



Why is it OK to Pee in the Ocean, But Not in the POOL????

By Bruce K. Bernard, PhD



A short video produced recently by the American Chemical Society answers the question, “Is it OK to Pee in the Ocean?” with a resounding “yes!” Ocean swimmers, relax, and know that your, eh, “contribution” is processed by the marine environment. Pool swimmers, you are not off the hook. When nature calls, swim to the nearest ladder and find the restroom.

A Tale of Two Watery Environments

Here’s why swimmers get a thumbs up for peeing in the ocean and a thumbs down for peeing in the pool:

All forms of aquatic life pee in the ocean with no adverse effects to the marine environment. Urea in the ocean actually helps feed plant life, so there is a “system balance” present that is not found in swimming pools. Pools are manmade constructions that must contain disinfectants, such as chlorine, to help prevent germs spreading among swimmers in close contact with one another.

In swimming pools, urea and disinfectant combine chemically to produce unwanted compounds that are irritants. Swimmer “red eye” and itchy skin are caused by these substances, known as disinfection byproducts. Many people think the characteristic pungent chemical smell around pools is from chlorine, but in fact, it is due to disinfection byproducts.

Ocean and Pool: Relative Volumes

The volume of the Atlantic Ocean, at 350 quintillion liters, is vast—140 trillion times the volume of an Olympic-size swimming pool (about 2.5 million liters). Urine, a salty water solution containing low levels of urea (a waste product left after our bodies process protein), is greatly diluted in the already salty ocean. Swimmer urine makes a much more significant contribution in a pool, especially a crowded one.

Swimmers can help maintain the quality of their pool water by using the bathroom and showering before swimming. Showering removes sweat, cosmetics and traces of urine and feces. Minimizing these substances in the pool helps prevent disinfection byproducts forming and frees chlorine do its job of destroying germs.

In conclusion, please don't pee in the pool, but if you are going for a swim in the ocean, take your cue from the fish: You can pee in the ocean and you don't have to feel guilty about it!

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