

7th workshop on the Assessment of Adequate and Safe Intake of Dietary Amino Acids

MOTONI KADOWAKI, Ph.D.
Professor of Nutritional Regulation,
Faculty of Agriculture,
Institute of Science and Technology,
Niigata University

KATSUNORI KOBAYASHI
Chief of Secretariat
International Council on Amino Acid Science

< Summary >

The Seventh Workshop on the Assessment of Adequate and Safe Intake of Dietary Amino Acids was held on November 2-3, 2007, at the United Nations University (Tokyo, Japan) inviting 19 speakers from over the world. Amino acids have become popular food ingredients for their biological functionalities, and their increased consumption over the world causes a growing concern over the safety. Meanwhile, existing toxicological safety evaluation methods can not be applied to the safety assessment of human intake of macronutrients such as amino acids unlike micronutrients such as vitamins. The goal of these workshops is to establish a sound scientific framework for the assessment of the effect of amino acid intake as food ingredients.

The workshop's Day 1 program, entitled as "Consideration for Setting Upper Intake Levels (ULs) for Nutrients", was co-sponsored with the ILSI Japan as its satellite symposium to the ILSI Japan Fifth International Conference on Nutrition and Aging. This article covers lectures and discussion of Day 2 program entitled "Animal Models and Biomarkers for Assessing Adequate and Safe Intake of Glutamine and Proline". During the discussion, participants agreed that there are plenty of scientific data on glutamine and its NOAEL (No Observed Adverse Effect Level) has been set at an adequately high level, while the amount of data on proline is insufficient for discussing about its safety. Participants also paid much attention to the possibility for using metabolic breakpoints as biomarkers to identify ULs for amino acid intakes.