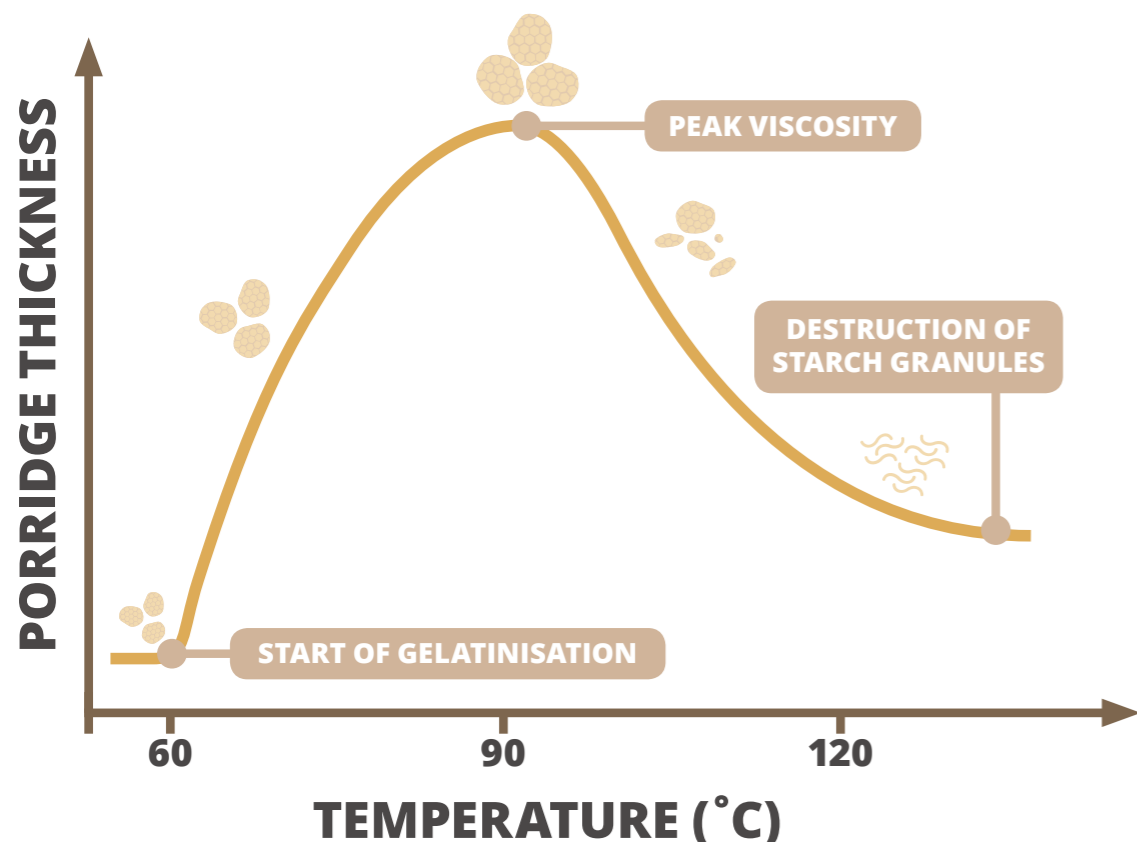


THE SCIENCE OF MAKING PORRIDGE

WHAT MAKES PORRIDGE THICKEN?

When oats are added to hot water, intermolecular bonds in the oat starch granules weaken, causing them to swell. The swelling causes the porridge to thicken. This process is known as gelatinisation.

TEMPERATURE AND PORRIDGE THICKNESS

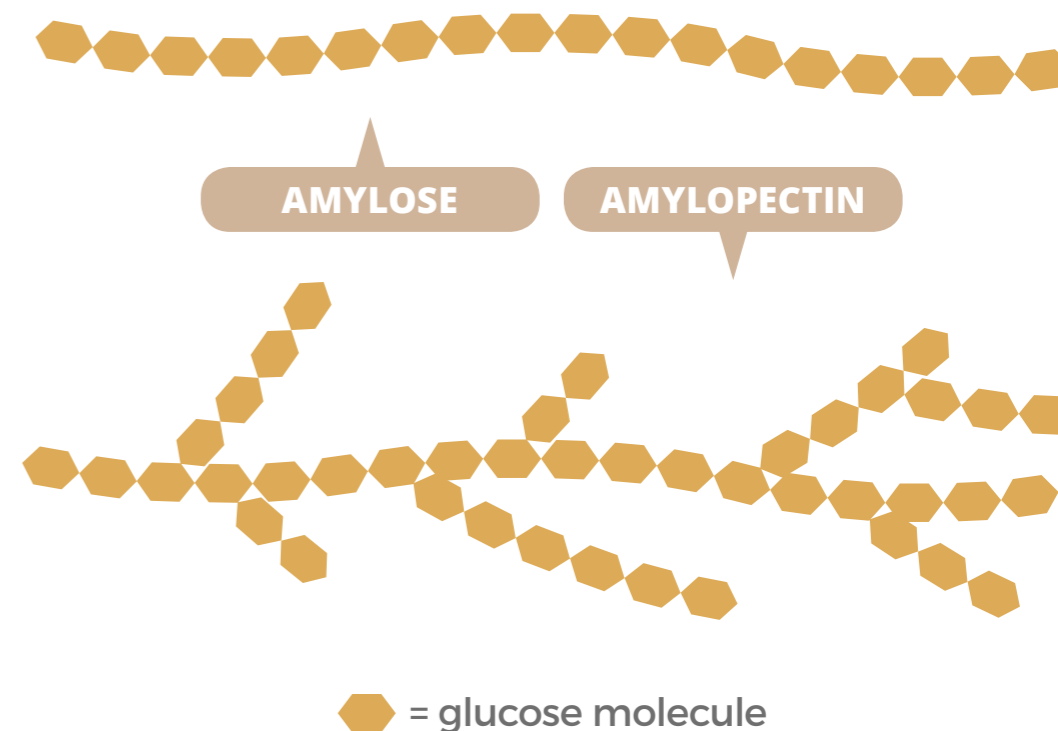


If heating of the oat starch granules continues, they eventually start to break down and disintegrate. This breakdown causes a decrease in porridge thickness.



WHAT ARE STARCH GRANULES MADE OF?

Starch granules are built up from amylopectin (approximately 70%) and amylose (approximately 30%).



Another glucose polymer in oats is β -glucan. β -glucans make up the bulk of oats' soluble fibre, and have been shown to decrease blood cholesterol levels.

