# 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
- 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 1½ cups of salad greens or cooked greens
  - $\frac{1}{2}$  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:

- Sucrose	<ul> <li>Brown-rice syrup</li> </ul>
- Dextrose	- Molasses
- Fructose	Evaporated cane juice
- Maltose	- Cane juice
- Lactose	- Fruit-juice concentrate
- Glucose	Corn sweetener
- Honey	- Invert syrup
- Agave syrup	<ul> <li>Partially inverted sugar</li> </ul>
- High-fructose corn syrup	<ul> <li>malt dextrin</li> </ul>
- Maple syrup	