

International Conference on

Aging & Gerontology

August 8-9, 2016 Las Vegas, USA

CALORIC RESTRICTION TO AUGMENT CANCER CARE: WHEN FOOD IS MEDICINAL

Nicole Simone*

*Thomas Jefferson University, USA

From prospective studies such as the Nurses Health Initiative, it has been established that weight gain after breast cancer treatment is directly linked to worse cancer outcomes such as increased local recurrence and distant metastases, with decreased overall survival. Unfortunately, the women in the aging population are most at risk for weight gain in the first year after treatment. Recently, because of an increasing body of literature demonstrating that there is an altered metabolic component to both carcinogenesis and tumor progression, there has been growing interest in the potential role of diet as a treatment modality for age-related diseases such as cancer. In multiple preclinical breast cancer and prostate cancer models, our laboratory has shown that caloric restriction can be added to radiation to increase local control of the primary tumor and to decrease metastases while increasing overall survival. We noted the same effect for both primary tumors and metastases when caloric restriction is added to chemotherapy. Molecularly, caloric restriction decreases the expression of multiple members of the IGF-1R/Akt pathway. In addition, we have started the first in-human clinical trial using caloric restriction with radiation. We have had 91% patient compliance with the diet, improved serum markers, quality-of-life measures and even acute toxicity during radiation. The innovative use of caloric restriction as a novel therapeutic option has the potential to change the biology of aging related diseases such as cancer to enhance the opportunity for clinical benefit in the treatment of patients.

nicole.simone@jefferson.edu

PHYSICAL ACTIVITY AND QUALITY OF LIFE IN CHINESE OLDER ADULTS WITH DIABETES

Sang-Lin*, Hui-Ping Cheng*, Chong-Shan Wang* and Ming-Shin Lin*

*National Cheng Kung University, Taiwan

Diabetes is a major health concern for older people in developing countries. Physical inactivity is common in older adults with diabetes and could not affect only the control of the disease, but also quality of life (QOL). This study examined the association between the level of physical activity and QOL in older Chinese with diabetes. A total of 201 community-dwelling older adults (age 60-89, mean=70 years) who had confirmed diagnosis of diabetes participated in this study. The Taiwan version of the International Physical Activity Questionnaire (IPAQ) was used to record and categorize (vigorous or moderate) the level of physical activity. Subjects who had at least 150 minutes of moderate or at least 75 minutes of vigorous activity were classified as active, while the rest as inactive. The WHOQOL-BREF Taiwan version was used to measure QOL. It was found that subjects in the different activity groups did not differ in age, gender, body mass index or duration of diabetes. About 67% of the subjects were inactive, but did not differ from their active counterparts in the four domains of QOL ($p=0.07-0.228$). Subjects with at least 10 min of moderate activity (47%) also did not differ from those without ($p=0.186-0.800$). For subjects (12%) with at least 10 min vigorous activity, their physical ($p=0.004$), psychological ($p=0.011$) and environment ($p=0.008$) QOL were significantly better than those who did not. The results showed that vigorous but not moderate activity was associated with better quality of life.

lin31@mail.ncku.edu.tw