Inside Messenger RNA COVID-19 Vaccines

COVID-19 vaccines developed by Pfizer-BioNTech and Moderna use messenger RNA (mRNA) to stimulate a response from your immune system. Each vaccine delivers a combination of active ingredients and components to help your body build protection against the disease.

**ACTIVE INGREDIENTS**

RNA is a template to produce a specific protein. The RNA tells our cells to produce a viral protein that triggers an immune response.

**LIPIDS**

Fatty molecules form a protective capsule and aid in delivery and protection of the RNA.

**SALTS**

Buffers that shield the vaccine and balance acid levels to match the pH of our bodies.

**SUGARS**

Protectant for lipids; keeps fatty molecules from being damaged at extremely cold storage temperatures.

*Both mRNA COVID-19 vaccines include polyethylene glycol (PEG) 2000, a lipid known in rare cases (less than .001%) to cause anaphylaxis in vaccine recipients.*

- Both mRNA COVID-19 vaccines are **95% effective** after two full doses.
- You should receive two doses of the **same** mRNA vaccine.
- Maximum protection begins **14 days** after your second dose.

For more information on COVID-19 vaccines, please visit: [coronavirus-sd.com/vaccine](http://coronavirus-sd.com/vaccine)