



Diabetes Solution Recommendations

BOOKS: Dr. Bernstein's Diabetes Solution and The Diabetes Diet by Dr. Bernstein

GLUCOGRAPH: Use the Glucograph to monitor your blood sugars for a few weeks until they are maintained at the goal level. Keep the Glucograph for one week prior to each follow-up doctor visit and for one day every other week to monitor that blood sugars are on track.

GLUCOSE METER: When selecting a blood-glucose measuring device, perform 4 blood glucose measurements in succession. The readings should be within 5% of each other. If the device is not accurate, return it and choose another.

BLOOD SUGAR MEASURING TECHNIQUE:

1. Wash your hands
2. Do not wipe fingers with alcohol
3. Make sure your hands are warm
4. Use the backs of the fingers, near the nail beds and between the first and second joints
5. Use all the fingers of both hands
6. Squeeze the finger in a pumping action to get an adequate drop of blood
7. Use hydrogen peroxide to get blood out of clothing

WHEN TO MEASURE BLOOD SUGAR:

1. Upon rising in the morning
2. Two hours after meals and snacks
3. At bedtime
4. Before and after exercise or activity
5. Whenever you suspect your blood sugar is high or low

POWDERED ARTIFICIAL SWEETENERS: Sweet'n Low, Equal, The Sweet One, Sugar Twin, and similar powdered products in paper packets usually contain about 96% glucose and about 4% artificial sweetener. More suitable for diabetics are tablet sweeteners such as saccharin, cyclamate, and aspartame (Equal in the tablet form only). **Stevia the herbal sweetener contains no sugar of any kind, sold in powder or liquid form.** This is the safest, healthiest option for everyone.

DIET AND SUGAR FREE FOODS: To be labeled "sugar-free", the product must be free of sucrose (table sugar). However the manufacturers are free to substitute any other form of sugar and still keep the "sugar-free" label. These substitute sugars will still raise blood sugars:

carob	corn syrup	dextrin	dextrose	dulcitol	fructose
glucose	honey	lactose	levulose	maltose	mannitol
mannose	molasses	saccharose	sorbitol	sorghum	treacle
turbinado	xylitol	xylose			

The exceptions: Diet soda, sugar-free Jell-O brand gelatin desserts and No-Cal brand syrups (available only in New York metropolitan area), products labeled "carbohydrate 0".

FIBER: In the US, labeling regulations require that undigestible fiber be listed as a carbohydrate. To determine the amount of digestible carbohydrate in a product (which will affect your blood sugar), subtract the dietary fiber content from the carbohydrate content.

AVOID:

Sweets and Sweeteners

- ❖ Powdered sweeteners (other than Stevia)
- ❖ Candies including “sugar-free” types
- ❖ Honey and fructose
- ❖ Diet and “sugar-free” foods (except sugar-free Jell-O gelatin and diet sodas that do not contain fruit juices)
- ❖ Desserts (except Jell-O) and pastries: cakes, cookies, pies, tarts, etc.
- ❖ Foods containing, as a significant ingredient, products whose names end in -ol, or -ose (dextrose, glucose, lactose, mannitol, mannose, sorbitol, sucrose, xylitol, xylose, etc); also, corn syrup, molasses, etc.

Sweet or Starchy Vegetables

- ❖ Beans (chili beans, chickpeas, lima beans, lentils, sweet peas, etc; string beans and soy bean products are okay).
- ❖ Beets
- ❖ Carrots
- ❖ Corn
- ❖ Onions
- ❖ Packaged creamed spinach containing flour
- ❖ Parsnips
- ❖ Potatoes
- ❖ Tomatoes, tomato paste, tomato sauce and raw tomatoes in large amounts
- ❖ Winter Squash

Fruit and Juices

- ❖ All fruits (except avocados)
- ❖ All juices (including tomato and vegetable juices)

Certain Dairy Products

- ❖ Milk
- ❖ Sweetened and low-fat yogurts
- ❖ Cottage cheese (except in very small amounts)
- ❖ Powdered creamers and milk substitutes

Prepared Foods

- ❖ Commercially prepared soups
- ❖ Packaged diet or “Health foods”
- ❖ Snack foods
- ❖ Balsamic vinegar

ACCEPTABLE FOOD:

Vegetables: Most vegetables other than those listed in the Avoid section. For example:

- ❖ Asparagus
- ❖ Avocado
- ❖ Broccoli
- ❖ Brussel sprouts
- ❖ Cabbage and sauerkraut
- ❖ Cauliflower
- ❖ Eggplant
- ❖ Onions (in small amounts)
- ❖ Peppers (any color)
- ❖ Mushrooms

- ❖ Spinach
- ❖ String beans
- ❖ Summer squash
- ❖ Zucchini

2/3 cups of cooked vegetables or 1 cup of mixed salad = 6 grams of carbohydrate

Cooked vegetables tend to raise blood sugar more rapidly than raw vegetables. Raw vegetables can be more difficult to digest for people with delayed stomach emptying.

Meat, Fish, Fowl, Seafood, and Eggs: These should be the major source of calories for diabetic patients.

Tofu, Soybean Meat Substitute: These contain vegetable fat, protein and slow-acting carbohydrates. Read the labels and count protein and carbohydrate content in your meal plan.

Commercially Prepared and Homemade Soups: Check labels for low or 0 carbohydrate prepared soups, or make them at home with acceptable vegetables, meat, herbs and spices.

Cheese, Butter, and Cream: Most cheeses (other than cottage cheese) contain approximately equal amounts of protein and fat and small amounts of carbohydrate. Figure the carbohydrate and protein into your meal plan. Every ounce of cheese contains 1 gram of carbohydrate, except cottage cheese, which contains more.

Yogurt: Plain whole milk yogurt without fruit or added sweetener is an acceptable food. Read labels. Sweeten and flavor with stevia, baking flavor extracts, Jell-O gelatin, or spices.

Soy Milk: Must be unsweetened. Check the label and the Westsoy brand. Less than one ounce does not need to be figured into the meal plan.

Soybean Flour: One ounce of full-fat soybean flour (~1/4 cup) contains only 7.5 grams of slow-acting carbohydrate. You may experiment with soybean flour in baking breads, cakes, pies, etc.

Bran Crackers: Check labels to find a low-carbohydrate option. Eat spread with cream cheese or butter.

Toasted Nori: Small amounts have no affect on blood sugar. Each strip weighing 0.3 grams, will have about 0.12 grams of carbohydrate. Additional ingredients include, soybeans, rice, barley and red pepper.

Sweeteners: Saccharin, Aspartame, Stevia, and Cyclamate: Use Stevia. For more detailed information refer to Dr. Bernstein's book.

No-Cal Brand Syrups: Available only in the New York metropolitan area. Read labels for artificially sweetened flavored syrups.

Flavor Extracts: Found in the baking section of most grocery stores. Read the labels to confirm zero carbohydrate content.

Mustard, Pepper, Salt, Spices, Herbs: Read the labels of commercially prepared mustard to confirm low carbohydrate content. Pepper, salt, spices and herbs generally are low in carbohydrate content and if used in small amounts have insignificant amount of carbohydrate.

Low-Carbohydrate Salad Dressing: Make your own using oil and vinegar (not balsamic), added spices, mustard, grated cheese or bacon bits. Read labels of commercial dressings for 1 gram of carbohydrate per 2 tablespoon serving. Be careful with mayonnaise. Low carbohydrate mayonnaise will add up if used in a large amount.

Nuts: Nuts contain differing amounts of slow-acting carbohydrate as well as protein and fat and can be worked into meal plans. For example, 10 small pistachio nuts contain 1 gram of carbohydrate, versus 10

cashew nuts contain 5 grams of carbohydrate. Beware, the carbohydrate in large numbers of nuts is going to add up. Also beware of nut butters. One tablespoon of natural, unsweetened peanut butter (other nut butters will differ) contains only 3 grams of carbohydrate. But larger amounts will add up.

Sugar-Free Jell-O Gelatin: A ½ cup serving contains no carbohydrate, no fat and only 1 gram of protein. It will have no effect on your blood sugar if you eat it in a reasonable amount and don't eat it until you feel stuffed. Enhance the taste by pouring some cream over it or whip it in a blender with cream. Add some no-carb flavored syrups or baking extracts and stevia for sweetening.

Sugar-Free Jell-O Puddings: Pudding contains 6 grams of carbohydrate per serving. Add this into your meal plan. Mix with water or diluted cream instead of milk.

Chewing Gum: The carbohydrate content of one stick of chewing gum varies from about 1 gram in sugar-free gum to 7 grams in regular gum. Read the label for carbohydrate content. "Sugar-free" gum still contains a sugar substitute.

Frozen Diet Soda Pops: Make your own with diet soda frozen in a mold. Do not get pops made with fruit juices.

Coffee, Tea, Seltzer, Mineral Water, Club Soda, Diet Sodas: None of these products should have significant effect upon blood sugar as long as they are sweetened with stevia or tablet sweeteners. Use cream to lighten instead of milk or powdered creamer. Beware of "diet" sodas and flavored mineral waters, as they often contain fruit juices or added sugars.

Alcohol: In limited amounts, distilled spirits has no direct effect on blood sugar. The effects of small amounts of alcohol (1 1/2 ounces of spirits for a typical adult) are usually negligible. Most "light" beers contain only about 3 grams of carbohydrate per can or bottle. A regular bottle of beer has 13 grams of carbohydrate, which is the total amount of recommended carbohydrate for an entire meal.

READ LABELS: Note the serving size when assessing the amount of carbohydrates in a product. Beware of labels that say "lite", "light", "sugar-free", "dietetic", "diet", "reduced-calorie", "low-calorie", etc. "Fat-free" will be the most dangerous of all because the fat in the food has undoubtedly been replaced with sugar or another high carbohydrate sweetener.

FOOD VALUE MANUALS: Show carbohydrate contents of various foods and can be very helpful in planning meals.

VITAMIN AND MINERAL SUPPLEMENTS: Doses of Vitamin C in excess of 500 mg daily may interfere with accurate readings of blood sugar. Vitamin E (natural form, d-alpha-tocopherol, not synthetic form, dl-alpha-tocopherol), 1200 IU/day has been shown to reduce the destructive effects of high blood sugars and lowers insulin resistance. Other dietary supplements should be in such small amounts to not affect blood sugar. However, careful monitoring of blood sugar is the only way to know for sure.

MEAL PLANNING: Start with the following carbohydrate recommendations and then add ounces of protein until you feel satisfied but not stuffed. Keep the amounts of carbohydrate and protein consistent for each meal each day. Do not juggle the amounts amongst the meals keeping daily totals. This does not work. Monitor your blood sugars until your blood sugars are within target range and the plan is finalized. Your blood sugars should be the same after the meal as they were before the meal.

Breakfast: 6 grams of slow-acting carbohydrate

Lunch: 12 grams of carbohydrate

Dinner: 12 grams of carbohydrate

Examples of 6 grams of carbohydrates:

- ❖ 6 strips of 1oz per serving carbohydrate bacon
- ❖ 3 2 oz per serving carbohydrate sausages

- ❖ 2 3 oz per serving carbohydrate crackers
- ❖ 4.5 oz of whole-milk unflavored yogurt (8 oz contains 11 grams of carbohydrates)
- ❖ 1 cup of mixed salad with oil-and-vinegar dressing
- ❖ 2/3 cup of cooked green vegetable
- ❖ 1 serving of Jell-O sugar-free pudding made with water or cream
- ❖ ½ medium avocado

Protein: As mentioned above, keep the amount of protein at each meal constant from one day to the next. About 10% of the cooked weight of most protein foods can be converted to glucose by the liver. 1 oz of a protein food typically contains only 6 grams of actual protein. A cooked portion the size of a deck of playing cards weighs about 3-4 oz.

Protein foods with virtually no carbohydrate:

- ❖ Beef, lamb, veal
- ❖ Chicken, turkey
- ❖ Eggs
- ❖ Fish and shellfish (fresh or canned)
- ❖ Frankfurters
- ❖ Pork (ham, chops, bacon, etc.)

Protein foods with a small amount of carbohydrate:

- ❖ Cheese (other than cottage cheese) includes one gram of carbohydrate per ounce of cheese

Soy products: 6 grams of carbohydrate/ounce of protein –check label on package

- ❖ Veggi burgers
- ❖ Tofu
- ❖ Meatless bacon or sausage

Snacks: Separate meals and snacks by at least 3.5 hours to keep carbohydrates at meals from overlapping each other. Snacks can duplicate but not exceed carbohydrate and protein amounts of meals. (You can have a snack with 12 oz of carbohydrate at least 3.5 hours after lunch and 3.5 hours before dinner). Snacks limited to small amounts of protein will have less effect on your blood sugar.

Breakfast: If you skip breakfast, your risk of being overweight increases by 800%.