This is what applies to the corona vaccines

Vaccination against COVID-19 is in progress in Sweden, and there is great interest in the vaccines. Unfortunately, misconceptions, myths and pure disinformation on the subject are circulating, which may cause unnecessary anxiety for many.

**Fighting disinformation**

**Contracting an infectious disease carries a greater risk than taking a vaccine.**

There are false claims that it would be better to catch the virus than to take the coronavirus vaccine. This is not true.

Contracting an infectious disease carries a greater risk than taking a vaccine. Many infectious diseases can cause long-term medical problems.

COVID-19 is a serious and unpredictable disease and the benefits of being vaccinated are much greater than the risk of suffering from a serious side effect.

**Protect yourself and others from spread of infection**

**It is better to be vaccinated against COVID-19 than to rely solely on a strong immune system.**

There are false claims that it would be better to rely on having a strong immune system than to be vaccinated against COVID-19.

Of course, a good immune system can help us to better withstand various infections that we are exposed to. But it is impossible to know in advance if you have a strong immune system against a specific disease, and it is risky to take a chance. COVID-19 is a new disease. The SARS-CoV-2 virus was detected in December 2019 and there is no scientific evidence that certain groups might already have good immune protection against the disease.

Vaccination is the best and safest way to protect against infectious diseases.

**The coronavirus vaccines that are approved in the EU provide good protection.**

There are false claims that the coronavirus vaccines would not provide adequate protection against the disease. This is not true.

There is extensive historical knowledge about the usefulness of vaccination against serious infectious diseases. Vaccines normally have a protective effect of about 60-90%, which both protects you from the disease and helps prevent the spread of the disease. The protective effect is always measured at group level, based on the results of clinical trials involving thousands of people. However, it is not possible to determine what protection each individual receives after vaccination.

The vaccines against COVID-19 that have been approved in Sweden have been tested on 20,000-40,000 people and have shown a good protective effect against the disease. COVID-
19 is a disease that can lead to serious illness and death, especially among the elderly and other vulnerable groups. It is therefore important that as many people as possible are vaccinated, especially if you are in a risk group.

**Vitamin D, ivermectin and chloroquine phosphate cannot prevent or treat COVID-19.**

There are false claims that vitamin D and chloroquine phosphate would be effective as a treatment for corona. This is not true.

There is no convincing scientific evidence that vitamin D, ivermectin or chloroquine phosphate can be used to prevent or treat COVID-19. Several studies have been carried out and there are a number of ongoing clinical trials in the world on several of these products, but no study has yet been able to show efficacy convincingly.

Chloroquine phosphate is a medicine used against malaria and can cause serious side effects in case of overdose. Ivermectin is mainly used against various parasitic infections in humans and animals. The EMA has reviewed the research for both of these medicines and concluded that there is no support for use against COVID-19 on the basis of current research.

Vitamin D is formed in the body by sunlight and a normal diet, but it can also be taken as a dietary supplement. According to the National Food Administration, a lack of vitamin D may have significance for susceptibility to respiratory infections, but not enough is known today to be able to say whether vitamin D can reduce the risk of being infected or having serious complications from COVID-19.

**COVID-19: reminder of the risks of chloroquine and hydroxychloroquine**

**There is no connection between vaccination and autism.**

There are false claims that vaccines could lead to autism. This is not true.

Suspicions that vaccines could cause autism took off with a study published in 1998 in the scientific journal The Lancet. Although the authors of the article pointed out that no link between MPR vaccine and autism had been demonstrated by the study, the article was criticised for implying this (Lee et al., Lancet, 1998).

Most of the research group later distanced themselves from this interpretation of the article (Murch et al., Lancet, 2004). The article has since been withdrawn by the Lancet (Lancet, 2 Feb 2010), when irregularities in the study emerged. In Denmark, Finland and the USA, for example, large epidemiological studies have been carried out comparing the incidence of autism and chronic bowel disease before and after the introduction of MMR vaccination in each country. No link has been found in any study between vaccination and the development of any of the diseases. The World Health Organisation (WHO) has also investigated the matter.

**The vaccines do not make us sterile.**

There are false claims that the vaccines are linked to sterility. This is not true.

There is no indication that the COVID-19 vaccines could affect women's or men's fertility.
All medicines and vaccines that have been approved have undergone a variety of studies to identify or exclude various risks. The manufacturer must always carry out a series of laboratory tests (in vitro) and animal tests (in vivo) and carefully describe how a drug works in the body in order to even start tests on humans.

The early tests on humans (phases I and II) pay particular attention, among other things, to toxicity (how toxic a substance is) and whether it can affect the ability of both women and men to have children. The scientific studies that form the basis for the approval of the corona vaccines are presented in the respective investigation reports (EPAR).

**The vaccines cannot change your DNA.**

**There are false claims that vaccines could alter your DNA. This is not true.**

The substance mRNA is found in every cell in our bodies and consists of ribonucleic acid-based structures with instructions to the cell on how to function. Some viruses (including SARS-CoV-2) may contain RNA that instructs the cell to replicate the virus so that it can multiply in the body.

The mRNA-based vaccines against COVID-19 (Comirnaty, Moderna) causes the cells to produce a surface protein similar to the SARS-CoV-2 virus, thus activating the immune system. There is no possibility for these proteins to form virus particles or new RNA. This means that it is not possible to become infected from the vaccine. When a real coronavirus later infects a vaccinated person, the immune system is prepared and can directly attack the virus.

Human cells cannot convert RNA into DNA, so the mRNA vaccine cannot alter the human genome. Also, the mRNA contained in the vaccines is broken down very quickly in the body.

The viral vector vaccines currently approved (Vaxzevria and Janssen) contain DNA as codes for the spike protein from SARS-COV-2. This DNA is translated in our cells into RNA and then to the surface protein which, as with the mRNA vaccines, gives rise to a protective immune response. DNA in these viral vectors cannot be incorporated into our own DNA or alter our genome.

**The corona vaccines do not contain a microchip.**

**There are false claims that the vaccines could contain a microchip for monitoring. This is not true.**

There are no vaccines that contain microchips or any other monitoring technology. Nor is such technology used in any of the vaccines against COVID-19.

**There is no secret content in the vaccines.**

**There are false claims that coronavirus vaccines could contain dangerous substances that are being kept secret. This is not true.**

There is no hidden or secret content in the vaccines. Their contents are described in the summary of product characteristics and the information sheet, which are published on the Swedish Medical Products Agency’s website. A manufacture of medical products and vaccines is subject to inspections by the medical authorities.
As with other medical products, vaccines may also contain various other types of ingredients, known as excipients or residue of ingredients used in the production. The information sheet for every authorised medical product and vaccine contains a complete table of contents.

**You cannot get COVID-19 from the vaccine.**

You cannot contract COVID-19 from the vaccines because they do not contain a functioning virus that can replicate itself. On the other hand, the body's immune system reacts to vaccination in the same way as with a real infection. You may therefore have side effects such as fever and headache and get tired after vaccination, which are common immunological reactions to infections.

None of the approved vaccines against COVID-19 provide complete protection against the disease, so even if you are vaccinated, there is a small risk that you may become infected and fall ill with COVID-19. But that doesn't mean you got the disease through the vaccination.

**The vaccines do not contain human cells.**

**There are false claims that the vaccines contain human cells.**

The approved vector-based vaccines (Vaxzevria, Janssen) contain an inactivated adenovirus, which is a common cold virus. It is used so that the DNA material in the vaccine is absorbed into the cells when it is injected into the muscle. The DNA is modified so that it forms a non-pathogenic surface protein that is identical to the coronavirus SARS-CoV-2 and creates immunity after vaccination.

The adenovirus is grown in commercial cell lines derived from foetuses in the 1970s. During production, these cells have since been removed and are not present in the vaccine.

**The vaccines are approved.**

**There are rumours that the conditional approval given to all COVID-19 vaccines in Europe does not have adequate authorisation.**

The vaccines that have been approved in Sweden and the EU have conditional approvals, which means that there is a requirement for the company to compile additional documentation that has not been included in the approval.

However, the authorities have assessed that there is sufficient evidence that the vaccines are effective and have an acceptable safety profile, as well as that the manufacturing process meets the requirements.

What is requested retrospectively may, for example, be additional data on the manufacturing process or final reports from the clinical studies. If these requirements are not met, approval may be reconsidered. Conditional approval is not unique to these vaccines, but is often used when there is a great medical need to accelerate the possibility of treating or preventing severe illness. The vaccinations now being carried out in Sweden are therefore not a clinical trial.