

Physical examination

The normal body temperature:

The body can only work properly at a certain temperature. The animal body maintains itself at a constant temperature, within a small range, in order for the systems to work properly. This normal body temperature is different in different types of animals.

There are a number of ways by which animals control the temperature of the body:

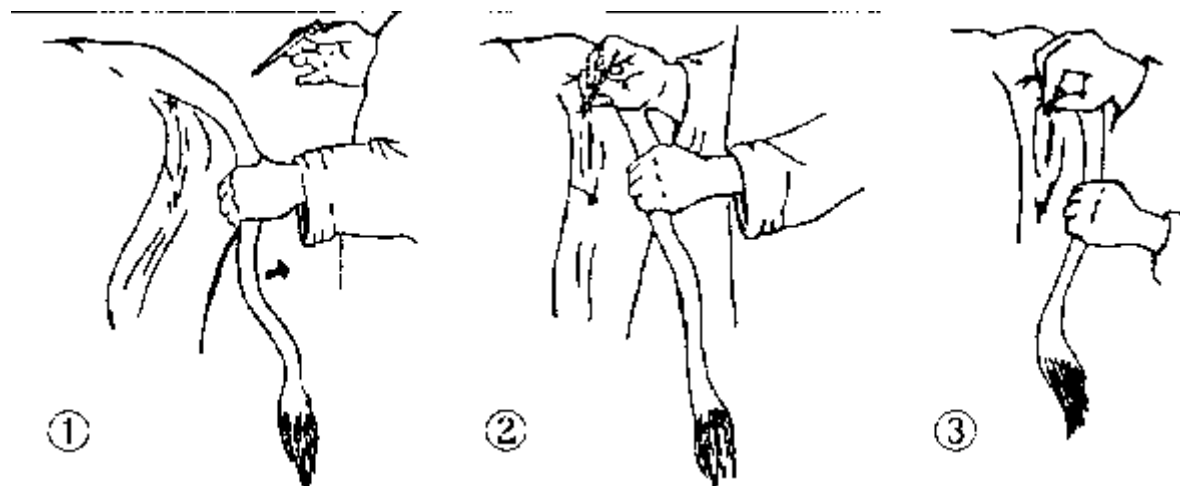
- ❖ Hair, wool, walking, running, shivering and the burning of energy in feed keep the body warm.
- ❖ Sweating, panting, wallowing in mud, and lying in the shade cool the body.

Measuring body temperature:

Use a thermometer to measure the temperature of the body. The unit of measurement is degrees centigrade ($^{\circ}\text{C}$). We measure the body temperature of animals by placing a thermometer in the anus.

How to take the body temperature of animals:

1. Before use it you must make sure that the mercury level is below 35°C . If it is not, shake the thermometer to make the level go down.
 2. Every time use the thermometer clean it with cold water and soap or disinfect it afterwards.
 3. Control the animal.
 4. Move the tail to the side.
 5. Put the thermometer gently into the anus, as far as possible.
 6. Hold the thermometer at an angle so that it touches the wall of the rectum.
 7. Hold the thermometer in place for half a minute. If you do not have a watch count slowly up to 30 (one, two, three, thirty).
 8. Remove the thermometer and wipe it if necessary and read it. Do not touch the bulb as this could change the reading.
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- ❖ Do not wash the thermometer in hot water as this will burst it. Do not leave your thermometer in the sun as this may burst it.



Normal body temperatures

Animal	Normal Temperature °C	Normal Animal	Temperature °C
Cattle	38.5	Calf	39.5
Buffalo	38.2	Goat	39.5
Sheep	39.0	Camel*	34.5-41.0
Chicken	42.0	Horse	38.0

Body temperatures may be 1°C above or below these temperatures.

If you suspect that the animal has a high temperature use thermometer to check it. Remember that a high temperature is one sign of ill health. When an animal has a high temperature it has a fever.

Physiological rises in temperature varying up to 1.5°C (3°F), occur after the following condition:-

- 1- excessive feeding.
- 2- exercise.
- 3- day of parturition.
- 4- high atmospheric temperature.
- 5- when the animal is excite.
- 6- In a sick animal even if the disease is non-febrile

Pulse rate

The pulse is a valuable index of the status of the circulatory system. It is palpated with the fingers lightly resting on a superficial artery, preferably with bone or other hard tissue directly underlying. Too much pressure may compress the artery and obliterate the pulse, particularly if it is small or weak.

In the process of evaluating the pulse, the examiner must be able to recognize an animal's state of being and take into consideration such factors as fright and excitement. He should also be able to recognize pathological irregularities in the pulse and correlate these with the clinical signs observed.

Sites for Taking the Pulse

Horses

1. The facial artery is the vessel that is most commonly used to take the equine pulse. This vessel can be palpated as it curves around the lower border of the mandible.
2. Another vessel that is also commonly used is the median artery which is located on the medial aspect of the forearm, just below the level of the elbow and just behind the border of the radius.

Cattle

1. The most common vessel used to take the pulse in the bovine is the ventral coccygeal artery.
2. The facial artery on the lateral aspect of the mandible is also commonly used.

Sheep, Goats and Young Calves

Femoral Artery

Normal Pulse Rate - Beats/Minute

<u>Animal</u>	<u>Range</u>
Horse	28-40
Neonatal foals	100
Foals, 6 months old to 1 yr.	45-60
Cattle	40-80
Calf (young)	100-120
Sheep and goat	70-90

If the pulse cannot be taken at the sites given above because of restlessness, trembling, etc, auscultation of the heart with a stethoscope and counting the beats may accurately reflect the pulse rate.

Respiratory rate:

The rate may be counted by

- 1- Observation of rib or nostril movements,
- 2- Feeling the nasal air movements
- 3- Auscultation of the thorax or trachea.

Normal Respiratory Rates

<u>Animal</u>	<u>Range</u>
Cattle (adult)	8-16/min.
Cattle (yearling)	15-30/min.
Sheep and goats	20-30/min.