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**德中医研究协会**



# **Scientific approaches to Chinese Medicine**

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## **Abstracts**



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The subscales cognitive functioning ( $p=0,046$ ) and future perspectives ( $p=0,046$ ) statistically significantly improved. However, in the control group virtually all scores worsened. In the global state of health sub scale we found a statistically significant aggravation ( $p=0,046$ ), a finding that we obviously prevent in qigong group although chemotherapy was applied.

2. The sub scale of symptoms tends to be improved in qigong group (not statistically significant). However in control group all symptoms tend to be worse. Even, pain ( $p=0,05$ ) and loss of hair ( $p=0,046$ ) aggravated statistically significantly.
3. Specific symptoms like nausea and vomiting appeared in both groups along the course of chemotherapy. In qigong group they did not aggravate statistically significantly. However in control group, nausea and vomiting, showed statistically significant aggravation ( $p=0,035$ ).
4. Salivary cortisol levels diminished in almost all patients in both groups, although in qigong group was more pronounced (results not statistically significant).
5. The assessment of the shoulder/arm mobility surprisingly revealed that all patients of both groups suffered impairment of mobility and related complaints like pain and functional loss. Within the qigong group mobility increased significantly ( $p=0,008$ ) and controls showed no significant change.

**Discussion:** The functional status and global health improved by qigong. We chose a specified sub-set of the so-called White Ball exercises based on the Heidelberg Model of Chinese Medicine. These exercises can therefore be recommended in the given scenario.

Concerning the methodology of this study, however, the general problem of adequate control groups within qigong studies shows the limits of conventional qigong study designs. Although the results are promising, continuation of the study increasing the number of cases is recommended.

## Antioxidant properties of different dietary supplements based on *Agaricus blazei* Murrill

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Abstract

In 2012, the market for nutraceuticals earned \$90 billion worldwide and it is predicted to reach \$33.6 billion in the next four years. *Agaricus blazei* Murrill mushroom is native to Brazil and widely cultivated due to nutritional and medicinal value [1,2]. Its beneficial effects have long been recognized, becoming popular as ordinary food, increasing also its production and marketing as dietary supplements [3].

*A. blazei* is traditionally used to combat a variety of diseases such as cancer, diabetes, hepatitis and hypercholesterolemia [2]. The use of dietary supplements based on *A. blazei* has grown significantly, due to pharmacological studies reporting antioxidant, antitumor, anti-inflammatory, antimicrobial, immunostimulant, apoptotic and chemopreventive effects [2,3], attributed to  $\beta$ -glucans and other bioactive compounds, such as steroids, tocopherols and phenolic compounds [4]. Herein, the antioxidant activity of *A. blazei* capsules enriched with fruits of *Malpighia glabra* L. (acerola), *Solanum melongena* L. (eggplant) and *Euterpe oleracea* Mart. (açai), calcium and chitosan, were



evaluated though *in vitro* assays: DPPH (2,2-diphenyl-1-picrylhydrazyl) radical scavenging activity, reducing power, inhibition of  $\beta$ -carotene bleaching and inhibition of lipid peroxidation in brain homogenates by thiobarbituric acid reactive substances (TBARS) assay. Two capsules (daily recommended dose) were dissolved in 100 mL of distilled water in order to prepare a stock solution. Several dilutions were tested until determination of  $EC_{50}$  values (concentration responsible for 50% of antioxidant activity or 0.5 of absorbance in reducing power assay).

Globally, all the tested formulations showed high antioxidant activity. *A. blazei* with acerola gave the highest DPPH scavenging activity ( $EC_{50}=0.81\pm 0.01$  mg/mL) and reducing power ( $EC_{50}=0.53\pm 0.01$  mg/mL). Nevertheless, *A. blazei* with açai showed the highest activity in the lipophilic assays:  $\beta$ -carotene bleaching inhibition ( $EC_{50}=0.55\pm 0.02$  mg/mL) and lipid peroxidation inhibition by TBARS assay ( $EC_{50}=0.14\pm 0.01$  mg/mL). The studied formulations might be useful as antioxidants-enriched supplements to prevent some of the diseases related to oxidative stress.

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## Effects of the acupuncture on the clinical signs of Labrador dogs with hip dysplasia: a preliminary study

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**Background:** The hip dysplasia is a chronic disease in which western conservative and / or surgical treatment often are not effective. Acupuncture is a common therapy for arthrosis and could potentially serve as a therapy in these cases. The assessment of the course of the disease is an important prerequisite for the proof of efficacy such treatment. The use of biomechanics such as kinetic, kinematic analysis and thermography have been proven to be a powerful diagnostic tool for evaluation, because of its objective and dynamic analysis. To the best of our knowledge, this technology has so far never been used to assess the effects of acupuncture in coxalgia in dogs.