



## Diabetes

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You have been diagnosed with type 2 diabetes. Type II Diabetes contributes in a large way to kidney disease, eye damage, blood vessel damage that leads to high blood pressure, heart disease and stroke; nerve damage that can result in long term pain, as well as other multiple medical problems. If you already smoke, have high blood pressure, heart disease, or previous stroke, you are at increased risk for even more problems if you do not appropriately treat your diabetes.

### **Many people wonder where they “get” diabetes.**

Diabetes can happen because of genetics (you inherited the problem from your family genes), or if the pancreas has been damaged from infection or trauma. Some drugs can cause diabetes, as well. Diabetes can also be caused by or made worse by misuse of the body (poor lifestyle habits such as obesity, alcohol consumption, poor diet). Most type II Diabetics also have obesity, and there is emerging research that says the diabetes causes the obesity, and NOT the other way around as previously thought. Most people develop the disease after the age of 30.

### **What happens in the body of a diabetic?**

In a diabetic, either the body stops making enough of its own insulin, or the body becomes resistant to using its own insulin. Insulin helps glucose get from the blood stream into the cell. When insulin is impaired, glucose levels in the blood stream rise to levels that are too high for the body. These high levels cause damage to nerves and blood vessels in the body, especially areas of the kidney, eyes, arteries, veins, and nerves. The diabetic person may not ever know these problems are happening until it is too late to correct the damage. That is why it is so important to keep the blood sugar at the correct level. Diabetes is a silent disease until it is too late! Once a diabetic's kidneys have been damaged, it's too late to reverse the problem!

**Treatment of diabetes is aimed at lowering the blood glucose levels to healthy levels.**

Below is a list of the medications that are widely used in this practice to treat diabetes. You can see there are many types of medicines and each one has some special considerations.

Drug	Special Considerations	Dosage	Drug Classification
Metformin	First line drug of Choice for Most Type II Diabetics ***Free from PUBLIX***	250-1000 mg twice daily	Biguanide
Glipizide	Good for Lean Individuals	2.5-20 mg in divided doses	Sulfonylurea
Januvia	Stop using if using GLP 1 Agonists	100 mg daily	DPP-4 Inhibitors
Acarbose	Mild fasting, postprandial	25-100 mg three times daily	Alpha-Glucosidase Inhibitors
Byetta Victoza Trulicity	Helps Lose Weight-injection	5-10 micrograms twice a day	Incretin Mimetic GLP 1 Agonists
Insulin	Used if 2 other drugs together don't don't work well enough.		

**No treatment is complete without an evaluation of the effectiveness of the treatment.**

You will be given follow up appointments regularly until your glucose levels are correct. This may be weekly, monthly, or more often, simply based on your response to the medications.

Once you are responding well to the treatment, you will be seen every three months.

You may be asked to keep a blood sugar log on a daily basis. You will be given a separate sheet about that testing if it is necessary. Most type II diabetics no longer regularly test with finger sticks.

A list of tests that will be regularly performed are:

Test Name	Goal	How often:

Long term glucose control: Hemoglobin A1C	<6.5	Every 3 months This test will tell on you if you haven't been managing your sugars!
Kidney Function: BUN Creatinine	Normal Levels	Every 3 months if previously abnormal
Finger stick Fasting Glucose	<110	When wakening for the day before eating.
Finger stick 2 hours after a meal	<140	2 hours after a meal. *When first diagnosed, you will check a few meals a day. *Once on the right medicine, you may check this less often
Thyroid – TSH and T4 levels	Normal Levels	Once a year
Cholesterol – Total LDL	<200 <100	Checked initially, then if abnormal, checked after 6 weeks and again every 3 months if on medicines for cholesterol.
Urine for albumin:creatinine ratio	<30	If elevated, 2 collections in a 3-6 month period
Electrocardiogram	Normal	Once a year or more often depending on risk factors

## Other Considerations

It is also necessary for you to have an **eye exam by an ophthalmologist** to test for eye vessel damage. You may be **referred to a podiatrist** if you can't care for your feet on your own, or if you develop nerve damage from diabetes. You will be given the opportunity to attend diabetic teaching either here at DPC or at Brunswick Hospital. If after 3 months, you are unable to achieve your blood sugar goals, you will be offered a dietician's services.

Many diabetics would like dietary suggestions. The following is an example of a day's diet. Notice Carbohydrates are 60-70% of the diet and proteins are 15-20%. Fats should be kept to a minimum, and use artificial sweeteners to sweeten your foods if needed.

\*\*Many type II Diabetics can improve their diabetes by eating 250-500 fewer calories than what they were previously eating before being diagnosed. Losing 10% of the body weight can often reverse the disease process for most type II diabetics.

We can help you lose weight here at Darien Primary Care, in a special program designed to help people with diabetes. For more a more complete diet, ask to be seen for diabetic weight management.

Examples of how to lower calories:

Meal Time	Carbohydrates	Protein	Fats
08:00 Breakfast	2 Pieces Toast or 1 Cup oatmeal with milk	1 egg	Canola Margarine Coffee with Artificial Sweetener
10:00 a.m. snack	1 Apple or other fruit	1 Cup skim milk	
12:00 Lunch	1 C Wheat Pasta 1 Vegetable Small Salad	1 serving Chicken	Low Fat Italian Dressing
2:30 p.m. snack	3 graham crackers	1T Peanut Butter	Unsweet tea with Artificial sweetener
5:00 Dinner	1 Sweet Potato ½ C Brown Rice	1 Pork Chop	Canola Margarine, Artificial Sweetener, cinnamon
8:00 p.m. snack	3 Low Salt Crackers	Cheese	