

# Epatoguna

Innovative nutraceutical to  
**support and restore  
the liver function**



OGM, LACTOSE FREE

## WHY Epatoguna

**Guna research** has designed a cutting-edge range of food supplements based on the principles of **Physiological Nutraceuticals**, among which **Epatoguna**. It is a modern and innovative supplementation indicated for a supportive treatment of **the liver function disorders**.

Thanks to the synergistic action of its active ingredients, Epatoguna helps

**SUPPORT**  
the liver function

**PREVENT**  
the worsening  
of liver damage



GMO, LACTOSE FREE

With **freeze-dried intact pig liver "NEORLAND®"**,  
**Choline** and **Epigallocatechin-3-gallate**

## FIELDS OF APPLICATION OF Epatoguna

As part of a balanced diet and a healthy lifestyle, Epatoguna can be used to:

### PREVENT

Thanks to its trophic action, Epatoguna is useful to slow down the progression of fibrotic liver parenchima in cases of:

Fatty liver

Chronic hepatitis C and B

Liver disease due to drugs and toxic agents

Metabolic syndrome

### TREAT

Thanks to its antioxidant, anti-inflammatory and detoxifying action, Epatoguna is useful as a supportive treatment in cases of:

Fatty liver

Abdominal bloating  
(especially in the evening)

Hepatomegaly (sign of impaired liver function), especially with high ALT (Alanine Aminotransferase) values

### PATIENTS

overweight or obesity

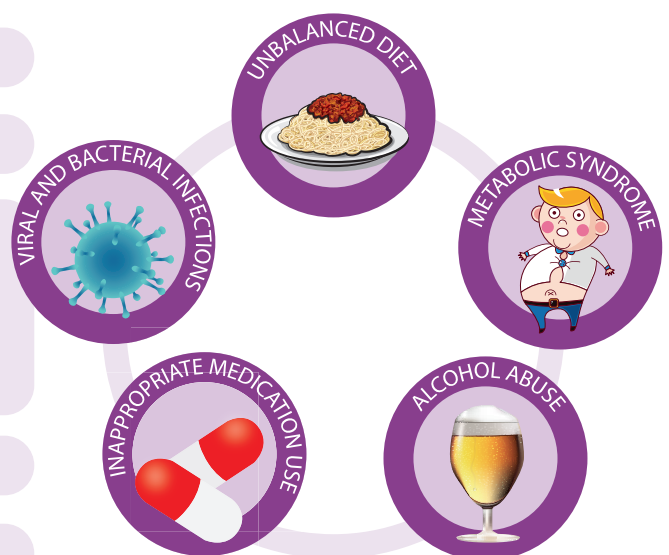
positive viral hepatitis test in the past

ill-defined symptoms due to impaired liver function (functional dyspepsia, abdominal bloating, skin rash, asthenia)

multi-drug treatments

treatment against alcohol addiction

elderly patients with physiological degeneration of the liver function



## ORIGINAL INGREDIENTS OF **Epatoguna**

### **FREEZE-DRIED PIG LIVER EXTRACT “NEORLAND®”** 1,2,3,4,5,6,7,8

The liver has repair and regeneration abilities. These abilities generally pertain to the liver cells and specifically to **adult stem cells**, which are present in high amounts in the liver.

The exclusive and intact freeze-dried extract **Neorland®** contained in Epatoguna is from young pigs controlled and certified for their good health conditions. It is particularly rich of **microvesicles**.

These microvesicles (exosomes) are carriers released by the liver cells, capable of transporting nutrients, such as amino acids, proteins, vitamins, trace elements and above all **micro RNA (miRNAs)**, essential for repair and regeneration.

Thanks to the presence of **specific membrane proteins** on the external surface of the microvesicles (Tetraspanins), the latter have the ability to stick specifically to the surface of the adult stem cells of the liver and to be incorporated through mechanisms of endocytosis.

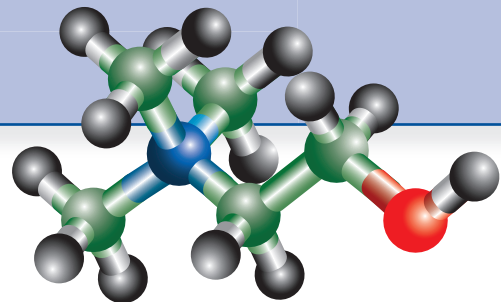
The nutrients and the regenerative stimulus mediated by the specific miRNAs are directly transported to the liver cells and especially to adult stem cells, helping the latter to mature and become liver cells.

Thanks to these characteristics and mechanism of action,  
the freeze-dried pig liver **Neorland®** stimulates and supports the  
**repairing, regenerative** and **trophic** action of the liver.

## CHOLINE (Choline bitartrate)

essential nutrient, is part of the group of **lipotropic** substances, capable of preventing the storage of fat inside the liver.

- A great number of experimental studies <sup>9,10,11</sup> show that a **low-choline diet** leads to **fatty liver disease (NAFLD – Non-Alcoholic Fatty Liver Disease)**. In some predisposed individuals, the liver damage is particularly significant, resulting in **increased** Alanine aminotransferase (ALT).
- The mechanism that leads to fatty liver disease due to **choline deficit** is linked to a reduced synthesis of very low density lipoproteins (**VLDL - Very Low Density Lipoprotein**). **Phosphatidylcholine**, synthesized from choline, is an essential constituent of VLDL structure, and whenever this is not available, **triglycerides cannot be transported outside by the liver cells and so they accumulate in the cell cytosol**.



## GREEN TEA (*Camellia sinensis* L.)

standardized to 95% **EPIGALLOCATECHIN-3-GALLATE**

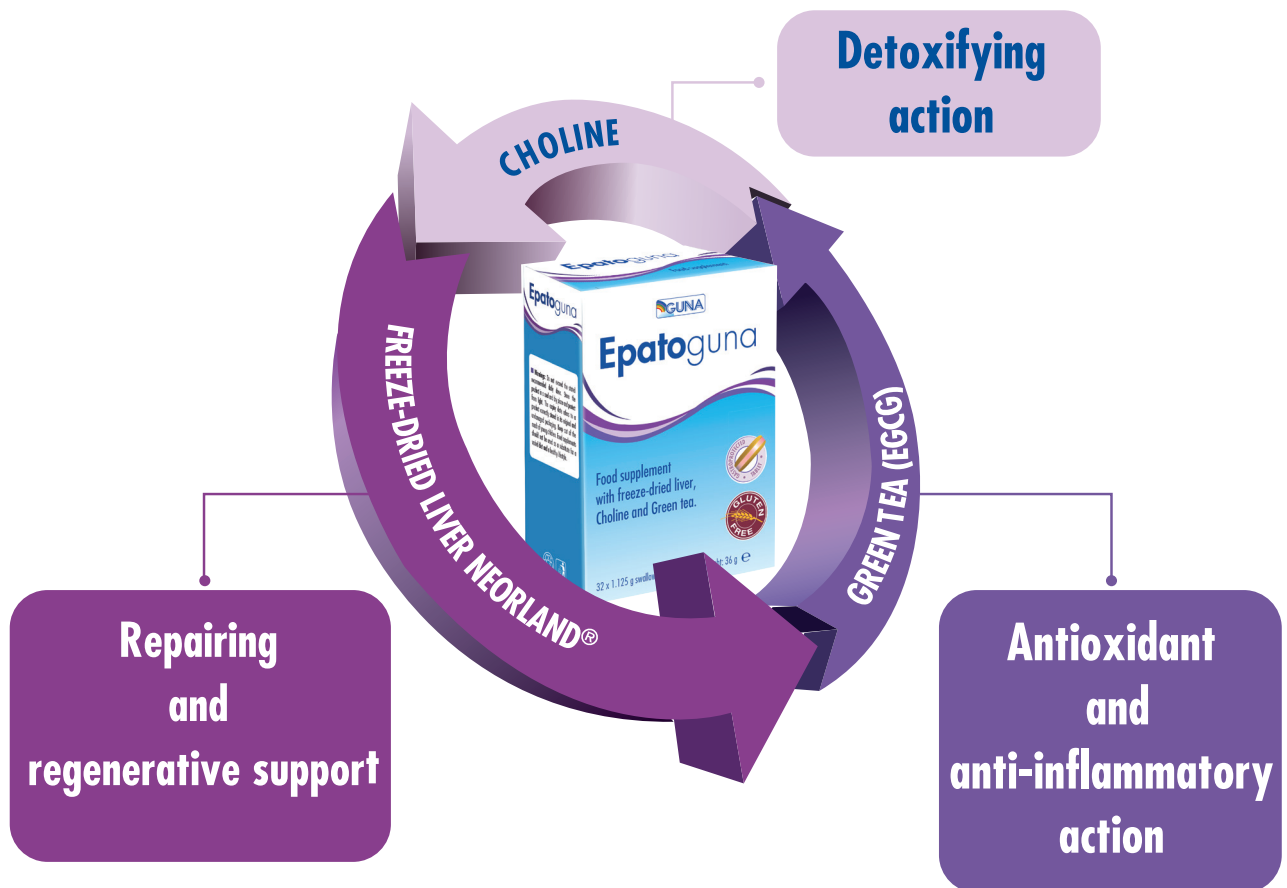
Several clinical studies <sup>12,13,14</sup> have shown that a consumption of green tea rich in this catechin:

- **Protects** the liver parenchyma and is able to reduce inflammatory markers in humans.
- Is **useful** to control insulin-resistance and capable of reducing the levels of liver triglycerides and ALT levels.





## THE UNIQUE AND FULL SYNERGISTIC ACTION OF **Epato**guna FOR A GOOD LIVER FUNCTION



### CONTROLLED RELEASE OF THE ACTIVE INGREDIENTS OF **Epato**guna

The diagram illustrates the controlled release of active ingredients of **Epato**guna. It shows a cross-section of the human digestive system, including the stomach and small intestine. A yellow and orange capsule is shown in the stomach, with a magnified view of its internal structure. A circular inset shows the capsule with the text "GASTROPROTECTED TABLET".

**Controlled release **Epato**guna**

The active ingredients of **Epato**guna are protected by the action of gastric juices, fully released and promptly absorbed only in the upper intestinal tract for a faster and more effective action on the liver.

## Epatoguna: INSTRUCTIONS FOR USE

- Swallow 1 gastroprotected tablet of Epatoguna 2 times daily with some water, for 2 consecutive months at least. Repeat the same treatment cycle to **prevent** the worsening of liver damage and to reduce the symptoms in the **treatment of liver function disorders**.

## Epatoguna - Combinations



Control overweight patients affected by metabolic syndrome.



Control dyspepsia symptoms and food intolerance.



Hypercholesterolemia and hyperhomocysteinemia control in patients with metabolic syndrome.

## KEY WORDS:

**Ideal nutraceutical  
for the liver function disorders.**



**GMO, LACTOSE FREE**

## NUTRITION FACTS

	per 100 g	per 2 tablets
Energy	361.10 kcal 1496.7 kJ	8.12 kcal 33.68 kJ
Fat of which saturates	14.3 g 12.64 g	0.322 g 0.284 g
Carbohydrate of which sugars	15 g 0.3 g	0.338 g 0.007 g
Protein	23 g	0.518 g
Salt	0.625 g	0.014 g
Freeze-dried liver	26.67 g	600 mg
Choline	7.33 g	165 mg
Green tea dry extract of which EGCG	1.78 g 1.69 g	40 mg 38 mg

## ■ Packaging

32 **gastroprotected** tablets in a blister pack.

## ■ Ingredients

Bulking agent: microcrystalline cellulose; freeze-dried liver; choline bitartrate; fatty acids; anti-caking agents: silicon dioxide, cross-linked sodium carboxy methyl cellulose, magnesium salts of fatty acids, croscopolidone, talc; Green tea (*Camellia sinensis* L. Kuntze) leaves dry extract standardized to 95% epigallocatechin gallate (EGCG); glazing agents: ethyl cellulose, carnauba wax; colour: iron oxides.

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