

**SUBMITTAL TO THE BOARD OF SUPERVISORS  
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

409



**FROM:** Fire

**SUBMITTAL DATE:**  
September 22, 2011

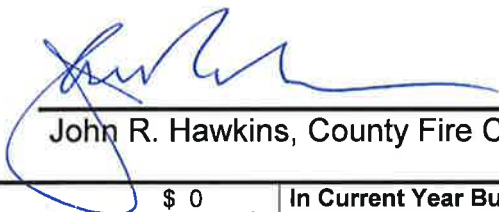
**SUBJECT:** Standardization of Gatorade G2 Sport Drink

**RECOMMENDED MOTION:** Move that the Board of Supervisors approve the Fire Department Standardization of Gatorade G2 Sport Drink for five (5) years.

**BACKGROUND:** Fire fighting is very difficult work. The weather is usually hot and dry, and the heat from the fire increases the temperatures. The Fire Department strives to keep our firefighters hydrated in all conditions. A study completed by the USFS Missoula Technology and Development Center (MTDS) Human Performance Lab cited that firefighters should be considered "Industrial Athletes". The study recommended as part of an incident hydration regime an electrolyte replacement drink be added after the first hour of strenuous work.  
(continued on Page 2)

Departmental Concurrence

Purchasing:  Mark Seiler, Assistant Director

  
\_\_\_\_\_  
John R. Hawkins, County Fire Chief

**FINANCIAL DATA**

Current F.Y. Total Cost:	\$ 0	In Current Year Budget:	N/A
Current F.Y. Net County Cost:	\$ 0	Budget Adjustment:	No
Annual Net County Cost:	\$ 0	For Fiscal Year:	N/A

**SOURCE OF FUNDS:**

Positions To Be Deleted Per A-30	<input type="checkbox"/>
Requires 4/5 Vote	<input type="checkbox"/>

**C.E.O. RECOMMENDATION:**

**APPROVE**

BY:   
\_\_\_\_\_  
Robert Tremaine

**County Executive Office Signature**

<input type="checkbox"/> Consent	<input checked="" type="checkbox"/> Policy
<input type="checkbox"/> Consent	<input checked="" type="checkbox"/> Policy

Dep't Recomm.:  
Per Exec. Ofc.:

**Prev. Agn. Ref.:**

**District:** All

**Agenda Number:**

**3.21**

**Background (continued):**

As part of the recommendation, it was determined that use of a beverage which is lightly flavored, contains electrolytes and contains sugar/carbohydrates to maintain mental performance (which can be hampered by decreased blood sugar) would be the best combination for firefighters. Firefighters also have an additional component to deal with and that is the "adrenaline rush" of the dangerous nature of the work. This adrenaline rush causes a fight or flight reaction in the body, thus changing the physiological response of the body to that of football player or even an endurance athlete, such as a marathon runner. Firefighters are often required to utilize maximum output for short times but also must be able to pace high level activity for prolonged periods. The other major issue is that in both other types of exertion the "danger" of life threatening activities does not exist.

The study also noted that sports drinks with too much sugar content caused two separate physiologically complex issues. The first issue was that high sugar content inhibited the absorption of water into the digestive track. The second issue was that higher sugar content also caused potential for nausea. This occurs during a "fight or flight" reaction when the body determines that it needs the blood flow to the muscles and the brain, not to digest food, thus causing the stomach to purge its contents (making a person nauseated or vomit). Both nausea and vomiting will reduce the productivity of the firefighters. It was determined that a reduced sugar content will prevent this process.

Fire Department personnel have been dumping a portion of the full Gatorade Sport Drink out and replacing it with water to dilute the product down to approximately half strength, or the sugar content of G2. However this caused two separate issues. First personnel were wasting half of the Gatorade, causing an increased cost. Secondly, but more importantly they were also reducing the amount of electrolytes by 50%. Firefighters also stated that they preferred the taste of the "G2" over any other sports drinks because it was not as sweet. We have been unable to locate other sports drinks that offer reduced sugar content. Other versions "lite" or "zero" have no sugar and no carbohydrates, which do not meet the needs for supplying the needed sugars and carbohydrates that will "fuel" our firefighting "industrial athletes." Several of the full strength versions contain more sugar than the original Gatorade.

**PRICE REASONABLENESS:** There are multiple distributors available to provide competitive pricing to the County of Riverside meeting the County Purchasing Policy and ensuring the County receives the best possible pricing.