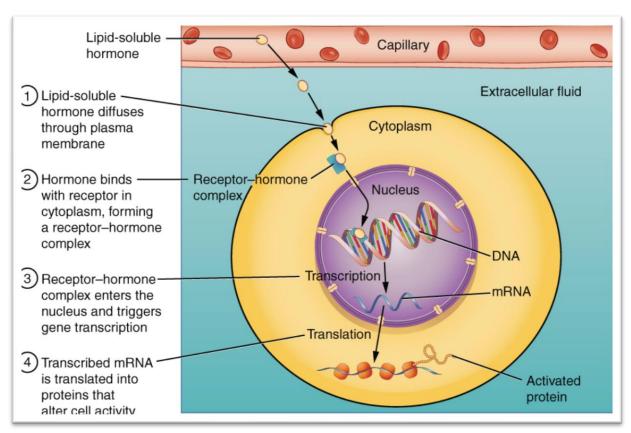
## Just why it is so important to wash our hands?

We are getting lots of advice from the health services around the world telling everyone that washing your hands is the best way to defeat Covid-19. But some people seem to think that this is a bit unnecessary and I have personally witnessed individuals using public washrooms and leaving without bothering to wash their hands first.

So, for all those individuals who fall into the 'why bother' category, here is a simple explanation from a Critical Care Nursing Sister, Mads Sheehan, based in the UK:

"So how the hell can washing your hands be so important, and how can it defeat Covid-19 virus that's causing so much havoc worldwide? Well here's the science bit, because some of my friends who are nerds like to know "why" something happens.

The outer wall of a virus is made of lipids, they're rather like oils or fats, that's a simple way of putting it. It's called a lipid layer. Behind the lipid layer is the virus, it's made up of proteins and RNA, which is rather like DNA and it's what lets the virus replicate. That's really it, it's that simple.



So, what about the washing of hands with soap? Here's the part that nobody is being told, but it's important. Soap is made up of loads and loads of lipids, it is what makes soap feel so soft and smooth. When you wash your hands really well you get all these lipids on your hands. So if you have Covid-19 on your hands the lipids in the virus wall start to break down, because the lipids in the virus lipid layer are soluble in the lipids in your soap on your hands.

So when you break down the lipid layer you end up destroying the proteins and the RNA. It's rather like years ago when your Dad used to clean a paintbrush with turpentine, it's because the paint was soluble in turpentine.....it's really that simple.

And for those people are searching high and low for antibacterial soap....don't bother. This is a virus, not a bacteria. Also, antibacterial soap is really just expensive soap.

## Break down the lipid layer with lipids in soap and you'll kill the virus.

Mads Sheehan - Critical Care Sister at Basingstoke and North Hampshire Hospital, UK