

AT THE HEART OF DIABETES



The relationship between diabetes and cardiovascular disease is clear, but the causes are complex. Over time, too much glucose in the blood damages nerves and blood vessels. This in turn, can cause heart disease and stroke. In addition, damage to the blood vessels in the legs can result in poor circulation and increase the risk of foot ulcers and amputations. Damage to the blood vessels that supply blood to the kidney can cause kidney failure and damage to the small blood vessels in the eye can eventually cause blindness. High blood glucose levels does not fully explain the relationship between diabetes and cardiovascular disease. People with diabetes also tend to express low-levels of inflammation in the lining of the arteries, which can interfere with the proper function of the blood vessels. This makes them more susceptible to developing atherosclerotic plaque – where cholesterol and other substances build up in the arteries, possibly limiting the flow of blood to the heart.

With diabetes there is also a greater tendency for blood cells to clump together to form blood clots within the blood vessels. A blood clot that blocks the arteries supplying blood to the heart causes a heart attack, while a blood clot that blocks an artery supplying blood to the brain causes a stroke.

Risk Factors

The blood vessels in patients with diabetes are also more vulnerable to the harmful effects of other heart disease risk factors.

These risk factors include:

Smoking

High blood pressure

Abnormal blood lipids:

- High LDL (bad) cholesterol
- High triglycerides
- Low HDL (good) cholesterol

Obesity

Lack of physical activity

Poorly controlled blood glucose levels

Family history of heart disease

Age

More than 90 percent of people with diabetes have at least one of these additional heart disease risk factors. While you cannot change risk factors such as family history or age, you can make a change in all the other risk factors. By controlling your blood glucose, blood pressure, lipid levels, losing weight if needed and meeting the activity recommendations you can alter your risk of heart disease! Just like in controlling or preventing diabetes, lifestyle modifications make a huge impact. Eating right and exercising helps you control your diabetes and is good for your heart.

Heart-healthy eating involves consuming vegetables, fruits, whole grains, fat-free or low-fat dairy products, fish, lean meats, poultry, eggs, nuts, seeds, soy products, legumes, and vegetable oils (except coconut and palm oils). Also, it limits sodium, saturated and trans fats, added sugars, and alcohol.

What to Eat?

The list for the foods to eat is a lot longer than the list of foods to avoid. The following foods are the foundation of a heart-healthy diet.

Vegetables

Fruits

Whole grains

Low-fat dairy foods such as milk, cheese, or yogurt

Fish high in omega-3 fatty acids, such as salmon, tuna, and trout, about 8 ounces a week (wild caught)

Lean meats such as 95 percent lean ground beef or pork tenderloin

Poultry such as skinless chicken or turkey

Eggs

Seeds such as sesame, sunflower, pumpkin, or flax

Nuts such as walnuts, almonds, and pine nuts

Legumes such as kidney beans, lentils, chickpeas, black-eyed peas, and lima beans

Oils and fats containing high levels of monounsaturated and polyunsaturated fats that can help lower blood cholesterol levels and the risk of cardiovascular disease. Some sources of these oils are: Canola, olive, safflower, sesame, sunflower, nut and seed butters, avocado and avocado oils.

How much should you eat?

You should eat the right amount of calories for your body, which will vary based on your sex, age, and physical activity level. This is what your meal plan from class will guide you on.

What to limit?

What to limit?

Sodium

Saturated fat

Trans fat

Added sugars

Alcohol

Want to learn more?

Check out this month's reunion topic on ***"A Heart Healthy Lifestyle"***.

Hope to see you at reunion!





Steak & Vegetables with Chimichurri Sauce

Originally from Uruguay and Argentina, chimichurri is a sauce or marinade with the main ingredients being fresh parsley and garlic. In this recipe it is paired with grilled steak, zucchini and tomato skewers.



By: Diabetic Living Magazine

Steak & Vegetables

- 1 pound boneless beef top sirloin steak, cut 1 inch thick
- ½ teaspoon chili powder
- ¼ teaspoon salt
- 2 cups grape tomatoes or cherry tomatoes
- 2 medium zucchini and/or yellow summer squash, trimmed and halved lengthwise
- 1 small red onion, cut into ½-inch-thick slices
- Nonstick cooking spray

Chimichurri Sauce

- 1 cup lightly packed fresh flat-leaf parsley
- ½ cup lightly packed fresh cilantro
- ¼ cup white wine vinegar
- 2 tablespoons water
- 1 tablespoon olive oil
- 6 cloves garlic, minced
- ¼ teaspoon salt
- ¼ teaspoon ground black pepper
- ¼ teaspoon crushed red pepper (optional)

Prepare Steak & Vegetables: Cut steak into four equal portions. Sprinkle chili powder and ⅛ teaspoon of the salt over the steak portions. Thread tomatoes onto four 6- to 8-inch skewers (see Tip). Lightly coat tomatoes and both sides of the zucchini and red onion slices with nonstick spray. Sprinkle vegetables with the remaining ⅛ teaspoon salt.

• For a charcoal grill, place steak, tomato skewers and vegetable slices on the rack of an uncovered grill directly over medium coals. Grill steak until desired doneness, turning once halfway through cooking. Allow 14 to 18 minutes for medium-rare doneness (145°F) or 18 to 22 minutes for medium doneness (160°F). Grill zucchini and onion slices for 10 to 12 minutes or until tender and lightly charred in places, turning occasionally. Grill tomatoes for 4 to 6 minutes or just until softened and lightly charred, turning once. (For a gas grill, preheat grill. Reduce heat to medium. Place steak, tomato skewers, and vegetable slices on grill rack over heat. Cover and grill as above).

Prepare Chimichurri Sauce: Combine parsley, cilantro, vinegar, water, olive oil, garlic, salt, ground black pepper and, if desired, crushed red pepper in a blender or food processor. Cover and blend or process with several on/off pulses until chopped, but not pureed.

• Slice steak and divide among four serving plates. Serve with grilled tomatoes, vegetable slices and Chimichurri Sauce. Tip: If using wooden skewers, soak in enough water to cover for 30 minutes before using. Serving size: 3 ounces cooked meat, 1 tomato skewer, ½ of a zucchini, ¼ of a red onion and 2½ tablespoons Chimichurri Sauce

Per serving: 245 calories; 9 g fat(2 g sat); 4 g fiber; 13 g carbohydrates; 28 g protein; 48 mg cholesterol; 6 g sugars; ; 62 mg vitamin C; 101 mg calcium; 4 mg iron; 387 mg sodium; 1,070 mg potassium
Carbohydrate Servings: 1
Exchanges: 3½ lean protein, 2 vegetable, 1 fat