



# MINNESOTA DANCE MEDICINE FOUNDATION

## Nutrition for Injury Prevention and Healing

In dance, injuries happen. Of course, preventing injury with proper training, rest, flooring, footwear, *and* nutrition is the best way to stay in class and achieve your top performance. However, when injuries do occur, very few dancers know exactly how to use food and nutrition to improve healing. Therefore, this paper outlines the specifics of 1) nutrition for preventing injury and 2) nutrition for optimal healing.

### Practical Tips For Preventing Injuries with Nutrition

**1. Have a plan!** To be sure you are getting enough of the important nutrients needed for optimizing recovery and healing, plan your meals and snacks ahead of time with foods that work for you and make you feel and dance your best. Have food items on hand to quickly and easily prepare meals and snacks – for on-the-go or after a busy day.



**2. Be prepared.** Everyone is different, but some examples of convenient and nutritious foods to keep on hand include:



*Freezer* - cooked chicken, fish filets, veggie burgers, leftovers, frozen veggies, fruit, and cooked rice or quinoa.

*Pantry* - canned tuna, soup, noodles, oatmeal, microwavable brown rice, nuts/seeds, nut butters, granola and whole grain crackers.

*Refrigerator* - eggs, deli meat, dairy foods, whole grain tortillas, and fresh fruit and vegetables.

**3. Don't skip meals.** Promote recovery by giving yourself permission to eat enough food during your most active time of the day, about every 3 to 4 hours. Skipping meals/snacks usually decreases mental focus and increases fatigue. Add stress and anxiety to the mix, and it's no secret that even the most dedicated healthy eater will be challenged to eat well. Being overly hungry often leads to overeating less healthy foods and increased cravings for a quick energy source, such as sweets, chips and fast food.

**4. Make whole foods your “everyday” foods.** Avoid relying on highly processed, convenient foods and drinks including sports bars and energy drinks. Although these foods can fit in a dancer’s diet as “*sometimes*” foods, many of these have added sugars or sugar alcohols that contribute to increased inflammation and GI distress. Nutrient dense foods, such as lean protein, fiber-rich whole grains, fruit, vegetables, low-fat dairy and healthy fats provide important vitamins, minerals and antioxidants that help improve recovery and healing.

**5. Add color to your plate.** Increase your daily intake of richly colored yellow, orange and red fruits and vegetables. These foods are rich in antioxidants and important vitamins and minerals for managing inflammation. Examples of Vitamin C foods include oranges, strawberries, tomatoes, and bell peppers, and Vitamin A foods include sweet potatoes, carrots, and dark leafy greens (spinach and kale).



**6. Prioritize protein.** Include protein at each meal and especially as part of a recovery snack after a period of dancing. Protein needs vary individually, but in general, aim for about 20 grams of protein per meal or snack (*20 grams of protein is the equivalent of a palm-sized serving of meat, pork or poultry; one cup of tofu; or 6 oz Greek yogurt with a couple tablespoons of almonds*).

**7. Include healthy fats.** Many dancers think of “fat” as a bad word, but fats promote healing. Good sources of “healthy fats” are those that provide omega-3 fatty acids and include salmon, tuna, ground flaxseed, and walnuts. One 3-ounce portion of salmon provides half of the daily recommendation for this essential fat. Nuts and seeds are also an excellent source of Vitamin E, essential to the process of healing.

**8. Stay hydrated.** Keep a water bottle on hand to prevent dehydration. Everyone is unique, so drink to your thirst evenly throughout the day, or until your urine is a pale yellow.

### Nutrition for Optimal Healing

Many dancers faced with an injury often fear gaining weight because of the decrease in training. However, for the dancer who is plagued with multiple small injuries or who is recovering from surgery, consuming enough fluids along with some specific nutrients will not only help the body to heal quickly, but minimize the loss of lean muscle.



**1) Energy intake is a top priority!** A dancer’s energy (calorie) needs are less than during periods of heavy dancing but still more than when he or she is sedentary. The type of injury and amount of activity allowed will determine how much a dancer needs, but consuming too little will likely slow the healing process.

**2) Managing Inflammation.** The initial pain, swelling, and redness that occur following an injury are hallmark signs that inflammation is occurring in the body. Some inflammation is normal and critical for triggering the repair process, but too much can be a problem. Therefore, including foods that help control inflammation can be very helpful.

**Eat more “anti-inflammatory” foods:**

- Colorful fruits and vegetables
- Healthy fats, such as those found in salmon, tuna, nuts, seeds, olive oil and avocados.

**Limit foods that may trigger additional inflammation:**

- Highly processed foods
- Foods high in saturated fats (fried food, butter, red meat, etc.)
- Foods and drinks high in simple sugars (cookies, candy, blended coffee drinks, energy drinks, etc.)

**3) Repair and Rebuilding.** Even after swelling and redness has decreased, it’s important for the dancer to remember the body is still in the active process of making healthy, new tissues. Including the following nutrients, along with plenty of fluids, in his or her daily food plan can help ensure optimal recovery.

<b>Nutrient</b>	<b>Why It’s Important</b>	<b>Good Sources</b>
Protein	An essential ingredient for healing and making healthy, new tissue in your body.	Lean meat, fish, chicken, turkey, milk, yogurt, nuts, nut butters, seeds, eggs, beans, and soy-containing foods (tofu, tempeh, edamame)
Fat	A variety of healthy fats assist with wound healing, joint health and the immune system.	Salmon, herring, tuna, walnuts, ground flax, avocado, flax and olive oil
Carbohydrates	Dancers will likely need fewer carbs during this time than during times of intense training, but these foods are still important for the healing process.	Nutrient dense carbohydrates including fiber-rich whole grains, such as oatmeal, whole grain bread, brown rice, and quinoa; potatoes, beans; fruit; and dairy products such as milk and yogurt
Fruits and Vegetables	The rich colors found in these foods are sources of important chemicals called antioxidants, as well as other	Green leafy veggies, such as spinach and kale; strawberries, blackberries, blueberries and raspberries, oranges, tomatoes; and, bell peppers,



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	vitamins and minerals that help repair tissues.	broccoli, and carrots
Vitamin D and Calcium	Both are critical nutrients needed for healing stress fractures or other injuries to bone.	Vitamin D is found in fortified milk, some fish, and eggs. Calcium is also found in dairy products, calcium-fortified orange juice, salmon, tofu ( <i>when prepared with calcium sulfate</i> ), and collard greens

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This resource paper was written by Val Schonberg MS, RD, CSSD, LD, NCMP under the auspices of Minnesota Dance Medicine Foundation

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