Diabetes and Wound Healing

Diabetes is a condition where the body is not able to use the insulin or there is not enough insulin in the body to control blood sugar levels. Having an injury or an illness can change your body’s insulin needs and make it harder to control your blood sugar. High blood sugar can slow healing and put you at risk for infection.

Check your blood sugar and work to keep it in a normal range. Talk to your doctor, nurse or diabetes educator for help to manage your diabetes.

Wound Problems with Diabetes
If your diabetes is not controlled and you often have high blood sugar, you are at greater risk for:
- Skin breaks or ulcers in the skin.
- Slow healing of wounds from poor blood flow.
- Small scrapes or blisters becoming infected wounds.
- Nerve damage that causes loss of feeling in your hands or feet. You may not feel any pain or pressure to make you aware that you have a sore or other injury to your hand or foot.

What You Can Do

Protect Your Skin
- Check your skin each day for any cuts, scrapes, boils or blisters. Look for red or bruised spots. Use a mirror to view hard to see areas like the bottom of your feet.
  - Use a moisturizing lotion on your skin that does not have perfumes or alcohol in it.
  - Wear gloves and clothing to protect your skin from cuts or scrapes.
  - Wear shoes that fit well and cotton socks that absorb moisture.

Treat Any Wounds
- If you have a wound, clean it right away. Rinse the skin for several minutes under water to remove dirt and germs. Use a mild soap to clean. Do not use hydrogen peroxide or iodine that can injure the skin.
- Apply an antibiotic cream or ointment. You can find antibiotic cream or ointment at grocery or drug stores. Ask the pharmacist to help you find it.
- Cover the wound with a sterile bandage or band-aid to keep it clean and protected until it heals. The bandage should be about an inch larger than the wound to be sure the wound is covered on all sides.
  - Change the bandage each day or anytime it is wet or soiled.
  - Check daily for signs of infection such as redness, warmth, swelling or a change in drainage from the wound site.
- Keep pressure off the wound as it heals. Protect the area by wearing clothing to keep dirt and germs away. Modify exercise as needed until the skin heals.
- If a wound is not healing or looks worse, call your doctor. You need to have your wound checked for infection.
Eat a Healthy Diet

Your body needs more calories, protein, vitamins A and C, and the mineral zinc to help with the healing process. Talk to your doctor, dietitian or diabetes educator about your diet or medicines while your body heals.

- Eat a variety of foods for a balanced diet, so you get enough calories, protein, vitamins and minerals.
- **Increase your protein intake.** Eating too little protein can delay or affect how well the wound heals.
  - Eat at least 2 to 3 servings each day. A serving equals 2 to 3 ounces of meat, 1 cup of cooked beans, 1 egg or 2 tablespoons of peanut butter.
  - Try to eat protein-rich foods at every meal and snack. Foods high in protein include meat, poultry, fish, eggs, milk, cheeses, peas, nuts and soy foods. Dry beans such as black, kidney and pinto beans are also good sources of protein.
  - Protein supplements, such as powders or liquids like Ensure, may be needed for people with poor nutrition or for people who cannot eat enough protein.
- **Get enough vitamins A and C, and the mineral zinc.** Eating a balanced diet should help you get enough vitamins and minerals, but your doctor may ask you to take a multivitamin and mineral supplement.
  - Good sources of vitamin A include liver, eggs, sweet potato, carrots, peas, broccoli, kale, spinach, collard greens, pumpkin, winter squash, cantaloupe, apricot, papaya and mango. Eat at least 1 serving a day.
  - Good sources of vitamin C include citrus fruits, orange juice, tropical fruits such as guava, papaya and mango, red and green peppers, broccoli, spinach, collard greens, strawberries, tomatoes and peas. Eat at least 1 serving a day.
  - Good sources of zinc include meat, poultry, some seafood like lobster and crab, liver, eggs, milk, whole grains, tofu and fortified cereals.

When to Call Your Doctor

If you have any of these signs, call your doctor right away:

- Redness, warmth or swelling at the site or streaking away from the wound
- A temperature over 100.5 degrees F or 38 degrees C
- An increase or change in draining from wound or any pus drainage
- Wound gets bigger or is not showing signs of healing

Talk to your doctor, nurse or diabetes educator if you have any questions or concerns.