Published in final edited form as:

Clin Gastroenterol Hepatol. 2014 July ; 12(7): 1201–1202. doi:10.1016/j.cgh.2014.05.006.

Reply to Drs. Floch and Fernandes

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Reply

For forty years, despite limited research or evidence, physicians and patients widely believed that a low fiber diet and constipation contributed to the development of *asymptomatic* diverticulosis. A low fiber diet has been identified as a risk factor for *symptomatic* diverticular disease in a handful of studies, including the work by Crowe et al cited by Dr. Floch.¹ However, risk factors for the development of *asymptomatic* diverticulosis may be different than those for *symptomatic* diverticular disease and should be studied independently.

In a previous study², we assessed risk factors associated with *asymptomatic* diverticulosis. We found that participants with regular bowel movements had a higher risk of diverticulosis compared to participants who had less frequent bowel movements and that dietary fiber intake was associated with a higher prevalence of diverticula. To validate our findings, we performed a second study of *asymptomatic* diverticulosis.³ As was clearly detailed in our methods, the two studies had completely different subject populations. We limited this new analysis to participants with no knowledge of their diverticular status to reduce the risk of bias. Contrary to conventional wisdom, our second study suggests that neither constipation nor a low fiber diet is associated with an increased risk of diverticulosis. While there are evidence-based benefits to dietary fiber intake⁴, our work does not question those benefits. Instead, our findings question the belief that inadequate fiber and constipation are risk factors for *asymptomatic* diverticulosis, for which there is no good evidence.

Dr. Fernandes's first concern that diet should be evaluated longitudinally was addressed in our paper.³ As we stated in our discussion, “the prevalence of diverticulosis increases with age, and the pathogenesis of diverticula may begin several decades before the disease manifests. Therefore, bowel habits and nutrition during a younger age may be more relevant than our dataHowever, nutritional research [not hypothetical] has shown that diets do not change greatly over time and for many people recent diet is a reasonable reflection of lifetime diet.⁵”

As for his second concern that total fiber intake did not reach the “recommended allowance,” the American Dietetic Associations (ADA) position paper on dietary fiber states

that there is no data available to determine a “recommended dietary allowance” for dietary fiber intake.⁴ Instead, the “adequate intake” recommendation was developed and is based on the intake that might be needed to reduce the risk of coronary heart disease. Interestingly, the ADA concludes that the evidence that dietary fiber is beneficial in cardiovascular disease is only fair and that benefits may occur with 12 to 33g of dietary fiber intake per day. In our analysis the mean total fiber intake in the highest quartile was 25 grams versus 8 grams in the lowest. Thus we assessed a wide range of dietary fiber intakes and found no association with diverticulosis.

Regarding Dr. Fernandes's final concern that subjects may have changed their survey answers because they knew the results of the colonoscopy, our paper clearly stated that we limited our analysis to participants with no knowledge of their diverticular status to reduce the risk of biased responses.

Acknowledgments

Grant Support: This research was supported in part by grants from the National Institutes of Health R01 CA098286 and 1KL2TR001109.

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