Heart Disease and Diabetes:
Prevention

The AADE7 Self-Care Behaviors™ is a good way to develop strategies to minimize heart disease risk

Diabetes increases the risk of heart disease (also known as cardiovascular disease) by 2 to 4 times. Traditional risk factors for heart disease include: family history of early death from heart disease, high blood pressure, smoking, high cholesterol, physical inactivity, obesity and poor eating habits. As can be seen from this list, there are many things that people with diabetes can do to delay or prevent the onset of heart disease.

The AADE7 Self-Care Behaviors™ is a good way for you and your diabetes care team to develop strategies to minimize heart disease risk:

■ Healthy Eating
- Salt intake – less than 2300 mg per day
- Mediterranean diet – emphasize fruits and vegetables (8 to 10 servings per day); select fish or chicken over red meat; replace butter with olive oil or canola oil

■ Being Active
- 150 minutes spread out over at least 3 days per week
- Include resistance training twice per week

■ Taking Medication
- Cholesterol – moderate or high intensity statin in addition to a low fat diet
- High blood pressure – ACE-inhibitors or ARBs
- Aspirin for people over age 50 with heart disease risk factors
- Diabetes – better A1C leads to better lipid control

■ Monitoring
- Home blood pressure monitoring – purchase a blood pressure measuring device only if necessary; many pharmacists provide free blood pressure checks
- Appointments
  – A1C test – every 6 months
  – Cholesterol – lab test at least every 6 months
  – Blood pressure – blood pressure goals should be attained after 1 month of treatment
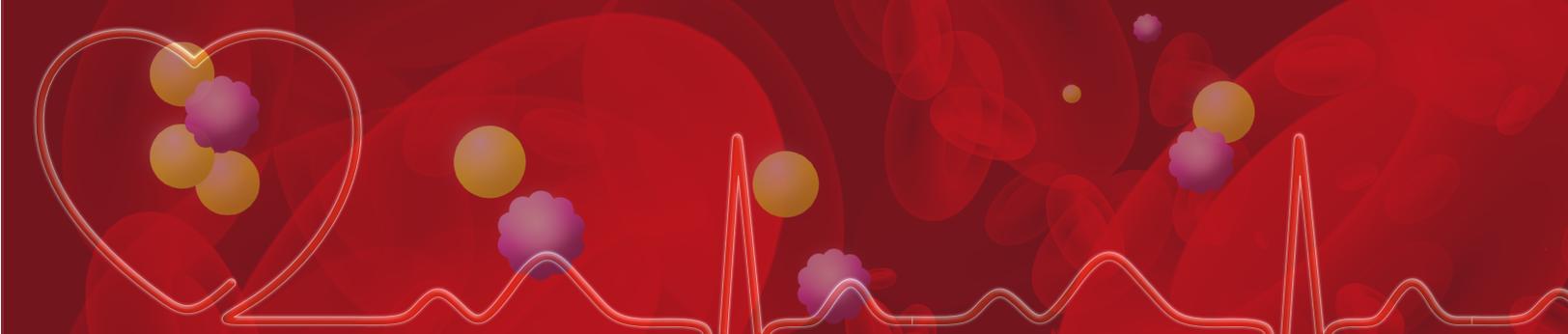
■ Reducing Risks
- Tobacco use – 1 year after stopping smoking, heart disease risk decreases by 50%

■ Problem Solving
- Symptoms of a heart attack and low blood sugar look the same

■ Healthy Coping
- Alcohol use – no more than 1 drink per day for women; 2 drinks per day for men
- Yoga and mediation lower heart disease and other health risks

Healthy Eating

The Mediterranean Diet has been proven to reduce heart disease risk. This diet emphasizes vegetables and fruits (8 to 10 servings per day); replaces butter with olive oil and canola oil; and favors fish or chicken (twice a week) while limiting red meat (less than once a week). Dietary salt increases blood volume and worsens blood pressure. To help control blood pressure, try flavoring your food with herbs and spices, and consume less than 2300 mg of salt per day.

Being Active

To maintain heart health, adults with diabetes should exercise at least 150 minutes per week. The goal is not to become an Olympic athlete but to consistently engage in moderate physical activity. The exercise should be spread over at least 3 days per week with no more than 2 consecutive days without exercise. Finally, your exercise program should include resistance training at least twice a week.

Taking Medication

People with diabetes are often prescribed medicines for cholesterol and blood pressure to reduce heart disease risk. These medicines support healthy lifestyles and are not a replacement. People with high levels of LDL ("bad") cholesterol are often prescribed moderate or high-intensity statins such as atorvastatin or rosuvastatin. For elevated blood pressure ACE-inhibitors (such as lisinopril) or ARBs (such as losartan) are often prescribed first. Aspirin is useful for adults with diabetes over age 50 with at least one heart disease risk factor. It is important to take all these medicines every day to prevent heart attacks and strokes.

Monitoring

High cholesterol has no symptoms, but people on statin therapy should watch for new muscle pains, especially in the thighs or calves (not the joints). Muscle pain related to statin therapy occurs during exercise and goes away once the statin is stopped. People who think they are experiencing statin muscle pain should contact their diabetes care team. Cholesterol tests should be performed every 6 to 12 weeks for people not at goal and at least twice yearly for people at their LDL goal.

Like blood sugar, routine blood pressure monitoring is often useful for the diabetes care team to evaluate therapy. You should discuss the need for home blood pressure monitoring with your team to determine whether a home blood pressure cuff should be purchased. For some people, regular blood pressure checks at the local pharmacy are enough and often free! Blood pressure goals should be assessed within a month after starting treatment.

Reducing Risks

Smoking is the greatest preventable heart disease risk factor. Like diabetes, smoking doubles the risk of heart attacks and death. People who stop smoking see immediate benefits. Blood pressure and heart rate improves in just 20 minutes! The risk of heart disease is reduced by 50% at 1 year. After 5 years of not smoking, your risk of stroke is similar to a non-smoker. Your heart disease risk becomes the same as a non-smoker after 15 years.

Problem Solving

Some people mistake symptoms of a heart attack with those of low blood glucose.

QUIZ: A 58-year-old woman with type 2 diabetes comes to the pharmacy to pick up her prescription after holiday shopping. She complains of feeling nauseated, weak and sweaty. What should the pharmacist do?

ANSWER:
1. Check her blood sugar
2. If her blood sugar is low (less than 70 mg/dL), then she should be treated with 15 gm of carbohydrates (4 oz juice, 3-4 glucose tablets), wait 15 minutes then recheck.
3. If her blood sugar is high (above 130 mg/dL) then the pharmacist should call 911 because she may be having a heart attack.

Healthy Coping

The incidence of heart disease in people with moderate alcohol intake is low. People with diabetes should consume no more than 1 drink per day for women and 2 drinks per day for men. More frequent alcohol use is associated with increased rates of high blood pressure, obesity and stroke. Healthier forms of stress management, such as yoga or meditation, have been shown to decrease heart disease and other health problems.