

The Safety of mRNA in Animal Agriculture

What is mRNA?

Much like DNA, mRNA (messenger ribonucleic acid) occurs naturally in all living organisms. mRNA is able to quickly break down in all forms of life, including digestion of food.



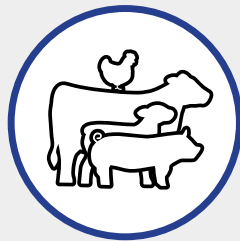
Is it safe?



USDA's Animal Plant Health Inspection Service (APHIS) in its Center for Veterinary Biologics (CVB) regulates veterinary medicine to ensure the therapeutics available for diagnosis, prevention, and treatment of animal diseases are pure, safe, potent, and effective. CVB's evaluation includes safety of food derived from livestock that have received a vaccine.

Are Livestock Vaccinated for COVID-19?

There are no COVID-19 vaccinations for traditional food animals (beef/dairy cattle, pigs, goats, sheep, chickens). The one veterinary COVID-19 vaccine licensed in the U.S. is used for mink.

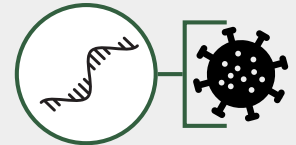


Does mRNA vaccine technology change my genes?

The mRNA vaccines cannot intermingle or change the genetic material of the person or animal receiving the vaccine.

How does it work?

Messenger ribonucleic acid (mRNA) technology and its application to human and animal health has been researched since 1961. In 2020, the mRNA platform was used to develop some COVID-19 vaccines. mRNA vaccines can be constructed quickly using only the pathogen's genetic code. The mRNA vaccines teach animal cells how to make a protein — or even just a piece of a protein—that triggers an immune response inside the body. This immune response, which produces antibodies, helps protect against disease.



Why do we need access to vaccines and new vaccine technology?

Vaccines for livestock protect against diseases and ensure animal safety and food security. Limiting mRNA vaccine technology would mean losing a new tool to protect animals from emerging diseases.

Can I become vaccinated through the meat, milk, or eggs I eat?

No. The USDA requires withdrawal times for all vaccinations administered to livestock. This ensures meat, milk, and eggs are safe for human consumption. Scientists agree that mRNA vaccines cannot be passed to humans through food. The use of recommended cooking temperatures and the digestion in the human gut destroy mRNA.

