CASE STUDIES ELABORATE LESSON 13



Case Study #1

Death from Dehydration

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Publication: Nutrients **Author:** Leigh Steinberg

Link: https://www.forbes.com/sites/leighsteinberg/2013/02/16/death-from-dehydration/

?sh=769ec7201966

Louisiana swelters in the summer. August is the most intense month, with enervating heat and humidity. Athletes treat admonitions to hydrate well the way we all viewed our mothers' stern warning to stay out of the water for an hour after eating--with surface acquiescence and extreme skepticism. In dozens of cases in the last thirty years, athletes have died of dehydration. Henry White was a 21-year-old junior basketball player getting ready for his first season at Grambling State University. On August 26, 2009, he showed up for the earliest conditioning workouts. He spent a rigorous session weight lifting. He then was punished for showing up to campus late by being forced to run four and a half miles on a day in the heat and humidity of August in Louisiana. He collapsed upon finishing, and he died 12 days later.

Athletes at the professional, collegiate, and high school levels train and work out every summer with a risk of dehydration. Signs of dehydration include fatigue, flushed skin, heat intolerance, lightheadedness, and dark-colored urine. Fluid is lost, as well as chemicals like sodium and potassium. Too little or too much electrolytes like sodium and potassium in the body can cause trouble. Consumption of beverages containing electrolytes and carbohydrates can help sustain fluid-electrolyte balance and exercise performance. A loss of more than 2% of body weight can create an emergency.

Chafin [the attorney for the family of Henry White] argued passionately that Grambling St. did not have adequate emergency procedures and trained personnel to deal with White on the campus after he collapsed. The first protocol would have dictated placing the collapsed athlete into an ice bath in one of the tubs present in the training room. Chafin was able to show the jury that with the proper procedures in place, White might have lived. The jury proved to be wise and compassionate and returned an award, which will allow his child a more promising future.

This is a critical issue that needs to be revisited at professional, collegiate, and high school levels. The younger an athlete is the more risk he or she faces. Weekend warriors, runners, as well as younger athletes need to be prepared prior to play or practice for the dangers and be able to avail themselves of proper emergency treatment if necessary. Williams vs. Board of Supervisors sends a clarion call to all sports organizations, athletes, and parents to be aware of the risks of dehydration.



Case Study #2

Georgia teen dies from drinking too much water, Gatorade

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Publication: CBS/AP

Link: https://www.cbsnews.com/news/georgia-teen-dies-from-drinking-too-much-water-gatorade/

DOUGLASVILLE, Ga. -- A Georgia high school football player is dead after drinking too much fluid during practice.

Relatives of 17-year-old Zyrees Oliver had him removed from life support early Monday in a hospital in Marietta. He had no brain activity.

Oliver was declared dead a short time later.

Relatives say the youth complained of cramping during football practice on Tuesday at Douglas County High School, west of Atlanta. Aunt Tammy Chavis says the teen drank two gallons of water and two more gallons of Gatorade.

Oliver's mother picked him up because he couldn't drive, and he later collapsed at home and was taken to the hospital by helicopter.

Relatives say doctors told them Oliver suffered massive swelling around the brain from over-hydration. The coroner says an autopsy is planned.

"It's incomprehensible," aunt Nina Oliver told the Atlanta Journal-Constitution. "We had a healthy, beautiful, vibrant young man."

Drinking large quantities of water in a short period of time can throw off the body's balance of electrolytes, causing brain swelling and leading to seizures, coma, or even death.

It is rare, but there have been several other highly-publicized cases of death from overhydration. In 2007, a California woman died after drinking about two gallons of water as part of a radio station contest. The Sacramento County coroner found that Jennifer Lea Strange, 28, died of water intoxication.

A similar case in 2005 claimed the life of a Chico State University student, Matthew Carrington, who drank too much water during a fraternity initiation. One fraternity member pleaded guilty to felony involuntary manslaughter, and two others pleaded guilty to lesser charges.