

***Pre and Post-Performance Nutritional Planning* | Tom McGary, DPT, MM**

Exercising or performing in a fasted state or going for long periods without eating, due to demanding practice and performance schedules reduces the availability of energy and nutrients to active muscles and has been shown to impair performance. Research with sport athletes has shown that eating before exercise improves performance. Several sports nutrition guidelines can apply to performing artists to improve performance and reduce the risk of injury, such as follows:

- Fuel for performance; never show up for a performance in a fasted state. Artists should eat at least two meals before an evening performance as well as a small snack before performing.
- Pre-event meals should consist of mostly carbohydrates (e.g. whole grains, pasta, rice, potatoes, energy bars, vegetables, and fruit), Moderate protein and low fat and be consumed 3-4 hours prior to performance
- The closer to the start of the performance, the smaller the meal should be.
- Stay hydrated. Performers are advised to drink 12-20oz of water or a sports drink at least 2-3 hours before a performance. This will optimize hydration and allow time for excretion of any excess fluid.

It is important to avoid overeating late at night by spreading meals throughout the day, a real challenge to performing artists. Baseball players ward off hunger during the game and are less hungry after a game by taking a few bites from a snack or energy bar between innings. Performing artists can do the same by eating small bites and drinking fluids between acts or during intermissions so as not to be as hungry late at night.

Post-event eating can impact fuel availability for the next day's performance. Similar to sport athletes who may compete in back-to-back games or in tournament play, performing artists often have little time to recover between performances. The window for optimal postexercise recovery spans several hours. The earlier the food is ingested within this window, the faster energy stores are replenished. This is especially important for multiple performances per day or those who practice/perform everyday. Post-performance nutrition tips include the following:

- Carbohydrate consumption within 30 min after a practice/performance replaces energy in the muscle and decreases recovery time compared to eating later.
- Protein should be added to a post-event recovery snack to support muscle repair and growth. Recent research suggests that consuming about 15-25g of protein is the maximum needed to stimulate muscle repair and growth.
- Protein should be ingested as part of a recovery snack or beverage as soon as possible after activity. Repeated feedings of protein throughout the day in the form of meals and snack can further support muscle building.
- Optimal rehydration post-activity includes consuming 1.5 times more fluid than was lost during the performance. Generally this means consuming 3 cups of fluid for each pound lost during the performance.

Adopting sports nutrition strategies for performing artists can improve practice tolerance and help with rapid recovery from performances. An important premise of these general recommendations is that the optimal mixture of nutrients to speed recovery from hard training and performance can be obtained by eating wholesome foods and beverages, provided correct choices are made regarding food type, amount, and timing.”

Dick, MS, Randall W., Jacqueline R. Berning, PhD, William Dawson, MD, Richard D. Ginsberg, PhD, Clay Miller, MD, and George T. Shybut, MD. "Athletes and the Arts- The Role of Sports Medicine in the Performing Arts." *Current Sports Medicine Reports* 12, no. 6 (2013): 399. Accessed February 1, 2015. www.acsm-csmr.org.