

Dance Recovery Nutrition: What is Appropriate for Dancers?

A dancer's body reminds me of a brand new car. At first the car runs without a hitch, no need for a tune-up, tire rotation, oil change, or any type of body work for a while. Then after many, many miles the car slowly starts having issues (i.e. flat tires, transmission etc). The best way to ensure a long-life for the car is constant attention to maintenance & repair. This common progression of wear & tear is similar to what happens with year-round training in dance.

There are many lines of defense against wear & tear, but the one I stress the most is Post-Dance Recovery Nutrition! Ideally the Dancer should start to focus on 3 main areas :

- Macronutrients/Energy

- Hydration

- Micronutrients

Let's start with the Macronutrients! There are three Macronutrients (fat, protein & carbohydrates). These are the main forms of energy we obtain through food in various food groups. The most impactful for a dancer during the recovery phase is protein & carbohydrates.

Carbohydrates are the MAIN energy source a dancer uses throughout their training. A dancer's muscles & liver contain the storage form of carbohydrates called glycogen. When a dancer completes a training session, glycogen stores need to be replenished. Carbohydrate intake help stimulate insulin, which in turn helps promote the absorption of incoming carbohydrates. If carbohydrates aren't found in the recovery blend, insulin isn't stimulated and glycogen stores won't be replenished. This not only effects recovery after the recent dance session, but will also affect any near future (next days) training.

Protein is the other essential macronutrient involved in recovery. Protein has many functions that are vital to daily function, but when it comes to recovery protein does the best job of repairing the muscle tissue. By implementing protein in the recovery blend, the dancer is creating protein synthesis in the body. This results in a rebuilding phase that assists with building new muscle tissue. In order to get stronger & perform at a higher level, protein needs to be right there with carbohydrate in recovery.

The final main element in recovery is hydration. Just like in any sport, hydrating the muscles & body is a MUST for injury prevention, rehydration & overall recovery. The body is made up of

over 60% water! Water is not just lost in dancing through perspiration, but also respiration (breathing) as well. The main tip I give dancers is do not wait until you're finished with training to hydrate, get ahead of possible dehydration and hydrate well before training, during and of course right after. Female dancers should consume 3 liters of fluid per day, whereas Males should strive for 4 liters of fluid per day. This amount does not include the hydration needed for training.

Combining all three elements results in the following recommended recovery meal composition:

Protein: 10-20g

Carbohydrates: 20-40g

Hydration: 16-24oz

My best advice for dancers to get all three is either a combination of simple snacks with hydration or a smoothie!

Here are some simple snacks + hydration, and a smoothie:

- 1) 5-10g Protein Bar + Serving of Fruit + 16oz Chocolate Milk
- 2) Greek Yogurt Cup + ¼ cup granola + 16oz Coconut Water
- 3) Smoothie: 1 cup frozen strawberries, 1 serving Whey Protein Powder, ½ cup frozen spinach, 12-16oz of Almond Milk & 1 full banana

The last phase of recovery comes in the form of Micronutrients. Micronutrients are smaller components of the recovery picture, but still important. Three micronutrients that stand out as a very important part when it comes to recovery are as follows:

-Vitamin C

-Vitamin E

-Gelatin

Vitamin C is found in every cell in our body. This makes Vitamin C a recommended micronutrient in not only the dancer's diet but in the general population's. Vitamin C is also a major component of collagen (more to come on this), and is important in iron absorption & fat metabolism. And you just thought Vitamin C's only function is immune protection!

Vitamin E is a very powerful antioxidant. This means that Vitamin E can fight off free-radicals that buildup in the body. One way free-radicals buildup is due to the stressors from training.

Free radicals are harmful when it comes to recovery time, which is why Vitamin E becomes so important. Vitamin E limits the loss of muscle proteins & reduces post-training soreness. Vitamin E is actually the most effective at the above functions when combined with Vitamin C. Talk about a positive relationship!

Finally, Gelatin is a part of recovery that isn't as widely discussed. New research is coming out on the effectiveness of supplementing Vitamin C & Gelatin together to enhance collagen synthesis! Think about what areas of a dancer's body take on the most impact? Joints, tendons, ligaments.....all of a sudden collagen becomes extremely important in supporting those areas for a dancer. Protecting and enhancing collagen is where a dancer can make a major impact with recovery!

How do you get Vitamin C, Vitamin E & Gelatin within a recovery option that also has the Macronutrients discussed earlier?

- Shake Recovery
 - **Vitamin C Rich Food:** 1 cup Frozen Strawberries
 - **Vitamin E Rich Food:** ¼ Avocado
 - **Gelatin:** 1 Pack of Gelatin Powder (non flavored) in Shake
- Snack Recovery (Greek Yogurt Parfait)
 - **Vitamin C Rich Food:** 1 cup Blueberries
 - **Vitamin E Rich Food:** ¼ cup Almonds
 - **Gelatin:** 1 Pack of Fruit Snacks in Parfait
- Meal Recovery (Super food, High Protein Salad)
 - **Vitamin C Rich Food:** 1 Sliced Tomato + ½ cup Kiwi
 - **Vitamin E Rich Food:** 2 tbsp Olive Oil/Vinegar dressing
 - **Gelatin:** Side of Jello (Homemade)

Disclaimer: *The information presented here is to help guide and inform the dancer and training staff, it is not meant to take the place of the advice of a medical professional. This information is provided by Dance/USA Task Force on Dancer Health.*

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