

Electrolyte Hydration: Identifying the Most Refreshing Post-Workout Beverages

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Supplemental Information

Table S1: Average thirst levels for three beverages: juice, Powerade, and water, measured at three time points: prior to exercise, immediately after exercise, and one hour after exercise. Data reflect participants' self-reported thirst levels following a 60-minute run and post-exercise hydration. Lower values indicate less thirst, while higher values indicate greater thirst on a scale from 0-9.

Time Point	Juice (n=9)	Electrolytes (n=9)	Water (n=9)
Prior to exercise	8.11	7.33	8.67
Immediately after exercise	3.11	4.56	3.22
One hour post exercise	1.44	2.56	1.22

Comparison of Palatability Ratings for Different Post-Exercise Drinks

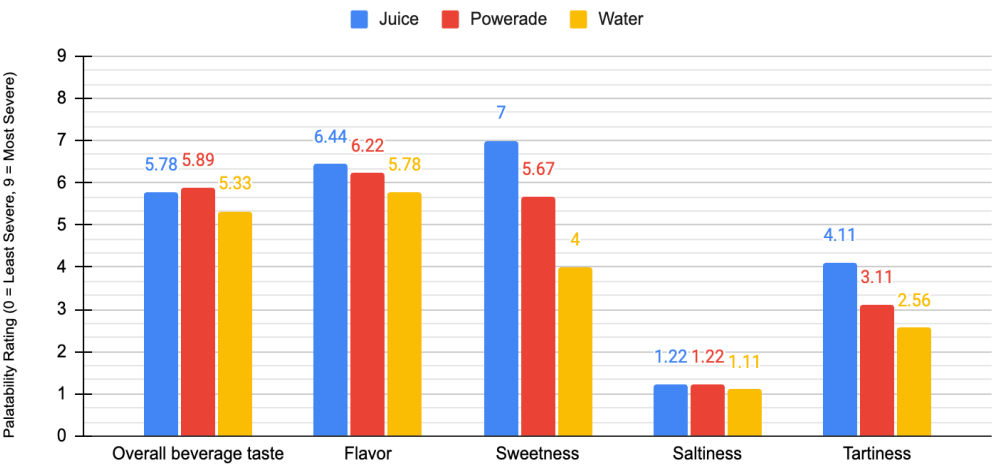


Figure S1: Average palatability severity ratings (scale: 0 = least severe/fewest symptoms, 9 = most severe/most symptoms) for three beverages: juice, Powerade, and water, as reported by participants following a post-exercise hydration session. Data reflect participant ratings of taste preferences and overall drink enjoyment.

Reflux/Heartburn Severity Over Time Following Different Post-Exercise Beverages

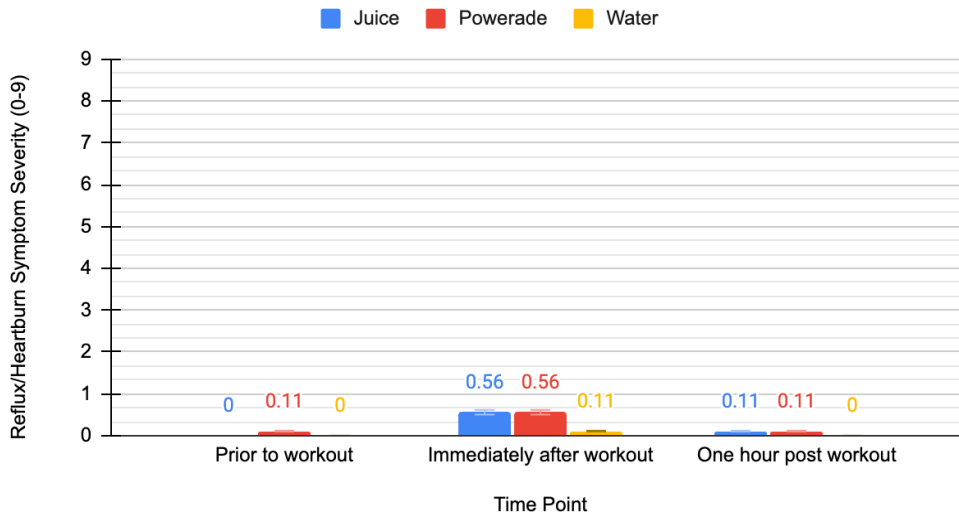


Figure S2: Average severity ratings (scale: 0 = no symptoms, 9 = most severe symptoms) for reflux/heartburn, as reported by participants following a post-exercise hydration session. Data reflect participant ratings of reflux/heartburn discomfort after consuming one of three beverages: juice, Powerade, and water.

Belching Symptom Severity Ratings for Different Post-Exercise Beverages

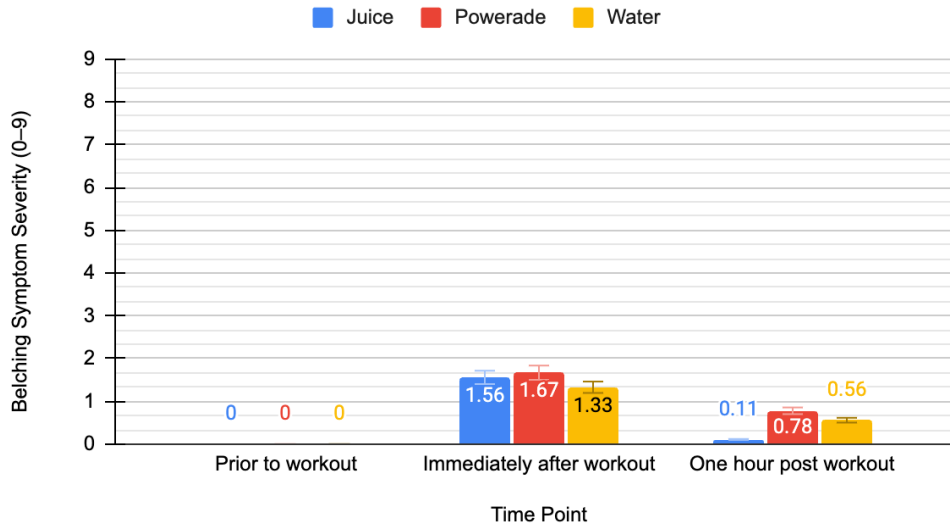


Figure S3: Average belching severity ratings (scale: 0 = no belching, 9 = most severe belching) as reported by participants following a post-exercise hydration session. Data reflect participant ratings of belching discomfort after consuming one of three beverages: juice, Powerade, and water.

Bloating Symptom Severity Ratings for Different Post-Exercise Beverages

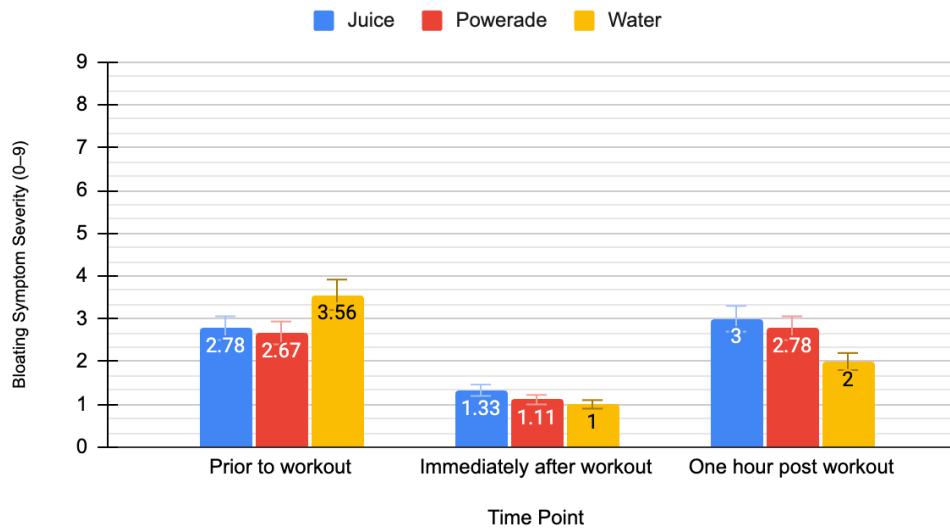


Figure S4: Average bloating severity ratings (scale: 0 = no bloating, 9 = most severe bloating) as reported by participants following a post-exercise hydration session. Data reflect participant ratings of bloating discomfort after consuming one of three beverages: juice, Powerade, and water.

Stomach Pain/Cramping Severity Over Time Following Different Post-Exercise Beverages

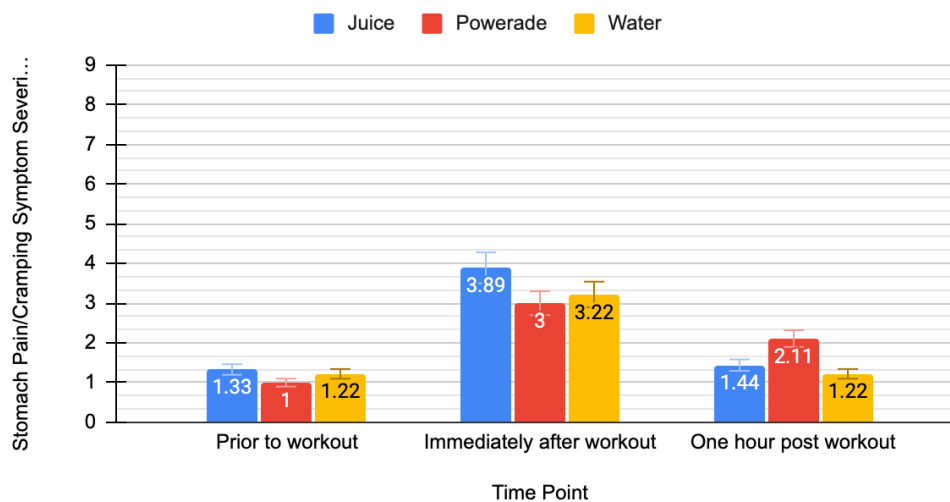


Figure S5: Average stomach pain severity ratings (scale: 0 = no pain, 9 = most severe pain) as reported by participants following a post-exercise hydration session. Data reflect participant ratings of cramping discomfort after consuming one of three beverages: juice, Powerade, and water.

Nausea Severity Over Time Following Different Post-Exercise Beverages

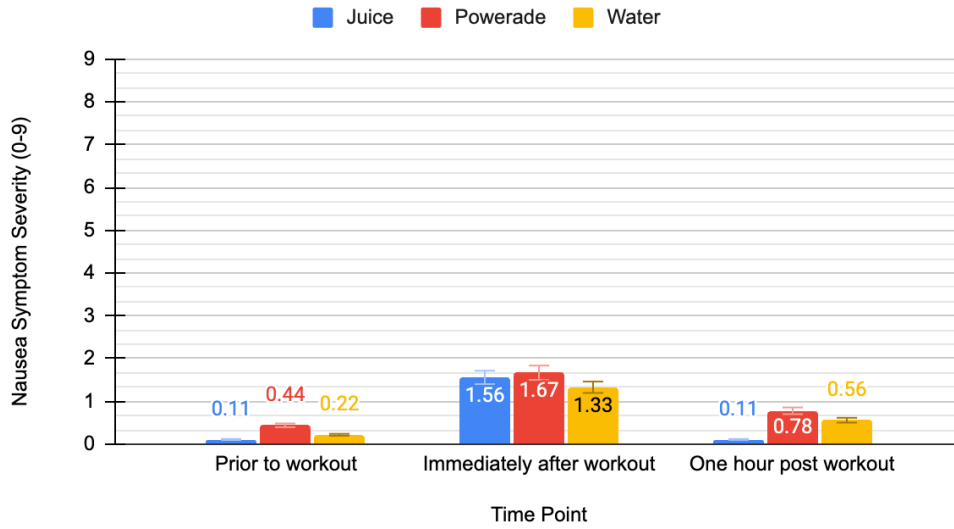


Figure S6: Average nausea severity ratings (scale: 0 = no nausea, 9 = most severe nausea) as reported by participants following a post-exercise hydration session. Data reflect participant ratings of nausea discomfort after consuming one of three beverages: juice, Powerade, and water.

Vomiting Severity Over Time Following Different Post-Exercise Beverages

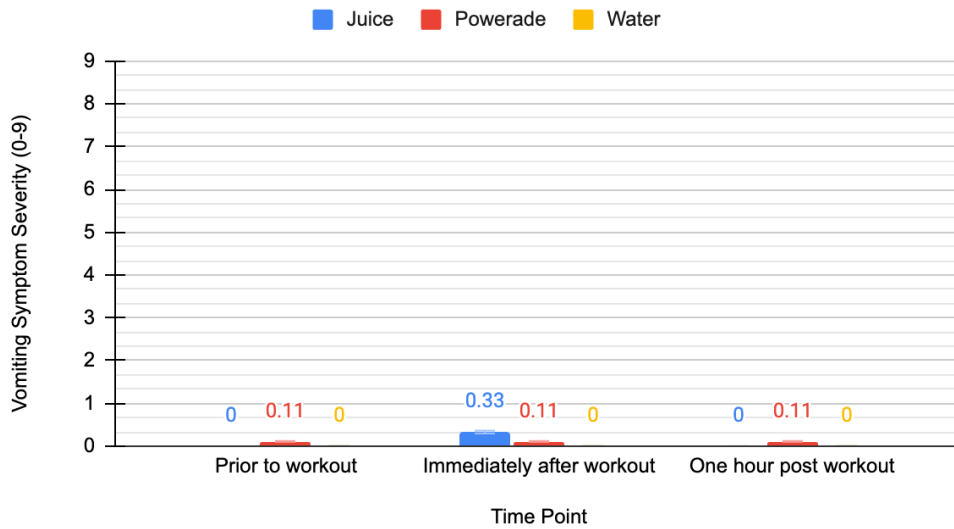


Figure S7: Average vomiting severity ratings (scale: 0 = no vomiting, 9 = most severe vomiting) as reported by participants following a post-exercise hydration session. Data reflect participant ratings of vomiting after consuming one of three beverages: juice, Powerade, and water.

Intestinal/Lower Abdominal Pain/Cramping Symptom Severity Ratings for Different Post-Exercise Beverages

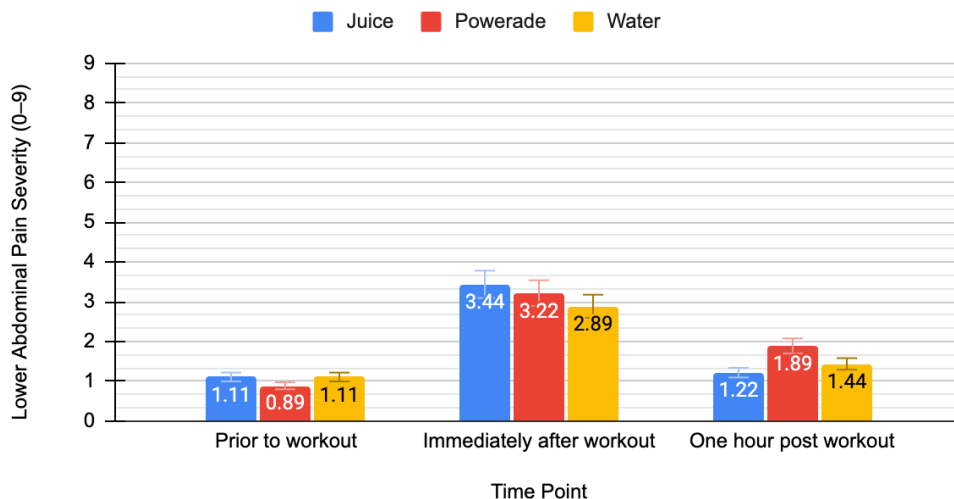


Figure S8: Average lower abdominal pain severity ratings (scale: 0 = no pain, 9 = most severe pain) as reported by participants following a post-exercise hydration session. Data reflect participant ratings of cramping discomfort after consuming one of three beverages: juice, Powerade, and water.

Flatulence Severity Over Time Following Different Post-Exercise Beverages

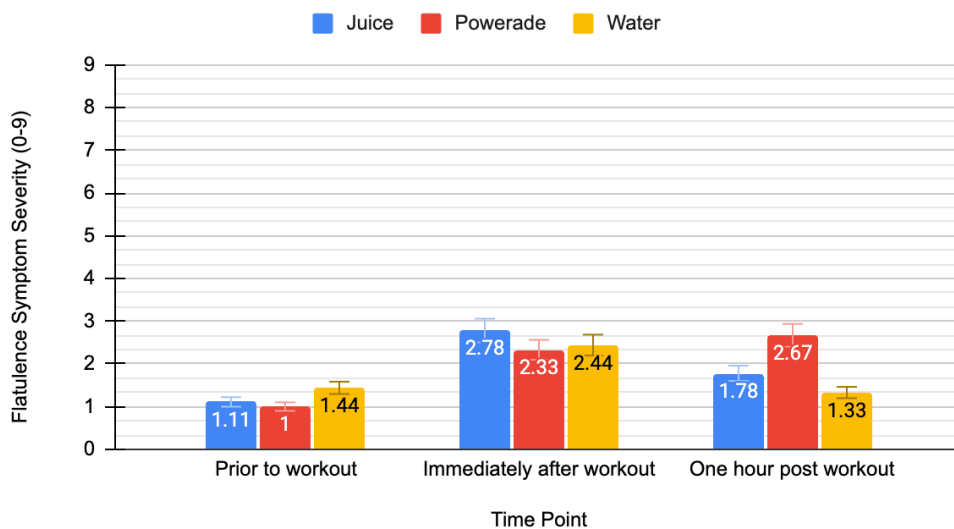


Figure S9: Average flatulence severity ratings (scale: 0 = no symptoms, 9 = most severe symptoms) as reported by participants following a post-exercise hydration session. Data reflect participant ratings of flatulence discomfort after consuming one of three beverages: juice, Powerade, and water.

Urge to Defecate Severity Over Time Following Different Post-Exercise Beverages

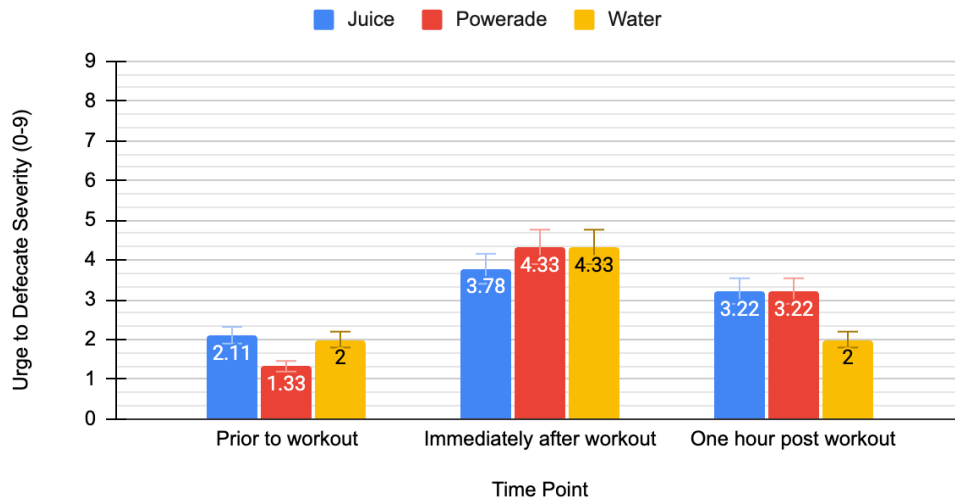


Figure S10: Average urge to defecate severity ratings (scale: 0 = no symptoms, 9 = most severe symptoms) as reported by participants following a post-exercise hydration session. Data reflect participant ratings of symptoms after consuming one of three beverages: juice, Powerade, and water.

Side Aches Symptom Severity Ratings for Different Post-Exercise Beverages

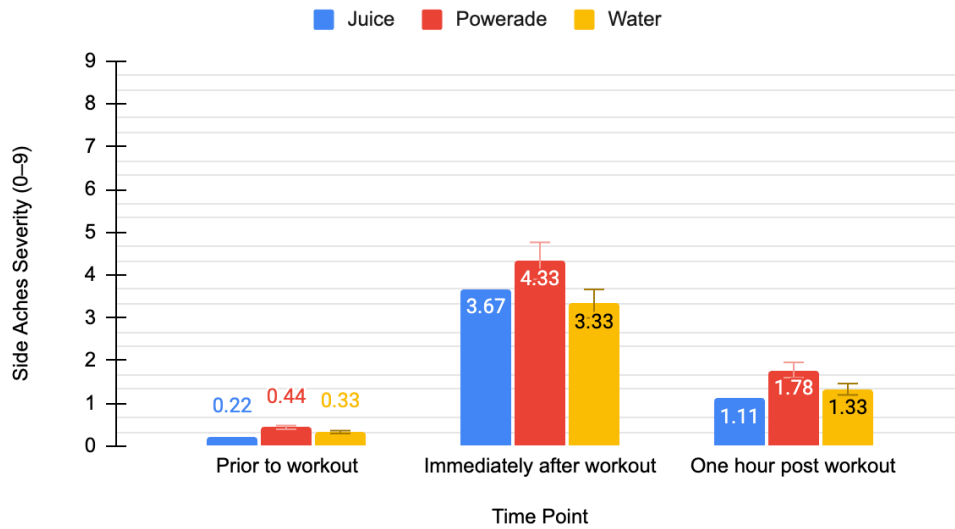


Figure S11: Average side aches severity ratings (scale: 0 = no pain, 9 = most severe pain) as reported by participants following a post-exercise hydration session. Data reflect participant ratings of symptoms after consuming one of three beverages: juice, Powerade, and water.

Loose Stool Symptom Severity Ratings for Different Post-Exercise Beverages

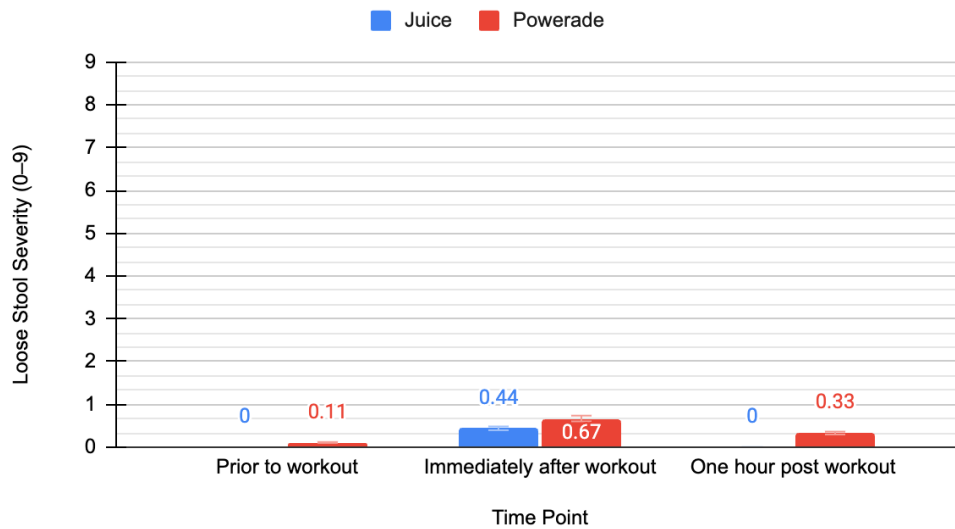


Figure S12: Average loose stool severity ratings (scale: 0 = no symptoms, 9 = most severe symptoms) as reported by participants following a post-exercise hydration session. Data reflect participant ratings of symptoms after consuming one of three beverages: juice, Powerade, and water.

Diarrhea Severity Over Time Following Different Post-Exercise Beverages

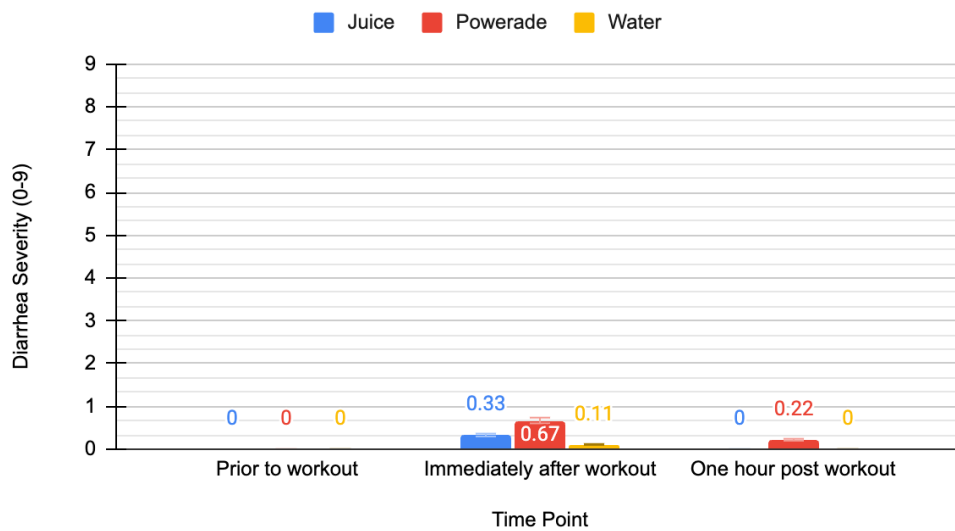


Figure S13: Average diarrhea severity ratings (scale: 0 = no symptoms, 9 = most severe symptoms) as reported by participants following a post-exercise hydration session. Data reflect participant ratings of symptoms after consuming one of three beverages: juice, Powerade, and water.

Dizziness Severity Ratings for Different Post-Exercise Beverages

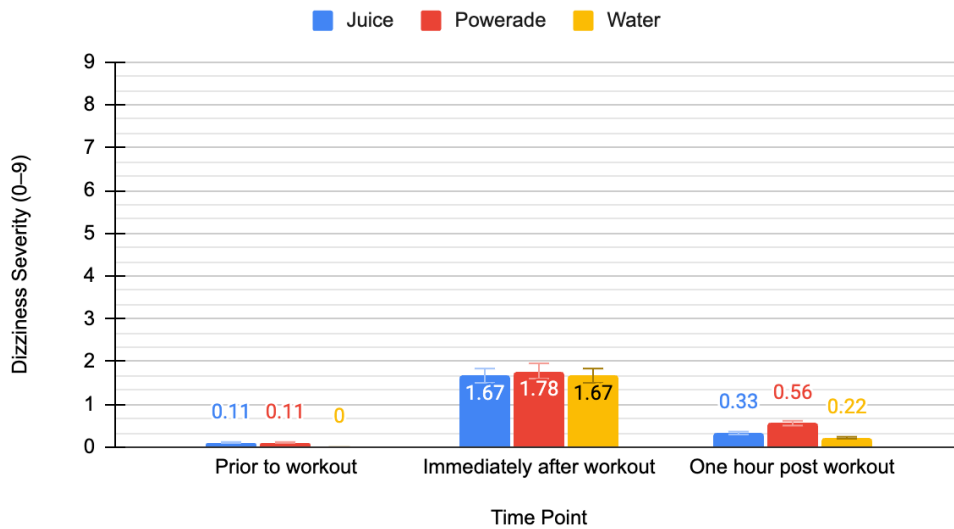


Figure S14: Average dizziness severity ratings (scale: 0 = no symptoms, 9 = most severe symptoms) as reported by participants following a post-exercise hydration session. Data reflect participant ratings of symptoms after consuming one of three beverages: juice, Powerade, and water.

Headache Severity Over Time Following Different Post-Exercise Beverages

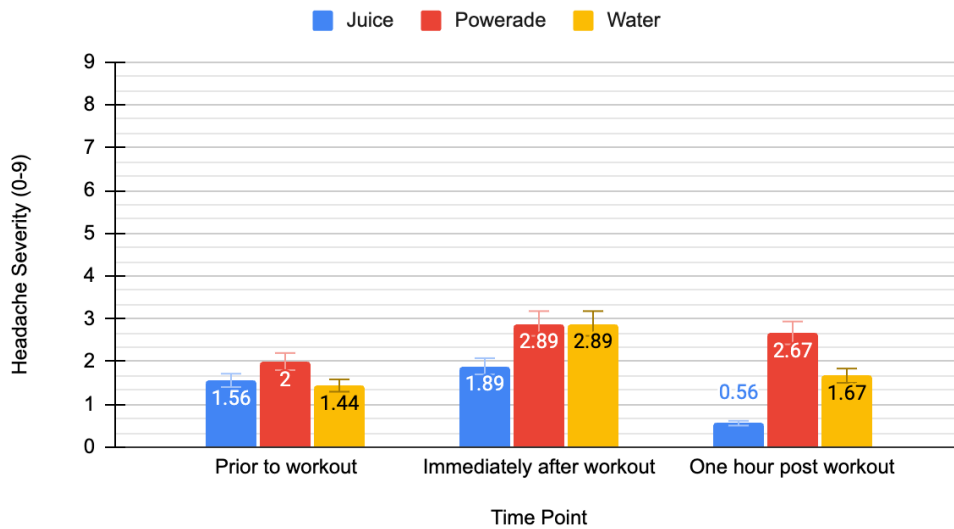


Figure S15: Average headache severity ratings (scale: 0 = no symptoms, 9 = most severe symptoms) as reported by participants following a post-exercise hydration session. Data reflect participant ratings of symptoms after consuming one of three beverages: juice, Powerade, and water.

Muscle Cramps Severity Over Time Following Different Post-Exercise Beverages

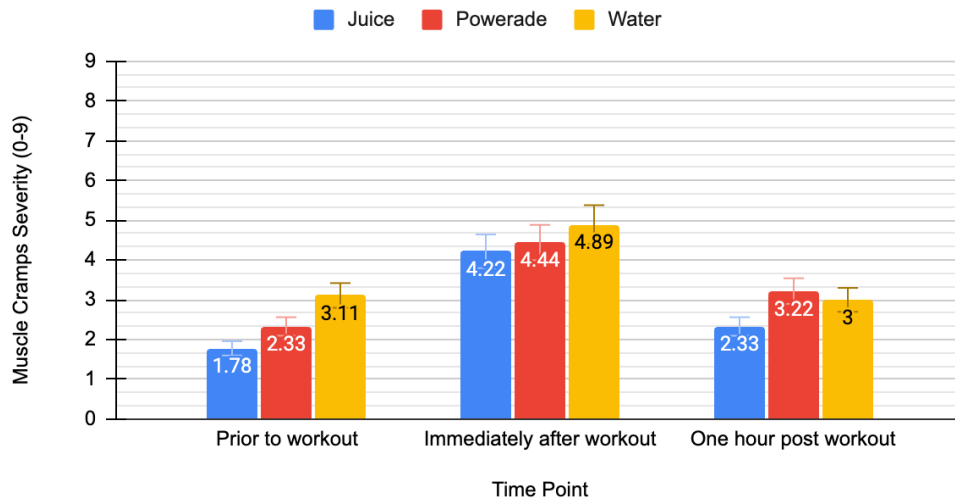


Figure S16: Average muscle cramp severity ratings (scale: 0 = no symptoms, 9 = most severe symptoms) as reported by participants following a post-exercise hydration session. Data reflect participant ratings of symptoms after consuming one of three beverages: juice, Powerade, and water.

Urge to Urinate Severity Over Time Following Different Post-Exercise Beverages

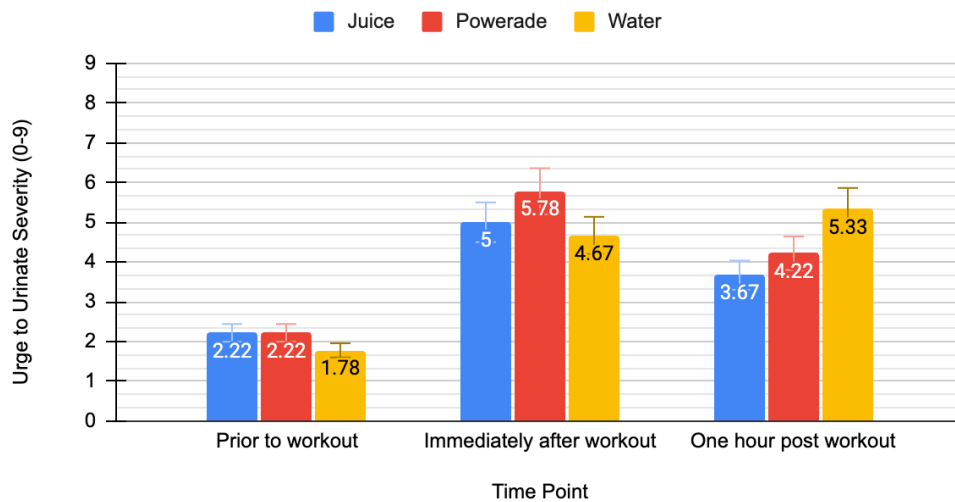


Figure S17: Average urge to urinate severity ratings (scale: 0 = no symptoms, 9 = most severe symptoms) as reported by participants following a post-exercise hydration session. Data reflect participant ratings of symptoms after consuming one of three beverages: juice, Powerade, and water.