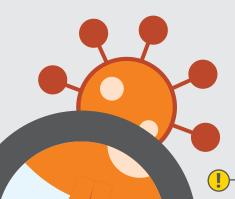


# HOW MRNA COVID-19 VACCINES WORK

## Understanding the virus that causes COVID-19.

Coronaviruses, like the one that causes COVID-19, are named for the crown-like spikes on their surface, called **spike proteins**. These **spike proteins** are ideal targets for vaccines.



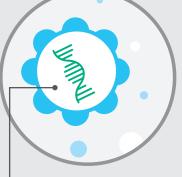
When your body responds to the vaccine, it can sometimes cause tiredness, headache, muscle pain, nausea, or mild fever.

These are normal signs the vaccine is working.

#### What is a mRNA?

Messenger RNA, or mRNA, is genetic material that tells your body how to make proteins.





The vaccine DOES NOT contain ANY virus, so it cannot give you COVID-19. It cannot change your DNA in any way.

### What is in the vaccine?

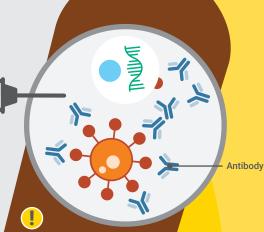
The vaccine is made of mRNA wrapped in a coating that makes delivery easy and keeps the body from damaging it.

### How does the vaccine work?

The mRNA in the vaccine teaches your cells how to make copies of the **spike protein**.

If you are exposed to the real virus later, your body will recognize it and know how to fight it off.





After the mRNA delivers the instructions, your cells break it down and get rid of it.