

## What Are We Doing About Dioxin?

A Total Maximum Daily Load Study (TMDL) has been initiated by the Texas Commission on Environmental Quality (TCEQ) in the Houston Ship Channel and Upper Galveston Bay to pinpoint sources of dioxin and develop an action plan to address the problem. The

goal of the TMDL program is to restore water quality to rivers, lakes and bays that have poor water quality. A TMDL is a scientific plan that determines the maximum amount of a pollutant that a lake, river, or estuary can receive and still maintain water quality and a margin of safety to ensure that the waterbody can be used for the purposes the state has designated.

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Visit the following websites  
H-GAC dioxin webpage:  
[www.h-gac.com/dioxintmdl](http://www.h-gac.com/dioxintmdl)

Texas Department of Health,  
Seafood Safety Division webpage:  
[www.tdh.state.tx.us/bfids/ssd](http://www.tdh.state.tx.us/bfids/ssd)

TCEQ Dioxin webpage:  
[www.tnrcc.state.tx.us/water/quality/tmdl/houston\\_group.html](http://www.tnrcc.state.tx.us/water/quality/tmdl/houston_group.html)



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# DIOXIN for Dinner?

**Why Catfish & Blue Crab  
Can Be Harmful To  
Your Health**



**W**here does your seafood come from and how healthy is it? If it was harvested from the Houston Ship Channel or Upper Galveston Bay, you may be getting more than you bargained for, because those areas have been under a seafood consumption advisory for catfish and blue crab since 1990. Why? Because of Dioxin.

### **What Is Dioxin?**

Dioxin is the term used to refer to a group of toxic chemicals found throughout the environment and in our food supply. According to the World Health Organization, the majority of our exposure comes from food, mostly fish, meat, poultry and non-skim dairy products. Fattier fish, like catfish, have more dioxin than leaner fish. Crab and shellfish are low in fat, but may have dioxin in their glands or organs, not the meat. Dioxin causes a variety of harmful health effects including cancer, birth defects, diabetes, learning and developmental delays, and immune system abnormalities.

### **How Do Dioxins Get Onto Your Dinner Table?**

Dioxin is part of a family of toxic chemicals that build up in the food chain and can remain in the



environment for many years. Dioxins are not manufactured products, but occur as byproducts from activities such as burning of medical waste and treated lumber, chemical processing, and bleaching of paper pulp.

People are exposed to dioxin in several different ways. Dioxin is emitted into the air and people breathe in the particles. The chemical also collects in the water either through runoff or atmospheric emissions. Dioxin settles on the bottom of a body of water, where fish and shellfish consume small particles of sediment. The toxin builds up in their fat or organs and continues to build up in the tissue of any organism that eats the tainted seafood, including humans.

### **How Can Dioxin Affect You?**

Dioxins stay in the environment for a long time because they do not dissolve in water and do not break down in soil. According to the U.S. Environmental Protection Agency (EPA), dioxins could harm human health at lower exposure levels than previously thought. They also reported that some effects, such as reproductive and developmental problems,



could occur at levels the general population is already being exposed to. Repeat exposure to dioxin may cause: cancer, liver damage, weight loss, thyroid disorders and immune system abnormalities.

### **What Should You Do?**

The Texas Department of Health advises people against eating catfish or blue crab caught in the Houston Ship Channel and Upper Galveston Bay. This seafood advisory was issued in 1990, when dioxin was found in the tissue of catfish and blue crab. This advisory includes all species of catfish and blue crabs and recommends eating no more than eight ounces or one meal, each month. Women of childbearing age and children should not consume any fish or blue crabs from the Houston Ship Channel or Upper Galveston Bay.

