

## Recovery Strategies in Endurance Athletes

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### ABSTRACT

In order to achieve optimal performance, endurance athletes, whether at the professional or recreational level, need to implement a variety of recovery strategies that are specific to their individual training and competition. Recovery is a multidimensional process involving physiological, psychological, emotional, social, and behavioral aspects. **PURPOSE:** The purpose of the current study is to examine current implementation, beliefs, and sources of information associated with recovery strategies in endurance athletes. **METHODS:** Participants included 240 self-identified endurance athletes (m=112, f=126, non-binary=1, and preferred not to answer=1) across different sports (cycling=57, running=100, triathlon = 61, other=22; pro=13, current/former collegiate athlete=67, recreational=160). The participants ranged in age from 18 to 79 years old ( $40.7 \pm 13.73$ ) and were primarily white ( $n=213$ ). Participants completed an online survey through Qualtrics on demographics, recovery strategies used in practice and competition, perceived benefit of the strategy, and their sources of information regarding recovery strategies.

**RESULTS:** Hydration was the most frequently reported recovery strategy in both training (91.3%,  $n = 219$ ) and competition (80.4%,  $n = 193$ ). Nutrition followed in training (78.8%,  $n = 189$ ) and competition (78.3%,  $n = 188$ ). Sleep was the third most utilized strategy in training (77.9%,  $n = 187$ ) and competition (76.7%,  $n = 184$ ). The least used recovery strategy was ultrasound in training (1.3%,  $n = 3$ ) and competition (1.7%,  $n = 4$ ). Chi-squared analyses showed no significant differences between training and competition for the use of the recovery strategies. Hydration was reported as a beneficial recovery strategy after practice (96.5%,  $n = 223$ ) and competition (94.7%,  $n = 200$ ) by the greatest percentage of participants, with sleep the second most frequently considered beneficial (91.4%,  $n = 213$ ; 92.5%,  $n = 199$ ), followed by nutrition (91.3%,  $n = 211$ ; 92.5%,  $n = 198$ ). The participants were most likely to get their information about recovery strategies from a fellow athlete (46.3%,  $n = 111$ ), a coach (42.5%,  $n = 102$ ), or a website (30.4%,  $n = 74$ ).

**CONCLUSION:** Hydration is the most common recovery strategy and found to be beneficial in both training and competition settings. These athletes are relying on the people around them and websites for information and recommendations. Endurance athletes should be educated on other strategies to address the multidimensionality of recovery. These findings will be useful for healthcare professionals, practitioners, and coaches in understanding recovery strategies in endurance athletes.