Lifestyle Medicine Clinic Duke University Medical Center

"No Sugar, No Starch" Diet

Getting Started

- This diet is about providing your body with the nutrition it needs
- Eliminating the food that your body does not require
 - Nutritionally empty carbohydrates.
- For effective weight loss keep total grams of carbohydrate below 20.
- Your diet is to be made up exclusively of foods and beverages from the following pages
- If the food is packaged, check the label for carbohydrate count for your meal
 - 2 grams or less for meat and dairy products,
 - 5 grams or less for vegetables.
- All food may be cooked in a microwave oven, baked, boiled, stir-fried, sautéed, roasted, fried (with no flour, breading, or cornmeal), or grilled.

When You Are Hungry, Eat Your Choice Of The Following Foods...

Meat

- Beef (including hamburger and steak)
- Pork, ham (unglazed), bacon,
- Lamb, veal, or other meats.
- For processed meats (sausage, pepperoni, hot dogs), check the label
- Carbohydrate count should be about I gram per serving (preferably organic and nitrate free).

Poultry

- Chicken
- Turkey
- Duck
- Any other fowl

Fish and Shellfish

- · Any fish, including
- Tuna
- Salmon
- Catfish
- Bass
- Trout
- Shrimp
- Scallops
- Crab
- Lobster
- (Avoid farmed seafood, there are too many toxins in them).

Eggs

Whole eggs are permitted without restrictions

REMEMBER...

- You do not have to avoid the fat that comes with the above foods.
- You do not have to limit quantities deliberately, but you should stop eating when you feel full.

Foods That Must Be Eaten Every Day... Salad Greens

- 2 cups a day minimum
 - Arugula
 - Bok choy
 - Cabbage (all varieties)
 - Chard
 - Chives
 - Endive
 - Greens (all varieties, including beet, collards, mustard, and turnip)
 - Kale
 - Lettuce (all varieties)
 - Parsley
 - Spinach
 - Radicchio
 - Radishes
 - Scallions (spring onion)
 - Watercress

(If it is a leaf, you may eat it.)

Fibrous Vegetables: includes

- Artichokes (globe or French only not Jerusalem)
- Asparagus
- Black Soybeans
- Broccoli
- Brussels sprouts
- Bamboo shoots

- Bean sprouts
- Cauliflower
- Celery
- Celeriac (celery root)
- Chayote
- Cucumber
- Edamame beans
- Eggplant (aubergine)
- Fennel
- Green beans (string beans)
- Jicama
- Mushrooms
- Okra
- Pepper
- Pumpkin
- Rhubarb
- Rutabaga (swede)
- Snow peas
- Sprouts (bean and alfalfa)
- Sugar snap peas
- Summer squash
- Tomatoes
- Turnip
- Wax beans
- Zucchini (courgette)

Bouillon

- 2 cups daily as needed for sodium replenishment.
- Clear broth (consommé) is strongly recommended, unless you are on a sodium-restricted diet for hypertension or heart failure.
- Use these particularly when you start. Helps avoid headaches and fatigue as your body adjusts to your new diet.

Foods Allowed In Limited Quantities...

Cheese

- Up to 4 ounces a day.
- Includes hard, aged cheeses such as Swiss and Cheddar,
- Brie, Camembert blue, mozzarella, Gruyere, cream cheese, goat cheeses.
- · Avoid processed cheeses, such as Velveeta.
- Check the label; carbohydrate count should be less than I gram per serving.

Cream

- Up to 4 tablespoons a day.
- · Includes heavy, light, or sour cream
- Not half and half

Mayonnaise

- Up to 4 tablespoons a day.
- Duke's and Hellmann's are low-carb.
- Check the labels of other brands.

Fatty Vegetables

- Olives (Black or Green):
 - Up to 6 a day.
- Avocado:
 - Up to 1/2 of a fruit a day.

Condiments

- Lemon/Lime Juice:
 - Up to 4 teaspoonfuls a day.
- Soy Sauces:
 - Up to 4 tablespoons a day.
 - Kikkoman is a low carb brand. Check the labels of other brands.

Pickles

- Dill or Sugar-Free:
- Up to 2 servings a day.
- Mt. Olive makes sugar-free pickles.
- Check the labels for carbohydrates and serving size.

Snacks

- Pork rinds/skins
- Pepperoni slices
- Ham
- Beef
- Turkey
- Other meat roll-ups
- Deviled eggs

THE PRIMARY RESTRICTION:

CARBOHYDRATES

On this diet, no sugars (simple carbohydrates) and no starches (complex carbohydrates) are eaten.

The only carbohydrates encouraged are the **nutritionally dense**, **fiber-rich** vegetables listed.

Sugars: Simple carbohydrate

- · Avoid anything containing:
 - White sugar
 - Brown sugar
 - Honey
 - Maple syrup
 - Molasses
 - Corn syrup
 - Beer (contains barley malt)
 - Milk (contains lactose)
 - Flavored yogurts (usually have a lot of sugar)
 - Fruit juice
 - Fruit

Starches: "complex" carbohydrate

- Avoid these kinds of foods:
 - Grains (even "whole" grains),
 - Rice
 - Cereals
 - Flour
 - Cornstarch

- Breads
- Pastas
- Muffins
- Bagels
- Crackers
- Beans and legumes (pinto, lima, black beans, peas etc)
- Most Root vegetables particularly carrots, parsnips, corn, potatoes, French fries, potato chips

SWEETENERS AND DESSERTS

- If you feel the need to eat or drink something sweet, you should select the most sensible alternative sweetener(s) available.
- Available alternative sweeteners are:
 - Splenda (sucralose),
 - Nutra-sweet (aspartame),
 - Truvia (stevia/erythritol blend),
 - Sweet 'N Low (saccharin).

SUGAR ALCOHOL SWEETENERS

- · Avoid food with these particular sugar alcohols
 - Sorbitol
 - Maltitol

FATS AND OILS

- · All fats and oils, even butter, are allowed. Some oils are better for cooking
- Coconut oil, butter, or lard is recommended for cooking as these are most stable at high temperatures
- Olive oil is recommended for cold dressings.
- Avoid margarine and other hydrogenated oils that contain trans fats they are not healthy.
- For salad dressings, the ideal dressing is a homemade oil-and-vinegar dressing, with lemon juice and spices as needed.
- Blue-cheese, ranch, Caesar, and Italian are also acceptable if the label says I to 2 grams of carbohydrate per serving or less.
- Avoid "lite" dressings, because these commonly have more carbohydrate.

Chopped eggs, bacon, and/or grated cheese may also be included in salads as a fat source

- Natural unprocessed fats, in general, are important to include, because they taste good and make you feel full.
- You are therefore permitted the fat or skin that is served with the meat or poultry that you eat, as long as there is no breading on the skin.
- Do not attempt to follow a low-fat diet!

BEVERAGES

- Drink as much as you would like of the allowed beverages, do not force fluids beyond your capacity.
- The best beverage is water.
- Essence-flavored seltzers (zero carbs) and bottled spring and mineral waters are also good choices.

Caffeinated Beverages

- Some people find that their caffeine intake interferes with their weight loss and blood sugar control.
- You may could consume a maximum of one of the following
 - 3 cups of coffee (black, or with artificial sweetener and/or cream)
 - 6 cups tea (black, or with artificial sweetener and/or cream),
 - 3 caffeinated diet sodas per day.
- For example:
 - 2 cups of coffee + 2 cups of tea

...or...

- 1 cup of coffee, 1 soda and 2 cups of tea.

Alcohol

- At first, avoid alcohol consumption on this diet.
- At a later point in time, as weight loss and dietary patterns become well established, alcohol in moderate quantities,
 - Low carbohydrate alcohol (spirits/hard liquor) may be added back into the diet.

Quantities

- Eat when you are hungry; stop when you are full.
- The diet works best on a "demand feeding" basis—that is, eat whenever you are hungry; try not to eat more than what will satisfy you.
- Learn to listen to your body. A low-carbohydrate diet has a natural appetite-reduction effect to ease you into the consumption of smaller and smaller quantities comfortably.
- Do not eat everything on your plate just because it's there. On the other hand, don't go hungry!
- You are not counting calories. Enjoy losing weight comfortably, without hunger or cravings.
- It is recommended that if you are hungry you start your day with a nutritious low-carbohydrate meal.
- Note that many medications and nutritional supplements need to be taken with food at each meal, or three times per day.

IMPORTANT TIPS AND REMINDERS

- The following items are NOT on the diet:
 - Sugar
 - Bread
 - Cereal
 - Flour-containing items
 - Fruits, juices
 - Honey
 - Whole or skimmed milk
 - Yogurt
 - Canned soups
 - Dairy substitutes
 - Ketchup
 - Sweet condiments and relishes

Avoid These Common Mistakes

- Beware of "fat-free" or "lite" diet products, and foods containing "hidden" sugars and starches (such as coleslaw or sugar-free cookies and cakes).
- Check the labels of liquid medications, cough syrups, cough drops, and or other over-the-counter medications that may contain sugar.
- Avoid products that are labeled "Great for Low-Carb Diets!"

Search the USDA food nutrient database online to find information about foods not listed above.

LOW-CARB MENU PLANNING

What does a low-carbohydrate menu look like?

You can plan your daily menu by using the following as a guide:

Breakfast

- Meat or other protein source (usually eggs)
- Fat source —this may already be in your protein; for example, bacon and eggs have fat in them. But if your protein source is "lean," add some fat in the form of butter, cream (in coffee) or cheese.
- Low-carbohydrate vegetable (if desired)—this can be in omelet or a breakfast quiche.

Lunch

- Meat or other protein source
- Fat source If your protein is "lean," add some fat, in the form of butter, salad dressing, cheese, cream, or avocado.
- 1 to 1 ½ cups of salad greens or cooked greens
- 1/2 to 1 cup of vegetables

Snack

- Low-carbohydrate snack that has protein and/or fat.

Dinner

- Meat or other protein source
- Fat source—if your protein is "lean," add some fat in the butter, salad dressing, cheese, cream, or avocado. 1 to 1½ cups of salad greens or cooked greens
- 1/2 to 1 cup of vegetables

A Sample Day May Look Like This

- Breakfast
 - Bacon or sausage
 - Eggs
- Lunch
 - Grilled chicken on top of salad greens and other vegetables, with bacon, chopped eggs, and salad dressing
- Snack
 - Pepperoni slices and a cheese stick
- Dinner
 - Burger patty or steak
 - Green salad with other acceptable vegetables and salad dressing
 - Green beans with butter

Reading a Low-Carb Label

- Start by checking the nutrition facts.
- Look at serving size, total carbohydrate, and fiber.
- Use total carbohydrate content only.
- You may subtract fiber from total carbohydrate to get the "effective or net carb count."
 - For example, if there are 7 grams of carbohydrate and 3 grams of fiber, the difference yields 4 grams of effective carbohydrates.
 - That means the effective carbohydrate count is 4 grams per serving.

Reading a Low-carb Label (cont)

- No need to worry at this point about calories or fat.
- Effective carbohydrate count of vegetables should be 5 grams or less.
- Effective carbohydrate count of meat or condiments should be I gram or less.
- Also check the ingredient list. Avoid foods that have any form of sugar or starch listed in the first 5 ingredients.

Sugar by any other name is still sugar!

• All of these are forms of sugar:

All of these are forms of sugar:	
- Sucrose	 Brown-rice syrup
- Dextrose	- Molasses
- Fructose	 Evaporated cane juice
- Maltose	- Cane juice
- Lactose	- Fruit-juice concentrate
- Glucose	- Corn sweetener
- Honey	- Invert syrup
 Agave syrup 	 Partially inverted sugar
 High-fructose corn syrup 	 malt dextrin
- Maple syrup	