

## Appendices


**Appendix Figure 1: Dietary Instruction Sheet for Low GI Diet**

### Foods for Low GI Diet (MRI Study)

		<b>Choose</b>	<b>Portion Size</b>	<b>AVOID</b>
(_____) servings	<b>Pulses</b>	<b>Beans</b> -red, navy etc. <b>Lentils</b> – red, green Chick peas	½ c cooked or canned	
	<b>Breads</b>	Stonemill™ 3 Grain Bread Dempster’s™ Ancient Grains Tortilla <b>Clinic Oatbran Bread</b>	1 slice 1small Tortilla 1x ½ inch slice (65g)	All other breads Bagel, pita, tortilla, buns, rolls
	<b>Cereal</b>	Red River Cereal Oatmeal (large flake, steel cut) Oat Bran <b>Kellogg’s™ All Bran Buds with Psyllium</b>	2 Tbsp. dry 1/3 c dry “ 1/3 c	All other cereal Instant oatmeal Pancakes, muffins, donuts
	<b>Other Starchy Food</b>	Pasta (al dente) Parboiled rice  Bulgur <b>Barley</b> Quinoa	1/3 c cooked 1/3 c cooked  ½ c cooked “ “	potatoes – baked, mashed, French fries White, brown rice Basmati rice Rice noodles Crackers, cookies
<b>3 servings</b>	<b>Fruits</b>	<b>Apple</b> Orange Blueberries, Raspberries Strawberries	1 small 1 1 cup 1.5 cups	Ripe banana, Grapes, raisins, Pineapple, mango, Papaya, melon Canned fruit
<b>5 or more servings</b>	<b>Vegetables</b>	All, especially <b>eggplant, okra</b> and zucchini, except potato	½ cup	potato
<b>3 servings</b>	<b>Dairy</b>	Low fat, low sugar yogurt Skim or 1% milk Soy Beverage, fortified Hard cheese <15%mf	1 cup 1 cup 1 cup 1 ½ oz. (45 g)	Cream, ice cream, Cheese > 15%mf
<b>2 servings</b>	<b>Meat, fish and alternates</b>	Lean meat, poultry, fish, Soy, tofu, seitan Nuts (almonds, walnuts ...) Egg	2-3 oz. (60-90g) (deck of cards) 10 1-2	Fatty meats, sausage
	<b>Snacks, desserts</b>	Fruit, vegetables Nuts yogurt	As listed above	Crackers, Cakes, cookies Chips, popcorn
	<b>Spreads</b>	Soft Margarine Peanut butter, natural Jam (reduced sugar) Low fat cottage cheese/ricotta Red pepper spread, Guacamole, hummus	1 tsp. 1 Tbsp. 1 tsp	Jam with sugar butter
	<b>Drinks</b>	Water, tea, coffee, Sugar-free drinks, Vegetable juice (low salt)		Fruit juice Regular pop

Appendix Figure 2: Dietary Instruction Sheet for High Cereal Fiber Diet

## Foods for High Fibre Diet (MRI Study)

		<b>Choose</b>	Portion Size	<b>AVOID</b>
 servings	<b>Breads</b>	whole wheat breads or bagels, wheat Bran, Ryvita™, Finn Crisp™ crackers	1 slice (40g)  3	<b>White</b> - bread, bagels, pita, buns
	<b>Cereal</b>	Bran flakes, Corn Bran, <b>Fibre 1™</b> Weetabix, Shredded Wheat Cream of wheat	$\frac{3}{4}$ cup  1 biscuit 2 Tbsp. dry	Pancakes, Muffins, Donuts Oatmeal, Red River, Bran buds
	<b>Other Starchy Food</b>	Potatoes – baked, boiled Brown rice Whole wheat Couscous	$\frac{1}{2}$ cup 1/3 cup 1/3 cup	French fries Pasta, Barley Beans/lentils/chickpeas
<b>3 servings</b>	<b>Fruits</b>	Banana Grapes Pineapple Mango, Papaya Watermelon Cantaloupe, honeydew Raisins guava	$\frac{1}{2}$ large ,4” 15 each $\frac{3}{4}$ cup $\frac{1}{2}$ fruit 1 $\frac{1}{2}$ cups 1 cup cubed mini box 1 $\frac{1}{2}$ each	Apples, Pears Oranges , Citrus fruits Peaches All berries
<b>5 servings or more</b>	<b>Vegetables</b>	All vegetables except >	$\frac{1}{2}$ cup	Beans, lentils, chickpeas
<b>3 servings</b>	<b>Dairy</b>	Low fat yogurt Skim or 1% milk, soy beverage Hard cheese < 15% MF	1 cup 1 cup 45 g	Cream, Ice cream, Cheese (>15% MF)
<b>2 servings</b>	<b>Meat, fish and alternates</b>	Lean meat, poultry, fish Soy, Tofu, seitan Medium egg	2-3 oz. (60-90g) 60-90g 1-2	Fatty meats, sausage <b>All nuts</b>
	<b>Snacks and Desserts</b>	Raw vegetables (from list) WW bread with listed spreads Low fat plain yogurt	No limit 1 slice 1 cup	White crackers Potato chips Corn/tortilla chips Cakes/cookies/wafers Nuts
	<b>Spreads</b>	Soft margarine, Jam (low sugar) Low-fat cottage/ricotta cheese Red pepper spread Guacamole (avocado spread)	1 tsp. 1 tbsp	Jam with sugar Hummus Butter Peanut butter
	<b>Drinks</b>	Water, tea, coffee Sugar-free drinks Vegetable juice (low salt)		Fruit juice Regular soft drinks

**Appendix Table 1: Sequence Parameters of MRI scans**

	2 Dimensional				3 Dimensional	
	T1W	T2W	PDW	T1W_PC	T1W	TOF
Slice number / n	16	16	16	16	100	160
Slice thickness / mm	2.00	2.00	2.00	2.00	0.50	1.40
Acquisition plane	Axial	Axial	Axial	Axial	Coronal	Axial
TE / ms	8.55	50.00	17.89	8.55	4.11	3.45
TR / ms	1034.48	1846.15	2068.97	923.08	11.22	26.00
TI / ms	-	-	-	-	560.00	-
Flip Angle / deg	90	90	90	90	15	18
NEX	1.00	1.00	1.00	1.00	2.00	1.00
FOV / mm	130.00	130.00	130.00	130.00	270.00	190.00
Matrix	256 x 220	256 x 209	256 x 209	256 x 220	272 x 224	360 x 232
Resolution	256 x 256	256 x 256	256 x 256	256 x 256	560 x 560	640 x 640

T1w- T1 weighted, T2w – T2 weighted, PDW – proton density weighted, TOF – time of flight.  
TE – Echo time, TR – repetition time, TI – Inversion time, NEX – number of excitations, FOV – field of view

## Appendix Table 2: Image Quality Grading

Category	Description
5	Wall boundaries of all slices clearly visible
4	Wall boundaries of 1-2 incongruent slices unclear
3	Wall boundaries of 3-6 slices unclear AND less than 3 congruent slices unclear.
2	Wall boundaries of > 6 slices unclear OR $\geq 3$ congruent slices unclear.
1	All wall boundaries unclear.

Image quality assessment scale. The image quality of the MRI sequences is graded using the above 5 point scale.

**Appendix Table 3: Nutritional Profile of High-Cereal Fiber and Low-Glycemic Index Diets**  
(adapted from Jenkins et al. JAMA 2008)

	<b>High-Cereal Fiber Diet</b>	<b>Low-Glycemic Index Diet</b>
Energy, kcal	1690	1706
Total Fat, % energy	31	33
Monounsaturated fatty acids	12	13
Polyunsaturated fatty acids	6	7
Saturated fatty acids	9	10
Dietary cholesterol, mg/1000kcal	143	142
Total Protein, % energy	21	21
Plant	7	8
Available carbohydrates, % of energy	48	44
Fiber, g/1000kcal	16	19
Alcohol, % of energy	1	2
Glycemic Index	83	70
Glycemic Load	166	129