

Discovered in foods toxins that can cause cervical and liver cancer

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Mexican scientists identified and quantified the amount of aflatoxins (carcinogenic) in food such as corn tortilla, rice, chili pepper, processed sauces, chicken breast and eggs, and revealed its relationship with cervical and liver cancer in humans.

The research won the National Award in Food Science and Technology in the Science Professional in Foods category organized jointly by CONACYT (National Council of Science and Technology) and the Mexican Coca-Cola Industry. It explains that both types of cancer can be originated by the ingestion of food contaminated with [aflatoxins](#) produced by the fungi *Aspergillus flavus* and *A. parasiticus*.

Magda Carvajal Moreno from the Biology Institute at UNAM (National Autonomous University of Mexico) and head of the research explained that this is the first time both conditions are related with the presence of aflatoxins, "the most frequent carcinogenic we ate daily" she said.

UNAM researcher analyzed 800 kilos of tortilla in Mexico City, ten different kinds of chili pepper, rice and corn among others. She also studied how much of this substance stays in animal tissues after ingesting this kind of food, and found that aflatoxins are present in chicken breast, gizzard, liver and eggs –white and yolk.

Carvajal Moreno explained that such molecule was recovered from tissue samples of liver and [cervical cancer](#) in humans, therefore aflatoxins are a very important factor in triggering this diseases.

"This research is the first in the world to report that cervical cancer can also be caused by ingesting aflatoxin contaminated food. This carcinogenic has also been detected as a trigger of colorectal, pancreatic, breast and lung cancer."

The specialist clarified that Human Papillomavirus

is more carcinogenic and prone to trigger cervical cancer than aflatoxins.

The toxins –the researcher said- are in the water, soil and airborne, the fungi that produce them are an olive green mold that can be found in refrigerators, besides they are very resistant to high temperatures.

Every day, Carvajal Moreno said, each person consumes traces of millionths or milligrams of aflatoxin that accumulate over the years in DNA, decreased resistance in people and generate disease.

To avoid these substances, the UNAM researcher suggests properly storing [food](#), which would control the production of the toxin. Also, vary the foods one ingests and preferably consume wheat tortilla and fish, as well as antioxidants.

The research that Carvajal Moreno did in collaboration with Jaime Berumen Campos from the Genomic Medicine Unit from General Hospital of Mexico now will be focused in studying stomach, esophagus and prostate cancer to determine if there is an association with aflatoxins.

Provided by Investigación y Desarrollo

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