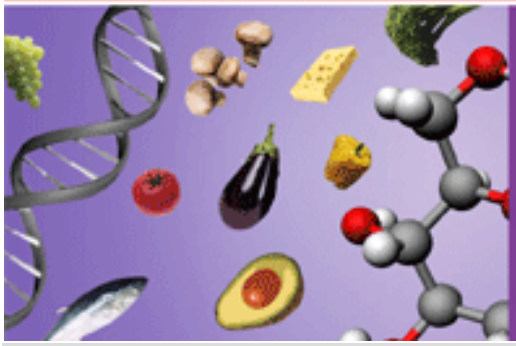

NUTRITION FRONTIERS

A newsletter of the Nutritional Science Research Group

Winter 2010 Volume 1, Issue 1

Dear Colleague,

Welcome to the first issue of *Nutrition Frontiers*, a quarterly newsletter from the Nutritional Science Research Group (NSRG), Division of Cancer Prevention, NCI. In this newsletter, we hope to highlight some of the emerging research on nutrition and cancer prevention and showcase the scientists behind the research. We also hope to stay connected to you!

RESEARCH UPDATE: ON THE CLINICAL FRONT

Women in the Women's Healthy Eating and Living (WHEL) Study successfully increased vegetable, fruit, and fiber intake and decreased fat intake without reducing breast cancer events or deaths *(Pierce et al. Am J Clin Nutr 2009;89(suppl):1565S)*. Now, a sub-group analysis finds that the dietary intervention was associated with lower risk in those women without hot flashes *(Gold et al. J Clin Oncol 2009;27:352)*. However, the greatest effect occurred among women who already were eating higher amounts of vegetables, fruits and fiber at baseline. This study was supported by a NCI grant.

RESEARCH UPDATE: WHAT'S NEW IN BASIC SCIENCE

Cruciferous vegetables and their bioactive components, including sulforaphane, have been studied for their anti-cancer properties.

Upcoming Events

March 16, 2010
Stars in Nutrition & Cancer, Dr. Jeremy Nicholson, Imperial College London, March 16, NIH Main Campus

December 31, 2009
Deadline for applying to the Nutrition and Cancer Prevention Research Practicum, March 2010.

Quick Links

- Funding Opportunities
- CRTA Fellowship in NSRG
- NSRG Factsheets
- Nutritional Science Research Group
- Division of Cancer Prevention
- National Cancer Institute

In human prostate cancer cells, sulforaphane causes growth arrest and apoptosis induction. In a study by Singh SV, et al. in which transgenic adenocarcinoma mouse prostate (TRAMP) mice were given sulforaphane 3 times/week beginning at 6 weeks of age, prostate carcinogenesis and pulmonary metastasis were significantly inhibited *(Singh et al. Cancer Res 2009;69(5):2117)*. Additionally, when compared with control mice, the sulforaphane-treated mice showed decreased cellular proliferation, increased apoptosis and augmented NK cell lytic activity. This study was supported by a NCI grant.

SPOTLIGHT: A BASIC SCIENTIST

Henry J. Thompson, Ph.D. Dr. Thompson earned his Ph.D. from Rutgers University in nutritional sciences. His M.S., M.Phil. and B.S. degrees were also earned from Rutgers University. Following his doctoral work, Dr. Thompson received postdoctoral training in the Dept. of Molecular Medicine at the Mayo Clinic in Rochester, MN. He is currently a Professor in the College of Agricultural Sciences and Director of the Cancer Prevention Laboratory at Colorado State University. His research focuses on the mechanisms underlying the cancer inhibitory activity of energy restriction and exercise. He was recently awarded an RO1 for his project titled, *Energy Restriction and Mammary Cancer*.

Read more »

SPOTLIGHT: A CLINICIAN

Daniel W. Lin, M.D. Dr. Lin received his M.D. from Vanderbilt University in Nashville, Tennessee. He then moved to the University of Washington for an internship and residency in the Dept. of Surgery; going on to a residency in the Dept. of Urology and Chief Resident. He completed a Fellowship in Urologic Oncology at Memorial Sloan-Kettering Cancer Center in New York City before completing a research fellowship at the Fred Hutchinson Cancer Center. He currently is Associate

Professor and Chief of Urology Oncology at the University of Washington School of Medicine. His research interests include the molecular mechanisms of prostate carcinogenesis. He was awarded a R01 for his project titled, *In vivo effects of sulforaphane supplementation on normal human prostate*.

Read more »

DID YOU KNOW?

"Broccoli was brought to the US in the early nineteenth century by Italian immigrants but was not popular with non-Italians. It took another century to catch on and be grown commercially. Now the top contributors of broccoli production are Canada, Japan, Hong Kong, Mexico and the US."

Source: Grotto D. *101 Foods That Could Save Your Life*, Bantam Dell, New York, NY, 2008.

Sincerely,

Your friends at the Nutritional Science Research Group

Division of Cancer Prevention
National Cancer Institute
National Institutes of Health
U.S. Department of Health & Human Services