

# A simple study on Fever

**Fever:-** A fever is defined as a body temperature that is higher than normal. The normal body temperature, however, varies slightly among different individuals. The average normal body temperature is 98.6°F (or 37°C). For adults, a fever is when the body temperature is higher than 100.4

**Probable reasons of fever:-** we get a **fever** because your body is trying to kill the virus or bacteria that caused the infection. Most of those bacteria and viruses do well when your body is at your normal temperature. But if you have a **fever**, it is harder for them to survive. **Fever** also activates your body's immune system.

Generic medicine of fever is Acetaminophen or paracetamol.

The active substance is paracetamol. Each tablet contains 500mg of paracetamol. The other ingredients are, maize starch, **potassium** sorbate, purified talc, stearic acid, povidone, and soluble starch.

**Reason for which paracetamol is use in fever:** - Because **Paracetamol** reduces **fever** by affecting an area of the brain that regulates our body temperature (the hypothalamic heat-regulating center). **Paracetamol** is about as effective as aspirin and ibuprofen at relieving mild to moderate pain and reducing **fever**, but unlike these it doesn't reduce inflammation.



Chemical structure of paracetamol is:-  $C_8H_9NO_2$

**Molar mass:** 151.163 g/mol

**Melting point:** 169 °C

**Other names:** N-acetyl-para-aminophenol (APAP),  
acetaminophen (USAN US)

**Drug class:** Analgesics and antipyretics

**Metabolism:** Predominantly in the liver

**Onset of action:** Pain relief onset by route: By mouth – 37 minutes; **Intravenous** – 8 minutes

**IUPAC ID:** N-(4-hydroxyphenyl)acetamide, N-(4-hydroxyphenyl)ethanamide

**Effects in overdose of paracetamol:-** There is only a small difference between the maximum daily dose of **paracetamol** and an **overdose**, which can cause liver damage. Large amounts of **paracetamol** are very dangerous, but the effects often don't show until about two to three days after taking the tablets.

**Side effects of paracetamol:-** \* an allergic reaction, which can cause a rash **and swelling.**

\* flushing, low blood pressure and a fast heartbeat – this can sometimes happen when paracetamol is given hospital into a vein in your arm.