

Ingredients of the Pfizer-BioNTech and Moderna mRNA COVID-19 Vaccines

For both the Pfizer-BioNTech and Moderna COVID-19 vaccines, severe allergic reaction (e.g., anaphylaxis) to any component of the vaccine is a contraindication to vaccination. The following is a list of ingredients for the [Pfizer-BioNTech](#) and [Moderna](#) COVID-19 vaccines, as reported in the prescribing information for each vaccine.

Description	Pfizer-BioNTech COVID-19 vaccine	Moderna COVID-19 vaccine
mRNA	Nucleoside-modified mRNA encoding the viral spike (S) glycoprotein of SARS-CoV-2	Nucleoside-modified mRNA encoding the viral spike (S) glycoprotein of SARS-CoV-2
Lipids	2[(polyethylene glycol)-2000]-N,N-ditetradecylacetamide	Polyethylene glycol (PEG) 2000 dimyristoyl glycerol (DMG)
	1,2-distearoyl-sn-glycero-3-phosphocholine	1,2-distearoyl-sn-glycero-3-phosphocholine
	Cholesterol	Cholesterol
	(4-hydroxybutyl)azanediyl)bis(hexane-6,1-diyl)bis(2-hexyldecanoate)	SM-102 (Proprietary to Moderna)
Salts, sugars, buffers	Potassium chloride	Tromethamine
	Monobasic potassium phosphate	Tromethamine hydrochloride
	Sodium chloride	Acetic acid
	Dibasic sodium phosphate dihydrate	Sodium acetate
	Sucrose	Sucrose

Note: Both the Pfizer-BioNTech and Moderna COVID-19 vaccines contain polyethylene glycol (PEG). PEG is a primary ingredient in osmotic laxatives and oral bowel preparations for colonoscopy procedures, an inactive ingredient or excipient in additional medications (including some injectable contraceptives and steroids), and is used in a process called pegylation to improve the therapeutic activity of some medications (including certain chemotherapeutics).^{1,2} Neither of the Pfizer-BioNTech or Moderna COVID-19 vaccines contains preservatives.