

# Breaking Down COVID-19 Vaccine Ingredients

By Heather Simpson,  
Back to the Vax

If you are anything like me, you probably want to know exactly what ingredients are that go into your child's body. I get it. I used to study ingredients on every single box of food before giving it to my baby, therefore it felt natural to research every ingredient in vaccines. What I quickly found was that the vaccine ingredients are typically big and somewhat scary sounding words. When you break them down to what they mean in everyday life, however, they become much easier to understand and digest.

To demonstrate this, below are the ingredients found in lavender essential oil.



For a while, there was a meme being passed around that listed these lavender ingredients, with a caption of “Look at these scary vaccine ingredients!” followed up by some fine print that said “These were actually lavender essential oil ingredients.” It was a very powerful and eye opening meme, to say the least.

Below are the ingredients to two different vaccines that are available for children right now, Pfizer and Moderna. Beside each ingredient, I have written what that means in real life.

Vaccine Ingredient	Meaning/use
Sodium phosphate dibasic [dihydrate] (Pfizer)	Emulsifier
Sodium chloride (Pfizer)	Salt
Potassium chloride (Pfizer)	Potassium
Sucrose (Moderna, Pfizer)	Table sugar
Acetic acid (Moderna)	Vinegar
Sodium acetate trihydrate (Moderna)	Shelf-life extender, pH regulator
Monobasic potassium phosphate (Pfizer)	Buffer
Tromethamine hydrochloride (Moderna)	Makes blood or urine more alkaline or less acidic
DSPC (Moderna)	Used in prep of liposomes for transfection & drug delivery applications
Lipids (Moderna, Pfizer)	Tiny balls of fat called lipid nanoparticles (LNPs) <ul style="list-style-type: none"> <li>• Ionized lipids</li> <li>• Pegylated lipids</li> <li>• Phospholipids</li> <li>• Cholesterol</li> </ul>
mRNA (Moderna, Pfizer)	Messenger ribonucleic acid is a type of RNA found in cells. They carry the genetic information needed to make proteins.



Vinegar and table sugar sound way less scary than their scientific names. And they should, because they are not scary ingredients. Remember, all of these ingredients were put into vaccines for a reason – to make them safer and more effective.



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