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Newly Published Feeding Trial Showed Cranberries Reduced the Negative Impact of a Low Fiber, Animal-Based Diet on Gut Health

In a recently published feeding trial in The Journal of Nutritional Biochemistry, scientists investigated the potential protective effect of cranberries on the gut microbiome with an animal-based diet. Consuming cranberry compounds modified the impact of an animalbased diet in study participants by restoring a healthier microbiota profile. The addition of whole cranberry powder lessened potentially carcinogenic secondary bile acids and blunted the decline in beneficial short chain fatty acids (SCFA) in the gastrointestinal (GI) tract. The press release can be viewed <u>here</u>.

The Cranberry Chronicles

This year, we've been chronicling the many whole-body health benefits of cranberries – from heart health to gut health to UTIs to helping reduce inflammation, cranberries have so much to offer – and you can find it all in <u>The Cranberry Chronicles</u>.

The Chronicles are the go-to resource for breaking scientific abstracts, articles, sharable resources, infographics and story ideas. Check out the latest graphics, Berry Truths: "It's Time to Bust the Myth's" and "Can Cranberries Improve Gut Health?".

Berries for Bellies

Berry Truths: Myths

Even though decades of research has revealed that naturally-occurring, cranberry compounds have a number of favorable effects on human health – **MYTHS PERSIST.**¹

It's time to BUST THOSE MYTHS.

BERRY TRUTH!

Myth #1:

Cranberry products do not help ward-off urinary tract infections (UTIs).

Myth #2:

It's the acidity of the juice that helps protect against UTIs.

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CRANBERRY



Experimental data show that the mechanism of action behind cranberries in urinary tract health stems from their unique proanthocyanidins (PACs) that help prevent bacteria from adhering to cell walls.⁵ Myth #3: It must be 100% cranberry juice to protect your urinary tract.

Myth #4:

You don't need cranberry

products until you have a UTI.





A clinical trial published in the American Journal of Clinical Nutrition in 2016 showed that **8-ounces/day of 27% cranberry juice beverage reduced the number of symptomatic UTIs** by nearly 40 percent in women with recurrent UTIs.⁶

BERRY TRUTH!

Cranberry products help protect against UTIs – especially for people that have recurring infections. Cranberry compounds have been shown to help stop bacteria from sticking to cells and initiating infections in the urinary tract. They have also been shown to do this in a variety of organs, including the oral cavity, stomach, small intestine and colon.² SO, ENJOY CRANBERRY PRODUCTS YEAR-ROUND!

 Bjurberg 18, et al. Crasherine's and Their Bioactive Constituents in Human Health. Advances in Nutrition. Nevember 2013;4(4):614.62;1;10:140;4(a):0:10;10:345;a):113:034 2: Zhood S et al. Assession: Constrainers and Health Beenlett - an Schwing Story of 25 years. J Sci of 2004 A prict, divid (Norga J Handy J do angl): 0:345;a): 113:034 3: Lisk Apple et al. Can Camberrian Contribute to Reduce the Incidence of Urinary Tract Infectious? A Systematic Review with Meta-Analysis and Trial Sequential Analysis Track. (Holvers: Section 2013;8): 81:445;3): 113:45;3):45;4):

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17;147[12]:2882-2888. Maki KC, et al. Consumption of a cranberry juice beverage lowered the number of clinical urinary tract infection episodes in women with a recent history of urinary tract infection

Cranberry Health Research Library

Our collection of cranberry research has a fresh look and more studies than ever! The Cranberry Health Research Library provides an extensive database of cranberry health research abstracts with an easy-to-follow breakdown by topic area. You can access the newest berry surprising cranberry science HERE!

Cooking Up Cranberries

We've got you covered with delicious cranberry recipes that are perfect for fall!



Savory Cranberry Stuffed Acorn Squash This festive and comforting dinner may look fancy, but don't let that scare you, it's a super simple meal perfect for chilly fall nights!



Apple Cranberry Grilled Cheese The ultimate fall combo, apples and cranberries come together as a delicious pair in this quick & easy grilled cheese by Lauren Harris-Pincus of <u>Nutrition Starring YOU</u> that moms and kids will love!

Cranberries & Human Health

Cranberries Beyond the Urinary Tract – Exploring the Whole-Body Benefits of Cranberry Polyphenols The benefits of consuming cranberry products to help prevent recurrent urinary tract infections (UTIs) is evidence-based and significant to human health. More recently, however, scientists are investigating whether the polyphenolic compounds in cranberries may also have a meaningful impact on other parts of the body. Below are two new studies that ask this very question.

Scientists Explore How Cranberry Polyphenols May Positively Impact Metabolic Disorders

The international obesity pandemic has prompted researchers in many areas of health science to investigate its etiology and relationship to other body systems and the food we eat. Diets high in fruits and vegetables have been linked to leaner, healthier individuals so scientists are searching for bioactive plant-compounds that may treat or prevent obesity and its related metabolic disorders.

Polyphenols are among the compounds found to be beneficial. Polyphenol-rich fruit extracts or isolated polyphenols as strategies to alleviate obesity-linked diseases have been demonstrated in humans and in animal models.

Cranberries are rich in polyphenols. Thus, Anhe, et al., investigated the potential of a polyphenol-rich cranberry extract to reverse already established obesity, insulin resistance, and non-alcoholic fatty liver disease (NAFLD), and whether such effects may be linked to the improving the health of the gut microbiota. In this animal model, mice were fed a high-fat, high-sucrose diet to induce obesity. When treated with cranberry extract on this same diet, the team observed an upregulation of genes that are involved in fat breakdown and a decrease in several pro-inflammatory genes in the liver. This was associated with improved glucose metabolism and normalization of insulin sensitivity. In addition, indicators of a healthy gut microbiota were increased. In addition to showing the value of cranberry polyphenols to metabolic health, this discovery suggests that cranberry polyphenols may improve conditions by way of the liver and gut.

A Polyphenol-Rich Cranberry Extract Reverses Insulin Resistance and Hepatic Steatosis Independently of Body Weight Loss. Authors: Anhe FF; Nachbar RT; Varin TV; Vilela V; Dudonne S; Pilon G; Fournier M; Lecours MA; Desjardins Y; Roy D; Levy E; Marette A. Journal: *Mol Metab.* 2017 Dec;6(12):1563-1573. doi: 10.1016/j.molmet.2017.10.003. Epub 2017 Oct 18.

Cranberry Extract May Help Protect Against III-Effects of a High-Fat Diet and Obesity

Scientific institutions in Australia. India and Sweden combined efforts to evaluate the effect of cranberry extract and isomaltooligosaccharides (a carbohydrate found in fermented foods like soy or miso) on metabolic health measures related to obesity. Using a mice model, the team found that with a high-fat diet, the combination of the cranberry and a fermentable carbohydrate significantly increased beneficial gut bacterial and overall gut health. It also prevented inflammation caused by the high-fat diet, glucose intolerance and obesity-associated metabolic changes in fat tissue and liver.

Co-Supplementation of Isomalto-Oligosaccharides Potentiates Metabolic Health Benefits of Polyphenol-Rich Cranberry Extract in High Fat Diet-Fed Mice Via Enhanced Gut Butyrate Production. Authors: Singh DP; Singh S; Bijalwan V; Kumar V; Khare P; Baboota RK; Singh P; Boparai RK; Singh J; Kondepudi KK; Chopra K;

Bishnoi M. Journal: Eur J Nutr. doi: 10.1007/s00394-017-1561-5



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