How wool grows

Before shearing

- Skin layer (epidermis)
- Wool follicle shaft
- Wool fibre
- Skin layer (dermis)
- Nerve fibres
- Blood and lymph vessels
- Follicle bulb

After shearing

Source: Adapted from The Story of Wool, Kondinin Group
How wool grows

Wool is a natural fibre grown by sheep to form a protective fleece that covers most of their body.

The fleece is shorter around the face, legs and belly, but longer and softer across the back and sides of the body.

The fleece protects sheep from the weather — keeping them warm during winter and cool during summer.

Wool fibres are made of protein, with a small amount of fat, calcium and sodium.

As wool grows out from the sheep’s skin, it naturally forms into groups of fibres called staples.

Wool fibres grow with a natural crimp (wave), which gives wool its elasticity (springiness).

Each wool fibre grows outwards from the sheep’s skin. Just like human hair, wool continues to grow, even after it has been cut (shorn).

Wool grows about six millimetres per month, but this varies with the breed of the sheep, nutrition and environment.

Did you know?

• When knitted into clothing, the natural crimp in wool provides insulation and helps keep us warm.
• The surface of each wool fibre is covered in tiny scales, which makes wool ideal for making felted products.
• New technology can be used to remove or hide the scales on wool fibres to preventing clothes from shrinking during washing.

Glossary

Calcium — a nutrient found in wool, but also in bones. Calcium is important as part of a healthy diet to keep our teeth and bones strong and healthy.

Fleece — the wool that covers the body of a sheep, usually removed by shearing.

Protein — a nutrient found in wool, but also in all body cells. Protein is important as part of a healthy diet to build and repair all our body cells.

Sodium — a type of salt.

More information

To find out more about how wool grows and protects sheep, take a look at:
• learnaboutwool.com
• Beyond the Bale magazine: beyondthebale.wool.com

Fun facts about wool

• Human hair grows about 10mm per month and wool grows about 6mm per month.
• The natural grease in wool (lanolin) coats each fibre.
• During processing, lanolin is removed and used in beauty products.