



## Diabetes: The Liver & Glucose Connection

Many people think diabetes is only about the pancreas and insulin. In reality, the liver plays a major role in blood sugar regulation. Understanding this relationship helps explain fasting glucose elevations and insulin resistance.

The liver acts as a glucose storage and production center. During fasting, it releases glucose to maintain energy supply.

In insulin resistance:

- \* The liver releases excessive glucose
- \* Fasting glucose rises
- \* Fat accumulates within liver cells
- \* Triglycerides increase

This process contributes significantly to prediabetes and type 2 diabetes.

Relevant labs include:

- \* Fasting glucose
- \* AST
- \* Fasting insulin
- \* Triglycerides
- \* ALT
- \* A1C

### 01 Is This Your Story?

A patient develops elevated fasting glucose despite eating reasonably well. Further evaluation reveals fatty liver disease. As liver fat decreases through weight loss and exercise, fasting glucose improves significantly.

### 02 Try This Today

**Measure:** Review liver enzymes and glucose trends together.

**Do:** Reduce highly processed carbohydrates this week.

**Reflect:** Ask whether liver health may be influencing blood sugar.

