

PRESS RELEASE

Have you recently had a respiratory infection? Help scientists who study COVID-19

An anonymous and multilingual questionnaire for a study involving 50 countries around the world. The purpose? Understand why the symptoms reported by these patients include loss of the sense of smell and taste. To do that, researchers say they need our help



Trieste, 28 April 2020

They are scientifically called anosmia and ageusia. They are respectively loss of the sense of smell and taste, symptoms often reported by patients with COVID-19. For this to happen, how often and its clinical significance, remains a mystery to scientists. Yet, experts say, this is an important scientific issue: discovering its origins could help to understand different aspects of the action of the virus on our organism. A useful contribution to solve the enigma could now come from all those who have or have recently had a respiratory disease, cold, flu or COVID-19. It is very easy to give your contribution. Those who have suffered from this problem can log on to the website <https://gcchemosensr.org> and take part in a large study involving more than 50 countries, from New Zealand to Japan, from Africa to Italy, from the United States to South America. All it takes is just a few minutes to fill in a simple questionnaire, totally anonymous, whose data will be used by experts for an in-depth analysis of data gathered worldwide and made public. The project was organised by the international association Global



Consortium for Chemosensory Research that brings together in this Open Science initiative teams of scientists and doctors from all over the world to address the issue both from a research point of view and in its most strictly clinical aspects. The questionnaires are available in 14 languages, including Italian, destined to increase to 30 in a very short time, precisely to break down any possible language barrier and thereby encourage participation.

Goal: collect a huge amount of data worldwide

“We have all experienced the loss of smell and taste when we have a cold. However, we must remember that what we commonly call “flavour” is actually “taste” and perceived primarily through the nose. Simply keep your nose plugged while you eat a strawberry flavoured sweet to verify that we will only feel the sweetness on the tongue. The taste of strawberry will only appear after we unplug our nose,” explains Professor Anna Menini of SISSA, for many years engaged in research on smell. “From what we have seen to date, in COVID-19 patients the loss of smell and taste presents itself in a very peculiar way. And we want to know more”. This explains this new initiative “which will allow us to collect a huge amount of information to draw evidence from it that will be published on scientific journals and made public to all. The more data collected, the more significant the results will be”. Through this study we will work to “better understand the origins of the loss of smell and taste, understand how frequent it is in COVID-19 patients and also discover if these symptoms can be potential alarm signals to identify the disease even in the absence of other symptoms. A feature which, if verified, would be very important to identify quickly the possibility of infection of the virus”.

The key to the mystery is our nose

The nose plays an important role in the disease. “We know that one of the preferential access routes of the virus to enter our body is precisely through the nose where besides the respiratory epithelial cells there are also the olfactory epithelial cells. It is as if the virus has the key to access these cells by opening a molecular door, which is specifically a protein, called ACE2, found in other organs of our body. Those present in our nose offer an excellent entry point to the virus to infect us. Having said that, there is still very little known about the mechanisms through which the virus actually enters our body”.

Of the research carried out in this field, the group of Professor Menini of SISSA will now study the mechanisms that lead to loss of smell: “We will investigate different physiological aspects of olfactory cells to shed light on this issue. The

data that will emerge from this questionnaire will be fundamental to understanding the relevance of the loss of smell and taste in COVID-19. This is why we invite everyone to participate. The commitment required is very minimal and individual contribution in this shared scientific project is important for all mankind”.

LINKS

GCCR website:

<https://gchemosensr.org>

IMAGE

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