

Title: Nutrition and Culinary Arts to Reduce Inflammation in Musculoskeletal and Joint Diseases

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Background: As the U.S. population ages, the number of adults with arthritis is expected to increase sharply to 67 million by 2030 (1). Current conventional treatments for joint pain focus on pain reduction using pharmacological and surgical approaches. Joint pain is also the most common reason that patients seek integrative health practices. Diet and nutrition studies in the treatment of joint disease have focused more on weight loss and less on food substances, nutrients, and culinary practices. A growing body of evidence demonstrates the positive impact of nutrition on symptom management and modification of the inflammatory process (2, 3). Anti-inflammatory nutrition approaches have been shown to decrease laboratory indicators of inflammation as well as symptom reduction in (arthritis) RA and multiple other chronic conditions and are now recommended by cancer centers (4). Drugs which target the inflammatory pathways are also being explored as additions to standard chemotherapies (5). Inflammation has been suggested to be the seventh hallmark of cancer (6).

Purpose: We will present the scientific evidence for using nutrition and culinary arts to reduce pain and modify the course of inflammatory joint disease. The model of presentation and anti-inflammatory luncheon for attendees was previously utilized at the 2014 International Planetree Conference through collaboration with conference hotel culinary staff. We will work with hotel staff for the current conference to produce a similar anti-inflammatory teaching meal to facilitate application of these principles.

Objectives: 1) Identify biochemistry and physiology associated with pain and inflammation in musculoskeletal and joint diseases. 2) Discuss scientific evidence for using food and nutrition interventions including the implications of antioxidants, bioflavonoids, omega-3 fatty acids, herbs and spices to decrease inflammation, maintain a healthy joint and facilitate recovery of function in patients. 3) Identify culinary techniques to enhance the anti-inflammatory properties of food, beverages, spices and herbs, meal planning and cross-cultural considerations through presentation and participation in a luncheon.

Results: Previous anti-inflammatory menu items included cayenne roasted chicken with black bean spread, avocado slices and Pico de gallo in quinoa wrap; turmeric roasted shrimp salad with baby kale in spinach wrap, curried cauliflower wrap; dark chocolate bark with cherries and walnuts; and green tea.

References:

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- 4) Tascherry, S Inflammation and cancer: Why your Diet is Important. Focused on Health May 2014 <http://www.mdanderson.org/patient-and-cancer-information/cancer-information/cancer-topics/prevention-and-screening/food/inflammationandcancer.html>
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