

# EMOTHION<sup>®</sup>

S-Acetyl Glutathione



A Multitude of Benefits

IMMUNE  
SYSTEM

LIVER  
DETOXIFICATION

SPORT  
NUTRITION

SKIN

ANTIOXIDANT

# EMOTHION®

S-Acetyl Glutathione

Emothion® is the active form of S-Acetyl Glutathione, developed to overcome the poor effectiveness of Glutathione (GSH) supplementation, due to its poor absorption and its hydrolytic degradation in the body. Emothion® optimizes the absorption of GSH, it has more rapid dissolution rate and, therefore, is orally well absorbed. Once internalised into the cells, Emothion® increases GSH level more efficiently than normal GSH. **Emothion® is the orally stable and crystalline form of glutathione, and works as GSH-replenishment agent (1).**

EMOTHION® is a lipid-like compound, easily absorbed and transported to tissues as it is

EMOTHION® is stable because it is protected by oxidation and enzymatic hydrolyzation by the natural form of acetyl group

EMOTHION® raises the GSH level inside the cells more efficiently than normal GSH

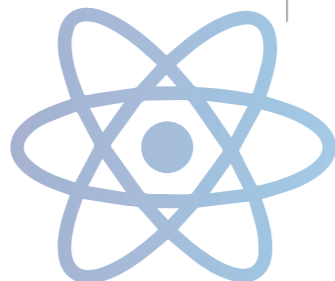
## IMMUNE FUNCTION

Emothion® is useful to increase GSH levels proposed to enhance the **innate and adaptive immunity** as well as conferring **protection against infections (11).**

## ANTI-INFLAMMATORY

Emothion® provides ready-to-use GSH that helps to **fight inflammation** at the source helping to **repair the oxidative damage and its progression. Low-grade and chronic inflammation is a highly significant risk factor for elderly people** as most, if not all, age-related diseases show an inflammatory pathogenesis (12).

IMMUNE SYSTEM



## ENERGY PRODUCTION AND CELLULAR METABOLISM

Emothion® provides free glutathione that can **assist cellular metabolism** through the **prevention of anomalies and dysfunction of mitochondria**, the organelle responsible for cellular energy production. Loss of function in mitochondria can result in excess fatigue and other symptoms that are common in almost every chronic disease (2,3).

## ATHLETIC PERFORMANCE AND RECOVERY

The GSH released by **Emothion®** may **benefit athletic performance, by controlling oxidative stress and free radicals formation during exercise.** GSH improves the health and quality of mitochondria as it directly affects their energy producing capabilities. **Increased strength and endurance, decreased recovery time from injury, less pain and fatigue** may be favoured by the use of glutathione. (4,5).



SPORT NUTRITION

## LIVER DETOXIFICATION

### LIVER HEALTH

Emothion® **protects liver functions** through the **natural replenishing of GSH**, the primary factor affecting liver activities and health. The liver contains the majority of the body's glutathione, used **to detoxify the body and to regulate immune function (9,10).**



SKIN

### SKIN HEALTH

By raising the GSH levels, **Emothion® may improve quality, health and appearance of skin, the body's first line of defence** against exogenous injuries, such as oxidants, UV rays, toxins and infections. By **topical and oral application**, the GSH released by **Emothion® may minimize age spots and wrinkles of exposed skin (13).**

### WHITENING

GSH is also known as **skin whitening and lightening. Three randomized controlled trials** support the skin-lightening effect and **good safety profile of oral glutathione (14).**



## COGNITIVE HEALTH

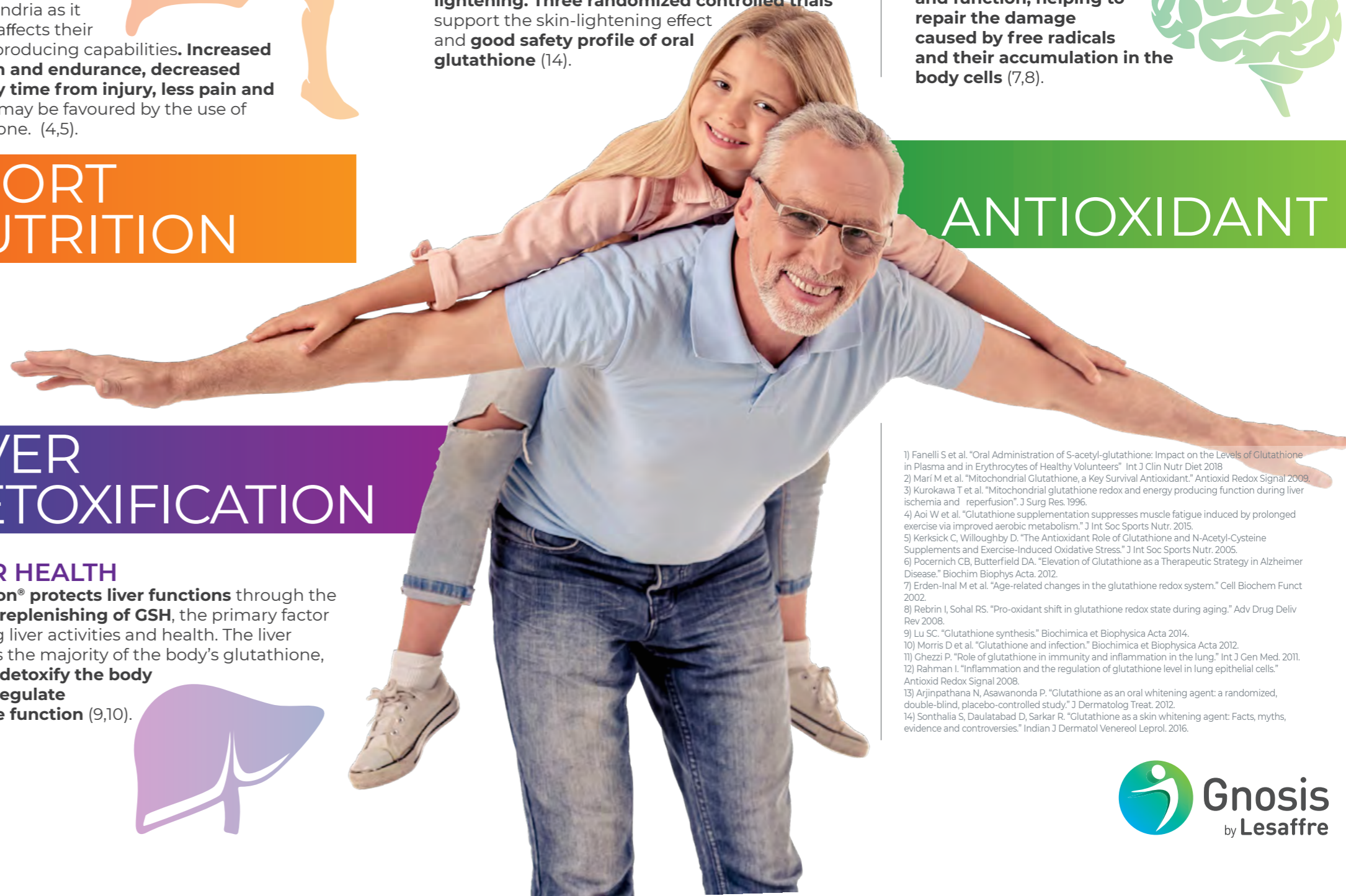
Emothion® may **support cognitive health** through the increase of GSH levels, the most prevalent antioxidant in the brain. **The brain is particularly vulnerable to oxidative damage** due to the high levels of unsaturated lipids, oxygen, redox metal ions, and relatively poor antioxidant systems. **Increasing glutathione levels remains a promising strategy to protect brain health and slow mild cognitive impairment (MCI)**, where the oxidative stress has been associated with their onset and progression (6).

### ANTI - AGING

GSH is central and critical to all of the primary processes of cellular protection. Oral supplementation of **Emothion® raises the level of GSH that naturally decreases with age, improving cellular health and function, helping to repair the damage caused by free radicals and their accumulation in the body cells (7,8).**



ANTIOXIDANT



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## Gnosis by Lesaffre

Via Laboratori Autobianchi, 1  
20832 Desio (MB) - ITALY  
+39 (0)362 16 70 001

137 rue Gabriel Péri  
59700 Marcq-en-Baroeul - FRANCE  
+33 (0)3 20 81 61 00

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