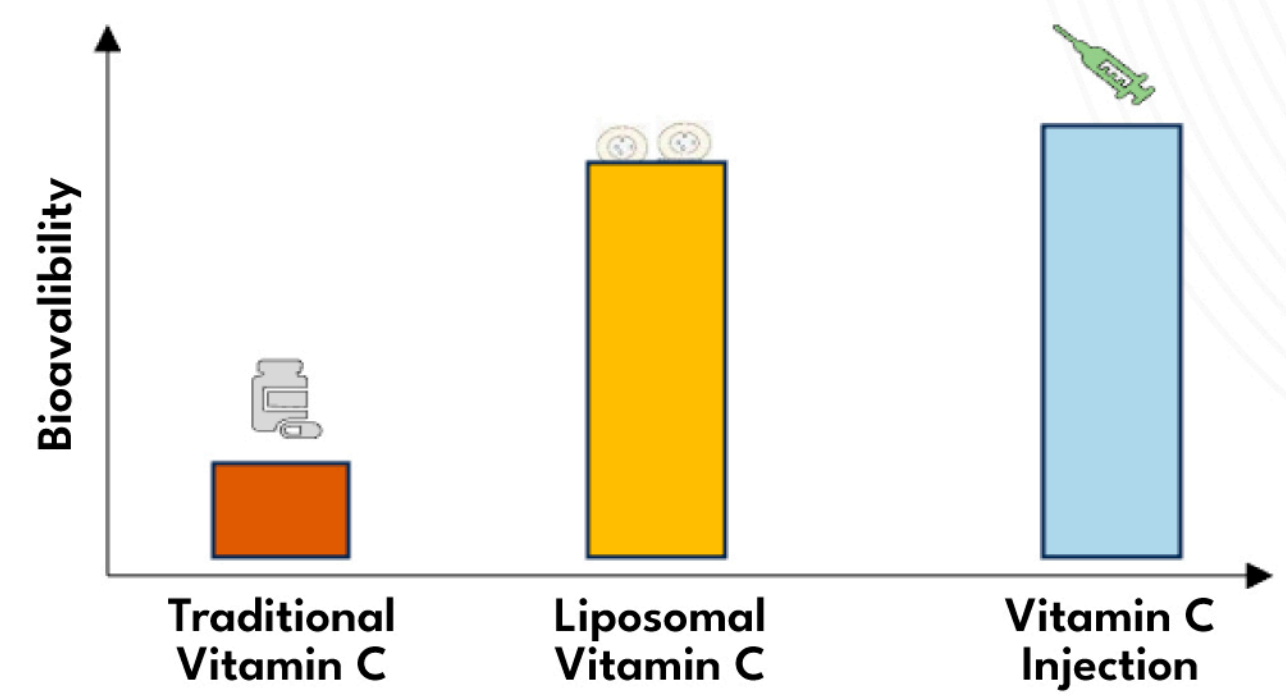
Liposomal products are generally offered in capsule or liquid forms. However, liquid liposomal products may lose their effectiveness during storage, and often don't meet consumers' sensory preferences. Capsule forms can be difficult for children or those with swallowing difficulties, affecting user comfort.

Produced with advanced technology, **LipoPer Liposomal Vitamin C** comes in a powder form, allowing it to be easily mixed into any food or drink. This unique formulation not only provides flexible use for both adults and children but also lays the foundation for a more economical product that the whole family can enjoy together.



Easier Use and Higher Bioavailability Compared to Traditional Vitamin C

LipoPer Vitamin C, offering an alternative to injectable forms of vitamin C—the most effective delivery route—is a superior option in terms of ease of use and accessibility. Injection is a traumatic method for many people, requiring time and expense as it must be administered in healthcare facilities.



LipoPer Liposomal Vitamin C Powdered Dietary Supplement START EACH DAY STRONG!

The High Benefits of LipoPer Liposomal Vitamin C

Eye Health

- Regular intake of liposomal vitamin C helps reduce age-related macular degeneration, vision loss, and cataract development.

Skin Resilience

- Vitamin C plays a vital role in collagen production, essential for maintaining skin strength and elasticity. As collagen levels naturally decrease with age, liposomal vitamin C boosts collagen production, promoting healthier and more resilient skin.
- It also acts as a powerful antioxidant, fighting free radicals and reducing oxidative stress.
- Additionally, liposomal vitamin C reduces hyperpigmentation and dark spots, provides UVA/UVB protection, and is known as a beauty supplement⁴.

Wound Healing

- Vitamin C is required for the synthesis, maturation, secretion, and degradation of collagen in wound healing⁵. Recent systematic reviews report that vitamin C accelerates wound healing and enhances the recovery of pressure ulcers⁶.

Immune Function

- Liposomal vitamin C supports key immune functions, including promoting antibody production, aiding the proliferation and optimal functioning of white blood cells, and combating oxidative stress, which can compromise immune effectiveness⁷.

Cardiovascular Health

- Thanks to its exceptional antioxidant properties, liposomal vitamin C prevents LDL-protein oxidation linked to atherosclerosis. It also improves arterial flexibility and lipid profiles, reducing the risk of heart disease⁸.

Mental Health

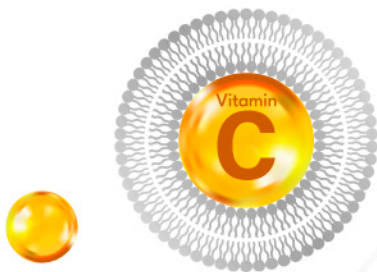
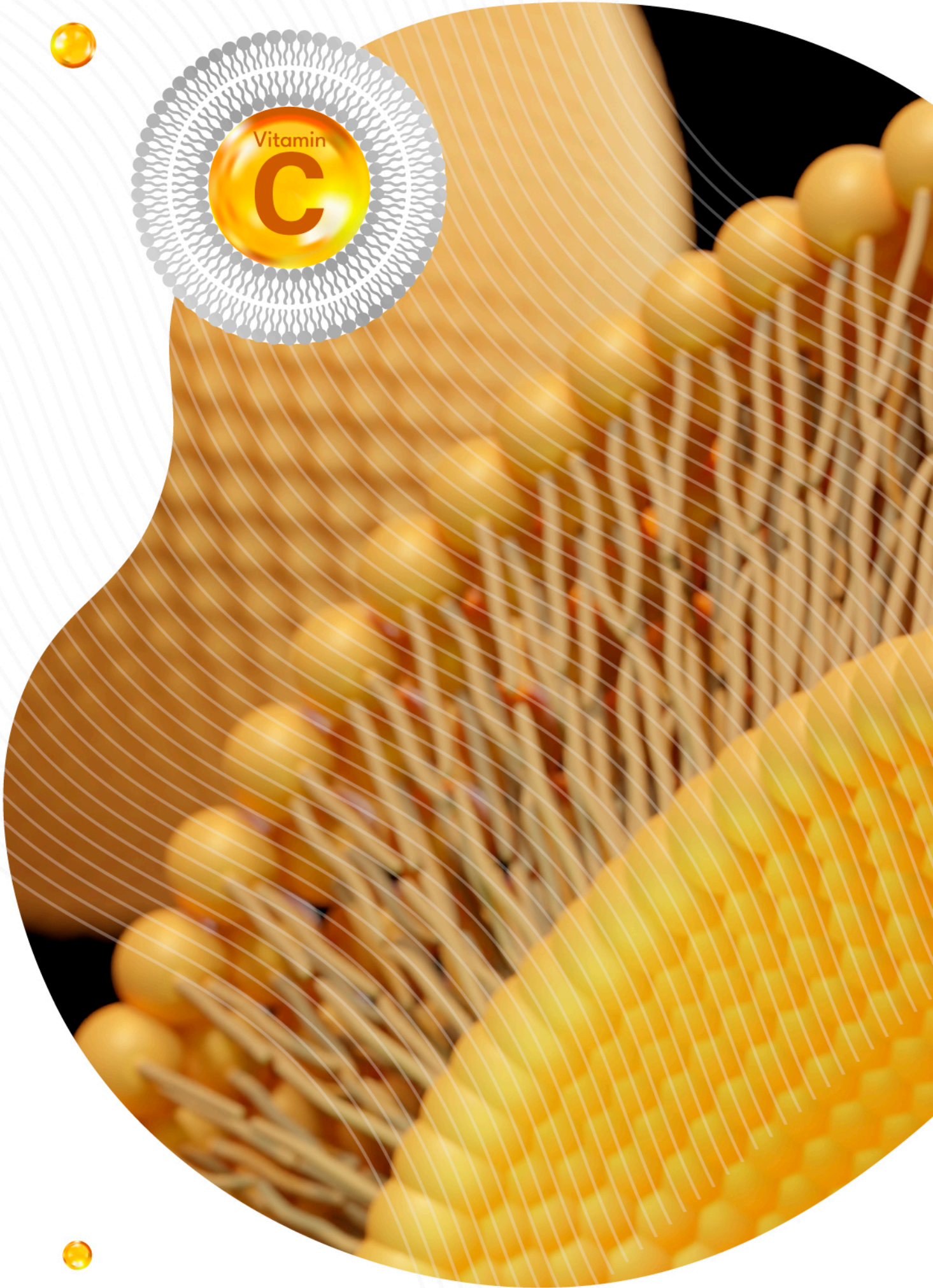
- Liposomal vitamin C plays a significant role in synthesizing mood-regulating neurotransmitters like dopamine and norepinephrine. Its ability to cross the blood-brain barrier supports mental well-being and mood stability⁹.

Enhanced Iron Absorption

- Vitamin C reduces iron to a more soluble and easily absorbable form in the intestines, supporting adequate red blood cell production and oxygen transport in the body.

Reduced Fatigue

- Vitamin C is crucial in energy metabolism, particularly in converting food into usable energy for cells. A deficiency can lead to decreased energy and increased fatigue.





LipoPer Liposomal Vitamin C

Specific Usage Recommendations

LipoPer Liposomal Vitamin C can be used any time of day, offering flexible dosing to meet personal needs and specific health goals. Here are some recommended uses:

Morning Use

Taking **LipoPer Liposomal Vitamin C** in the morning can help support your immune system throughout the day and reduce fatigue. Morning use also helps combat oxidative stress, which is especially beneficial for those who smoke.

Pre/Post-Exercise Use

If the goal is to combat oxidative stress caused by exercise, taking **LipoPer Liposomal Vitamin C** before or after physical activities can be advantageous.

Before Bed Use

Some people prefer to take **LipoPer Liposomal Vitamin C** before bed to boost cell regeneration and collagen production while they sleep.

LipoPer Liposomal Vitamin C Recommended Dosage

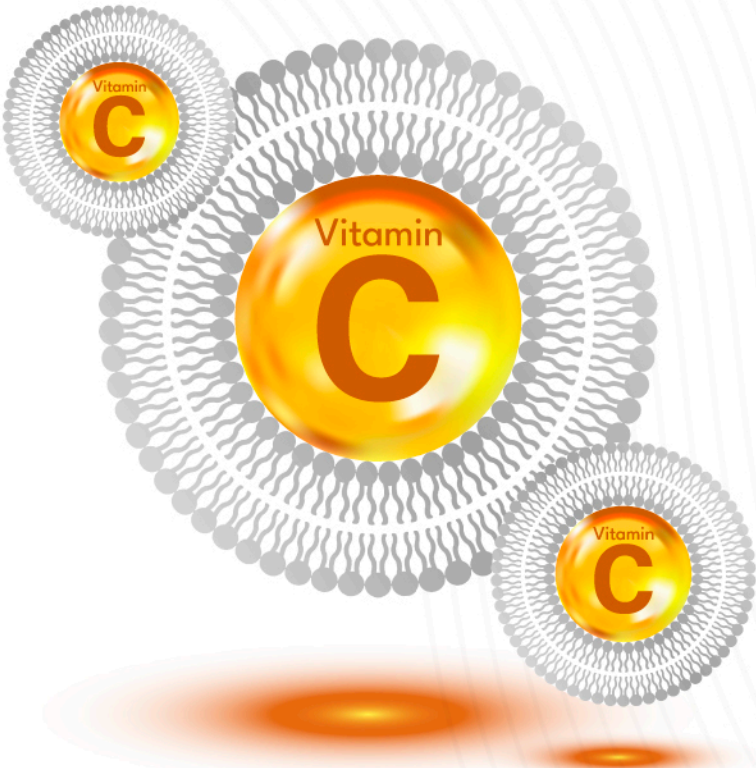
LipoPer Liposomal Vitamin C offers a high concentration of Vitamin C. The recommended daily dose is 1000 mg, easily met with just 3 grams of LipoPer Liposomal Vitamin C. This formulation provides a practical and convenient option without the need for daily dose tracking.



LipoPer Liposomal Vitamin C Ingredients

LipoPer Liposomal Vitamin C contains lecithin—a blend of glycolipids, triglycerides, and phospholipids found in plant and animal tissues—L-ascorbic acid, sodium ascorbate, xylitol, sorbitol, and natural orange flavor.

- No solvents, alcohol, preservatives or artificial colors are used in the liposomal formulation.
- It is free from gluten, lactose, and animal products.
- Contains liposomal structures with an encapsulation efficiency of 70-80% and vesicle sizes ranging from 200-400 nm.



Differences Between LipoPer Liposomal Vitamin C and Other Liposomal Products

Liposomal Vitamin C Products in Market	Product Form	Homogeneity of Liposomal Structures (%)	Liposom Size	Daily Recommended Dosage	Total Product Quantity	How many days can one package last?
Product 1	Liquid	73	260	2	150 ml	15
Product 2	Liquid	71	440	1	150 ml	30
Product 3	Liquid	91	317	1	150 ml	30
Product 4	Powder(Capsule)	-	-	4	60 capsules	15
Product 5	Powder(Capsule)	-	600	2	30 capsules	15
LipoPer	Powder	97	200-400	1	150 g	50

* The calculation is based on one package being used by a single person

PERYUM BIOTECHNOLOGY PHARMACEUTICAL FOOD RESEARCH AND DEVELOPMENT CONSULTANCY



About Us

Peryum Biotechnology was established on February 3, 2020, in Teknopolistanbul. With a team of experts and innovative technological solutions, Peryum focuses on providing high-quality, custom biotechnology products. The facility includes a research and development (R&D) laboratory, where all quality control studies are conducted before commercial and innovative product production, as well as a 200-liter production area for finalized formulations. In this facility, enhanced food components such as vitamin C, glutathione, various antioxidants, and minerals are manufactured as private-label products upon request. These high-quality liposomal products offer numerous advantages for dietary supplement producers, the food industry, pharmaceuticals, cosmetics, veterinary medicine, and consumers.

Operating in two categories—active molecule production (enzymes) and nanobiotechnology (liposomal products)—all productions at Peryum Biotechnology adhere to the HACCP food safety quality management system.

Our Vision

To meet the liposomal raw material needs of Turkey and the world with our patented technology, and to support companies on this journey.

Our Mission

- Conduct R&D projects upon request
 - Formulate custom solutions
 - Develop and design new products
- Perform quality analyses and produce them in our manufacturing facility
 - Conduct quality control for liposomal products
- Offer process-related consultancy
 - Manufacture private-label products for clients



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