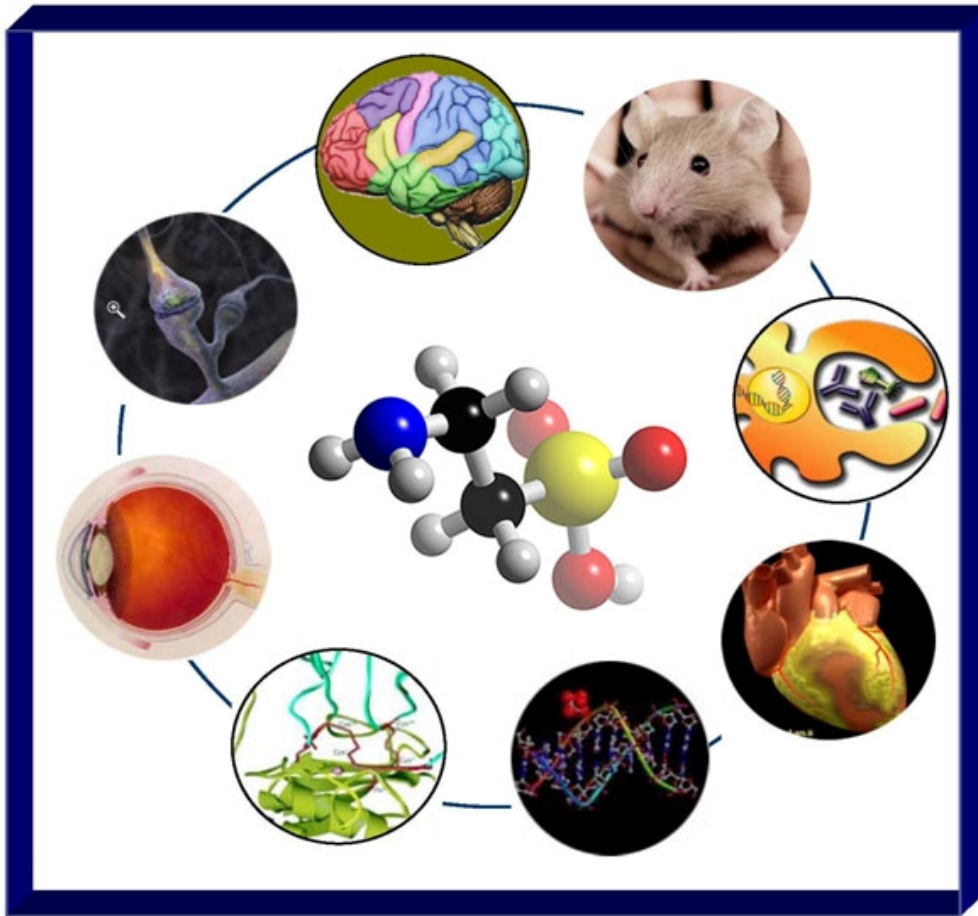


**Special Supplementary Issue of Journal of Biomedical
Science**

“Taurine: A Wonder Molecule”



Guest Editors:

**Jang-Yen Wu
Stephen W. Schaffer
Junichi Azuma**

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Review Articles

Role of taurine in the central nervous system

Jang-Yen Wu and Howard Prentice

Role of taurine in the cardiac and skeleton muscle: An overview

Stephen W. Schaffer (not done)

Taurine bromamine (TauBr) - its role in immunity and new perspectives for clinical use

Janusz Marcinkiewicz

Taurine and the renal system

Russell Chesney, Xiaobin Han, and Andrea B. Patters

Reciprocal Regulation between Taurine and Glutamate Response via Ca²⁺-Dependent Pathways in Retinal Third-Order Neurons

Simon Bulley and Wen Shen

Taurine in health and diseases: Consistent evidence from experimental and epidemiological studies

Yukio Yamori, Takashi Taguchi, Atsumi Hamada, Kazuhiro Kunimasa, Hideki Mori, Mari Mori

Original Papers

I Taurine and Neuro/Endocrine System

Protection effect of taurine on nitrosative stress in the mice brain with chronic exposure to arsenic

Ning Ma, Mikio Sasoh, Shosuke Kawanishi, Hiromichi Sugiura, Fengyuan Piao

Neuro-Endocrine basis for altered plasma glucose homeostasis in the Fragile X mouse

Abdeslem El Idrissi, Xin Yan, Francoise Sidime, William L'Amoreaux

Effects of taurine on male reproduction in rats of different ages

Jiancheng Yang, Gaofeng Wu, Qiufeng Lv, Shumei Lin and Jianmin Hu

Comparative study of the binding characteristics to and inhibitory potencies towards PARP and in vivo antidiabetogenic potencies of taurine, 3-aminobenzamide and nicotinamide

Kashyap G. Pandya, Maulik R. Patel and Cesar A. Lau-Cam

Pharmacological characterization of GABA_A receptors in taurine-fed mice

William J. L'Amoreaux, Alexandra Marsillo, Abdeslem El Idrissi

Glutamate receptor-mediated taurine release from the hippocampus during oxidative stress

Brian Tucker and James E. Olson

Taurine regulates insulin release from pancreatic beta cell lines

William J. L'Amoreaux, Christina Cuttitta, Allison Santora, Jonathan F. Blaize, Janto Tachjadi, and Abdeslem El Idrissi

Comparative study of the binding characteristics to and inhibitory potencies towards PARP and in vivo antidiabetogenic potencies of taurine, 3-aminobenzamide and nicotinamide

Kashyap G. Pandya, Maulik R. Patel and Cesar A. Lau-Cam

Taurine reduces ER stress in *C. elegans*

Hye Min Kim, Chang-Hee Do, Dong Hee Lee

Characterization of taurine as anti-obesity agent in *C. elegans*

Hye Min Kim, Chang-Hee Do, Dong Hee Lee

Neuroprotection by taurine in ethanol-induced apoptosis in the developing cerebellum

Andrey G Taranukhin, Elena Y Taranukhina, Pirjo Saransaari, Irina M Podkletnova, Markku Peltö-Huikko, Simo S Oja

II Taurine and Cardiovascular and Pulmonary System

Protective action of taurine, given as a pretreatment or as a posttreatment, against endotoxin-induced acute lung inflammation in hamsters

Tapan M Bhavsar, Sanket N Patel and Cesar A Lau-Cam

Cardiac and skeletal muscle abnormality in taurine transporter-knockout mice

Takashi Ito, Shohei Oishi, Mika Takai, Yasushi Kimura, Yoriko Uozumi, Yasushi Fujio, Stephen W. Schaffer, Junichi Azuma

Low Cardiovascular Risks in the Middle Aged Males and Females Excreting Greater 24-hour Urinary Taurine and Magnesium in 41 WHO-CARDIAC Study Populations in the World.

Yukio Yamori, Takashi Taguchi, Mari Mori, Hideki Mori

High sugar intake exacerbates cardiac reperfusion injury in perinatal taurine depleted adult rats

Supaporn Kulthinee, J. Michael Wyss, Dusit Jirakulsomchok, and Sanya Roysommuti

III Taurine and Mitochondria/ER/Immune System

A role for taurine in mitochondrial function

Svend Høime Hansen, Mogens Larsen Andersen, Claus Cornett, Robert Gradinaru and Niels Grønnet

Taurine and proliferation of lymphocytes in physically restrained rats

Fili Fazzino, Francisco Obregón and Lucimey Lima

**Effect of β -alanine treatment on mitochondrial taurine level and 5-
taurinomethyluridine content**

Chian Ju Jong, Takashi Ito, Mahmood Mozaffari, Junichi Azuma, Stephen Schaffer

Taurine reduces ER stress in *C. elegans*

Hye Min Kim, Chang-Hee Do, Dong Hee Lee

Effect of taurine chloramine on the production of matrix metalloproteinases (MMPs) in adiponectin- or IL-1 β -stimulated fibroblast-like synoviocytes

Kyoung Soo Kim, Hyun-Mi Choi, Da Hee Oh, Chaekyun Kim, Myung Chul Yoo, Hyung-In Yang

IV Taurine and Renal Function

Stress-responsive gene *TauT* and acute kidney injury

Xiaobin Han and Russell W. Chesney

Perinatal taurine exposure alters renal potassium excretion mechanisms in adult conscious rats

Sanya Roysommuti, Pisamai Malila, Wichaporn Lerdweeraphon, Dusit Jirakulsomchok, and J. Michael Wyss

High sugar intake via the renin-angiotensin system blunts the baroreceptor reflex in adult rats that were perinatally depleted of taurine

Atcharaporn Thaeomor¹, J. Michael Wyss², Dusit Jirakulsomchok¹, and Sanya Roysommuti¹

Adult renal function is modified by perinatal taurine status in conscious male rats

Sanya Roysommuti¹, Pisamai Malila¹, Dusit Jirakulsomchok¹, and J. Michael Wyss²

Differential Effects of Taurine Treatment and Taurine Deficiency on the Outcome of Renal Ischemia Reperfusion Injury

Mahmood S. Mozaffari, Rafik Abdelsayed, Champa Patel, Hereward Wimborne, Jun Yao Liu, Stephen W. Schaffer

Characterization of taurine as anti-obesity agent in *C. elegans*

Hye Min Kim, Chang-Hee Do, Dong Hee Lee
Miteshkumar Acharya and Cesar A. Lau-Cam

V Taurine and Nutrition/Metabolism

Effect of combination of taurine and azelaic acid on antimelanogenesis in murine melanoma cells

Ji Sun Yu and An Keun Kim

Antiobesity and hypolipidemic effects of lotus leaf hot water extract with taurine supplementation in rats fed a high fat diet

Huan Du, Jeong Soon You, Xu Zhao, Ji Yeon Park, Sung Hoon Kim, Kyung Ja Chang

Deterioration of traditional dietary custom increases the risk of lifestyle-related diseases in young male Africans

Atsumi Hamada, Mari Mori, Hideki Mori, Alfa Muhihi, Marina Njelekela, Zablon Masesa, Jacob Mtabaji, Yukio Yamori

Comparison of the protective actions of N-acetylcysteine, hypotaurine and taurine against acetaminophen-induced hepatotoxicity in the rat

Miteshkumar Acharya and Cesar A. Lau-Cam

Metabolic Bone Disease in Lion Cubs at the London Zoo in 1889: The Original Animal Model of Rickets

Russell W. Chesney and Gail Hedberg

Antioxidant and hepatic protective effects of lotus root hot water extract with taurine supplementation in rats fed a high fat diet

Huan Du, Xu Zhao, Jeong Soon You, Ji Yeon Park, Sung Hoon Kim, Kyung Ja Chang

Regulation of taurine transport at the blood-placental barrier by calcium ion, PKC activator and oxidative stress conditions

Na-Young Lee and Young-Sook Kang

A maternal low protein diet has pronounced effects on mitochondrial gene expression in offspring liver and skeletal muscle; protective effect of taurine

Ole Hartvig Mortensen, Hanne Lodberg Olsen, Lis Frandsen, Peter Eigil Nielsen, Finn Cilius Nielsen, Niels Grunnet, Bjørn Quistorff