

# GROWTH OF A FOETUS *in the cow*

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Cows, like humans, are mammals that give birth to live young. The average length of gestation (pregnancy) in cattle is about 280 days, roughly similar to the average length of pregnancy in humans.

The gestation period is an average and can differ according to breed and the presence of multiples. Meat and dairy production is a major industry worldwide and therefore reproduction and replacement calves are of great importance. In this article we will be looking at some basic developmental features in our calf reproduction.

## Early stages

After the egg has been fertilized by the sperm of your prime sire, the egg begins to divide. It grows to form eight cells within the first three days of development. The embryo implants in the uterus by about four days. The cells then rearrange into three distinct tissue types and the embryo continues to grow. These stages are similar to the process in other mammals including humans.

## Fetal growth

The major organs form over the course of the first three months of development. By about 120 days, the calf will have reached half its final length. Limb development begins as early as the 25th day of pregnancy, while the heartbeat may be audible even sooner. Around 75% of the growth in size takes place during the last three to four months of gestation.

Just as in humans, it is important that pregnant cows receive adequate nutrition in order to ensure maximum fetal growth. Several studies cited by the University of Nebraska-Lincoln found that restricting nutrients during pregnancy was linked to an increase in calf mortality and disease susceptibility.

## Foetus size

During the first month, the fetal cow is smaller than your fingernail. The second month the foetus will grow to be the size of a mouse and the third, the size of a rat. By the fourth month the baby cow is the size of a large cat. By the sixth month it has reached almost birth size, or the size of a beagle dog.

From days 35 to 50 the fetus is settled on the pelvic floor. On day 60, it can be found in the pelvic/abdominal region. During days 90 to 150 the fetus is securely in the abdomen. What do the veterinarian feel for in a rectal pregnancy exam?

The veterinarian will be able to feel uterine asymmetry/fetal slip at about 35 days of pregnancy and the membrane slip at around day 60. At 60 days, the fetus can be felt (10 – 15cm). After 120 days, placentomes and fremitus vibrations and pulsing of the uterine artery is probable.

Within the first two to six hours of labour, the calf rotates into an upright position and uterine contractions begin. The cow's water breaks and if all goes well, a calf will be born. There are several diseases that can cause abortions or misconception. Malnutrition should not be underestimated for foetal losses. Protect your future animals by vaccination the female animals against, Brucellosis, Salmonellosis etc.

## Cattle Gestation Periods

Breed	Average Days (±7 - 10 days)
Angus	281
Ayrshire	279
Brahman	292
Brown Swiss	290
Charolais	289
Guernsey	283
Hereford	285
Holstein	279
Jersey	279
Limousin	289
Shorthorn	282
Simmental	289

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References:

1. <http://www.ehow.com/facts/fetal-growth>