

MB asks: *Why do diabetics who drink moderately have improved blood glucose control?*

WineDoctors' response:

Alcohol is considered a nutrient because it has caloric value. Carbohydrates have 4kcal/gm; proteins have 4kcal/gm; alcohol has 7kcal/gram and; fat has 9 kcal/gram. Remember that the body cannot store alcohol. Alcohol calories are used first over calories from other sources.

Alcohol is metabolized via the carbohydrate/glucose pathway. The first step in the metabolism of digestible carbohydrate is the conversion of complex carbohydrates to simpler, soluble forms that can be transported across the intestinal wall and delivered to the tissues. Insulin is a hormone produced by the pancreas. It regulates our blood glucose levels. One of the ways insulin does this is by stimulating extrahepatic (i.e., outside of the liver) uptake of glucose from the blood. Light-to-moderate alcohol intake is associated with enhanced insulin sensitivity. Increasing insulin sensitivity in diabetics improves their blood glucose control. Several studies show that improved blood glucose control from moderate alcohol consumption decreases cardiovascular disease in this patient population.