

EXPERIMENT-2

Aim: Recording of body temperature.

Principle:

Body temperature is the degree of sensible heat or cold which represents the balance between production and loss of heat by the body. Normal body temperature. The physical properties of water in blood help to maintain body temperature. Normally, body temperature in adult human is 37°C (Celsius) or 98.4°F (Fahrenheit) when measured orally. This temperature corresponds to the temperature of vital organs of body and is also called as 'core or inner temperature'. The temperature on skin of body is called as surface temperature. The constant core temperature of body enables it to carry on various physiological processes required for normal functioning. Physiological measurement of temperature is one of the first tests observed in a person if he/she is not feeling well. This is done by using a clinical thermometer. The body temperature is commonly recorded on three body locations i.e. mouth, rectum and arm pit. When the person cannot hold the thermometer in mouth, then arm pit or rectal temperature is Mercury tube recorded. In general, arm pit temperature also called as axillary temperature is 1°F less than oral temperature which in turn is 0.5°F to 1°F less than rectal temperature. An elevation in body temperature (99 to 105°F) or (37.2 to 40.5°C) is called fever or pyrexia which is usually due to bacterial, viral or other microbial infections.

Procedure:

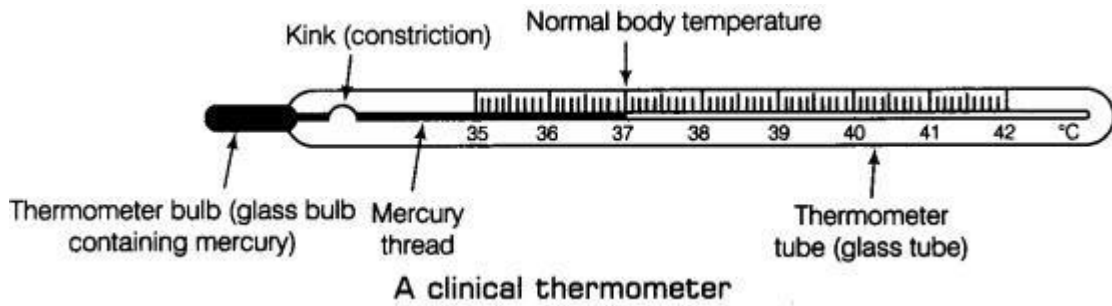
Set the lowest reading in the thermometer by holding the end opposite to the mercury bulb firmly and shaking it downwards carefully until it reads 95°F or less.

(a) Recording of Mouth Temperature:

1. Ask the subject to place the thermometer under the tongue, and close the mouth. Instruct the subject to use the lips and not teeth to hold the thermometer tightly in Place.
2. During this subject shall be instructed to breathe through the nose.
3. After 2 minutes carefully take out thermometer and record temperature.
4. Take three readings at the interval of 5 minutes and calculate the mean body Temperature.

(b) Recording of Arm Pit Temperature:

1. Ask the subject to place the thermometer in arm pit with arm placed against body
2. After 5 minutes take it out and note the temperature.
3. Take three readings at the interval of 5 minutes and calculate the mean body temperature



Observation:

| Location | 1 st Reading | 2 nd Reading | 3 rd Reading |
|----------|-------------------------|-------------------------|-------------------------|
| Mouth | | | |
| Arm pit | | | |

Result: The mean body temperature recorded was-----