

News Release

Lonza Group Ltd
Muenchensteinerstrasse 38
CH-4002 Basel, Switzerland
www.lonza.com

New study confirms that Carnipure™ supplementation can help during aging in multiple ways

Basel, Switzerland, 30 October 2008 – Research from the University of Dijon, France, adds new evidence that supplementation with Carnipure™ could play a role in supporting healthy aging. A new study released in the October 2008 issue of the *Journal of Gerontology* demonstrates that supplementation with Carnipure™ can restore age-decreased L-Carnitine levels in the muscle cells of old rats, restore muscle oxidative capacity and further induce positive changes in body composition. The study found that without any change in food intake, the old animals showed a decrease in abdominal fat mass and an increase in muscle capabilities.

In elderly people both dietary intake of L-Carnitine and the nutrients required for the body to naturally make L-Carnitine are frequently reduced, leading to reduced L-Carnitine levels in various body compartments. This may result in a reduction in energy metabolism. Skeletal muscles constitute the main reservoir of L-Carnitine in the body since they have high energy needs, and L-Carnitine plays an important role in energy generation. Muscle mass and muscle strength tend to decrease with age, which can lead to a reduction in physical ability and may cause adverse metabolic effects. The new study found a statistically significant difference of 34% in muscle L-Carnitine content between young and old rats. This can be restored in the old animals with Carnipure™ supplementation. Although more research is needed, these findings, combined with additional animal and human research, suggest a potential role for L-Carnitine supplementation in supporting healthy aging.

Generally the capacity for energy generation from fatty acids as measured via β -oxidation rates is reduced in the elderly. Supplementation with Carnipure™ was found to increase the β -oxidation rate and thus muscle oxidative capacity in old rats by 55%. Also in healthy adults, Carnipure™ supplementation has been shown to stimulate *in vivo* long chain fatty acid metabolism.

Body weight in old rats normally increases over time, which was also true for the old rat control group without Carnipure™ supplementation. In old rats, Carnipure™ supplementation seemed to limit body weight increase by limiting fat gain and possibly by increasing fatty acid oxidation. At the same time the data clearly showed that food intake is not modified by Carnipure™ supplementation. These findings support another human trial: one month's treatment with L-Carnitine in subjects aged from 70 to 92 was found to be associated with a significant increase in total muscle mass, compared with placebo. The total fat mass was reduced at the same time.

“With the world's elderly population predicted to nearly triple by 2050, it is not surprising that the market for anti-aging foods and supplements will see increased levels of activity and opportunity for manufacturers. Carnipure™ may help support functions that seniors

need to stay fit and healthy in both mind and body”, says Professor Jean Demarquoy, leading researcher of this study.

Lonza is the only manufacturer of the Carnipure™ brand of L-Carnitine products including Carnipure™ tartrate (U.S. Patent 5073376, Japan Patent JP 2546068 and other international patents). Carnipure™ tartrate consists of 68% pure L-Carnitine and 32% L-tartaric acid and is self affirmed as GRAS (Generally Recognized as Safe). Carnipure™ products are crystalline, white, water-soluble and heat stable which makes them ideal for use in various food and drink applications. In addition, Carnipure™ tartrate is non-hygroscopic, odorless, has a pleasant citrus taste and excellent flowability. Carnipure™ products are kosher certified. Further details are available at www.carnipure.com.

About Lonza

Lonza is one of the world's leading suppliers to the pharmaceutical, healthcare and life science industries. Its products and services span its customers' needs from research to final product manufacture. Lonza is the global leader in the production and support of active pharmaceutical ingredients both chemically as well as biotechnologically. Biopharmaceuticals are one of the key growth drivers of the pharmaceutical and biotechnology industries. Lonza has strong capabilities in large and small molecules, peptides, amino acids and niche bioproducts which play an important role in the development of novel medicines and healthcare products. Lonza is a leader in cell-based research, endotoxin detection and cell therapy manufacturing. Lonza is also a leading provider of value chemical and biotech ingredients to the nutrition, hygiene, preservation, agro and personal care markets.

Lonza is headquartered in Basel, Switzerland and is listed on the SWX Swiss Exchange. In 2007, Lonza had sales of CHF 2.87 billion. Further information can be found at www.lonza.com.

These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

For further information please contact:

Lonza Ltd
Marketing & Sales Nutrition
Reto Renggli
Tel +41 61 316 8244
reto.renggli@lonza.com

Lonza Group
Media Relations
Dominik Werner
Tel +41 61 316 8798
dominik.werner@lonza.com

Lonza Inc.
NAFTA Head of Technical Marketing & Scientific Affairs
Kevin Owen, Ph.D.
Tel +1 806 655 8002
kevin.owen@lonza.com

Lonza America, Inc.
Corporate Communications Sr. Manager
Melanie Disa
Tel +1 201 316 9413
melanie.disa@lonza.com