

The  
Lymphocyte



Proliferator

# Glutahenz-DT 1000

L-Glutamine Dispersible Tablets 1000 mg

La Renon

# A Novel Approach to Chemotherapy Induced Toxicity

Radiotherapy is one of the cornerstones in the management of head and neck malignancies. Annually, there are approximately 400,000 cases of treatment induced damage to the oral cavity. Oral mucositis is the most frequently occurring painful and dose limiting side effect of therapeutic irradiation of the head and neck cancer.

Glutamine may help decrease mucous membrane injury induced by radiation by altering the inflammatory response. Glutathione, a byproduct of glutamine metabolism protects against oxidant injury. Glutathione is an antagonist to prostaglandin E2 (PGE2) production, which is a strong inflammatory mediator.

A randomized, prospective single institutional case control study on 70 biopsy proven patients with head and neck cancer receiving primary or adjuvant radiation therapy were randomized to receive either oral glutamine suspension daily 2h before radiation in the study arm (n = 35) or nothing before radiation; control arm (n = 35).

Although, there have been various trials in the past which prove that Oral glutamine is having strong role to reduce the chemotherapy induced side effects i.e. stomatitis, intestinal injury in cancer patients.

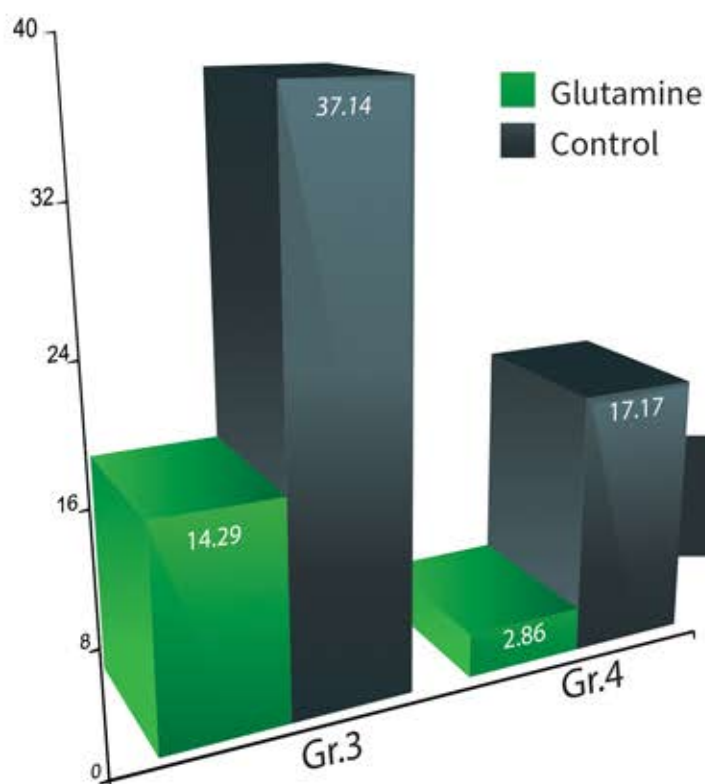


Figure: Bar diagram comparing the incidence of grade 3 and grade 4 mucositis in both arms

In the following analysis of result, Patients who developed grade 3 and grade 4 mucositis was significantly less in study arm(Glutamine) than control arm.

1. Number of patient
2. The mean duration of mucositis
3. The mean time to onset of mucositis
4. Patients received concurrent chemo radiation
5. Patients undergoing only radiation

# A novel therapeutic approach to stimulating insulin secretion in Obesity and Type 2 diabetes

Incretin hormones, such as glucagon-like peptide 1 (GLP-1) and glucose-dependent insulinotropic polypeptide (GIP), play an important role in meal-related insulin secretion.

Three groups- 8 healthy normal-weight volunteers (LEAN), 8 obese individuals with type 2 diabetes or impaired glucose tolerance (OB-DIAB) and 8 obese nondiabetic control subjects (OB-CON).

Circulating GLP-1 concentrations increased in all study groups after glutamine ingestion, with peak concentrations at 30 min of  $22.5 \pm 3.4$ ,  $17.9 \pm 1.1$ , and  $17.3 \pm 3.4$  pmol/L in LEAN, OB-CON, and OB-DIAB subjects, respectively.

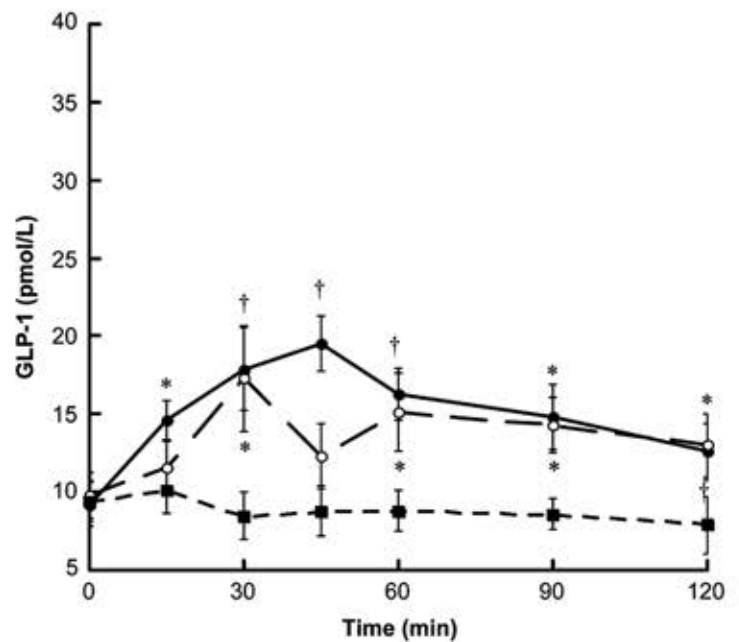
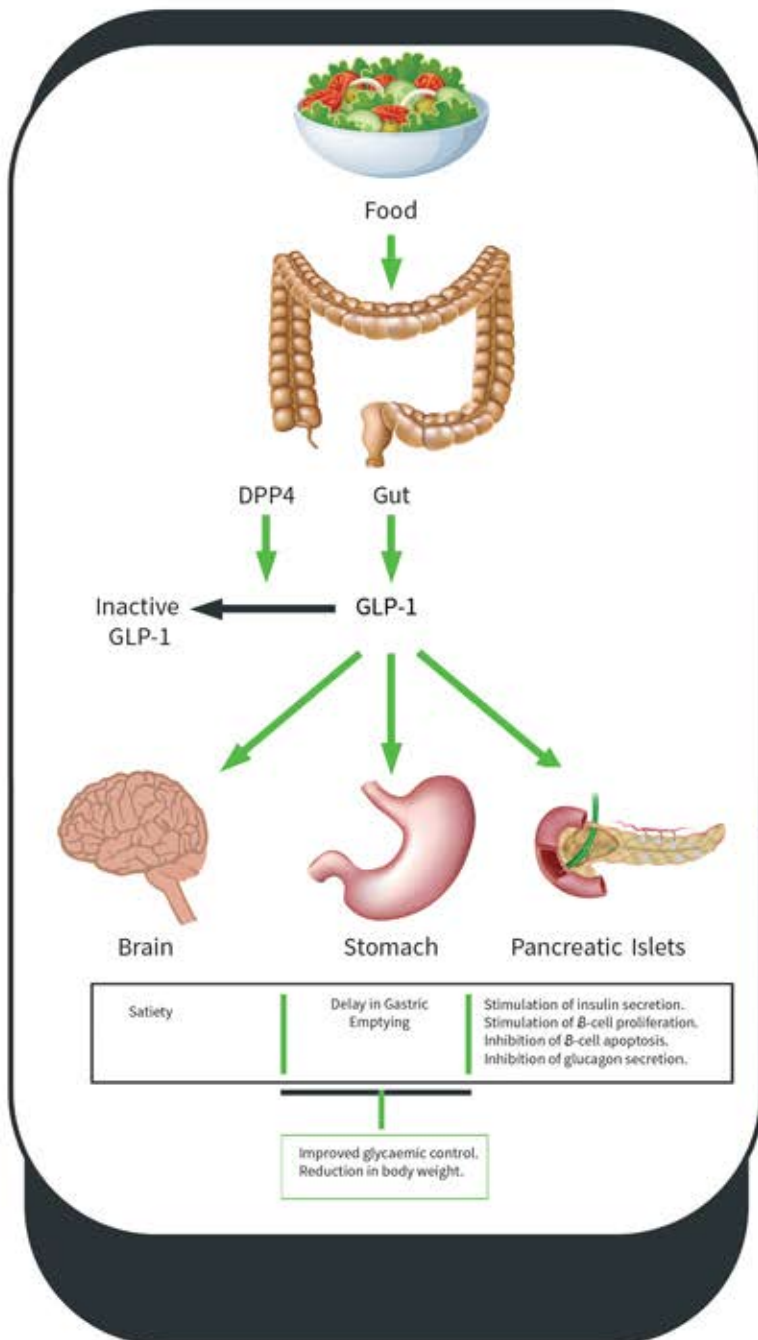


Fig: Plasma glucagon-like peptide 1 (GLP-1) concentrations after the ingestion of glucose (black circles), glutamine (white circles), and water (black squares) in obese individuals with type 2 diabetes or impaired glucose tolerance. Data are mean  $\pm$  SE. \*P < 0.05, \*\*P < 0.01, and \*\*\*P < 0.001 compared with water (paired t test).

Consistent with the increases in GLP-1 and GIP, glutamine significantly increased circulating plasma insulin concentrations may represent a novel therapeutic approach to stimulating insulin secretion in obesity and type 2 diabetes.

Reference:  
 1) Subrata C, Aramita S et. al. *South Asian Journal of Cancer*; January-March 2014; Vol 3(1);8-13.  
 2) Jerry R G, I Sadaf F et. al. *American Journal of Clinical Nutrition* 2009;89:106-113

# Glutahenz-DT 1000

L-Glutamine Dispersible Tablets 1000 mg

## DESCRIPTION

Glutahenz DT 1000 is formulated as dispersible form meant for oral administration. Each Tablet of Glutahenz DT contains 1 g of L-glutamine. The amino acid glutamine is also known as (S)-2-aminoglutaramic acid, L-glutamic acid 5-amide, (S)-2,5-diamino-5-oxopentanoic acid, or L-glutamine.

## CLINICAL INDICATIONS

- Short bowel syndrome
- ICU patients- Surgical patients, Hospital infection, Burn, Trauma
- Surgery – Abdominal, cardiovascular, post surgery and cancer surgery
- Cancer-chemotherapy, Radiation Therapy
- Gastro patients- Pancreatitis
- Infection-Nosocomial infection, Urinary tract infection, wound infection

## MECHANISM OF ACTION

L-glutamine has important functions in regulation of gastrointestinal cell growth, function, and regeneration. Under normal conditions, glutamine concentration is maintained in the body by dietary intake and synthesis from endogenous glutamate. Data from clinical studies indicate that the role of and nutritional requirements for glutamine during catabolic illness, trauma, and infection may differ significantly from the role of and nutritional requirements for glutamine in healthy individuals. Glutamine concentrations decrease and tissue glutamine metabolism increases during many catabolic disease states, and thus glutamine is often considered a conditionally essential amino acid.

## DOSAGE AND ADMINISTRATION

Dosages vary greatly depending on the clinical situation, but are in the range of two to four grams daily in divided doses for general wound healing and intestinal support. Numerous clinical trials in humans demonstrate that even at high doses, glutamine administration is without side effects and well tolerated, even during times of physiologic stress or as advised by registered medical practitioner.

## DIRECTION FOR USE

Disperse the tablet in boiled & cooled water immediately before administration.

## PRESENTATION

Glutahenz DT 1000 is supplied in box of 1\*10\*10 tablets.

## STORAGE

Store protected from light & moisture at a temperature not exceeding 25°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 \_\_\_\_\_