

Treatment of Irritable Bowel Syndrome in Outpatients with Inflammatory Bowel Disease Using a Food and Beverage Intolerance, Food and Beverage Avoidance Diet

Richard P. MacDermott, MD

Abstract: Irritable bowel syndrome (IBS) in the outpatient with chronic inflammatory bowel disease (IBD) is a difficult but important challenge to recognize and treat. It is very helpful to have effective treatment approaches for IBS that are practical and use minimal medications. Because of the underlying chronic inflammation in IBD, IBS symptoms occur with increased frequency and severity, secondary to increased hypersensitivity to foods and beverages that stimulate the gastrointestinal tract. This paper discusses how to treat IBS in the IBD outpatient, with emphasis on using a food and beverage intolerance, avoidance diet. The adverse effects of many foods and beverages are amount dependent and can be delayed, additive, and cumulative. The specific types of foods and beverages that can induce IBS symptoms include milk and milk containing products; caffeine containing products; alcoholic beverages; fruits; fruit juices; spices; seasonings; diet beverages; diet foods; diet candies; diet gum; fast foods; condiments; fried foods; fatty foods; multigrain breads; sourdough breads; bagels; salads; salad dressings; vegetables; beans; red meats; gravies; spaghetti sauce; stews; nuts; popcorn; high fiber; and cookies, crackers, pretzels, cakes, and pies. The types of foods and beverages that are better tolerated include water; rice; plain pasta or noodles; baked or broiled potatoes; white breads; plain fish, chicken, turkey, or ham; eggs; dry cereals; soy or rice based products; peas; applesauce; cantaloupe; watermelon; fruit cocktail; margarine; jams; jellies; and peanut butter. Handouts that were developed based upon what worsens or helps IBS symptoms in patients are included to help patients learn which foods and beverages to avoid and which are better tolerated.

(*Inflamm Bowel Dis* 2007;13:91–96)

Key Words: irritable bowel syndrome, inflammatory bowel disease, food intolerance, beverage intolerance, food avoidance diet, beverage avoidance diet

Received for publication July 18, 2006; accepted July 25, 2006.

From the Inflammatory Bowel Diseases Center, The Albert M. Yunich MD Professor of Medicine, Division of Gastroenterology, Albany Medical College, Albany, New York.

Reprints: Richard P. MacDermott, MD, Division of Gastroenterology MC 48, Albany Medical College, 47 New Scotland Avenue, Albany, NY 12208 (e-mail: macderr@mail.amc.edu)

Copyright © 2006 Crohn's & Colitis Foundation of America, Inc.

DOI 10.1002/ibd.20048

Published online in Wiley InterScience (www.interscience.wiley.com).

One of the greatest challenges in the care of our inflammatory bowel disease (IBD) outpatients with chronic symptoms is tapering and maintaining our patients off of steroids and other medications that potentially have significant side effects associated with their use. In this setting, it can be extremely helpful for both the physician and the patient to be able to recognize and differentiate gastrointestinal (GI) tract symptoms caused by irritable bowel syndrome (IBS) from GI tract symptoms caused by IBD.^{1–4} Coexistent IBS in the IBD patient can cause significant impairment in quality of life, increased anxiety and depression, and increased use of health resources.^{5–7} It should also be noted that both IBS patients as well as IBD patients, when studied separately, exhibit similar major psychosocial disturbances and unhealthy coping strategies.⁸ Therefore, in patients who have both IBS and coexistent IBD, difficulties in coping can increase because even though the IBD may be in remission, the IBS symptoms may persist. This can lead to the use of IBD medications, with their potential side effects, or narcotics to treat IBS. Therefore, it is important to apply treatment approaches that are practical, that work, and that use minimal medications in patients who are already on large numbers of medications for IBD. The purpose of this paper will be to discuss how to treat IBS in the IBD patient, with emphasis on identifying food and beverage intolerances and using a food and beverage avoidance diet.

DIFFERENTIATING IBS FROM IBD

The symptoms of IBS can be similar to the symptoms of IBD, making differentiation of IBS from IBD difficult. A careful history is critical in making the distinction. Abdominal pain caused by IBD is often constant and not relieved by a bowel movement, whereas abdominal pain caused by IBS is often cramping and is relieved by a bowel movement. Excess gas and bloating are more likely associated with IBS than IBD. Watery diarrhea is common in both, but obviously bloody diarrhea is consistent with IBD and not IBS. Likewise, fever and chills indicate IBD and not IBS. Although weight loss is most commonly related to active IBD, some IBS patients, in whom foods and beverages induce major GI symptoms, will lose weight because of fear of eating (sitophobia). Nausea and vomiting are more likely to be associated with IBD than IBS. In contrast, heartburn and dyspeptic

symptoms are more likely to be associated with IBS than with IBD. Additional functional GI disorders that can be seen in IBD patients include fecal incontinence, anorectal pain, and constipation. A normal C-reactive protein, normal sedimentation rate, normal white blood cell count, and a stable hemoglobin and hematocrit are more consistent with IBS than IBD. Likewise, a negative or minimally abnormal upper endoscopy, colonoscopy, abdominal computed tomography (CT) scan, small bowel follow through, or capsule endoscopy argue in favor of IBS over IBD as a major contributor to the ongoing GI symptoms.

STANDARD MEDICAL TREATMENT OF IBS IN IBD

For patients with chronic diarrhea caused by IBS or mild to moderate IBD, antidiarrheal medications such as diphenoxylate, loperamide, and low-dose tricyclic antidepressants have been used for many years. The use of antispasmodic, anticholinergic medications such as dicyclomine, hyoscyamine, propantheline, and belladonna can also be helpful. For both the antidiarrheals and antispasmodic medications, each patient has different preferences as to which work best and have the least side effects. It is often helpful to have the patient take their antidiarrheals or anticramping medications on a regular daily basis and in divided doses, rather than as needed, to even out the patient's symptoms and treatment. For the IBS or mild to moderate IBD patient with constipation, fiber, docusate, polyethylene glycol 3350, and tegaserod can be used. Effective treatment usually requires trials with each medication plus time learning how to use them for the individual patient. Patients who have had a cholecystectomy or extensive resection(s) of the terminal ileum may have bile salt induced diarrhea and may benefit from cholestyramine as a bile salt sequestering agent. For stress/anxiety/depression symptoms, psychologic approaches include cognitive therapy, biofeedback, and stress relaxation. In addition, appropriate use of antidepressants and anxiolytics can also be helpful, although GI side effects of these medications are very common, and a change in the dose or class of drug used is often needed.

APPROACH TO PAIN IN PATIENTS WITH IBS OR IBD

One of the most difficult issues to deal with in our patients with chronic IBD is abdominal pain. Patients with IBS or IBD often become narcotic dependent and sometimes will exhibit very persistent and even relentless pain medication seeking behavior. Although avoidance of chronic outpatient narcotic use is very important, this is often difficult to achieve. Our chronic IBS or IBD patients who are pain medication dependent will often come into the hospital with the appearance of being in severe pain, demanding their own special regimen of high-dose intravenous (IV) narcotics. Patients who chronically ingest large amounts of narcotics can

develop narcotic bowel syndrome, which can mimic small bowel obstruction. At surgery, these patients have no organic findings to explain the obstructive-like appearance of the bowel. Therefore, we need to use every possible alternative to the outpatient use of chronic hydrocodone, oxycodone, meperidine, hydromorphone, etc. When our patients have severe chronic abdominal pain, we frequently repeat a full evaluation including blood work, abdominal CT scan, upper endoscopy, colonoscopy, small bowel follow through, or capsule endoscopy to make certain the chronic pain is not caused by a major medical complication of their IBD. When this evaluation proves negative, we then must find alternative approaches to the use of addictive narcotic medications. The best approach is to work with a specialist in pain management in an attempt to have the patient understand the importance of eschewing narcotic medications. The severe chronic abdominal pain issues are heightened in our patients who have both IBS and IBD. The use of pain medications is a complex and challenging issue for physicians caring for IBD patients.

WHAT IS THE MAJOR PROBLEM WITH OUR CURRENT APPROACH TO TREATING IBS?

The cause of many of the GI symptoms in patients with IBS is food and beverage intolerance. That is, the most important factor in the cause of symptoms in our IBS patients is what and how much they eat and drink.⁹⁻¹⁶ Therefore, the major problem with our current treatment approach, as discussed above, is that our therapy for IBS in the IBD patient (as well as for IBS in general) is based upon using medications to allow our patients to eat and drink what they want. This approach of using medications for illnesses so as to allow patients to eat and drink what they want is not at all unique. We treat patients with statins for hyperlipidemia, we use antihypertensives for hypertension, and we use oral hypoglycemics for diabetes. For all these illnesses, significant improvement can be achieved by diet, weight loss, and avoiding foods that, unfortunately, we all love to eat and believe we cannot eliminate. However, in our patient with IBS, the only thing the medications accomplish is keeping the foods and beverages in the GI tract longer, where the foods and beverages continue to cause symptoms. The stimulation of the GI tract induced by foods and beverages is much more powerful than the medications can overcome. The best time to use symptomatic medications for diarrhea, cramping, and constipation is after the patient has learned to avoid the foods and beverages to which they have intolerances, at which time medications are of much more help because the provocative foods and beverages are no longer in the GI tract, thus exacerbating GI symptoms. Thus, our current approach to treating IBS in the IBD patient relies too heavily on the use of medications.

WHY DO FOODS AND BEVERAGES STIMULATE THE GASTROINTESTINAL TRACT SO VIGOROUSLY IN OUR PATIENTS WITH IBS AND IBD?

It is not surprising that foods and beverages stimulate the GI tract so vigorously in our IBD patients with IBS. The GI tract's purpose is the processing and absorption of food and beverages. Therefore, the GI tract is rapidly stimulated by what we eat and drink. Whether it is gastric motility, gastric acid secretion, gallbladder contraction, pancreatic enzyme secretion, small bowel motility, or the "gastro-colic reflex," the GI tract is regulated and controlled by food-induced neuropeptide mediated changes in motility and intestinal function within the GI tract. It has long been known that IBS patients exhibit increased meal stimulated sigmoid motility and increased food induced serotonin secretion. Thus, IBS patients are hypersensitive to foods because of physiologic mechanisms. Furthermore, inflammation from an acute infectious illness can induce IBS symptoms for as long as 9 months or a year, and there may be similar pathophysiologic processes in IBS and IBD that are now better appreciated.¹⁷⁻²⁰ In our patients with IBD, chronic inflammation may increase hypersensitivity of the intestinal tract, and, therefore, foods and beverages can very easily trigger diarrhea, cramping, abdominal pain, increased gas, nausea, and dyspepsia. Thus, because of underlying chronic inflammation in IBD, IBS symptoms may occur with increased frequency and severity because of increased hypersensitivity to foods and beverages that stimulate the GI tract.¹⁷⁻²⁰

TAKING THE FOOD AND BEVERAGE INTOLERANCE HISTORY

One of the most difficult things to learn is what foods and beverages stimulate GI symptoms in any individual patient. Many patients are unable to determine which foods bother them other than to say that they need to run to the bathroom immediately after meals. When asked about foods that cause GI symptoms, patients will often say that it is "too difficult to figure out" or "all foods go right through me." Therefore, it becomes critical learn how to take a food intolerance history. Questions that can be helpful include "What foods or drinks do you avoid? Do you have trouble eating out? Do you have trouble with fast foods? Have you had a recent change in your diet? Do you get frequent gas/bloating?" These are all questions that may help the clinician begin to determine the types of foods and beverages that may be causing worsening GI symptoms. Most patients will have "comfort foods" that they will not admit to eating but that cause them a great deal of trouble. For many patients, particularly males, asking the spouse who does the cooking which foods cause problems or have to be avoided can be very helpful. For particularly difficult patients, it may be necessary to ask "What foods and beverages are in your diet?" As the foods that bother the patient become clearer,

appropriate dietary instructions on using a food and beverage avoidance diet can be given.

OVERALL APPROACH TO USING A FOOD AND BEVERAGE AVOIDANCE DIET

It is first important to point out to the patient that food and beverage intolerances are not allergic reactions. Allergic reactions to nuts, shellfish, or other foods that are immunoglobulin (Ig)E and mast cell mediated anaphylactic reactions can be fatal. Foods and beverages that initiate a true allergic or anaphylactic reaction must be completely avoided.

In contrast, food and beverage intolerances result in GI symptoms that are very distressful but which are not caused by a disease. The effects of foods and beverages are easy to recognize if the symptoms occur 5 to 30 minutes after a meal or snack. This is common, for example, with caffeine or alcohol containing beverages, spices, sauces, and fast foods. However, the effects of many foods and beverages are amount dependent and can be delayed, additive, or cumulative. For example, when patients experience a great deal of difficulty in the morning, it is often caused by what they ate and drank for dinner and had for a bedtime snack the night before the symptoms. This delay in symptoms can be caused by fermentation by intestinal bacteria of many foods and beverages, which can take 2, 6, 12, or as many as 24 or 48 hours to have an effect.

Many patients learn that they can tolerate small amounts of certain problem foods and beverages. However, it is often very difficult for patients to realize that the effects of the foods and beverages can be additive, meaning that small amounts of two or three different foods and beverages can combine together to cause major GI symptoms, whether taken together at the same meal or at two or three separate meals or as snacks. Because food intolerances can be cumulative and delayed, the effects of eating multiple problem meals in a row can lead to chronic symptoms that will last for up to 2 or 3 days. For example, if someone is traveling or at a wedding or a meeting, the multiple meals eaten out with many sauced and highly seasoned foods plus drinks such as sodas or alcohol can result in a patient who is certain that he or she is very sick with a major relapse of IBD and may need to be admitted to the hospital. In this setting, it can be very difficult to determine the role of dietary changes until after an admission CT scan has been performed and IV medications have been given. It is not unusual to work with patients who require 2 or 3 days of a careful and strict food avoidance diet to mitigate the effects of multiple problem meals in a row. It can sometimes be helpful for the patient to record all of the foods and beverages eaten; the amounts and times of the meals/snacks/drinks; and the time and types of GI symptoms. Then, the patient by him or herself, or with the help of a physician, nurse, or registered dietitian, may be able to interpret the diary and determine which foods and beverages are inducing the symptoms.

TABLE 1. Richard P. MacDermott MD Food and Beverage Intolerance, Avoidance Diet Handout: Foods and Beverages that Induce and Aggravate Irritable Bowel Syndrome Symptoms

Irritable Bowel Syndrome patients have gastrointestinal symptoms (diarrhea, cramps, abdominal pain, nausea, gas, bloating, heartburn, etc.) caused by many of the following foods. Food induced gastrointestinal symptoms can begin within 5–15 minutes after eating, or up to twelve to forty eight hours later (due to fermentation). Foods and beverages are additive within and between meals. Foods and beverages eaten out at restaurants will cause problems due to sauces, spices, and hidden ingredients. Listed below are examples of some of the foods and beverages that IBS patients have found to aggravate their GI symptoms. Your problem foods and beverages may differ or may be similar. Keep a list of all foods and beverages eaten. Record what symptoms occur and when, to determine what foods and beverages are causing your symptoms.

1. Milk and milk containing products: such as ice cream, cream cheese, cheese, cottage cheese, yogurt, ice milk, cream soups, butter, pudding, whipped cream, cream, cheesecake, chocolate, pastries, crackers, pretzels, cookies, etc.
2. Caffeine containing products such as coffee, tea, colas, sodas, chocolate, etc.
3. Alcohol products: beer, wine, coolers, foods containing or cooked in alcohol.
4. Fruits and fruit juices, particularly apples, apple juice or cider, citrus fruits, orange juice, tomatoes, tomato juice, etc.
5. Spices and seasonings; hot sauce; barbecue sauce; chili sauce; salsa.
6. Diet beverages, diet foods, diet candies, diet gum, sugar free products, “lite or light” products look good and taste good, but to not put on weight, go right through you, causing diarrhea, or stay in the GI tract and cause symptoms.
7. Fast foods and Chinese food: contain spices, sauces, and hidden ingredients.
8. Condiments: ketchup; mustard; mayonnaise; relish.
9. Fried foods and fatty foods.
10. Whole grain or multigrain breads; sourdough breads and bagels.
11. Salads: usually not the lettuce, but rather added ingredients such as bacon bits, croutons, onions, peppers, etc.
12. Salad dressings, particularly those containing mayonnaise, cheese and spices.
13. Vegetables, particularly cabbage, broccoli, cauliflower and corn.
14. Legumes: beans, lentils, chili, etc. Popcorn. Foods with high fiber content.
15. Red meats, i.e., steak, hamburger, sausage, bacon, prime rib. Spicy marinades or gravies tend to cause even greater problems.
16. Gravies, spaghetti sauce, cream sauces, cheese sauces, soups, stews, and stuffing.
17. Artificial flavorings, preservatives, and sweeteners.
18. Foods containing large amounts of fructose or high fructose corn syrup (honey, grapes, raisins, nuts, etc).
19. Cookies, crackers, pretzels, cakes and pies.

The next sections will discuss the specific types of foods and beverages that can cause GI symptoms and the types of foods and beverages that may be better tolerated. Very helpful tables and recommendations are found in Ginsburg and Bayless⁴ and Simren et al.¹² Tables 1 and 2 are the handouts I give to patients to help them learn what foods and beverages to avoid and to eat. The handouts were developed on the basis of what patients told me bothered or helped them. This approach has proven useful in my practice for many patients with IBD who have IBS as well as patients who only have IBS (many of whom were referred for refractory IBD).

FOODS AND BEVERAGES THAT CAUSE DIARRHEA AND ABDOMINAL CRAMPING

Milk products including milk, ice cream, chocolate, cheese, yogurt, salad dressings, and mayonnaise are well known to cause diarrhea and abdominal cramping (Table 1). The effects of milk products are often felt to be caused by lactase deficiency. Indeed, some patients are truly lactose deficient. However, when tested, many of our IBD patients who have intolerances to milk products are not lactase deficient. Milk contains many other

substances in addition to lactose, including fats, proteins, sugars, and Igs, which may stimulate the GI tract. Patients often fail to recognize that cheese, chocolate, and ice cream are concentrated forms of milk. Although skim milk and lactose free products will help some patients tolerate milk, for many patients, switching to soy milk and soy products or rice milk and rice products provides the only complete relief. Another problem for patients is that milk products are used as additives in many different snacks and foods.

There are many other foods and beverages that frequently cause diarrhea and abdominal cramping (Table 1). Caffeine products including coffee, tea, iced tea, and sodas directly stimulate the GI tract and cause diarrhea quickly after consumption. Alcoholic beverages (hard liquor, wine, or beer) can lead to very severe diarrhea, depending upon the amounts consumed. Sorbitol containing products are very common causes of severe diarrhea. Diet beverages, diet foods, diet gum, and diet candy all contain sugars and other substances that are not absorbed but that add taste, color, and texture to the final product. These nonabsorbed substances in dietetic products are well known to remain in the GI tract and cause diarrhea and abdominal cramp-

TABLE 2. Richard P. MacDermott MD Food and Beverage Intolerance, Avoidance Diet Handout: Foods and Beverages that are Well Tolerated by Patients with Irritable Bowel Syndrome

Listed below are examples of some of the foods and beverages that IBS patients have found to well tolerated. The foods and beverages that are easy on your GI tract may differ or may be similar. For each type of food that causes symptoms, appropriate substitutes and alternatives are available. Note that the foods and beverages, which cause problems, differ from person to person and thus finding well tolerated foods and beverages must be individualized. Remember: what you eat and drink is in large part determined by your taste buds, which makes your brain happy, but your stomach, small bowel and colon do not have taste buds and suffer the consequences of eating foods and beverages that please the tongue, but not the gastrointestinal tract. With a modified diet, such as this it is important to use daily vitamins (Multivitamin, Calcium with Vitamin D, Folic Acid, Vitamin B Complex, and Vitamin C).

1. Water. Flavored, noncarbonated water, ginger ale, Sprite. Gatorade.
2. Rice: cooked white, without sauces or additives.
3. Plain pasta, noodles—(avoid tomato, spicy, or cream sauces).
4. Potato—boiled or baked without sour cream; Sweet potatoes. No French Fries.
5. Breads—French, Italian, whole white; English muffins; white rolls; cornbread.
6. Plain fish—broiled, without sauces. Tuna fish without mayonnaise.
7. Chicken or turkey—broiled or baked without spices or sauces.
8. Ham—plain, not smoked.
9. Eggs—soft boiled, poached, and scrambled (use water, not milk).
10. Cereals—dry or with soymilk or rice milk. Plain Cornflakes, Rice Krispies, Corn or Rice Checks, Cheerios. Avoid artificial colorings, flavorings, and sweeteners.
11. Soy or rice milk. Soy or rice based products.
12. Salads—lettuce, tomatoes, hard-boiled egg slices, oil and vinegar dressing.
13. Peas, carrots, cooked (avoid raw vegetables).
14. Crackers—Oyster, saltines, or animal crackers.
15. Applesauce, in small amounts.
16. Cantaloupe, watermelon, honeydew melon, in small amounts.
17. Fruit cocktail, peaches—nondietetic, canned or frozen.
18. Margarine, jams, jellies, peanut butter.

ing. Foods containing large amounts of fructose or high fructose corn syrup (honey, grapes, raisins, nuts, etc.) are well known to aggravate the GI tract. Fresh fruits and fruit juices can also be very potent inducers of diarrhea. Spices are used in many types of foods and are often desired by our patients. Highly spiced fast foods can be very potent inducers of diarrhea. Sauces, including spaghetti sauce, gravies, soups, and stews, will also commonly cause diarrhea and abdominal cramping. Fried foods, condiments (ketchup, mustard, relish), nuts, corn, and high-fiber products can also cause diarrhea and cramping in sensitive patients.

FOODS AND BEVERAGES THAT CAUSE GAS AND BLOATING

Many of the foods and beverages that cause diarrhea also cause gas and bloating. Gas and bloating are caused by a fermentation process caused by bacterial fermentation in the GI tract. Because the fermentation process takes a number of hours, gas and bloating caused by foods and beverages can be delayed for 2, 6, 12, 24, or even 48 hours. Once again, milk containing foods and beverages, including milk, ice cream, chocolate, cheese, yogurt, salad dressings, and mayonnaise, can cause increased gas and bloating. Milk products are also

used in many different snacks and foods, which also cause gas and bloating. Other food groups well known for fermentation, with gas and bloating as the result, are vegetables, particularly the cabbage family; bread products including bagels, sourdough bread, and multigrain breads; and fast foods (Table 1).

LEARNING TO FIND SUBSTITUTE FOODS AND BEVERAGES THAT ARE WELL TOLERATED

The most common and important practical question that our patients ask is what foods and beverages can they eat that do not cause GI symptoms (Table 2). For each type of food that causes symptoms, appropriate substitutes and alternatives are available. Of particular importance, the foods and beverages that cause problems are different from patient to patient, and thus the approach must be individualized separately for each person. It can be very helpful to tell our patients that what they eat and drink is in large part determined by their taste buds, which makes their brains happy, but that their stomach, small bowel, and colon do not have taste buds and only suffer the consequences of eating foods and beverages that please the tongue but not the GI tract. It is

also important to emphasize to the patient that we do not want to restart or increase steroids because they are eating pizza and ice cream and drinking beer.

Although lactose free milk can be helpful for some patients who need to avoid milk, milk contains an enormous number of additional substances including fats, proteins, lgs, etc. Therefore, for most patients, avoidance of all milk products including lactose free milks is necessary. For milk products, the best alternatives are soy or rice based products. These are often found in health food and gluten free sections of supermarkets. Soy milk, rice milk, soy cheese, soy ice cream, rice based breads, and many other products are available. Milk products are used in the preparation of many foods. It is therefore important for the patient to also learn to avoid foods containing hidden milk products, such as cookies, crackers, pretzels, cakes, icing, etc. For this, reading labels is necessary.

In regard to beverages, caffeine containing products, sodas, diet sodas, diet beverages, fruit juices, and alcohol will all induce IBS symptoms and must be completely avoided. Caffeine free coffee and tea still will cause symptoms. Water is the best-tolerated beverage, and the water should be non-carbonated to avoid gas. Flavored waters are also available. For some patients, noncaffeinated, nondietetic sodas such as ginger ale can be tolerated. Gatorade and Pedialyte are well tolerated and also helpful for those patients who are having diarrhea. Herbal teas can also be tolerated.

Problematic bread products include bagels, sourdough breads, and multigrain breads. Plain white breads, Italian bread, French bread, and English muffins are usually well tolerated. Salads are problematic not because of the lettuce but because of the ingredients and particularly salad dressings. Thus, croutons, onions, cabbage, carrots, bacon bits, etc., should be avoided. Most salad dressings contain multiple spices and milk products such as cheese and mayonnaise. Therefore, lettuce with hard-boiled egg slices, tomatoes, and oil and vinegar as the dressing is the best-tolerated salad.

Raw fruits and vegetables may induce considerable symptoms. Small amount of cooked (boiled or canned) fruits and vegetables are better tolerated. Red meats and their gravies frequently cause problems. Instead of red meats, plain chicken, turkey, ham, or fish are well tolerated. It is important not to use sauces and spices with plain chicken, turkey, ham, or fish to avoid GI symptoms. Sauces, gravies, stews, soups, Chinese food (sauces and spices), fast foods (additives, spices, condiments), fried foods, spiced foods, barbecued foods, and pizza all contain multiple substances that stimulate the GI tract and need to be completely avoided. There are no substitutes for these foods. Nuts, peanuts, corn, and popcorn all can cause severe GI symptoms and also must be avoided.

CONCLUSION

Learning to treat IBS in our IBD patients can be very helpful in the outpatient setting as a way of avoiding in-

creased or prolonged use of IBD medications and narcotics and their associated side effects. Because our IBD patients have a chronically inflamed GI tract, they are often extremely hypersensitive to foods and beverages, and coexistent IBS is very common. Learning to identify and avoid the particular foods and beverages that induce IBS symptoms in an individual patient can be a particularly helpful and practical approach to learn to use. The easiest way to get started is to simply begin asking patients or their spouses which foods and beverages bother them or which ones they avoid. This will help you to begin to develop your own lists similar to those found in Tables 1 and 2.

REFERENCES

1. Isgar B, Harman M, Kaye MD, et al. Symptoms of irritable bowel syndrome in ulcerative colitis in remission. *Gut*. 1983;24:190-192.
2. Bayless TM, Harris ML. Inflammatory bowel disease and irritable bowel syndrome. *Med Clin North Am*. 1990;74:21-28.
3. Pezzone MA, Wald A. Functional bowel disorders in inflammatory bowel disease. *Gastroenterol Clin North Am*. 2002;31:347-357.
4. Ginsburg PM, Bayless TM. Managing functional disturbances in patients with inflammatory bowel disease. *Curr Treat Options Gastroenterol*. 2005;8:211-221.
5. Simren M, Axelsson J, Gillberg R, et al. Quality of life in inflammatory bowel disease in remission: the impact of IBS-like symptoms and associated psychological factors. *Am J Gastroenterol*. 2002;97:389-396.
6. Minderhoud IM, Oldenburg B, Wismeijer JA, et al. IBS-like symptoms in patients with inflammatory bowel disease in remission: relationships with quality of life and coping behavior. *Dig Dis Sci*. 2004;49:469-474.
7. Farrokhyar F, Marshall JK, Easterbrook B, et al. Functional gastrointestinal disorders and mood disorders in patients with inactive inflammatory bowel disease: prevalence and impact on health. *Inflamm Bowel Dis*. 2006;12:38-46.
8. Jones MP, Wessinger S, Crowell MD. Coping strategies and interpersonal support in patients with irritable bowel syndrome and inflammatory bowel disease. *Clin Gastroenterol Hepatol*. 2006;4:474-481.
9. Nanda R, James R, Smith H, et al. Food intolerance and the irritable bowel syndrome. *Gut*. 1989;30:1099-1104.
10. Friedman G. Diet and the irritable bowel syndrome. *Gastroenterol Clin North Am*. 1991;20:313-324.
11. Gertner D, Powell-Tuck J. Irritable bowel syndrome and food intolerance. *Practitioner*. 1994;238:499-504.
12. Simren M, Mansson A, Langkilde AM, et al. Food-related gastrointestinal symptoms in the irritable bowel syndrome. *Digestion*. 2001;63:108-115.
13. Burden S. Dietary treatment of irritable bowel syndrome: current evidence and guidelines for future practice. *J Hum Nutr Diet*. 2001;14:231-241.
14. Floch MH, Narayan R. Diet in the irritable bowel syndrome. *J Clin Gastroenterol*. 2002;35(Suppl):S45-S52.
15. Lea R, Whorwell PJ. The role of food intolerance in irritable bowel syndrome. *Gastroenterol Clin North Am*. 2005;34:247-255.
16. Dapoigny M, Stockbrugger RW, Azpiroz F, et al. Role of alimentary intolerance in irritable bowel syndrome. *Digestion*. 2003;67:225-233.
17. Collins SM, Piche T, Rampal P. The putative role of inflammation in the irritable bowel syndrome. *Gut*. 2001;49:743-745.
18. Bradesi S, McRoberts JA, Anton PA, et al. Inflammatory bowel disease and irritable bowel syndrome: separate or unified? *Curr Opin Gastroenterol*. 2003;19:336-342.
19. Coates MD, Mahoney CR, Linden DR, et al. Molecular defects in mucosal serotonin content and decreased serotonin reuptake transporter in ulcerative colitis and irritable bowel syndrome. *Gastroenterology*. 2004;126:1657-1664.
20. Quigley EM. Irritable bowel syndrome and inflammatory bowel disease: interrelated diseases? *Chinese J Dig Dis*. 2005;6:122-132.