LIVING WITH IRRITABLE BOWEL SYNDROME

Irritable bowel syndrome (IBS) is a condition affecting your digestive tract. There is no definite cause for IBS, but several factors may trigger IBS symptoms:

- low fibre diet
- high fat diet
- food intolerances
- increased use of antibiotics
- intestinal infections
- busy lifestyle/stress
- stomach surgery
- emotional upset
- combination of the above factors

IBS symptoms can include: bowel pain, changes in bowel habits (diarrhea, constipation or both), bloating and gas, nausea, mucus in your stools, feeling of having an incomplete bowel movement, or frequent urge to move your bowels.

You may experience some or all of these symptoms but not necessarily at the same time. It is important to identify your own symptoms and the factors that trigger them. Diet, lifestyle changes and possibly medications may be needed to manage your symptoms.

Management and Relief of IBS Symptoms

- 1. Remember that your bowel is normal just irritable.
- 2. Your bowel will thrive on regular routine, such as eating meals at regular intervals throughout the day, and getting adequate sleep.
- 3. Identify and limit foods that trigger symptoms.
- 4. Eat plenty of fibre.
- 5. Identify sources of stress and strategies to manage them.
- 6. Practice relaxation strategies.
- 7. Enjoy regular physical activity.

IBS is very individual and people have varying symptoms. Dietary management and treatment of IBS is based on an individual's specific symptom profile. Therefore, self monitoring is important. This can include a journal to record food intake, symptoms, and stress.

The following information will help you manage your IBS symptoms through dietary changes.

Symptom	Diet Adjustment
Abdominal pain	High fibre
	Low gassy foods
	Low caffeine
	Low fat
	Low fructose
Constipation	High fibre, especially insoluble fibre
	Low caffeine
	High sugar-free fluid intake
Diarrhea	High fibre, especially soluble fibre
	Low caffeine
	Low fat and low spice
	Low sorbitol, sugars and sweets; low fructose
	Decrease foods which may contribute to diarrhea: prune juice,
	coffee, beer, dried peas and beans
	High sugar-free fluid intake
Gas	Low gassy foods
	Low caffeine
	Low fructose
Bloating	Low gassy foods
	Low fat
	Low caffeine
	Low sorbitol; low fructose

Other Diet Adjustments

Alcohol – this is a stimulant to your digestive system. It stimulates the production of digestive juices and enhances your appetite. For people with irritable bowel symptoms, it may also cause symptoms such as heartburn, abdominal pain, and diarrhea. Drink alcohol in moderation (0 - 2 drinks a day for men; 0 - 1 drink a day for women; a drink is 5 oz of wine, 1 ½ oz of liquor, or 12 oz of beer). If even a small amount triggers IBS symptoms, then it is best to avoid alcohol completely.

Lactose – this is sugar found in dairy products. Although lactose intolerance is a separate condition from IBS, it can produce similar symptoms—gas, bloating, and diarrhea. It is important to determine if your symptoms are actually IBS, lactose intolerance or both. Your physician can perform specific testing to determine if you have a lactose intolerance. Another option is to eliminate lactose from your diet and see if the symptoms disappear. If you are lactose intolerant, removing lactose from your diet should help to decrease gas, bloating, and diarrhea. Your dietitian can provide further direction if you wish to try a lactose-reduced diet.

Fibre

<u>Gradually</u> increase your fibre intake from whole grain breads, cereals, fruits, vegetables, and legumes. Dietary fibre can be generally classified as soluble and insoluble. Both types are present in varying amounts in different plant foods, but some foods have more of one type than the other.

Soluble fibre dissolves in water forming a gel in your stomach. This slows the rate of digestion. Good sources of soluble fibre include dried peas and beans, lentils, oats, barley, psyllium, apples and citrus fruits. Research is indicating that soluble fibre sources may be the most beneficial in treating IBS symptoms.

Insoluble fibre does not dissolve in water but has a large capacity for holding water. In this way, it acts to increase the bulkiness of stools and promote regular bowel movements. Insoluble fibre food sources include wheat bran, whole grains and some vegetables.

You need 25 to 38 grams of total fibre per day. The following chart lists some high fibre foods. A food marked with an asterisk (*) is a good source of soluble fibre. Your dietitian can provide you with further detailed information on high fibre food sources if needed.

Food	2 – 4 grams	4 – 6 grams	More than 6 grams
Breads	Cornbread	100% whole wheat	
(2 slices)	Multigrain	Cracked wheat	
	Pumpernickel*		
	Rye*		
Cereals	Bran Flakes	Bran Chex	100% Bran
(Portion size varies;	Oat bran*	Corn Bran	All Bran*
check nutrition panel	Shredded Wheat	Fruit and Fibre	Bran Buds*
on package)		Raisin Bran	Fibre First
			Fibre One
Grains	Cornmeal	Brown rice	Barley*
(1/2 cup cooked)	Natural bran (1 tbsp)	Bulgur	
	Wheat germ*		
	Whole wheat pasta		
	Psyllium* (1 tsp)		
Vegetables and	Asparagus, broccoli*, Brussels	1 artichoke*	Black-eyed peas*,
Legumes	sprouts*, carrots, cauliflower,	Black beans*, chick	navy beans
(1/2 cup cooked)	corn*, eggplant, green peas,	peas, kidney beans*,	
	spinach, squash*	lentils*, northern	
	1 baked potato with skin*	beans*, pinto beans	
Fruit	1 apple*, banana or orange*	1 pear*	1 cup blackberries*
	³ / ₄ cup apricots*		½ cup dates, prunes*,
	½ cup raspberries* or rhubarb		raisins
	1 cup strawberries*		
Nuts and Seeds	Almonds, peanuts* (dry		Flaxseed*
(1/4 cup or 1 oz)	roasted)		

Adapted from: Learning about ... Eating more fibre. Hamilton Health Sciences, 2001.

Note: it is very important to get adequate fluids as you slowly increase your fibre intake. Fibre needs water in order to work properly. Aim for 8 to 10 glass of caffeine-free fluids daily--about half of this should be water.

Gassy Foods

Pay attention to how you are eating:

- Avoid gulping foods, eating quickly or talking while eating. This can increase gas production.
- Do not skip meals. Skipping meals allows your digestive system to fill with air.
- Avoid chewing gum or sucking on hard candy.
- Avoid using a straw to drink liquids.
- Choose fruits and vegetables that are generally well tolerated.
- When your symptoms are under control, add one food from "foods which may cause discomfort" to your diet. Try them cooked first and then fresh. If you do not have any symptoms from this food, include it in your diet once every three days. Then try including another food from this group. By adding one food at a time to your diet, you will be able to identify foods that you can tolerate and limit those that cause IBS symptoms.

Well-tolerated foods:

• cooked vegetables:

0	asparagus	beets	green/yellow beans	carrots	green peas
0	mushrooms	potato	sweet potato	spinach	squash
0	pumpkin	zucchini			

- vegetable juices
- fruits:

0	canned fruit	peeled apples	soft, ripe banana	grapefruit	kiwi
0	nectarine	orange	peach	pear	

Foods which may cause discomfort (this will vary from person to person):

- raw vegetables
- the following vegetables even if cooked

0	broccoli	cauliflower	Brussels sprouts	cucumber	cabbage
0	corn	kohlrabi	rutabaga	leeks	sauerkraut
0	onion	scallions	red/green pepper	shallots	pimentos
0	turnip	radish			

- dried peas, beans, and lentils, such as:
 - o kidney beans, lima beans, navy beans, split peas, lentils, black-eyed peas
- some fruits unpeeled apples, avocados, cantaloupe, melon, prunes, watermelon
- other foods beer, hard-boiled eggs, nuts, popcorn, seeds, soft drinks, wheat germ

Caffeine

Caffeine can be a stomach irritant. Caffeine intake of less than 400 mg per day is usually tolerated by many people with IBS. If symptoms continue to occur, you may need to decrease caffeine further.

Common caffeine sources:	<u>mg</u>		<u>mg</u>
Coffee (6 oz) filter drip	110 - 180	Chocolate milk (225 mL)	2 - 7
instant	60 - 90	Dark chocolate bar (2 oz)	40 - 50
		Milk chocolate bar (2 oz)	3 - 20
Tea (6 oz) weak	20 - 45		
strong	79 - 110	Cold remedies (1 tablet)	15 - 30
Cola drinks (280 mL can)) 22-50	Headache remedies (1 tablet)	30 - 32

Fatty Foods

High fat foods slow stomach emptying and movement of food through the bowel. They can cause bloating and sometimes diarrhea.

You will not likely need to reduce your fat intake below the current recommendations for all Canadians, which is less than 30% of calories from fat (at 1800 calories, this is 60 grams of fat, at 2500 calories, this is 80 grams of fat).

Although your bowel doesn't recognize the difference between the types of fat (i.e. saturated vs unsaturated), your heart and blood vessels do—so the low fat diet should be low in saturated types of fat from high fat meats and dairy products and hydrogenated fats, and use small amounts of unsaturated fats from fatty fish, nuts, canola oil, extra virgin olive oil, and non-hydrogenated margarine.

Some tips:

- 1. Go lightly on added fats:
 - a. Choose light non-hydrogenated margarines, e.g. Becel Light.
 - b. Use jam or jelly instead of a fat spread.
 - c. Choose low-fat mayonnaise, sour cream, and salad dressings.
- 2. Choose lower fat dairy products:
 - a. Drink skim or 1% milk.
 - b. Choose fat-reduced yogurt (less than 1% milk fat [M.F.].
 - c. Choose fat-reduced cheese (less than 20% M.F.)
 - d. Choose frozen yogurt, low-fat ice cream, or frozen ice milk.

- 3. Choose lean meats and use low-fat cooking methods:
 - a. Lean cuts of beef round, sirloin, blade, extra lean ground, filet, stew meat
 - b. Lean cuts of chicken skinless chicken breasts; remove skin and fat from other cuts.
 - c. Lean cuts of pork tenderloin; loin chips; and ham with fat removed
 - d. Lean sandwich fillings sliced beef, chicken, ham, pastrami, turkey
 - e. Lean cooking methods barbecuing, baking, broiling, roasting, stewing, steaming, braising.
- 4. Watch out for hidden fats:
 - a. Make reduced-fat muffins, cookies, pancakes, and waffles rather than buying their higher-fat versions from the baker or grocery store.
 - b. Monitor the fat in baked goods. Check labels.
 - c. Choose crackers/snack foods with less than 3 grams of fat per serving, and avoid those with hydrogenated oils.

Fructose

Fructose is the naturally sweet carbohydrate found in many fruits. Also, because it is cheaper than sugar, fructose (especially in the form of high fructose corn syrup) is used in many products including canned fruits, juices, vegetables, soups and sodas as well as many prepared foods. Some people have problems digesting fructose. Fructose intolerance can cause bloating, abdominal pain, gas, excess belching and diarrhea. Avoid foods containing high fructose corn syrup or corn syrup; and limit intake of soft drinks, diet foods, fruit juices, and dried fruits. High fructose fruits include grapes, cherries, apples, and pears.

Sorbitol

Sorbitol is a sugar alcohol found naturally in some foods and often used as a sweetener in many diet products. Large amounts of sorbitol can cause bloating, abdominal pain and diarrhea.

People with IBS may have increased sensitivity to sorbitol-containing foods:

- Examples:
 - o Peaches, apple juice, pears, plums
 - o Sugarless gum, sugar-free candy, chocolate
 - o Diet jams
 - Other diet products read the label before purchasing

Other Remedies

Peppermint

- some studies have found peppermint oil to reduce pain, distension, diarrhea, and gas in IBS sufferers
- the volatile oils in peppermint are known to affect the smooth muscle of the digestive tract and reduce spasms, and flavonoids in peppermint stimulate the secretion of bile which aids in the digestive process
- recommend dose is 1-2 capsules (0.2-0.4 mL) three times daily, 15 to 30 minutes before meals. An enteric-coated product is preferred to reduce risk of heartburn.
- peppermint tea may also be helpful

Probiotics/Prebiotics

- studies on the ability of pro/prebiotics to improve IBS are mixed and inconclusive
- the health-friendly bacteria are called lactic acid bacteria—the most widely studied are Lactobacillus and bifidobacteria (e.g. yogurt or probiotic supplements)
- Fructo-oligosaccharides (FOS) are a prebiotic which may help reduce bacterial overgrowth

Additional Resources

Websites

www.niddk.nih.gov National Institute of Diabetes & Digestive & Kidney Diseases

(NIDDK). From the home page click on Digestive Diseases to find

a list of topics including IBS.

www.badgut.org GI Canadian Society of Intestinal Research - An organization

committed to improving the lives of people with GI and liver

conditions.

www.dietitians.ca Dietitians of Canada. Provides general nutritional information plus

a meal planner to help you evaluate your nutritional status and

improve your diet.

Books

Breaking the Bonds of Irritable Bowel Syndrome; a psychological approach to regaining control of your life. Barbara Bradley Bolen. Oakland, CA: New Harbinger Publications Inc., 2000.

I.B.S. Relief: a doctor, a dietitian and a psychologist provide a team approach to managing irritable bowel syndrome. Dawn Burstall, T. Michael Vallis, Geoffrey K. Turnbull. Minneapolis, MN: Chronomed Publishing, 1998.

Tell Me What to Eat if I have Irritable Bowel Syndrome: nutrition you can live with. Elaine Magee. Franklin Lakes NJ: Career Press, 2000.

Adapted from: IBS Relief: A Doctor, A Dietitian, and A Psychologist Provide a Team Approach to Managing Irritable Bowel Syndrome; D. Burstall, RD, T.M. Vallis, PhD, & G.K. Turnbull, MD; Chronomed Publishing, 1998.

Prepared by Carol Clarke, RD

March 2004