Food Allergies Linked to Drinking Water

















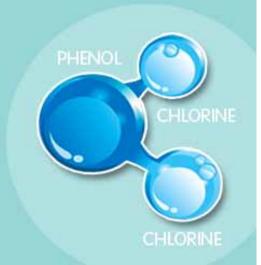


In 2007, it was reported that three million children in the United States had some type of food or digestive allergy. Now, according to the CDC's summary of the National Health Interview Survey, that number increased to almost six million by the start of 2012. Foods containing milk, eggs, peanuts, tree nuts, fish, shellfish, soy and wheat make up over 90% of food allergies. This trend of increasing childhood food allergies does not seem to be slowing. In a 2012 issue of *Annals of Allergy, Asthma and Immunology*, researchers argued that this increase seems to be linked to exposure to a specific chemical.

90% of Food Allergies



The US National Health and Nutrition Examination Survey concluded that individuals who are exposed to dichlorophenol were more likely to have some type of allergic food reaction.



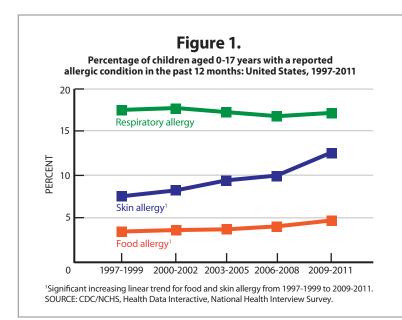
Reported Increase in Food Allergy Related Illnesses

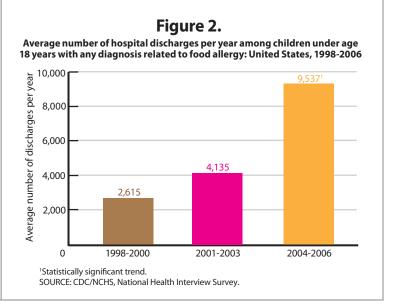
The Centers for Disease Control have reported that in 1997 3.4% of the children under 18 in the United States had some type of food allergy. By 2011 the number had risen to 5.1%.

Children with food allergies are two to four times more likely to have other conditions, including asthma. When combined with food allergies, respiratory problems can

become even more life-threatening and may be a contributing factor to the significant increase in hospitalizations related to food allergies.

In the year 2000, hospitals reported an average of 2,600 patients related to food allergies. In 2003, that number grew to 4,100, and in 2006, it more than doubled to 9,500.



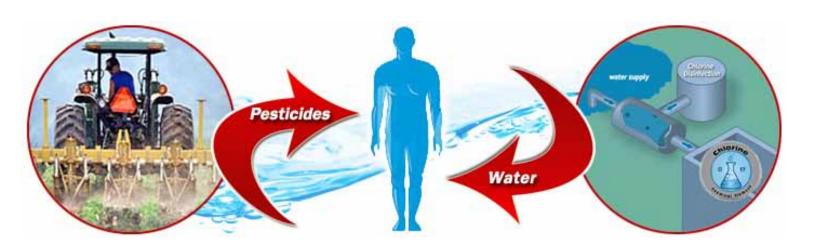


How Does Dichlorophenol (DCP) Get Into the Human Body?

A person can be exposed to dichlorophenol in two ways. First, it is a key ingredient used in formulating chemical pesticides used throughout the agricultural industry. Research that has linked the development of food allergies with DCP has found that the primary source of exposure is through unwashed produce, but there is a second path of exposure as well: drinking water.

Approximately 90% of America's city municipalities use chlorine

to disinfect drinking water before sending it out to homes and businesses. Unlike chlorine, dichlorophenol is not added to the water during treatment, instead it is a by-product of the chlorine used during the disinfection stage. Since most consumers do not have the appropriate water filtration system to remove the chlorine and DCP from their tap water, many will continue to be exposed to this harmful chemical.



Water Filtration Options for Reducing Dichlorophenol

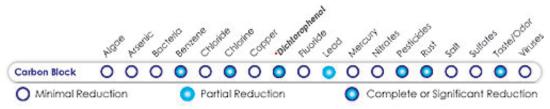
Dichlorophenol consists of two chlorine molecules and one phenol, also known as carbolic acid, which is an organic compound. This compound can be absorbed almost instantly by a point of use carbon water filter. However, DCP is rarely the

only chemical contaminant found in tap water. For other dangerous chemicals like fluoride, nitrates, and phosphate, use a higher level water filtration system.



Carbon Filtration Systems

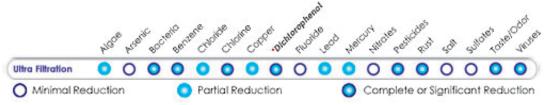
Activated carbon filter and block carbon water filter systems are used to remove specific contaminants including DCPs from water and to give water a better taste.





Ultrafiltration Water Purfication Systems

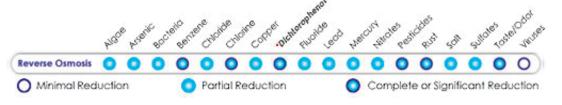
UF water systems offer more comprehensive water filtration reducing bacteria, viruses, lead, and other chemical compounds.





Reverse Osmosis Filter Systems

An RO water filtration system will reduce a wide array of contaminates such as fluoride, pesticides, benzene, mercury, arsenic, pesticides, and more.



Since there are no specific testing parameters or data from WQA or NSF about DCPs, we have asked one of our Senior Certified Water Specialist (CWS VI) for advice about water filtering options. As with any water filtration system, the influent levels of DCP, along with the flow rate and contact time with filter media is the key to determining actual reduction rates.

To achieve the WQA-certified title of Certified Water Specialist, a person must pass a lengthy exam and agree to abide by the WQA Code of Ethics for the Water Quality Improvement Industry.



