GATORADE FBOOK

BY: ASHLIN CANNELLA

GATORADE

UF HISTORY

4. INVENTORS

- Dr. Robert Cade
- Dr. Dana Shires
- Dr. Jim Free
- Dr. A.M. deQuesada

(Gatorade #2)

2. ORIGINAL INGREDIENTS

- water
- sodium
- potassium
- phosphate
- glucose
- lemon concentrate for flavoring

(Gatorade #1)

3. CURRENT INGREDIENTS

- water
- sugar
- dextrose
- citric acid
- salt
- sodium citrate
- monopotassium phosphate
- gum arabic
- glycerol ester of rosin
- natural flavor
- yellow 5

(“Thirst Quencher, Lemon Lime”)

4. ANALYSIS OF INGREDIENTS

1. Since 1966, the core ingredients of Gatorade have remained the same, proving what accurate scientific knowledge went into this research by Dr. Robert Cade and the other scientists at UF.
2. The first flavor to come was lemon-lime as Dr. Cade flavored the drink with lemon juice or lemon concentrate.
3. The orange flavor was released in 1969 under Stokely Van Camp.

DR. ROBERT CADE

Born: September 26, 1927 in San Antonio, Texas
Death: November 27, 2007 in Gainesville, Florida

- WWII Navy Veteran
- Education: University of Texas (1948 -1950); Cornell University (completed his post-doctoral fellowship in 1961)
- 1961 - 1970: Assistant Professor of Medicine at the University of Florida
- 1971 - 1978: Chief of the Renal Division at the University of Florida College of Medicine
- Inducted into the UF Athletics Hall of Fame in 2007 (Gatorade #2)

(J. Robert Cade)

OTHER DR. CADE INVENTIONS

- Gator-Go
(high protein milk based drink)
- Hoppin’ Gator
(alcoholic beverage - said to absorb faster in the body as it was essentially a beer and Gatorade solution)
- Pneumatic Helmet
(Gatorade #2)

GATORADE INSPIRATION

Dwayne Douglass - UF Assistant Football Coach

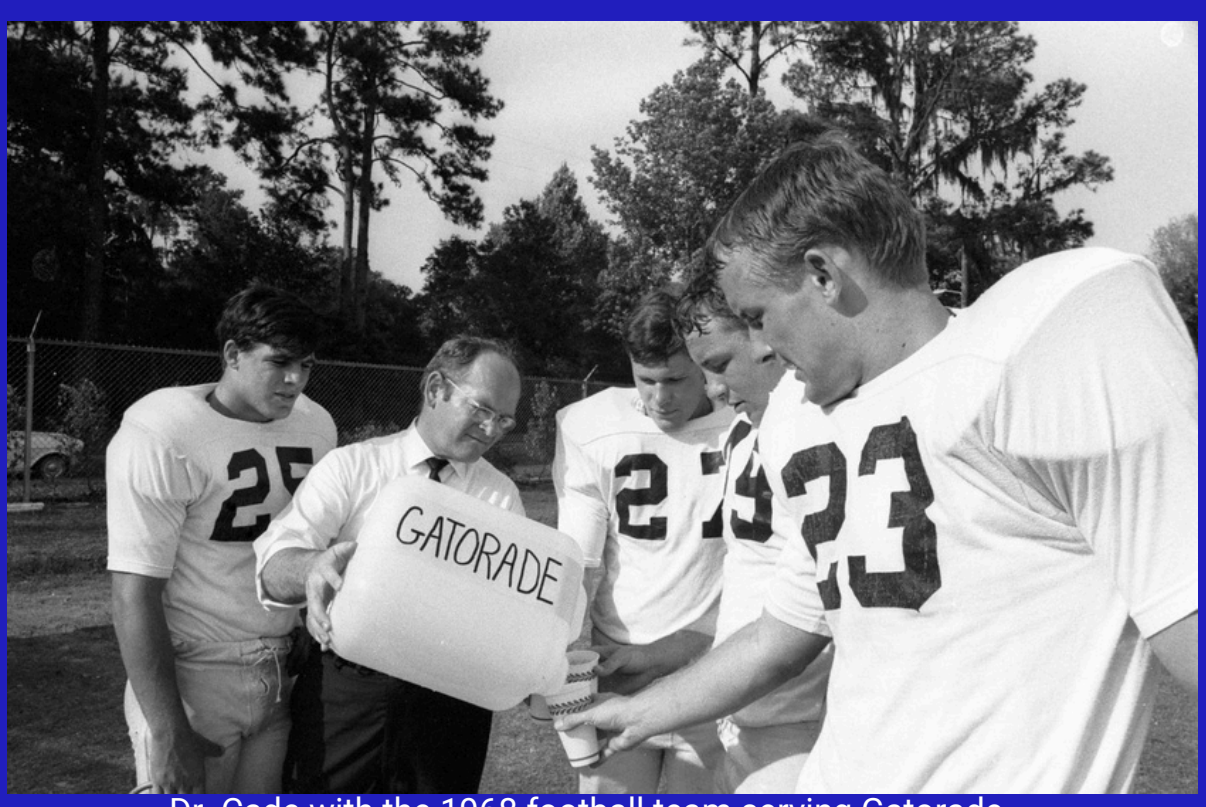
1. In 1965, the UF Assistant Football Coach Dwayne Douglass, who was a former Florida football player and NFL player, asked, “Why don’t players pee after games?” Coach Douglass himself had recalled losing 18 pounds during a game and wanted to find a solution.
2. The Florida heat also had detrimental effects on the football players. They reportedly lost 10 pounds per game and had many heat-related illnesses after games and practices.

(Gatorade #2)

Dr. Robert Cade

1. Dr. Robert Cade was a nephrologist at the University of Florida. He studied exercise physiology and was in the renal department. He came to the University of Florida College of Medicine in 1961. Dr. Cade was posed Coach Dwayne Douglass’ question while he was conducting a clinical study on salt and water metabolism under a $57,000 grant awarded by the United States Department of Health, Education, and Welfare (HEW) (Dr. James Robert Cade - Gatorade Inventor).
2. In September of 1955, Dr. Cade had asked the UF Head Football Coach, Coach Ray Graves if he could use some football players as subjects to determine what was happening to them during games and practices. Dr. Cade collected data from 10 UF freshman football players, where he had found their blood sugar levels and total blood volume to be very low. He had discovered the potential for Gatorade. Cade discovered that these players needed water, but that they needed water with salt to replace the salt they lost from sweat and sugar to keep the players blood sugar levels normal.
3. Preseason polls said the 1966 Gators’ Football team would finish a 5-5 football season, but they finished 8-2. Many say this was due to Gatorade’s invention by Dr. Cade at the University of Florida. Water takes 30 minutes to absorb in the body, therefore something was needed for quicker hydration. Gatorade absorbs in the body in 2-3 minutes, a 93% improvement in rehydration time. The hostile conditions of The Swamp make rehydration especially important as heat has a vital effect on strength and endurance (Gatorade #1).
4. The first time Dr. Robert Cade tried making this solution, the taste was nearly unbearable. However, Cade’s wife had suggested the addition of lemon juice, making this product easier to drink. The players had said, “I don’t like the taste much, but during a rough game, who cares?”

(Gatorade #2)



Dr. Cade with the 1968 football team serving Gatorade.

Credit: Lynn Pelham (Photo by Lynn Pelham/Sports Illustrated/Getty Images)
(Set Number: X13176 TK1 R6 F24)

LEGAL HISTORY OF GATORADE

Dr. Cade applied for a US Department of Health, Education, and Welfare (HEW) grant in 1961. This grant was received on May 11, 1962 and continued until June 30, 1967.

3 Basic Provisions of a HEW Grant

1. "The rights to the invention may be disposed of by dedicating it to the public through publication"
2. HEW may transfer the rights to the invention to the grantee institution for development under the institution's rules and regulations if such is agreed to prior to the grant award and included in the contract documents
3. HEW may apply for a patent and commercialize the product or invention.

(Gatorade #2)

In the fall of 1965, the Gatorade formulation was made. It was starting to be consumed by the University of Florida football team in the spring of 1966 and in the summer of 1966, Head Coach Ray Graves asked for Gatorade to be used for both football practices and games.

- In December, 1966, Dr. Cade informed the National Institute of Health(NIH) of the invention. On December 12, 1966, Mr. Charles Brown, Special Assistant for patent policy for the United States Government sent Dr. Cade forms for a full disclosure report. On December 21, 1966, Dr. Cade filed this invention statement.
- On June 8, 1967, Dr. Philip R. Lee of the US government had informed Dr. Cade that, so far, all rights were property of the US, that HEW wouldn't file a patent for the invention of Gatorade, and that a publication would fulfill the point that this invention is given to the public.
- In the Fall of 1966, Dr. Cade applied for a received Federal Drug approval for sale and distribution of Gatorade without informing HEW or the University of Florida. Again, without informing anyone, Dr. Cade and other stakeholders filed a charter for Gatorade, Inc. on Feb. 17, 1967 as well as applied for registration of the name Gatorade on April 7, 1967.
- On May 16, 1967 , Dr. Cade and 8 others entered into a trust agreement where they transferred all interest of Gatorade, Inc. to American Fletcher National Bank and Trust Company of Indianapolis, Indiana. Dr. Cade refused to give a copy of this trust agreement to the university of Florida.
- In the fall of 1967, one of Cade's research fellows took a job at Indiana University, where they told Indianapolis-based Stokely-Van Camp about Gatorade, and Stokely-Van Camp had gotten the rights to Gatorade by Dr. Cade.
- In August 1967, the University of Florida learned that Stokely-Van Camp had acquired interest in Gatorade, so the University of Florida began an investigation. HEW also began an investigation into the case when they learned Dr. Cade applied for a patent assigned to Stokely-Van Camp. Cade had said he didn't inform the University of Florida of the market for Gatorade because he did not know himself.
- In the Fall of 1968, the Board of Regents, which was the governing body for the University System of Florida, took action to protect the University of Florida and the interest of the State to whatever rights it might have to the invention of Gatorade.
- On January 3, 1970, the Gatorade Trust filed suit against the US government (HEW) seeking that the Gatorade invention be declared the sole property of the inventors and their assignees. Dr. Cade believed HEW's grant regulations were unconstitutional and invalid. He said he only filed for a patent because he wanted a court hearing. Cade believed the discovery of Gatorade was not made under HEW and with little UF resources, so it should belong to the inventors.
- On February 2, 1970, the Board of Regents passed a resolution requesting the Governor and the Cabinet of State of Florida transfer all rights that State of Florida may have had in Gatorade to the University of Florida. The Board of Regents gave the University of Florida permission to seek a solution to the Gatorade controversy themselves.
- In 1972, a settlement was approved by the Indiana Southern District Court in the dispute between Gatorade Trust, State Board of Regents - on behalf of UF, and the U.S. Department of Health, Education, and Welfare.

(Gatorade #2)

Settlement

The University of Florida was to receive 20% of the royalties from all Gatorade sales. Dr. Cade reported that he and four other stakeholders were set to receive 10% each in royalties. These 4 other stakeholders were Dr. Alex Dequesada of the University of Indiana Medical School, Dr. Dana Shires of the University of Indiana Medical School, Dr. Harry Free of Clearwater, and Dr. Gene Tubbs who was a State Legislator.

(Gatorade #2)

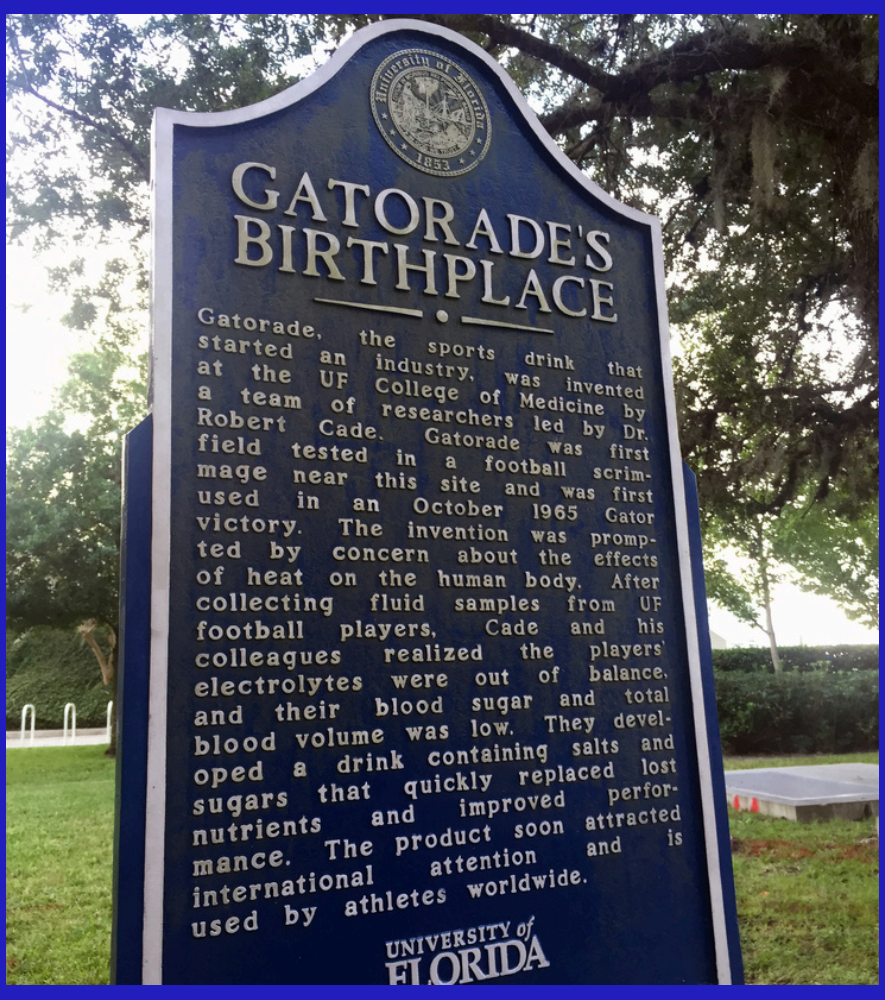
DR. CADE AND THE UNIVERSITY OF FLORIDA

Dr. Robert Cade had reported the invention of Gatorade to his supervisor, Dr. Vincent R. Learned, who was the director of the UF's Division of Sponsored Research. When shares were offered to the University of Florida by Cade, they had reportedly originally said, "Oh no, we are not interested in your crazy ideas."

Dr. Cade was upset that the University of Florida and Board of Regents were now demanding shares and had reportedly said, "UF is entitled to nothing, and that's exactly what they deserve." Cade was upset that the University only now was interested in the product after it became profitable. During the time of the lawsuit, there appeared to be some tension between the University and Cade.

There was a lack of communication between UF and Cade as he refused to comment on many situations. On April 3, 1970, President O'Connell of the University of Florida had sent a letter to Dr. Cade responding to various tops he had heard about Dr. Cade including his complaints about the University. Cade responded to this letter on April 5, 1970, where he outlined his complaints about the University of Florida. Additionally, Dr. Cade had said he would be leaving the University. Although there was a constant lack of communication, O'Connell told Cade he was a valued professor. Dr. Cade did resign from the University of Florida, but was reemployed shortly after.

Dr. Free, one of the original stakeholders of Gatorade had said, in 2007, there was "no bad blood" between UF and the scientists who created Gatorade as is obvious because Dr. Cade was named to the UF Athletics Hall of Fame this year. Dr. Cade had remained an esteemed professor responsible for millions of dollars in research at the University in Florida as his invention of Gatorade caused UF to receive 20% of the royalties from the product.
(Gatorade #2)



(Midelis)

(Midelis)

GATORADE'S IMPACT

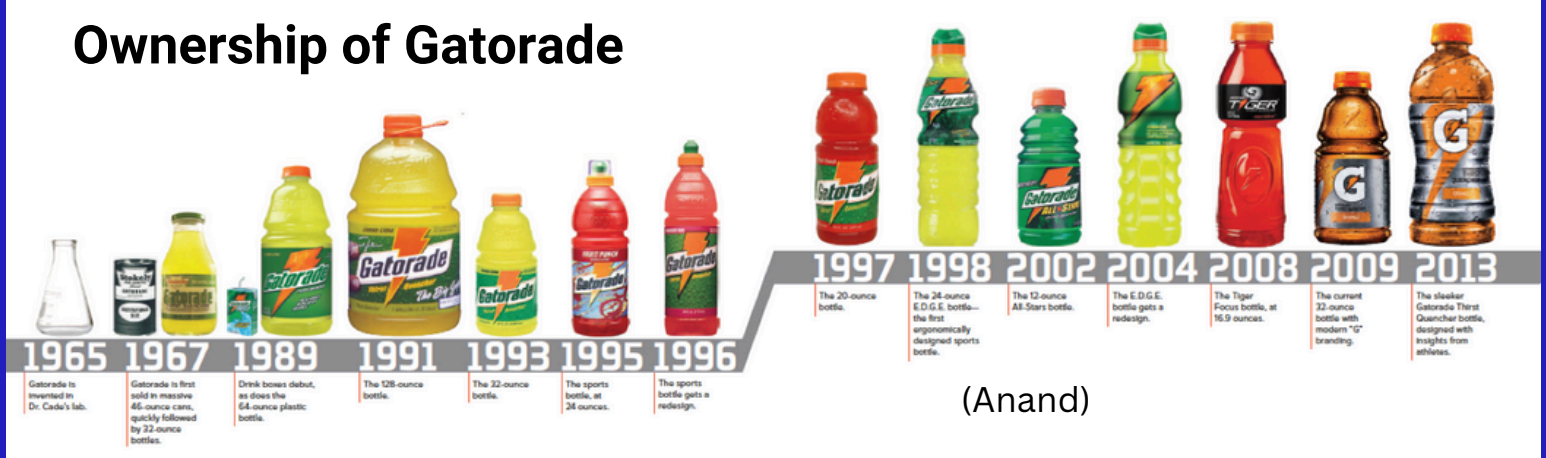
Gatorade is trademarked, so it doesn't have a patent that will expire, meaning the invention can generate money indefinitely. For example, in each year from 2002 to 2007, Gatorade generated $12 million a year for the University of Florida. Gatorade is largely successful due to its official sponsorships of the NFL, NBA, and MLB. (Gatorade #2)

The royalties the University of Florida receives from Gatorade goes into the Gatorade Trust at the University. This money is used exclusively for research at UF to help advance the institution.

~$400 MILLION

The University of Florida has received about $400,000,000 to be used for research. An undisclosed share of Gatorade profits is distributed to the Gatorade Trust which then distributes 20% to the University of Florida.

Ownership of Gatorade



(Anand)

1967: Stokely - Van Camp

- 1973, Gatorade introduced its lightning-bolt logo.

1983: Quaker Oats

- 1983, went international to Japan
- According to former UF marketing Professor Richard Lutz, Quaker Oats "launched Gatorade from a sleepy little brand into superstardom"

2003: Pepsi Co.

- Pepsi Co. buys Quaker Oats and obtains Gatorade

(Gatorade #2)

WORKS CITED

Anand, Vejay. "Gatorade - Preventing Dehydration." *Point of View*, 11 May 2023, https://onlykutts.com/index.php/2023/05/11/gatorade-preventing-hydration/.

Dr. James Robert Cade – Gatorade Inventor » *History of Medicine » College of Medicine » University of Florida*. https://history.med.ufl.edu/profiles-in-history/dr-robert-cade/. Accessed 5 Dec. 2024.

Gatorade #1. University Archives Vertical File Collection

Gatorade #2. University Archives Vertical File Collection

J. Robert Cade » Division of Nephrology, Hypertension & Renal Transplantation » College of Medicine » University of Florida. https://nephrology.medicine.ufl.edu/education/visiting-professorships/j-robert-cade/. Accessed 5 Dec. 2024.

Midelis, Jewel. "Gatorade's Birthplace." *Historical Marker Program*, 12 June 2019, https://explore.research.ufl.edu/historical-markers/gatorades-birthplace/.

"Thirst Quencher, Lemon Lime." *Nutritionix*, https://www.nutritionix.com/i/gatorade/thirst-quencher-lemon-lime/542086853d0f3a6a51023b64#:~:text=Ingredients-,Water%2C%20Sugar%2C%20Dextrose%2C%20Citric%20Acid%2C%20Salt%2C%20Sodium,%2C%20Natural%20Flavor%2C%20Yellow%205. Accessed 5 Dec. 2024.