COVID VACCINE 101

DR. BUHR

WHAT YOU SHOULD KNOW

- HOW DOES IT WORK?
- DO THE VACCINES PROTECT ME FROM COVID?
- WILL THE VACCINES MAKE ME SICK? IF SO, HOW LONG?
- WILL THE VACCINES DO OTHER THINGS TO ME? MYTHS ABOUT VACCINE.
- IF I HAVE MORE QUESTIONS, WHERE DO I GET ANSWERS?

HOW DOES IT WORK?

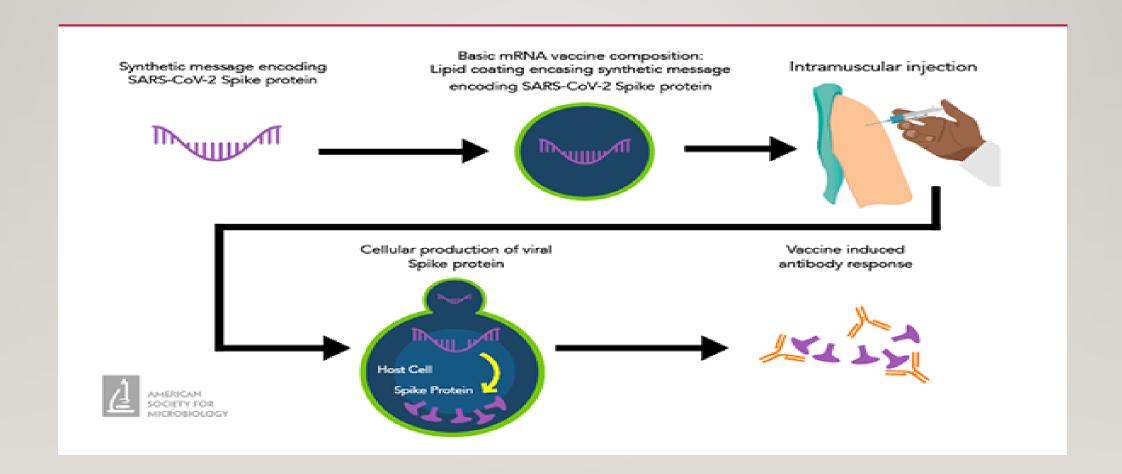
- Made from an mRNA (messenger RNA)
- What is that???
- Think of mRNA as part of a recipe to make something, like pizza (mmmm...pizza...) – it is a SMALL PIECE of the virus
- mRNA is like one of the ingredients (think flour, water for dough, pepperoni, tomato sauce, etc.)
- BUT, mRNA itself DOES NOT make a pizza (it is not the whole virus)



Vs.



HOW DOES IT WORK?



HOW DOES IT WORK?

• HOW COVID VACCINE WORKS

DO THE VACCINES PROTECT ME FROM COVID?

- Two vaccines: Pfizer and Moderna
- Peoples Clinic is using the Moderna vaccine
- Both vaccines are more than 90% effective at preventing COVID infection in Phase III
 Studies
- More importantly, they both had NO deaths from the vaccine and side effects in most people were mild and self-limited (2-4 days)

DO THE VACCINES PROTECT ME FROM COVID?

- Pfizer vaccine study in New England Journal of Medicine December 2020:
 - 21,720 with BNT162b2 (vaccine) and 21,728 with placebo (not vaccine)
 - Seven days after 2nd dose of vaccines/placebo: 8 COVID cases in people that got the vaccine,
 162 COVID cases in people that got placebo
 - One severe COVID case in person getting vaccine, 9 severe cases COVID in people getting placebo
 - 95% effective at preventing COVID!!!

DO THE VACCINES PROTECT ME FROM COVID?

- Moderna Vaccine (Peoples Clinic vaccine) New England Journal of Medicine December 2020:
 - 15,210 people got the COVID vaccine and 15,210 got placebo (not vaccine)
 - 96% got both injections
 - Eleven COVID cases in vaccine group vs. 185 in the placebo group.
 - ZERO people with severe COVID in vaccine group vs. 30 people with severe COVID in placebo group
 - 94.1% effective at preventing COVID!!! 97.5% effective in communities of color!!!

WILL THE VACCINE MAKE ME SICK?

- Pfizer vaccine study:
 - Side effects were generally mild (arm pain, headache, fatigue) and limited to several days after vaccine dose – NOBODY DIED FROM GETTING THE VACCINE!!!
- Moderna vaccine study:
 - Side effects were generally mild (arm pain, headache, body aches) and were more common after 2nd dose BUT lasted on average 3 days or less - NOBODY DIED FROM GETTING THE VACCINE!!!
- Almost 420,000 people have died from COVID infection in the United States since the start of the pandemic

WILL THE VACCINES DO OTHER THINGS TO ME? MYTHS ABOUT VACCINE.

- WILLTHEVACCINE CHANGE MY DNA??? NO!!!
- WILL THE VACCINE MAKE ME INFERTILE??? NO!!! See this article: <u>USA Today -</u>
 <u>COVID Vaccine Debunking Claims Causes Infertility Sterilization</u>
- DOES THE VACCINE HAVE A MICROCHIP IN IT??? NO!!!
- DOES THE VACCINE GIVE ME COVID??? NO (REMEMBER THE VACCINE IS THE PEPPERONI, NOT THE PIZZA!)
- WILL I GROW THREE HEADS AND A TAIL FROM THE VACCINE??? NO!!!

IF I HAVE MORE QUESTIONS, WHERE DO I GET ANSWERS? MYTHS ABOUT VACCINE.

- HOW DO ITELL BETWEEN TRUE AND UNTRUE MEDICAL STORIES?
 - CONSIDER THE SOURCE
 - Would you trust this source with your health?
 - READ BEYOND THE HEADLINE
 - Are they trying to scare you? Do they want you to click/share something? A RELIABLE SOURCE WOULD NOT DO THAT!
 - FIND A RELIABLE SOURCE INSTEAD

IF I HAVE MORE QUESTIONS, WHERE DO I GET ANSWERS?

- TALK TO YOUR PRIMARY CARE PROVIDER
- CDC COVID VACCINE INFORMATION: CDC COVID VACCINE INFO
- MAYO CLINIC COVID VACCINE INFORMATION:
 - MAYO COVID VACCINE INFORMATION
 - MAYO COVID VACCINE MYTHS DEBUNKED
- UNITYPOINT HEALTH COVID VACCINE INFORMATION: <u>UNITYPOINT COVID VACCINE INFORMATION</u>
- IDPH COVID VACCINE INFORMATION: IDPH COVID VACCINE INFORMATION
- AMERICAN SOCIETY OF MICROBIOLOGY COVID VACCINE INFORMATION (MORE INFO ON mRNA vaccines in general too):
 - ASM COVID VACCINE INFORMATION