

# Thiotres

## Tablets

Glutathione 500 mg Tablets

Get rid of  
**UNWANTED**



La Renon

## Research Says That:

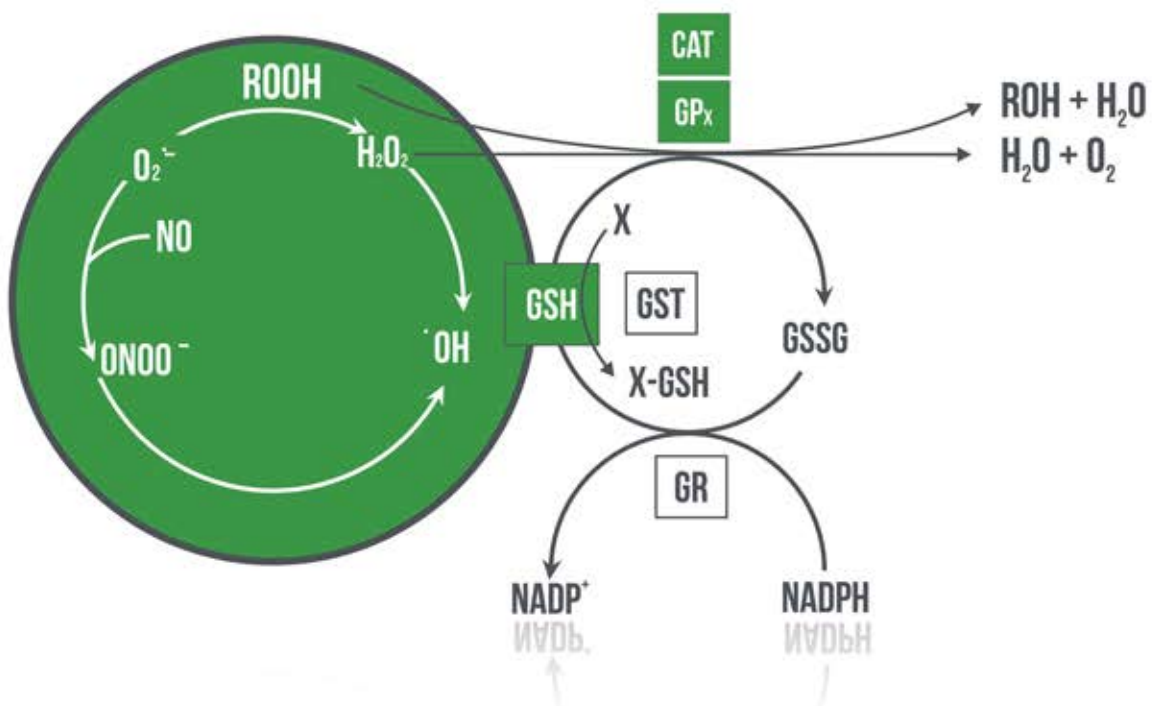
- GSH is an important intracellular antioxidant and are significantly reduced in CHC patients. This was associated with increased oxidized GSH metabolite suggesting an increased GSH turnover <sup>1</sup>.
- Daily GSH regimen appears to be associated in cystic fibrosis(CF) patients with significant improvement in lung function <sup>2</sup>.
- Glutathione is an extremely important cell protectant, it directly quenches reactive hydroxyl free radicals, oxygen-centered free radical, radical centers on DNA and other biomolecules which shows protective effects in diabetic nephropathy <sup>3</sup>.
- GSH was significantly lower in diabetic cases <sup>4</sup>.

## Reduced Glutathione Level In Different Liver Ailment Condition:

Sr. No.	Group	GSH Content (g/mg Protein)
1.	Normal Healthy Person	3.58±0.25
2.	Non-Alcoholic Liver Disease	2.93±0.13*
3.	Alcoholic Liver Disease (Moderate Alcohol Intake)	3.16±0.16*
4.	Alcoholic Liver Disease (High Alcohol Intake) (n=46)	2.72±0.15* <sup>@</sup>

\* Indicates p < 0.05 when compared with normal healthy control and @ indicated p<0.05 when compared with alcoholic liver disease with moderate alcohol intake.  
(Indian Journal of Clinical Biochemistry, 2005)

## Glutathione working as an antioxidant:



## Scientific Support

### Randomized controlled trial of oral glutathione supplementation on body stores of glutathione

*Eur J Nutr*; 54(2): 251-63: 2015

#### Purpose

Glutathione (GSH), the most abundant endogenous antioxidant, is a critical regulator of oxidative stress and immune function. The objective was to determine the long-term effectiveness of oral GSH supplementation on body stores of GSH in healthy adults.

#### Method

A 6-month randomized, double-blinded, placebo-controlled trial of oral GSH (250 or 1,000 mg/day) on GSH levels in blood, erythrocytes, plasma, lymphocytes and exfoliated buccal mucosal cells was conducted in 54 non-smoking adults. Secondary outcomes on a subset of subjects included a battery of immune markers.

#### Result

GSH levels in blood increased after 1, 3 and 6 months versus baseline at both doses. At 6 months, mean GSH levels increased 30–35 % in erythrocytes, plasma and lymphocytes and 260 % in buccal cells in the high-dose group. GSH levels increased 17 and 29 % in blood and erythrocytes, respectively, in the low-dose group. In most cases, the increases were dose and time dependent, and levels returned to baseline after a 1-month washout period. A reduction in oxidative stress in both GSH dose groups was indicated by decreases in the oxidized to reduced glutathione ratio in whole blood after 6 months. Natural killer cytotoxicity increased > two fold in the high-dose group versus placebo at 3 months.

#### Conclusion

These findings show that, daily consumption of GSH supplements was effective at increasing body compartment stores

# Why Thiotres Tablets ?

#### References:-

1. Saudi J Gastroenterol; 18(6): 375–379: 2012
2. Journal of Cystic Fibrosis; (7): 433–436: 2008
3. IJPRR; 2(12): 2013
4. Biol Med; 24(5): 699–704: 1998
5. Indian Journal of Clinical Biochemistry; 20 (2): 24–28: 2005
6. Afr. J. Microbiol. Res; 7(50): 2013
7. Alcoholism: clinical and experimental research; 28(1): 2004

- Glutathione (GSH) plays a major role in cellular protection against oxidative damage <sup>5</sup>.
- Reduced glutathione in Thiotres plays an important role against tissue oxidative damage, its depletion results in the accumulation of free radicals <sup>6</sup>.
- Depletion of gastric mucosal GSH may result in the accumulation of free radicals that can initiate membrane damage by lipid peroxidation <sup>6</sup>.
- Lower hepatic GSH levels are well known to occur in patients with alcoholic liver disease that can cause increase liver damage, in that case external supplementation is required <sup>7</sup>.



# Thiotres

## Tablets

Glutathione 500 mg Tablets

### Indication:

- Alcoholic Liver Disease
- Liver Cirrhosis
- Liver Damage in HIV/HCV Coinfection
- In H. Pyroli gastric pathologies
- As adjuvant therapy option in Polycystic Ovary Syndrome
- As adjuvant therapy in preventing growth of Mycobacterium tuberculosis
- Adjuvant treatment option in Cystic Fibrosis
- Cataracts
- Glaucoma
- Preventing aging
- Heart disease
- High cholesterol levels
- Osteoarthritis
- Memory loss

### Description:

Reduced glutathione, most commonly called glutathione or GSH, is a relatively small molecule ubiquitous in living systems. Occurring naturally in all human cells.

GSH levels in human tissues normally range from 0.1 to 10 millimolar (mM), most concentrated in the liver (up to 10 mM) and in the spleen, kidney, erythrocytes, and leukocytes. Plasma concentration is in the micromolar range. Oxidative stressors that can deplete GSH include ultraviolet and other radiation; viral infections; environmental toxins, household chemicals, and heavy metals; surgery, inflammation, burns, septic shock; and dietary deficiencies of GSH precursors and enzyme cofactors.

### Pharmacology:

Glutathione (GSH) is a water-soluble tripeptide composed of the amino acids glutamine, cysteine, and glycine. The thiol group is a potent reducing agent.

GSH detoxifies a variety of electrophilic compounds and peroxides via catalysis by glutathione S-transferases (GST) and glutathione peroxidases (GPx).

The tripeptide can exist intracellularly in either an oxidized (GSSG) or diminished (GSH) state and maintaining optimal GSH: GSSG proportions in the cell are basic to survival, so tight regulation of the system is required.

A deficiency of GSH puts the cell at risk for oxidative damage. An imbalance of GSH is observed in a wide range of pathologies, including, cancer, neurodegenerative disorders, cystic fibrosis (CF), HIV and aging.

### Dosage:

One or Two Tablets a day or as suggested by Healthcare Professional.

### Storage:-

Store in cool and dry place below 30°C.

### La Renon Healthcare Pvt. Ltd.

207-208 Iscon Elegance, Circle P, Prahlad Nagar Cross Roads,  
S.G.Highway, Ahmedabad-380015, Gujarat, India.  
Phone: +91-79-3046-1000 (30 Lines) , Fax: +91-79-3046-1001  
E-mail: info@larenon.com, Web: www.larenon.com

HELLO

I Am \_\_\_\_\_  
Call me on \_\_\_\_\_  
Mail me at \_\_\_\_\_