The COVID-19 pandemic has drastically changed our lives in ways few could have anticipated. To combat the virus, researchers around the world are developing treatments and vaccines. One of the most promising treatments is known as an mRNA vaccine, which uses a small piece of genetic material called messenger RNA to instruct cells to produce a protein found on the surface of the virus. This triggers an immune response, helping the body build up defenses. Clinical trials have proven mRNA vaccines to be highly effective at preventing COVID-19 infection, as well as reducing the severity of symptoms in those who become infected. Moreover, mRNA technology can be quickly adapted to target new variants of the virus, making it an ideal treatment for continuing the fight against COVID-19 and other infectious diseases.