

## Insulin resistance leads to type 2 diabetes

Your task is to develop a 3–5 minute role play to explain what insulin resistance is. The play is in 2 acts.

You will find useful information to complete this task in the Student Presentation Slides: *Insulin Resistance*.



### Act 1

Glucose, having been released from its bonds within starch, finds itself inside the small intestine of a human being ... wondering how it will find a muscle cell that will appreciate a burst of energy.

Glucose is sucked through the wall of the small intestine into the blood stream where it finds other molecules, including insulin ...

As it is swept along the narrow winding blood vessels, glucose finds a needy muscle cell and with the help of insulin, glucose eventually finds its way into the muscle cell to deliver its package of energy ...

### Act 2

Meanwhile ... inside another human being belonging to the same family, another glucose molecule has struck trouble! Having found its way to a muscle cell, it cannot get inside to deliver its package of energy ...

### Organisation of your group

Decide on the roles that you will need and assign these to people in your group.

Roles could include:

Director	Narrator	Glucose molecule
Pancreas	Insulin molecule	Cell membrane
Insulin receptor	Glucose transporter	

**WRITE AND REHEARSE YOUR PLAY READY TO PRESENT TO THE CLASS**

### Peer Assessment

Your play will be assessed by your peers using the following criteria

	Always	Mostly	Sometimes	Not at all
1. Correct use of biological terminology				
2. Correct explanations provided for each step along the way				

Write a 1–2 sentence comment about how useful the play could be in helping people learn about diabetes