

The COVID-19 Vaccine

What **ingredients** are in the available COVID-19 vaccines?

The main ingredients in the Pfizer and Moderna vaccines are very similar and have been tested for safety. The development of the vaccines marks a huge step towards herd immunity and the end of the pandemic.



The Moderna vaccine contains:

- mRNA
- Lipids
- Salts
- Sugar
- Acids
- Acid Stabilizers

The Pfizer vaccine contains:

- mRNA
- Lipids
- Salts
- Sugar

The ingredients in the vaccines all have important roles in the vaccine's effectiveness:

- **mRNA:** (messenger ribonucleic acid) contains genetic material that provides instruction for our body on how to make a viral protein that triggers an immune response within our bodies. This immune response is what causes our bodies to make the antibodies needed to protect us from getting infected if exposed to the coronavirus.
- **Lipids:** protect the mRNA and help the mRNA slide inside the cells
- **Salts:** help balance the acidity in your body
- **Sugar:** helps the molecules hold their shape during freezing
- **Acids and Acid Stabilizers:** helps maintain the stability of the vaccine

Learn more about the vaccine at mass.gov/vaccinesforYOUTH