

Routine Dietary Restrictions for Diverticular Disease Questionable

By Cathy H. Turner, Pharm.D.

In the August 27th issue of *JAMA*, the common practice of instructing patients with diverticular disease to eliminate intake of nuts, corn, and popcorn is challenged.¹ Historically restriction of high residue foods such as nuts, seeds, popcorn, and corn has been advised in order to avoid abrasion or trauma to the colonic mucosa.¹ Current medical references generally recommend incorporating a high fiber diet to prevent recurrence of diverticulitis;²⁻⁶ few mention restricting intake of certain foods,⁶ and there is no evidence known to the authors of the *JAMA* article to support this practice.¹

The association between nut, corn, and popcorn consumption and complicated diverticular disease was evaluated within the Heath Professionals Follow-up Study.¹ This study started in 1986 with an initial group of 51,529 male health care professionals (40-75 years of age) including dentists, veterinarians, pharmacists, optometrists, osteopathic physicians, and podiatrists. Study participants were surveyed initially regarding their diet, lifestyle, and medical history. Follow-up questionnaires on medical conditions were sent every two years and semi-quantitative food frequency questionnaires were sent every four years.¹

Participants reporting diverticulosis, cancer, excluding nonmelanoma skin cancer, or inflammatory bowel disease at baseline and those who failed to return the food-frequency questionnaire were excluded leaving 47,228 men who were followed until 2004. In this group of men, 801 cases of diverticulitis and 383 cases of diverticular bleeding were reported. Multivariate hazard

ratios were calculated for the risk of diverticulitis and diverticular bleeding and adjusted for age, study time period, body mass index, physical activity level, total daily caloric intake, intake of nuts, corn, and popcorn, total fat, total fiber, and red meat, current use of non-steroidal anti-inflammatory drugs or acetaminophen, and current cigarette smoking.¹ These results are summarized in Table 1.

Table 1. Risk of Diverticulitis and Diverticular Bleeding as Calculated by Multivariate Hazard Ratio (95% Confidence Interval)¹

	Number of Servings				p-value for trend
	<1/ month	1-3/ month	1/ week	≥ 2/ week	
Risk of Diverticulitis					
Nuts	1	0.97 (0.78-1.21)	1.10 (0.90-1.34)	0.800 (0.63-1.01)	<i>0.04</i>
Corn	1	1.08 (0.85-1.38)	0.98 (0.76-1.27)	1.13 (0.83-1.54)	<i>0.44</i>
Popcorn	1	0.98 (0.82-1.19)	0.87 (0.70-1.09)	0.72 (0.56-0.92)	<i>0.007</i>
Risk of Diverticular Bleeding					
Nuts	1	1.05 (0.76-1.45)	1.08 (0.80-1.45)	1.08 (0.77-1.49)	<i>0.89</i>
Corn	1	1.16 (0.80-1.67)	1.40 (0.96-2.04)	1.07 (0.67-1.71)	<i>0.97</i>
Popcorn	1	0.75 (0.57-1.00)	0.70 (0.50-0.98)	0.82 (0.59-1.15)	<i>0.63</i>

According to these results, consumption of nuts, corn and popcorn was not associated with an increased risk of diverticular disease. Furthermore, an inverse relationship was observed when the lowest and highest consumption groups were compared. Since undiagnosed diverticular disease may have

led to a reduction in nut, corn or popcorn consumption, the investigators performed a 2-year time lag analysis of diet and diagnosis. These comparisons for the highest and lowest intake groups strengthened the inverse association between nut consumption and risk of diverticulitis and weakened the association with popcorn. No significant changes were noted in the risk of diverticular bleeding.¹

The investigators conclude that “the recommendation to avoid these foods in diverticular disease should be reconsidered.”¹ While this recommendation is appropriate, it appears that dietary restriction has already begun to evaporate from standard medical references. It is hoped that this study will prompt reconsideration in practice as well.

References

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Reflections on a Newsletter, Reflections on a College

By Cathy H. Turner, Pharm.D.

In the last two weeks, I have pondered the appropriate topic for this issue of *Inquiry*, the “perfectly” controversial article on drug therapy has not appeared. I have asked colleagues for their ideas, and they have generously provided them.

My mind has swirled with opening lines about two-step skin testing for tuberculosis, autism and childhood vaccination, the availability of personal information of health care professionals on the internet, the first pharmacy students arriving at Belmont, what it means to be a mentor, how we differ as professional educators compared to our liberal arts counterparts... I have debated the merits of each topic in my head – Is it relevant to my audience? Is it consistent with the stated goal of the newsletter? As I have asked myself these questions, I realized that the potential topic list itself was worth consideration.

In our roles as health care professional educators, we must know how to treat and prevent disease in our patients and then be able to teach our students to do the same. Additionally, we have an obligation to protect ourselves and our students from disease and, with the advent of the internet, invasion of privacy that may occur as a result of patient interaction. How then, do we shed the distractions and focus on the first day of class, at the bedside, or in discussion with a student? Perhaps this tension is what defines us as educators... health care professionals... the College of Health Sciences.

Call for Articles

Submissions from College of Health Sciences Faculty are welcomed and encouraged. Please contact Cathy Turner, Pharm.D. [turnerch@mail.belmont.edu, ext. 6531] if you are interested in contributing to *Inquiry*.