treat rheumatism by moxibustion in Chinese medicine. A small carbohydrate fraction of approximately 1,000
dlaton from the water-soluble extract of the Artemisia Folium promoted survival of the mouse thymocytes in
culture. A mouse gene array study suggested that the fraction might modulate Fas/FasL dependent apoptotic cell
death and thus had influence on the survival of the thymocytes in culture. RT-PCR analysis confirmed the down-
regulation of the Fas gene by the treatment, supporting that the fraction modulated thymocyte death by
suppressing the Fas gene expression.

[PB4-8] [ 2003-10-10 09:00 - 13:00 / Grand Ballroom Pre-function ]
Effects of anti-inflammation and cell protection through biphenyl dimethyl dicarboxylate on Rat Microglia
Joo SeongSoo, Kang HeeChul, Lee Dolk
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Biphenyl dimethyl dicarboxylate (DDB) is a by-product produced in process of synthesizing Schizandrin-C. Generally, DDB has known to protect hepatocytes and to decrease the index of liver enzyme (e.g. GOT and GPT) in chronic hepatitis. The present study was aimed to demonstrate whether DDB can protect the brain cell, especially the Alzheimer brain in vitro. As Alzheimers disease can be induced by activated microglia, a macrophage in the brain, through Abeta peptide (Aβ) produced from amyloid precursor protein (APP). Results showed that DDB attenuated the production of proinflammatory repertoire such as IL-1β, TNF-α, and Nitric oxide(NO) in 10μM to 25μM of DDB with the highest peak value at 24h. The attenuation was started from 6h and lasted up to 48h with clear evidences of cell protection (DAPI). The study suggested that DDB plays an important role in protecting the brain cells from the progressive Alzheimer's disease by inhibiting the chronic inflammation. In conclusion, we found that DDB can be used in neurodegenerative disease caused by inflammation and cell damages from stresses.

[PB4-9] [ 2003-10-10 09:00 - 13:00 / Grand Ballroom Pre-function ]
Inductive Effects of Vibrio vulnificus Infections on Cytotoxic Activity and Expression of Inflammatory Cytokine Genes in Human Intestinal Epithelial Cells
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Vibrio vulnificus, a Gram-negative estuarine bacterium, is the causative agent of food-borne diseases, such as
life-threatening sepsis. V. vulnificus penetrating into the intestinal epithelial barrier stimulates an
inflammatory response in the adjacent intestinal mucosa. Therefore, interaction between V. vulnificus and
intestinal cells is important for understanding of both the immunology of mucosal surfaces and V. vulnificus. In
this study we investigated the effects of V. vulnificus infection on cytokine gene expression of human intestinal
epithelial cells, Caco-2 and INT-407 cells. V. vulnificus infection significantly induced the expression of pro-
inflammatory cytokines such as IL-1, IL-6, IL-8, IL-12, and IL-18 in both incubation time- and MOI-dependent
manner, while did not affect TGF-beta, etc. expression. Especially, infection with V. vulnificus increased IL-8
mRNA level and also increased the binding activity of transcription factor NF-kB to the kB sites in both Caco-2
and INT-407 cells. Furthermore, treatment with inhibitors for NF-kB activation and translocation abrogated the
enhanced IL-8 gene expression by V. vulnificus infection, indicating that V. vulnificus infection induced IL-8 gene
expression by increasing NF-kB binding activity in human epithelial cells.

[PB4-10] [ 2003-10-10 09:00 - 13:00 / Grand Ballroom Pre-function ]
Allergenicity of soybean and soybean-based products
Kim Hyung Soo*, Park Jae Hyun, Ryu Mi Hyun, Lee Jong Kwon, Eom Juno H, Byun Jung-A, Oh Hye Young
NITR, FDA