

## **TYPE 2 DIABETES**

Type 2 diabetes is the most common of the two forms of diabetes, affecting 90% or greater of the people with diabetes. In type 2 diabetes, the pancreas produces insulin but the cells of the body become resistant or the amount of insulin produced is not enough. Glucose builds up in the blood stream (hyperglycemia,) and the cells of the body are unable to function properly.

Type 2 diabetes can affect anyone at any age but is more common in overweight populations, people with a family history of type 2 diabetes, the elderly, and people with metabolic syndrome (problems with hypertension and cholesterol issues.) The origin is still unknown but it is probably a combination of factors. Many life-threatening problems can occur with uncontrolled blood glucose levels. The three most notable are retinopathy, kidney damage, and circulatory problems.

<u>Retinopathy</u> is caused by damage to the small blood vessels of the retina. These blood vessels begin to leak fluid into the retina which leads to blurred vision. <u>Kidney damage</u> is cause by destruction of the small vessels in the nephrons allowing protein to flow into the urine. As this neuropathy continues, the function of the kidney declines and leads to kidney failure and end-stage kidney disease. <u>Circulatory problems and nerve damage</u> are cause by a hardening of the arteries. This causes loss of sensation, risk of ulcers, infection and can lead to amputation.

The effects of type 2 diabetes on the body are often irreversible and compounding. Quick diagnosis and immediate strict control of blood glucose levels is crucial.

**QUESTIONS:** (express your ideas and opinions)

- **1. What is the problem with insulin in type 2 diabetes?**
- 2. What populations are more likely to get type 2 diabetes? Why?
- 3. What causes retinopathy in type 2 diabetes?
- 4. What causes kidney damage in diabetes patients?
- 5. What causes circulatory problems in diabetes patients?
- 6. How to diagnose type 2 diabetes?



## **PATIENT'S INFORMATION ABOUT TYPE 2 DIABETES**

Type 2 diabetes is caused by a lack of insulin or the body doesn't recognize the insulin, called insulin-resistance. Insulin moves nutrients into the cells of the body. When insulin resistance occurs, the cells of the body starve and many problems occur. The initial damage to the body can go unnoticed but the damage is severe. Uncontrolled blood sugar can lead to kidney failure, heart disease and even amputation.

Some common symptoms of uncontrolled blood sugar are frequent urination, increased thirst, dry mouth, vision problems, fatigue, and numbness in the hands and feet, among others.

Treatment of type 2 diabetes is usually managed with oral medication. There are medications that help increase insulin production and medications that increase the cells' sensitivity to insulin. Combination therapy may also be required. If oral therapy fails, insulin replacement therapy may be necessary. This uses insulin injections. Constant monitoring of blood sugar levels several times per day is very important. This can be done with blood sugar monitors.

Exercise, weight loss and diet management can be very effective means of managing type 2 diabetes initially. Obesity (the condition of being overweight) is a major factor in causing type 2 diabetes. In type 2 diabetes, exercise and weight loss can make dramatic changes for the better.

The damages and problems in the body caused by diabetes can often go unnoticed until they are serious. Proper management of blood sugar levels isn't easy, but aggressive therapy and control can greatly improve quality of life and lengthen life expectancy.

## **QUESTIONS:** (express your ideas and opinions)

- **1.** How can diabetes patients improve their quality of life?
- 2. What happens when insulin resistance occurs?
- 3. What are the symptoms of high and low blood sugar?
- 4. How is type 2 diabetes treated?
- 5. What are some ways to initially treat diabetes without medication?

