

# Metabolism

## Glucose Breakdown

### Animals

convert glucose into glycogen, which is stored in the liver.

This process reduces their blood sugar concentration.

### Plants

converted to insoluble starch

stored, or converted to cellulose used for cell walls and growth

## Lipid Production

made from three molecules of fatty acids and one molecule of glycerol

used to make cell membranes and as a chemical store of energy.

## Protein Breakdown

broken down to form amino acids

diffuse from a high concentration in cells into the lower concentration in blood

## Amino Acid Breakdown

An enzyme in the liver removes an amine group

breaks down the amino acid into urea.

## Protein Synthesis

Glucose and nitrate ions are used to make amino acids

A chain of amino acids when folded into a specific shape is a protein.