Cranberry and Urinary Tract Health

A recent study by researchers at the University of Michigan and reported in *Clinical Infectious Diseases* found drinking 8-ounces of 27% cranberry juice cocktail (CJC) or a placebo twice daily reduced the expected number of urinary tract infections (UTI) by 50 percent. Based on previous studies, it's expected that 30% of women who have a UTI will have another infection within six months but in this study, only 20% of women who drank CJC experienced a recurring infection.

Despite this positive outcome, the researchers noted cranberry juice to be no more effective than the placebo in this six-month study of 232 college-aged women with history of UTI. Media coverage of the study focused on the finding that CJC was no more beneficial than the placebo provided in the trial.

Amy Howell, Ph.D., a cranberry researcher at the Marucci Center for Blueberry and Cranberry Research at Rutgers University, commented on the interpretation and limitations of the University of Michigan results. According to Howell:

There is a wealth of evidence in support of cranberry consumption for urinary tract infection (UTI) prevention that dates back to the early 1900’s, including well-designed clinical trials. I have been a scientist in this area for the last 17 years and have found that cranberry consumption has a meaningful impact on preventing bacterial adhesion to bladder cells, which is the initial step in the infection process.

The researchers did find that both groups (cranberry juice and placebo) experienced fewer UTIs during the six-month period of the study. In addition, the researchers suggest that the placebo may have contained an active component that helped prevent UTIs.

Another limitation with this study is the issue of compliance. The researchers relied on self-reports without any biomarkers (i.e., urine samples) to validate whether or not the students were actually drinking the products as indicated.

In summary, there are numerous positive studies on the benefits of cranberry consumption for urinary tract health. Given the body of evidence, if women are currently consuming cranberry products, the results of this one study do not provide a reason for them to change their current practices.

Cranberry Products and the new Dietary Guidelines for Americans

The 2010 *Dietary Guidelines for Americans* were recently released and there are several key areas of interest for the cranberry industry. The new guidelines provide the industry both opportunities and challenges. Opportunities in that the guidelines encourage more fruits, vegetables and other foods that are naturally nutrient rich; but, challenging in that foods and beverages with added sugars...
are to be limited in the diet. Cranberry products will need to leverage their inherent natural berry nutrition attributes while offering alternatives to consumers who desire or require lower calorie alternatives.

- Unlike most fruits, cranberries are naturally low in sugar and high in acid and beneficial (but bitter-tasting) PACs, so cranberry foods and beverages need to be sweetened in order to be palatable.
  - Most people would not consume cranberry products and benefit from their healthy goodness if cranberries did not have some added sweetness.
  - Cranberry producers use a variety of sweeteners and calorie-free sugar substitutes in products to provide consumers choices.

Many leaders in the industry are seeking ways to produce and market cranberry-containing products with less sugar to make it easier for consumers to enjoy cranberries, while still meeting the recommendations of the Dietary Guidelines.

Below are key summary points from the new Dietary Guidelines for fruits and fruit juices.

**Fruit**

- Americans eat only 42% of their daily recommended fruit servings and need to increase fruit intake.
- Moderate evidence indicates that intake of at least 2 1/2 cups of vegetables and fruit per day is associated with a reduced risk of cardiovascular disease, including heart attack and stroke.

**Fruit Juices**

- The majority of the fruit recommended should come from whole fruits, including fresh, canned, frozen, and dried forms, rather than from juice. When juices are consumed, 100% juice should be encouraged.
- Unless the package also states it is “100% juice,” it is not 100% juice. Sweetened juice products with minimal juice content, such as juice drinks, are considered sugar-sweetened beverages (SSBs) rather than fruit juice.
- Healthy eating pattern: SSBs are currently a major source of calories, and many do not provide essential nutrients. Therefore, water or other calorie-free beverages, along with fat-free or low-fat milk and 100% fruit juice, are recommended to meet total hydration needs.

Cranberry Research Library: Conversation with Tufts University Researcher, Diane McKay, PH.D, Assistant Professor, Friedman School of Nutrition Science and Policy, Antioxidants Research Laboratory at Tufts University

The Cranberry Institute (CI) recently commissioned Tufts University researchers to compile all the existing published cranberry research into a comprehensive database for use on the CI website. Dr. McKay provides a few insights about the review conducted and areas of consideration for future research.

Of the human clinical trials with cranberry, the majority are studies on urinary tract health. In addition, while cranberries have long been known to be an antioxidant-rich food, the research in the area of cardiovascular health (tied to potential antioxidant benefits) with cranberry appears to be a more emerging area of cranberry health research. Other exciting areas of research with cranberry are also gaining traction.

Based on the totality of the research that McKay and her team reviewed, one of her recommendations for future research is in the area of cranberry’s effect on gastrointestinal health. "A high priority area of nutrition is the role of pre-and probiotics in disease prevention. It seems that this might be an area of exploration for the cranberry industry, as several studies suggest that cranberries may play a role in maintaining a healthy gut flora," McKay stated.

To access the full research library compiled by Dr. McKay, click here.

Get to Know: Terry Humfeld, CAE, Executive Director, The Cranberry Institute
The Cranberry Institute welcomes its new Executive Director, Terry Humfeld, CAE. Humfeld has worked with produce associations for more than two decades and brings a wealth of relevant work experience and management skills to the Cranberry Institute.

Humfeld began his career in association management in 1984 with a greenhouse growers association and later took his skills to the Produce Marketing Association where he worked in a variety of roles, most recently as Vice President of International Chapter Relations. He has served on the Produce for Better Health Foundation board of trustees and was a member of their executive committee for eight years.

Terry holds B.S. and M.S. degrees in Horticulture from Kansas State University and has held positions in university level teaching and extension programs prior to his work in association management.

To get to know Terry and his vision for the CI, here’s a Q & A:

**What have you enjoyed most so far about the CI?**
Getting to know the great people in this industry. I’ve been warmly received and welcomed by handlers and growers alike. One of my primary goals is to build the CI’s membership so I also enjoy visiting members and prospective members to understand their business needs and expectations of the CI.

**What goals do you have for the CI in the future?**
The CI is doing incredibly important work for the cranberry industry, and I look forward to spreading and defending the good news about the health benefits of eating and drinking cranberry products. I believe that we can do an even better job of helping health care providers and other consumer influencers to understand these benefits so that they will encourage their patients to consume cranberry products on a regular basis.

**Before this position, what were your past experiences with the cranberry industry?**
My first job after college was as a horticultural extension agent in Milwaukee County, Wisconsin. I once attended a meeting in central Wisconsin where we visited a cranberry receiving facility. I was fascinated with the whole process, taking lots of photographs so that I could show my family how cranberries found their way to our dinner table.

**How do you enjoy cranberry products?**
I like all cranberry products, but my family has always enjoyed cranberry sauce at the holidays and we’ve been drinking cranberry juice cocktail in our home for many years. Personally, I like to mix cranberry juice cocktail with orange juice. I also have a bowl of oatmeal with sweetened dried cranberries for breakfast several times a week.

---

**Orange, Olive and Fennel Salad with Cranberry Vinaigrette**

*Six servings; makes 1¼ cups vinaigrette*

**Ingredients:**

For the Vinaigrette
1 cup fresh or frozen, thawed cranberries
½ cup fresh orange juice
1 tablespoon finely chopped shallot or green onion, white part only
2 tablespoons rice vinegar
1 tablespoon honey
1 tablespoon fresh lime or lemon juice
1/3 to ½ cup canola or neutral-flavored olive oil
Kosher or sea salt
Freshly ground pepper

**For the Salad**

3 large navel oranges, peeled and sliced 1/4 –inch thick
1 large head fennel, sliced paper thin vertically
1 small sweet red onion, peeled and thinly sliced in rings (soak in ice water if the flavor is too strong)
2/3 cup mixed country-style olives, such as Niçoise, cracked green or Sicilian

**Directions:**

**For the Vinaigrette**

In a blender or food processor, combine the cranberries, orange juice, shallot, vinegar, honey, and lime juice; puree. With the motor running, slowly add the oil to the desired consistency.

Over a medium bowl, strain the puree through a fine-mesh strainer, pushing down on the solids.

Season to taste with salt and pepper. Store, covered, in the refrigerator for up to 5 days.

**For the Salad**

Arrange the oranges, fennel and onion attractively on a plate.

Scatter the olives around and drizzle with 3-4 tablespoons of the vinaigrette.

Garnish with the fennel sprigs (the top leafy part of the bulb).

*This healthy salad is courtesy of the Cranberry Marketing Committee. For more great recipes, visit [www.USCranberries.com](http://www.USCranberries.com).*

**Health and Research Professionals:**

The Cranberry Health Newsletter is designed to bring the latest research about cranberry and health to practitioners concerned about the health and well being of patients.

If you would like a colleague to receive updates about cranberry health, subscribe by sending an email to (cinews@earthlink.net).