Comparing Nutrient Density of Raisins to Sports Chews

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Learning Outcome: Participants will understand the nutrient difference between an all-natural carbohydrate source (raisins) to a commercially available product, sports chews.

Research Outcome: To compare the nutrient density of an all-natural carbohydrate source (raisins) to a commercially available sports chew.

Methods: A published study examined the performance levels of male athletes (n=11) who underwent each of three randomized nutrition treatments (raisins, sports chews, and water) while performing an 80-minute treadmill run at 75% VO2 max, followed by a 5 kilometer timed trial. The study showed that performance levels were similar when athletes consumed 400 kcals of raisins and 400 kcals of sports chews in comparison to water (20.6 ± 2.6, 20.7 ± 2.5, 21.6 ± 2.7 min for raisin, sports chews, and water) respectively. IRB was granted.

Results: The nutrient comparison showed that sugar, fiber, protein, and carbohydrate content of raisins was 80g, 6.4g, 3.2g, and 96g respectively while content of the sports chew was 48g, 0g, 0g, and 96g respectively. Raisins contain 25% daily value of fiber and 6.4% daily value of protein respectively while sports chews are void of these nutrients. The mineral content of the raisins was 32mg sodium, 952mg potassium, 68mg calcium, 44mg magnesium, 136mg phosphorus, and 8μg folate. The sports chew contained 280mg sodium, 80mg potassium, 0mg calcium, magnesium, phosphorus, and folate. The vitamin content of raisins was 3.2mg vitamin C, 4.8μg vitamin K, and 16mg vitamin E while the sports chew were void of these vitamins.

Conclusion: Although raisins and sports chews may provide similar performance results, raisins provide a nutrient dense all-natural carbohydrate source which contains more vitamins and minerals overall.

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