

Current prospects for nutraceutical in integrative cancer treatment and prevention (I)

The World Health Organization (WHO) identifies cancer as one of the most prominent chronic diseases, recognizing the importance of integrated chronic disease prevention and control. However, cancer incidence and mortality rates remain high worldwide. Many experts and scholars who attended the Taiwan International Nutraceutical Conference to discuss the benefits of nutraceutical intervention in cancer treatment, all agree that total nutrition support can synergistically increase the efficacy of treatment, and improve patient quality of life.

Probiotics & Prebiotics are the key immuno-modulatory agent

Cancer strikes fear in the hearts of many today. Cancer prevention guidelines include: eating properly, exercising regularly, quality sleep, avoiding tobacco, and exposure to high stress environments. However, Dr. Zhaoping Li, Professor of Medicine and Director of the Center for Human Nutrition at the University of California, Los Angeles, emphasized the human microbiome is an emerging paradigm for better health.



Dr. Zhaoping Li

Genetic factors may account for approximately 30 percent of an individual's health and longevity; lifestyle choices, particularly diet, play an undisputed role in determining the remaining 70 percent of our longevity and quality of life. Our genes are regulated by complicated pathways influencing gene expression, and nutrients

have dramatic effects on that expression, and on the human microbiome. Dr. Li stated, "Recently, many people are aware that gut microbiota provides essential health benefits, particularly by regulating immune homeostasis. Therefore, more people now choose to take a probiotic supplement. However, they miss another important component: that of prebiotics which are foods for probiotics. Prebiotics are found in many colorful vegetables and fruits, especially those rich in fiber and resistant starch, which act as fertilizer for improving the balance of good bacteria in the gut. " Maintaining optimal composition, diversity and function of the gut microbiota by supplementing probiotics plus prebiotics can support gut membrane integrity, prevent antibiotic-induced mucosal barrier damage, decrease intestinal inflammation, modulate immune balance, and show beneficial effects in preventing chronic diseases and cancer. Dr. Zhaoping Li especially emphasized every human cell exists in a dynamic microenvironment. Therefore, choose foods wisely, get adequate nutrients, be physically active on a regular basis, and maintain a healthy microbiota to ensure that we take the path for better health.

Nutraceutical should be the first line treatment

"Malnutrition not only has health complications on the personal level, the long-term consequences of malnutrition also are daunting to overall economic and social development." Dr. Hanping Shih, physician of Beijing Shijitan Hospital and Capital Medical University Cancer Center said. Malnutrition is a frequent

problem in hospitalized patients, where up to 85% of patients admitted are found to be malnourished. Malnutrition is associated with many adverse clinical outcomes, including longer length of stay, decreased treatment effectiveness and efficacy, and increased morbidity and mortality. However, there are many nutrition misconceptions not only among the general population, but even among medical professionals.

Dr. Hanping Shih states that the establishment of hunger-free hospitals and community should be a national goal. Fundamental nutrition education is needed to correct misconceptions and provide scientific evidence-based knowledge and application. Nutraceuticals need to be the first line treatment for every kind of disease, the more frequently that complete nutrients are provided to patients, the less often that medication and antibiotics need to be prescribed resulting in a lower medical deficit.



Dr. Hanping Shih

Cancer stem cells cannot hide from selenium yeast plus the TG form of fish oil



Dr. Giming Lai

Properties of the small group of cancer cells called cancer stem cells (CSCs) are involved in drug resistance, metastases to distant organs, and the relapse of cancer which can significantly affect tumor therapy. High drug resistance and metastasis are the greatest challenges for the

treatment of lung adenocarcinoma currently, and methods to diminish the clinically devastating properties of cancer stem cells or to induce cancer stem cell death are desperately needed.

The latest research conducted by Dr. Giming Lai at Cancer Center of Taipei Municipal Wanfang Hospital has shown astounding results. The natural TG form of fish oil with selenium yeast can induce cancer stem cell suicide and inhibit its "stemness" properties including self-renewal, differentiation and proliferative potential. Moreover, fish oil and selenium yeast can have the same therapeutic effect as the latest immunotherapy which targets PD-L1 and boosts the immune response against cancer cells, but without side effects. This stunning new discovery means the combination of TG form fish oil and selenium yeast belong in the front line of the battle for lung adenocarcinoma treatment.