Here she goes again. Deborah Blum couldn’t resist bemoaning the state of our environment this time, trace chemicals in water. In her *New York Times* Sept 25th blog, *A Rising Tide of Contaminants*, Blum seems to be trying to convince us that we are drinking pure poison. If followed to its logical conclusion, one might wonder why anyone is still alive.

Blum’s piece is based upon studies by Deborah Swackhamer, a professor of environmental health sciences at the University of Minnesota. Swackhamer recently decided to measure certain chemicals in the Zumbro River, a tributary of the Mississippi River in southeastern Minnesota.

To no one’s surprise, she found chemicals in the water, including traces of pesticides and, gasp, prescription and over-the-counter drugs. Some of the drugs detected included acetaminophen (Tylenol), Prozac, antibiotics, and steroid hormones (birth control pills).

Blum adds, Researchers realized more than 15 years ago that pharmaceuticals excreted by users, dumped down drains were slipping through wastewater treatment systems [1].

Never one to be deterred by science, Ken Cook, president of the *Environmental Working Group* [2] chimes in Our chemical safety net is more hole than net. Cook is concerned that the The Food and Drug Administration doesn’t regulate the environmental spread of pharmaceuticals. He adds, Where does that leave us in terms of scientific understanding of what drugs to regulate?

ACSH’s Dr. Josh Bloom, who needed both Tylenol and Prozac after reading this, is incredulous: The ludicrous nature of these statements indicates that those involved in this cause are utterly clueless about chemistry, or being purposefully disingenuous simply to scare people.

He adds, Drugs do not slip through wastewater plants. These plants were never designed to handle drugs in the first place. They treat bacteria from sewage. Anyone who thinks that thousands of drugs can be removed from wastewater has been reading too much science fiction. Or taking too much LSD (which is no doubt in the water as well.)

ACSH friend, and super-chemist, Dr. Joe Schwarcz, Director of McGill University’s Office for Science & Society finds the entire article to be absurd. He says, The reason that all of these
chemicals are now being detected is enormous advances in analytical chemistry not because there are more chemicals present. Compared to twenty years ago, the level of detection has improved between 1,000 and 1,000,000-fold. We are now able to measure chemicals at concentrations of about 1 part per trillion (PPT). To give you an idea of the magnitude of this, one PPT is equivalent to one second in 32,000 years.

Dr. Schwarcz also notes, To those who propose testing all of the chemicals, how exactly are you going to do this? Feed them to people? And where is the evidence of harm? People are living longer every year, and age-adjusted cancer rates have been steady for decades.

Then, there's the practical matter of how to keep these chemicals out of wastewater. Dr. Bloom says, There are only two ways that this is possible. 1) Do not take antibiotics, birth control pills, antidepressants, or Tylenol. 2) Do not urinate, since this is how the drugs get into the water. Personally, I'm a big fan of urination. It makes me happy. Unlike this stupid article.