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 1 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 1 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 1 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
  – ½ 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 1 ½ cups of salad greens or cooked greens
  – ½ 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 1 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:

<table>
<thead>
<tr>
<th>Sucrose</th>
<th>Brown-rice syrup</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dextrose</td>
<td>Molasses</td>
</tr>
<tr>
<td>Fructose</td>
<td>Evaporated cane juice</td>
</tr>
<tr>
<td>Maltose</td>
<td>Cane juice</td>
</tr>
<tr>
<td>Lactose</td>
<td>Fruit-juice concentrate</td>
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<tr>
<td>Glucose</td>
<td>Corn sweetener</td>
</tr>
<tr>
<td>Honey</td>
<td>Invert syrup</td>
</tr>
<tr>
<td>Agave syrup</td>
<td>Partially inverted sugar</td>
</tr>
<tr>
<td>High-fructose corn syrup</td>
<td>malt dextrin</td>
</tr>
</tbody>
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