

GERMS

On the 31st of August an article was broadcast on Carte Blanche about germs. It is quite amazing to learn about germs and how they affect our daily lives. As they said, "some humans like to live on the edge and they push the boundaries of personal safety with glee and that such risks are definitely not for all of us"

Devi Govender of Carte Blanche did an interview with Professor Eugene Cloete of the University of Pretoria who has devoted his life to study all creatures, small and very small.

Bacteria, in their billions, live in and around us every day and if you happen upon the wrong one at the wrong time, it could be lethal. Eugene Cloete is a microbiologist whose speciality is the unseen world of micro-organisms. He explained that Germs are small little organisms which we cannot see with the naked eye.

To find out how prevalent bacteria are in our everyday environment, Eugene suggested a simple experiment to look at bacteria in general.

A team of young scientists from the University of Pretoria were solicited to explore the seemingly dangerous world of micro-organisms for Carte Blanche. They were sent out to swab everything in sight. After a day of hunting these germs they returned to put the catch in a special incubator where the bacteria could multiply in peace. And oh boy, did they multiply!

They found that in just 24 hours colonies of bacteria have started to grow. These colonies were representative of what was living on all the surfaces that have been swabbed or touched.

Eugene Cloete explained that bacteria multiply rapidly and form colonies. A pavement was sampled. The growth results were massive. This was an indication that many different kinds of bacteria were present on the pavement. He explained that in the tests done there were billions and billions of bacteria and among those there could be a high percentage of bacteria that could potentially be pathogens.

Public toilets are notorious for germs. The swabbing done by the scientists confirmed this. They even found the dangerous E.Coli lurking in there. Eugene said that it is virtually impossible not to pick up germs. Lots of germs were even found on the taps, so even though you are washing your hands, you are continuing to contaminate yourself by closing the tap. The high-tech dryer is also a problem. Eugene explained that the filters and the fan in these dryers suck up bacteria in the air and when used the aid used to dry your hands just blows the same bacteria onto your hands again. The better way is to use a paper towel or to just let your hand dry by themselves.

Statistics show that there are still many people that do not wash their hands even after being to the bathroom. Statistics has shown that about 50% of men do not wash their hand when they have been to the bathroom. Your hands are a major source of contamination of food and of yourself. You have to wash your hands regularly. He explained that if you do not wash your hands when you have been to the toilet you can carry with you disease-causing bacteria. He always says that eating food prepared by someone else is a matter of trust.

Bacteria live all around us every day. They even live on our skins and in our mouths, but Eugene explained, that we should not all get to paranoid now as not all germs are bad for you. In fact some are crucial for our well being. From early on we need to be exposed to germs so that our bodies build up an immune system. We do not need to live in a sterile environment.

Prof Cloete also said that sometime people go overboard and want to make everything to sterile. In the process of using disinfectants and not using them correctly you can breed bacteria that are resistant. He explained that out of the millions of different kinds of bacteria identified that there are only 150 that are pathogens or disease causing and dangerous. In our day to day life we can avoid most of the danger by simple hygiene. To wash your hands is one of the biggest defense-mechanisms that we as humans have to prevent infection. He said that in washing your hands is one of the ways the chain of cholera can be broken in rural areas.

Another test that was done by the professor and his team was coins. An interesting result was that there was no growth of bacteria on the copper coins. He explained to Devi that copper in itself was an antimicrobial compound and that it kills bacteria. So all your copper coins would normally be sterile. In comparison with silver coins and paper money, they have a lot of bacteria growth on them.

He finally said that we will never be able to avoid bacteria and because we do not know if we are in contact with good ones or bad ones, the basic message seems to be: "Use common sense and wash your hands".

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