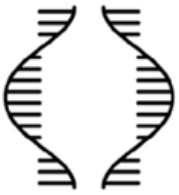


The Science of Vaccines: How the COVID-19 mRNA Vaccine Helps Your Immune System Fight COVID-19



1. Scientists take a part of a virus's genetic code that tells cells what to do.

2. and coat it in a fatty layer to protect it and allow it to enter cells



3. This is injected into our arm muscles. Our muscles have immune cells to start the immune response.

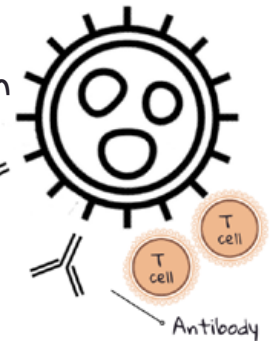


Muscle tissue also keeps the vaccine components localized, meaning that it stays in the arm muscle and rarely moves anywhere else.

4. The vaccine then tells our cells to produce the virus's spike protein.



5. Spike proteins are recognized as intruders by the immune system, causing the production of a protective army (antibodies & T cells) that can specifically recognize and fight the coronavirus.



6. Now, if you get infected with the real coronavirus, the body remembers those spike proteins, and triggers your protective army to quickly and powerfully fight off the virus.

