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كلية العلوم

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Subject: Body Temperature

Level: first

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Body Temperature

The normal human body temperature range is typically stated as 36.5–37.5 °C

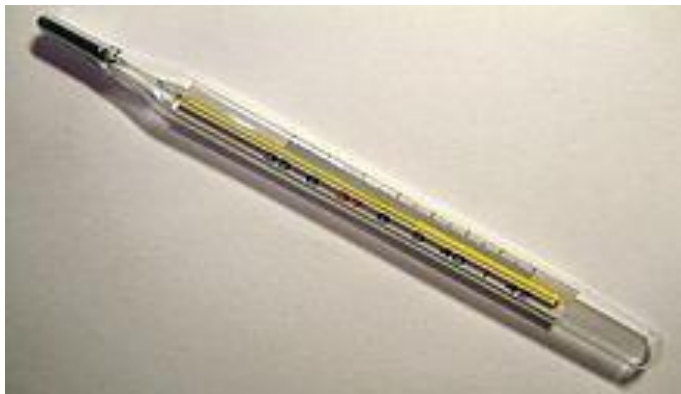
Human body temperature varies

It depends On

- 1- sex, age, time of day
- 2- exertion level, health status (such as illness)
- 3- what part of the body the measurement is taken at
- 4- state of consciousness (waking, sleeping), and emotions.

Body temperature is kept in the normal range by a homeostatic function known as thermoregulation, in which adjustment of temperature is **triggered by the central nervous system**

Methods of measurement



(Figure -1) A medical thermometer showing a temperature



Taking a human's temperature is an **initial part** of a full [clinical examination](#).

There are various types of [medical thermometers](#), as well as sites used for measurement, including:

- In the rectum
- In the mouth
- Under the arm
- In the ear
- On the skin of the forehead over the [temporal artery](#)

How is body temperature controlled?

Our internal body temperature is regulated by a part of our brain called the **hypothalamus**. The hypothalamus checks our current temperature and compares it with the normal temperature of about 37°C. If our temperature is too low, the hypothalamus makes sure that the body generates and maintains heat. If, on the other hand, our current body temperature is too high, **heat is given off or sweat is produced to cool the skin**.

What causes a fever?

People get a fever when their brain sets the body temperature higher than normal. **This may happen as a reaction to germs such as viruses or bacteria**, but it can also happen as a reaction to substances that are made by the body, such as **prostaglandins**. Our body produces prostaglandins to fight off germs.



*A body temperature of **38°C** or more is considered to be a fever in **adults**.

*Temperatures **above 39.5°C** are considered to be a **high fever**.

* **very high fever is defined as any temperature above 41°C.**

A temperature between 37.5°C and 38°C is an elevated body temperature.

Symptoms of Fever

Symptoms of a fever can be constant or intermittent (come and go). They include: -

- Feeling warm or hot
- Skin warm to touch
- Flushed face
- Tired eyes
- Chills



Symptoms of a Fever



Tired eyes

Skin warm to touch



Chills



Feeling warm or hot



Flushed face