

Schizophrenia and diabetes: what is the connection?

People with schizophrenia develop more medical illnesses than people without schizophrenia. One medical illness that occurs more frequently in people with schizophrenia is diabetes mellitus, type 2 (or type 2 diabetes).¹

People with schizophrenia are at an increased risk for type 2 diabetes based on a Medical college of Georgia study.²

Key terms

Connections between schizophrenia and type 2 diabetes may be better understood when you learn a few key terms:

- **Glucose and insulin:** Glucose is the body's primary source of energy. Glucose is made when the body breaks down sugars and starches. After glucose gets into the blood, it combines with insulin, a chemical produced by the pancreas (a body organ responsible for digestion). Insulin takes glucose from the bloodstream into the body's cells. At that time, glucose provides the fuel needed for completion of physical and mental activities.³
- **Insulin resistance and impaired glucose tolerance:** Insulin resistance occurs when the body does not produce enough insulin or the body's cells do not use insulin properly. Insulin resistance causes glucose levels in the blood to be higher than they should be. Higher than normal blood glucose levels is referred to as impaired glucose tolerance.⁴

- **Metabolic syndrome:** Metabolic syndrome refers to problems that occur with impaired glucose tolerance and insulin resistance. These problems include high blood pressure, high LDL (bad) cholesterol, low HDL (good) cholesterol, large waist size and obesity.⁵
- **Type 2 diabetes:** This condition occurs when glucose levels in the blood are much higher than they should be.³

The connection

The following provides reasons why having schizophrenia may increase the risk for developing medical problems related to type 2 diabetes.⁶

- **Poor diet:** Because of the easy access and low cost of fast food, many individuals eat unhealthy diets. An unhealthy diet is dangerous for people with schizophrenia because they are at higher risk for developing metabolic syndrome and type 2 diabetes. Examples of foods considered to be unhealthy when eaten in large amounts are high saturated fat foods (burgers and fries), high sugar foods (cookies and cakes), and high carbohydrate foods (white bread).



- **Smoking:** Smoking is dangerous for people with schizophrenia because smoking is associated with the development of metabolic syndrome.
- **Lack of exercise:** For people with schizophrenia, lack of exercise is dangerous because lack of exercise leads to obesity, which leads to metabolic syndrome.
- **Medications:** Some medications used to treat schizophrenia are associated with the development of metabolic syndrome.

Addressing the connections

There are many steps that can be taken to control risk factors for or complications of type 2 diabetes. One step that is NOT advisable is to stop taking your medicine. Stopping medication (either for type 2 diabetes or schizophrenia) without a doctor's okay may result in problems managing both illnesses.

Healthy steps that can be taken include:

Diet:⁷

- Consume less fat. Instead of drinking whole milk, drink low-fat or skim milk. Use small amounts of butter or margarine. Eat light meat chicken or turkey. Cut down on cheese and eggs.
- Eat more whole grains. Foods with whole grains include whole wheat bread, brown rice, oatmeal, and puff-grain cereals.

- Eat more fruits and vegetables. Eating fruits and vegetables makes you feel fuller longer. Fruits and vegetables contain many things that are good for you.
- Eat fish. Fish is good for your heart and mind.
- Instead of using corn or vegetable oil, use olive, canola, or sesame oil.
- Cut down on sugar. Eat half of your dessert. Drink low-calorie drinks or water.

Exercise: Talk with your doctor before starting to exercise. Always start out slow to prevent injuries. Have realistic expectations about your progress. For example, build from a five-minute slow walk two times per week to a 30-minute brisk walk three times per week.

Smoking: Discuss options for stopping or reducing smoking with your doctor. Your doctor can help you choose the method that is best for you.

Monitor and manage your health:⁸

- Get a checkup at least every year and more often if you have signs of metabolic syndrome. A complete health checkup should include weight, waist size, blood pressure, fasting glucose level, and fasting fat (cholesterol and triglyceride) levels.
- Give permission in writing for your psychiatrist and primary care doctor to talk with each other about your health care.



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