



Glutazorb[®] -vs- Glutamine Digestion Study

Presented by

All American[®] Pharmaceutical & Natural Foods Corporation

Study Performed by

Atlas Bioscience

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Purpose

To determine the stability of L-Glutamine -vs- Glutazorb® stabilized glutamine, it was important to do a digestion study to see how each reacts in the stomach before absorption.

Both set of amino acids were subjected to digestion as 1% solutions in simulated gastric solution (0.5% betain/pepsin in 1M HEPES buffer pH 3.5, titrated with 0.5M HCL and 0.5N NaOH to compensate for inherent salt pH). Samples desalted on a mixed bed ion-exchange column. Elluent is evaporated to dryness. Amino Acid analysis was performed on aliquots of the dry residue by derivatization according to the AccQtag methodology (Waters, Inc.) using 20 mM HCL, Borate buffer, and AQC reagent in acetonitrile (1:3:1, v/v/v), followed by HPLC using Waters Exteva C18 Column (150ml/min with UV detection (254nm)).

The results reported were as relative concentrations remaining as a function of incubation time.

Results

	Relative concentrations remaining following incubation		
	30 min	60 min	120 min
Conventional Glutamine	0.939	0.849	0.645
Glutazorb®	1.000	1.000	0.999

Conclusion

Glutazorb® glutamine is much more stable in the stomach than conventional Glutamine.