

# COVID-19 mRNA Vaccine

The first authorized vaccines for COVID-19 use mRNA technology. Here is how these new mRNA vaccines train your body to detect and stop COVID-19.



The vaccine contains mRNA (messenger RNA). The mRNA acts as a set of instructions for building the spike protein found on the surface of the COVID-19 virus. The vaccine does not contain DNA and does not interact with your DNA. The vaccine does not contain a full copy of RNA. It does not enter the cell's nucleus.



Once the vaccine is given, your cells read the mRNA and start to make the spike protein. No other parts of the COVID-19 virus are made. Your cells secrete the spike protein to their surface. The vaccine's mRNA inside your cells quickly breaks down and is disposed of.



Your immune system detects the foreign spike protein. It responds by developing antibodies, then it breaks down and disposes of the spike proteins.



Your vaccinated body can now recognize COVID-19 based on its unique spike proteins. This means your immune system can respond rapidly to COVID-19 should you be infected in the future.