

Preface

The first comprehensive review of taurine (2-aminoethanesulfonic acid) was published in 1968 by Jacobsen and Smith in Physiological Reviews. At that time the knowledge concerning the role of taurine, a low molecular weight organic molecule, was at best rudimentary. Prior to 1968 it was known that taurine was widely distributed in the animal kingdom and was present in high concentrations in all mammalian tissues. It had been determined that taurine conjugated with specific bile acids, and may have some osmoregulatory role in marine species that traverse between fresh and salt water during their life cycle.

The substance later to be identified as 2-aminoethanesulfonic acid was first isolated in 1827 by Tiedemann and Gmelin from ox bile. Demarcay in 1838 named this interesting but enigmatic compound "taurine". In the intervening 171 years and especially in the last 30 years since the elegant review by Jacobsen and Smith, interest in the role of taurine has increased exponentially. In these last 3 decades there have been at least 15 international symposia or satellite symposia devoted exclusively to gathering together participants who have a major interest in discovering "what taurine does." Thanks to Professor Gert Lubec, the last two International Congresses on Amino Acids held in Vienna, Austria, in 1995, and Chalkidiki, Greece, in 1997, each had a full day dedicated to papers on the biochemistry, physiology, and pharmacology of taurine.

This special issue of the journal Amino Acids is devoted to articles that report on a wide range of effects of taurine in a variety of different mammalian tissues. The subject matter that taurine encompasses is extensive, as can be observed by perusing the Table of Contents. Because of the observations that taurine has many different effects in many different tissues, the quest to discover a primary mechanism of action that can potentially unify the role of taurine has been a long time goal of many investigators. Future studies will hopefully realize this ambition.

The guest editors would like to express their gratitude to Professor Gert Lubec, Editor-in-Chief, for the opportunity to organize this special issue of Amino Acids.

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