**Viral Vector Vaccine Q&A’s**

**Question**
"What are AstraZeneca and Johnson & Johnson’s viral vector vaccines?"

**Answer**
A viral vector vaccine uses a safe virus as a "carrier." It has information about COVID-19 to teach your body how to make COVID-19’s spike protein. Your immune system memorizes the spike protein and destroys the protein and the safe virus. Now if you get COVID-19, your body will know how to fight it off effectively.

**Question**
"How effective are viral vector vaccines?"

**Answer**
Viral vector vaccines are very effective at reducing severe COVID-19 symptoms, hospitalization, and death. This can relieve pressure on the healthcare system and may allow us to end lockdown sooner. They also seem to reduce spread from one person to another.

**Question**
"Are the ingredients in viral vector vaccines safe?"

**Answer**
Yes! Viral vector vaccines use a safe virus to teach your body about COVID-19. Other ingredients include salts, sugar, water, and medical-grade alcohol. There are no blood products, animal products, or fetal tissues.

**Question**
"What is the risk of blood clots with viral vector vaccines?"

**Answer**
Viral vector vaccines can cause a rare but serious blood clotting disorder. For AstraZeneca, the risk is estimated to be 1 in 60,000 for the first dose and 1 in 600,000 for the second dose. The risk with the Johnson & Johnson vaccine is around 1 in 500,000. These numbers may change as more people get the vaccines.