Special Supplementary Issue of Journal of Biomedical Science

“Taurine: A Wonder Molecule”

Guest Editors:
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   Stephen W. Schaffer
   Junichi Azuma
Acknowledgements

Most of the articles published in this Special Supplementary Issue of the Journal of Biomedical Science were presented at the 17th International Taurine Meeting which was held December 14-19, 2009, Florida, USA. We are deeply grateful to the National Science council, Taiwan, for the generous support of the cost of the online publication. We are also grateful to Isobel Peters from BioMed Central for her assistance and guidance in the process of its publication. The support from Taisho Pharmaceutical Co. LTD, Japan, Dong-A Pharmaceutical Co./Korea Taurine Society, Korea, and Florida Atlantic University, USA for the Special thanks go to Wanda Dominger Johns at the Charles E. Schmidt College of Biomedical Science, Florida Atlantic University for her professionalism, dedication and tireless assistance in all aspects of the meeting and the subsequent publication of the proceedings of the conference.
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 Ca$^{2+}$-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 Pelto-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
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 Grunnet

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-1b-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 *τauT* 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 Muhiihi, 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