Breast


To evaluate the association between dietary mushroom intake and breast cancer risk, a total of 362 women between the ages of 30 and 65 years who were histologically confirmed to have breast cancer were matched to controls by age (+/-2 years) and menopausal status. Mushroom intake was measured via a food frequency questionnaire that was administered by well-trained interviewers. The associations between the daily intake and the average consumption frequency of mushrooms with breast cancer risk were evaluated using matched data analysis. Both the daily intake (5th vs. 1st quintile, OR = 0.48, 95% CI = 0.30-0.78, p for trend 0.030) and the average consumption frequency of mushrooms (4th vs. 1st quartile, OR = 0.54, 95% CI = 0.35-0.82, p for trend 0.008) were inversely associated with breast cancer risk after adjustment for education, family history of breast cancer, regular exercise [+or~22.5 MET (metabolic equivalent)-hr/week], BMI (body mass index, Kg/m(2)), number of children and whether they are currently smoking, drinking or using multivitamin supplements. Further adjustments were made for energy-adjusted carbohydrate, soy protein, folate and vitamin E levels, which tended to attenuate these results. After a stratification was performed according to menopausal status, a strong inverse association was found in postmenopausal women (OR = 0.16, 95% CI = 0.04-0.54, p for trend 0.0058 for daily intake; OR = 0.17, 95% CI = 0.05-0.54, p for trend 0.0037 for average frequency), but not in premenopausal women. In conclusion, the consumption of dietary mushrooms may decrease breast cancer risk in postmenopausal women.

Suzuki, R, T. Rylander-Rudqvist, W. Ye, S. Saji, H. Adlercreutz and A. Wolk. Dietary Fiber Intake and Risk of Postmenopausal Breast Cancer Defined by Estrogen and Progesterone Receptor Status--a Prospective Cohort Study among Swedish Women. *International Journal of Cancer*. 2008 Jan 15; 1222: 403-412. There is few data on the association between dietary fiber intake and estrogen receptor (ER)/progesterone receptor (PR)-defined breast cancer risk. We evaluated the association between dietary fiber and ER/PR-defined breast cancer risk stratified by postmenopausal hormone use, alcohol intake, and family history of breast cancer in the population-based Swedish Mammography Screening Cohort comprising 51,823 postmenopausal women. Fiber intake was measured by food-frequency questionnaire collected in 1987 and 1997. Relative risks (RRs) were estimated by hazard ratio derived from Cox proportional hazard regression models. During an average of 8.3-year follow-up, 1,188 breast cancer cases with known ER/PR status were diagnosed. When comparing the highest to the lowest quintile, we observed non-significant inverse associations between total fiber intake and the risk of all tumor subtypes; the multivariate-adjusted RRs were 0.85 (95% CI: 0.69-1.05) for overall, 0.85 (0.64-1.13) for ER+PR-, 0.83 (0.52-1.31) for ER+PR- and 0.94 (0.49-1.80) for ER-PR-. For specific fiber, we observed statistically significant risk reductions for overall (34%) and for ER+PR+ (38%) for the highest versus lowest quintile of fruit fiber, and non-significant inverse associations for other subtypes of cancer and types of fiber. Among ever-users of postmenopausal hormone (PMH), total fiber intake and especially cereal fiber were statistically significantly associated with approximately 50% reduced risk for overall and ER+PR+ tumors when comparing the highest to the lowest quartile, but no association was observed among PMH never users. Our results suggest that dietary fiber intake from fruit and cereal may play a role in reducing breast cancer risk.

Prostate


BACKGROUND. Pretreatment urinary, bowel, and sexual dysfunction may increase the toxicity of prostate cancer treatments or preclude potential benefits. Using patient-reported baseline dysfunction from a prospective cohort study, we determined the proportion of patients receiving relatively contraindicated ('mismatched') treatments. METHODS. Baseline obstructive uropathy and bowel dysfunction relatively contraindicate toxicities of treatments or patients' baseline dysfunction.
brachytherapy (BT) and external beam radiation therapy (EBRT), respectively, because they increase patients' vulnerability to treatment-related toxicity. Baseline sexual dysfunction renders moot the intended benefit of nerve-sparing radical prostatectomy (NSRP), which is to preserve sexual function. We categorized patients' clinical circumstances by increasing complexity and counted the mismatches in each, expecting weaker or multiple contraindications to increase mismatched treatments. RESULTS. Of 438 eligible patients, 389 (89%) reported preexisting dysfunction, and more than one-third received mismatched treatments. Mismatches did not significantly increase with clinical complexity, and watchful waiting was very infrequent, even when all treatment options were contraindicated. Patient age and comorbidity, but not preexisting dysfunction, were associated with treatment choice. As expected, mismatched BT and EBRT led to worsened urinary and bowel symptoms, respectively, and NSRP did not improve outcomes after baseline sexual dysfunction. CONCLUSIONS. Pretreatment dysfunction does not appear to reliably influence treatment choices, and patients receiving mismatched treatments had worse outcomes. Further study is needed to determine why mismatched treatments were chosen, including the role of incomplete patient-physician communication of baseline dysfunction, and whether using a validated questionnaire before treatment decision-making would bypass this difficulty. Treatment mismatch may be a useful outcome indicator of the quality of patient-centered decisions.

Galvao, DA, D. R. Taaffe, N. Spry and R. U. Newton. Exercise can Prevent and Even Reverse Adverse Effects of Androgen Suppression Treatment in Men with Prostate Cancer. Prostate Cancer and Prostatic Diseases. 2007 Dec; 104: 340-346. Side effects accompanying androgen deprivation therapy (ADT), including sarcopenia, loss of bone mass and reduction in muscle strength, can compromise physical function, particularly in older patients. Exercise, specifically resistance training, may be an effective and cost-efficient strategy to limit or even reverse some of these adverse effects during and following therapy. In this review, we discuss common morphological and physiological ADT-related side effects or ‘Androgen Deprivation and Sarcopenia-Related Disorders’ and the existing clinical trials incorporating physical exercise in prostate cancer patients receiving active therapy. Further, training concepts and guidelines are provided for prescribing resistance exercise programs for this population.

Northouse, LL, D. W. Mood, A. Schafenacker, et al. Randomized Clinical Trial of a Family Intervention for Prostate Cancer Patients and their Spouses. Cancer. 2007 15 Dec; 11012: 2809-2818. BACKGROUND. Few intervention studies have been conducted to help couples manage the effects of prostate cancer and maintain their quality of life. The objective of this study was to determine whether a family-based intervention could improve appraisal variables (appraisal of illness or caregiving, uncertainty, hopelessness), coping resources (coping strategies, self-efficacy, communication), symptom distress, and quality of life in men with prostate cancer and their spouses. METHODS. For this clinical trial, 263 patient-spouse dyads were stratified by research site, phase of illness, and treatment; then, they were randomized to the control group (standard care) or the experimental group (standard care plus a 5-session family intervention). The intervention targeted couples' communication, hope, coping, uncertainty, and symptom management. The final sample consisted of 235 couples: 123 couples in the control group and 112 couples in the experimental group. Data collection occurred at baseline before randomization and at 4 months, 8 months, and 12 months. RESULTS. At 4-month follow-up, intervention patients reported less uncertainty and better communication with spouses than control patients, but they reported no other effects. Intervention spouses reported higher quality of life, more self-efficacy, better communication, and less negative appraisal of caregiving, uncertainty, hopelessness, and symptom distress at 4 months compared with controls, and some effects were sustained to 8 months and 12 months. CONCLUSIONS. Men with prostate cancer and their spouses reported positive outcomes from a family intervention that offered them information and support. Programs of care need to be extended to spouses who likely will experience multiple benefits from intervention.

Peters, U. A. J. Littman, A. R. Kristal, R. E. Patterson, J. D. Potter and E. White. Vitamin E and Selenium Supplementation and Risk of Prostate Cancer in the Vitamins and Lifestyle (VITAL) Study Cohort. Cancer Causes and Control. 2008 Feb; 191: 75-87. Objective: Vitamin E and selenium are promising nutrients for the prevention of prostate cancer, and both are currently being tested in a large randomized trial for prostate cancer. However, results are not expected for at least 6 years. We aimed to investigate the association of vitamin E and selenium supplementation with prostate cancer in the VITamins And Lifestyle (VITAL) study, a cohort study specifically designed to examine supplement use and future cancer risk. Methods: In a prospective design, 35,242 men recruited between 2000 and 2002 from western Washington State completed a questionnaire, including detailed questions about vitamin E and selenium supplement intake during the past 10 years from brand-specific multivitamins and single supplements. Using linkage to the western Washington SEER cancer registry, we documented 830 new cases of prostate cancer from baseline through December 2004. Results: A 10-year average intake of supplemental vitamin E was not associated with a reduced prostate cancer risk overall [hazard ratio (HR) 0.86, 95% confidence interval (CI) 0.65-1.1 for [greater-than or equal to]400 IU/day vs. non-use, p for trend 0.36]; however, risk for advanced prostate cancer (regionally invasive or distant metastatic, n = 123) decreased significantly with greater intake of supplemental vitamin E (HR 0.43, 95% CI 0.19-1.0 for 10-year average intake [greater-than or equal to]400 IU/day vs. non-use, p for trend 0.03). There was no association between selenium supplementation and prostate cancer risk (HR 0.90, 95% CI 0.62-1.3 for 10-year average intake >50 mug/day vs. non-use, p for trend 0.97). Conclusions: In this prospective cohort, long-term supplemental intake of vitamin E and selenium were not associated with prostate cancer risk overall; however, risk of clinically relevant advanced disease was reduced with greater long-term vitamin E supplementation.

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**Thank you to the BC Foundation for Prostate Disease for their generous support.**

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**Ovarian**

Reb, AM Transforming the Death Sentence: Elements of Hope in Women with Advanced Ovarian Cancer Oncol Nurs Forum. 2007 11; 346: E70-81. PURPOSE/OBJECTIVES: To describe the experience of hope in women with advanced ovarian cancer. RESEARCH APPROACH: Grounded theory methodology with interviews. SETTING: Oncology clinics in the northeastern United States. PARTICIPANTS: 20 women aged 42-73 who had completed initial chemotherapy and had no evidence of recurrence. METHODOLOGIC APPROACH: A personal data form and focused interview guide supported data collection. The core variable and related themes were identified using the constant comparative process. Demographic and treatment information was analyzed using descriptive statistics. MAIN RESEARCH VARIABLES: The process of hope in women with advanced ovarian cancer. FINDINGS: Facing the death sentence emerged as the main concern. The core variable in dealing with the concern was transforming the death threat. The three phases of the trajectory were shock (reverberating from the impact), aftermath (gripping reality), and rebuilding (living the new paradigm). Healthcare provider communication and spirituality influenced women's...
Gastric


The objective of this study was to determine whether the intake of nitrate relative to antioxidant vitamin rather than absolute intake of nitrate affects the risk of gastric cancer (GC). In a case-control study in Korea using a food frequency questionnaire, trained dietitians interviewed 136 GC cases and an equal number of controls matched by sex and age. As an index of nitrate intake relative to antioxidant vitamins intake, we calculated the nitrate:antioxidant vitamin consumption ratio. The mean daily nitrate intake from foods was very high in our subjects. Higher absolute intake of nitrate was not associated with GC risk [odds ratios (OR) = 1.13; 95% confidence interval (CI) = 0.42-3.06]. However, the GC risk distinctly increased as the nitrate:antioxidant vitamin consumption ratio increased, particularly with higher nitrate:vitamin E (OR = 2.78; 95% CI = 1.01-7.67) and nitrate:folate ratios (OR = 3.37; 95% CI = 1.28-8.87). Therefore, GC risk was influenced by the intake of nitrate relative to antioxidant vitamins. Our results suggest that a decrease in the intake of nitrate relative to antioxidant vitamins is considerably more effective in reducing GC risk than either a lower absolute intake of nitrate or a higher intake of antioxidant vitamins alone.

Endometrial

Lucenteforte, E, R. Talamini, M. Montella, et al. Macronutrients, Fatty Acids and Cholesterol Intake and Endometrial Cancer. Annals of Oncology. 2008 Jan; 191: 168-172. Background: There is some evidence that dietary habits may influence the risk of endometrial cancer independently of body mass, although the role of diet on endometrial carcinogenesis is unclear. Patients and methods: We carried out a multicenter case-control study from 1992 to 2006 in Italy on 454 women with incident, histologically confirmed endometrial cancer (age range 18-79 years) and 908 controls (age range 19-79 years) admitted to hospitals for acute, non-neoplastic diseases. A validated food-frequency questionnaire was used to estimate macronutrients, fatty acids and cholesterol intake. Logistic regression models, conditioned on age and study centre, and adjusted for major known risk factor of endometrial cancer and residual of energy intake were used to estimate odds ratios (OR) and 95% confidence intervals (CI). Results: Significant direct associations were observed with intake of energy (OR = 1.7 for the highest versus the lowest quintile, 95% CI = 1.1-2.5), and cholesterol (OR = 2.1, 95% CI = 1.4-3.2), while a direct borderline association emerged with saturated fatty acids (OR = 1.3, 95% CI = 0.9-2.0). There was no association with proteins, sugars, starch, total fat and other selected fatty acids. Conclusion: Energy and cholesterol intake were associated with endometrial cancer.

Psychosocial

Epstein, DR and S. R. Dirksen. Randomized Trial of a Cognitive-Behavioral Intervention for Insomnia in Breast Cancer Survivors Oncol Nurs Forum. 2007 09/Sept2007 Online Exclusive; 345: E51-9. Behavioral intervention for treating insomnia in breast cancer survivors. Design: Randomized controlled trial. Setting: University and medical center settings. Sample: 72 women at least three months after primary treatment for breast cancer with sleep-onset or sleep maintenance insomnia at least three nights per week for at least three months as determined through daily sleep diaries. Methods: Random assignment to a multicomponent intervention or control group. Intervention consisted of an eight-week MBSR program that incorporated relaxation, meditation, gentle yoga and daily home practice. Main Research Variables: Sleep-onset latency, wake after sleep onset, total sleep time, time in bed, sleep efficiency, and sleep quality. Findings: After the intervention, both groups improved on sleep-onset latency, wake after sleep onset, total sleep time, time in bed, sleep efficiency, and sleep quality. Conclusions: A nonpharmacologic intervention is effective in the treatment of insomnia in breast cancer survivors. Implications for Nursing: Breast cancer survivors can benefit from a cognitive-behavioral intervention for chronic insomnia. Sleep education and hygiene, a less complex treatment than a multicomponent intervention, also is effective in treating insomnia.
Nutrition


The olive tree, Olea europaea, is native to the Mediterranean basin and parts of Asia Minor. The fruit and compression-extracted oil have a wide range of therapeutic and culinary applications. Olive oil also constitutes a major component of the ”Mediterranean diet.” The chief active components of olive oil include oleic acid, phenolic constituents, and squalene. The main phenolics include hydroxytyrosol, tyrosol, and oleuropein, which occur in highest levels in virgin olive oil and have demonstrated antioxidant activity. Antioxidants are believed to be responsible for a number of olive oil’s biological activities. Oleic acid, a monounsaturated fatty acid, has shown activity in cancer prevention, while squalene has also been identified as having anticancer effects. Olive oil consumption has shown activity in cancer prevention, while squalene has also constituted a major component of the “Mediterranean diet.”

Acupuncture


Background: Cancer-related fatigue after chemotherapy is a difficult symptomatic to manage in practice and the most disruptive symptom in patients’ lives. Acupuncture is a popular complementary therapy among cancer patients and some evidence exists that it could potentially alleviate fatigue by stimulating ”energy” points in the body. Hence, this study was carried out to assess the effects of acupuncture and acupressure in managing cancer-related fatigue and the feasibility of running a randomised trial with these two complementary therapies in preparation for a large trial. Methods: This study was a randomised controlled trial. Forty-seven patients with cancer who experienced moderate to severe fatigue were randomised either to an acupuncture group (n = 15), an acupressure group (n = 16) or a sham acupressure group (n = 16). The acupuncture group received six 20-min sessions over 2 weeks, while the patients in the two acupressure groups were taught to massage/press the points and did so daily thereafter for 2 weeks on their own. Patients completed the Multidimensional Fatigue Inventory before randomisation, at the end of the 2-week intervention and again about 2 weeks after the end of the intervention. Results: Significant improvements were found with regards to General fatigue (P < 0.001), Physical fatigue (P = 0.016), Activity (p = 0.004) and Motivation (P = 0.024). At the end of the intervention, there was a 36% improvement in fatigue levels in the acupuncture group, while the acupressure group improved by 19% and the sham acupressure by 0.6%. Improvements were observed even 2 weeks after treatments, although they were lower (22%, 15%, 7%, respectively). Acupuncture was a more effective method than acupressure or sham acupressure. Subjects needed a longer treatment period to have more sustained results. The trial was methodologically feasible. Conclusion: Acupuncture shows great potential in the management of cancer-related fatigue. As a randomised trial with acupuncture is feasible and preliminary data shows significant improvements, it should be tested further using a large sample and a multicentre design.

CAM of the Month


A conceptual model of a partnership in ‘like-minded thinking’ consists of the following components: a relationship, a shared goal with mutual agreement to work toward that goal, and reciprocal encouragement between two people. A like-minded alliance is a relationship that offers support while at the same time encourages hope and establishes a reciprocating emotional attitude of hopefulness. The discussion focuses on the principles of such a model that is designed primarily as a lay intervention for anyone who has a close friend with cancer and who wants to assist the friend in maintaining a hopeful attitude in the face of illness. While this model is not directed at healthcare professionals it may be transferable into psychosocial interventions to assist persons toward sustaining hopefulness in the context of the cancer trajectory. Much has been written in the literature about how hopelessness spawns despair for individuals who have cancer and in those near the end of life; it may even create a desire for hastened death (Breitbart W., Heller K.S.: 2003, ‘Reframing Hope: Meaning-Centered Care for Patients Near the End of Life’, Journal of Palliative Medicine 6, 979-988; Jones J.M., Huggins M.A., Rydall A.C., Rodin G.M.: 2003, ‘Symptomatic distress, hopelessness, and the desire for hastened death in hospitalized cancer patients’, Journal of Psychosomatic Research 55, 411-418). Therefore, the aim of this paper is to explore how like-minded thinking for a person with cancer and his or her support person provides a framework for a personal shared worldview that is hope-based, meaningful and coherent.

InspireHealth provides an integrated whole person approach to health for individuals living with cancer. Our medical doctors guide patients to explore and learn about a variety of wellness approaches to health and healing in addition to conventional cancer treatment. This integrated medical model, which engages people in their own care, improves quality of life and reduces the likelihood of cancer recurrence. The editorial board includes: Dr. Hal Gunn, CEO and Co-founder, Dr. Janice Wright, Dr. Teresa Clarke and Dr. Ron Puthiy.

Megan Wiebe, Clinical Librarian, compiles Research Updates under the supervision of the editorial board. She has a Master’s degree in Library and Information Studies and a Bachelor’s degree in Psychology from the University of British Columbia, and has worked in a variety of medical library settings. Megan can be contacted at mwiebe@inspirehealth.ca or 604.734.7125, ext 238.