

Marco Ebert is horrified. Despite the rising number of members and good financial situation, he is forced to close his gym for the second time this year. What has happened?

Something that causes the entire population to tremble. A tiny virus that is highly contagious and for which there is neither medication nor vaccine. The only effective method left for the state is to restrict social activities and thus stop the spread of the virus. The restrictions however, have far-reaching economic and social consequences which Marco and many others experience.

Pharmaceutical companies around the world are feverishly researching vaccines. The research, development and studies take hundreds of millions of euros and valuable time. Will the success of the vaccine be certain once it is approved for the market?

The answer is “no”. Among others, proper vaccine storage is an important factor in preventing and eradicating many common vaccine preventable diseases. Yet, each year, storage and handling errors result in revaccination of many patients and significant financial loss due to wasted vaccines. Improper storage in household refrigerators is a common mistake and often goes unnoticed. The operating instructions teach: eggs belong in the egg compartment, meat and fish in the zero-degree compartment and drinks at the door. Why? Because the temperatures in household refrigerators fluctuate by up to 15°C. The vaccines are much more delicate and far more precious than foods. High temperature fluctuations are deadly for vaccines as they should be stored at constant 5°C. Tainted vaccines are at best no longer effective, at worst they lead to complications when vaccinated. So what to do?

Storage of vaccine in proper pharmaceutical refrigerator built in accordance to DIN standard. DIN standards are a guideline in Germany. Their purpose is to make recommendations based on reliable findings. There is also a DIN standard (DIN 58345) for the storage of vaccines and medicines. The pharmaceutical researcher CureVac and many others follows this standard and develop their vaccines in such a way that they can be kept in the refrigerator, under the condition that a constant storage temperature of 5°C throughout the refrigerator is guaranteed. Because not everything always runs smoothly, according to DIN norm the refrigerators must also be equipped with safety features, e.g. warnings in case of power failure, temperature deviations, etc.

Ultimately, everything is done to ensure that the vaccination can have its full effect and be the final tool in the fight against the pandemic.

Besides Marco Ebert, the whole world is hoping for a rapid end of social restrictions and pharmaceutical refrigerators are playing an important role in making it happen.

Best regards,