

COVID-19 VACCINES: ADDRESSING CONCERNS, OFFERING COUNSEL

Miami Temple Health Ministry

The questions and answers that follow first appeared in the *Adventist Review* on December 18, 2020. They were part of a much longer article discussing not only the science surrounding the vaccine, but also biblical teachings surrounding vaccines in general. We encourage you to read the article in its entirety; the link to the article is included at the end of this excerpt. This information is being presented as general information and should not be considered formal medical advice. If you have questions or concerns about the safety and efficacy of the COVID-19 vaccines as relates to your personal health situation, please discuss them with your primary care practitioner.

In a conversation with the Loma Linda University School of Public Health (LLUSPH), Michael Hogue, dean of the Loma Linda School of Pharmacy, who serves on the U.S. Centers for Disease Control (CDC) Advisory Committee on Immunization Practices Workgroup on COVID-19 Vaccines and on the San Bernardino County COVID-19 Vaccine Taskforce in California, shared the following insights regarding frequently asked questions on the Pfizer/BioNtech and Moderna vaccines. His insights and explanations of common questions appear below.

Question: Does the mRNA (messenger Ribonucleic Acid) vaccine change your DNA?

FACT: Both referenced vaccines are based on mRNA, which is a first for vaccines, but the technology has been used in medical treatments for the past 15 years. The vaccine enters into a

cell's cytoplasm (the fluid within the cell), where it stimulates the production of antibodies to fight the SARS-CoV-2's spike protein. Since it does not enter the nucleus of the host cell, it does not change the DNA or genetic structure/function.

Question: Can it be safe and effective, as it was developed so quickly?

FACT: Due to current technology, the SARS-CoV-2 virus was sequenced within days of its being identified, and work on a vaccine was started right away. The sample size for the large study is 40,000 people (the average FDA vaccine study sample size is usually only 27,000). We are two months into a two-year study. Data is being carefully monitored.

The first dose showed a 50 percent immune response protection. The second dose reached 95 percent protection! (Only Hepatitis A vaccine is higher, at just about 100 percent protection.) The study was well designed and represented U.S. demographics very closely, with the exception of Native Americans (and the ongoing study is working to rectify that). Efficacy and side effects were similar in all ethnic groups.

Question: Are the ingredients and preservatives in the vaccine dangerous?

FACT: There are no preservatives in these two COVID-19 vaccines, which is why they require deep freeze/freezer facilities for storage and transport. The vaccine is carefully purified.

Question: What are the side effects?

FACT: So far, 10 percent of subjects have reported fever by the second day, and in 24 hours, 50–60 percent reported feeling “achy.” There have so far been very few serious side effects with the Pfizer/BioNtech vaccine, including three cases of significant allergic reactions (unusually low; probably due to the non-use of preservatives).

Dr. Hogue further commented that if a person has already tested COVID-19 positive in the past, that person can still get the vaccine; it will simply increase the person's antibody levels. He also pointed out that taking the vaccine in the USA is voluntary, not mandatory.

The efficacy of the Pfizer/BioNtech and Moderna vaccines is similar, but they are not interchangeable (if a person starts with one, the second dose has to be from the same brand). For the Pfizer vaccine, there is 21-day interval between the two doses; it is reported that for the Moderna vaccine, the interval will be 28 days between doses. The vaccine is not authorized for use during pregnancy or in those under 16 years of age.

General Conference Department of Health Ministries
General Conference Biblical Research Institute,
and Loma Linda University School of Pharmacy
and School of Public Health

Source: *Adventist Review* Online | COVID-19 Vaccines: Addressing Concerns, Offering Counsel