

# Insulin Resistance: How You Can Fight It!

Eating foods high in fiber can reduce your risk of Insulin Resistance.

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Eating foods high in carbohydrates, such as pasta, French fries or even an apple, can potentially cause a great deal of harm to your body, as a result of a condition called Insulin Resistance (IR). People with Type 2 diabetes have a 90 percent chance of having IR. But what exactly is IR? What are the health consequences? How do you prevent it? And, are there medications that can help? Here are the answers to the four most frequently asked questions about IR:

**What exactly is IR? When eating a meal, your body breaks food down into glucose (sugar). Glucose is the energy source for muscle and other tissues. It enters the bloodstream from the intestinal tract. The pancreas releases insulin, which helps to deliver the glucose into your cells.**

Insulin acts as a key to open cell doors and allows glucose into the cells. When people have IR, the insulin “key” does not fit into the cell “doors”; therefore, glucose cannot enter. This causes glucose levels to rise in the blood. The pancreas then produces more and more insulin to make sure glucose enters the cells and tries to overcome the resistance.

What are the health consequences of IR? After many years of IR, the pancreas burns out and cannot keep up with the large production of insulin. The glucose levels rise in the blood and Type 2 diabetes develops. In addition, people with IR often have high levels of bad cholesterol and high blood pressure. The combination of diabetes, IR, high cholesterol and high blood pressure are the primary risk factors for heart disease. Therefore people with IR and diabetes are at extremely high risk for heart attacks and strokes.

What can you do to prevent IR? Basic life-style changes and simply losing 10 pounds can reduce IR substantially. It is important to develop good eating habits. Eat balanced meals, low in carbohydrates and high in fiber (salads, vegetables), and stay away from sweets and the popular unbalanced diets. Remember portion control is important. Slow weight loss, like one to four pounds per month, is more effective than losing five to 10 pounds on a crash diet.

Likewise, exercise has a great impact on reducing IR and burning glucose. Active muscles are more efficient in taking up glucose than sedentary muscles. Aerobic exercise helps to improve cardiovascular fitness and improve weight control.

Do medications help? Diet and exercise are the first line of treatments for IR and Type 2 diabetes. However, sometimes they are not enough. Thiazolidinediones (TZDs) such as Actos® and Avandia® reduce IR by helping insulin work better in muscle and fat cells, allowing more glucose to enter the cells. Metformin (Glucophage®) has similar effects. The future looks bright, since a great deal of research is being done to reduce IR – the underlying defect in Type 2 diabetes.

Events and Support Groups Diabetes Club Lecture: Managing Your Diabetes through Thick and Thin Wednesday, October 20, 2 to 3 p.m. Kristina Moore, RD, Certified Diabetes Educator and Margaret Corwin, RN, Certified Diabetes Educator and Program Coordinator of the Diabetes Program Diabetes Dialogue Group Education September 8-21 (registration required) Diabetes Support Group First Tuesday of the month, 9 to 10 a.m. Diabetes Teen Support Group Second Wednesday of the month, 6 to 7:30 p.m. Call (760) 773-1578 for info and location.