

### **Nutrition for the Dancer**

Dance training is often rigorous and a big investment of time, energy and money. In addition to hard work and proper training, adequate sleep and good nutrition are essential for achieving optimal health and top performance. The daily demands of attending work or school, along with dance classes, rehearsals or performances, creates a need for nutrition strategies that optimize fueling for the body and enable dancers to *dance healthy*!

# **Daily Nutritional Needs**

To perform their best, dancers need to be well fueled for class, rehearsals and performances. An important challenge facing dancers is having enough energy available to support not only their intense training, but also growth, recovery, daily activities, and other body functions. Dancers may be unaware of the need to boost their intake with increased activity, such as during performance season, or when adding in additional exercise. Also, dancers may intentionally or unintentionally decrease the amount of food consumed because of stress or weight concerns. In either situation, an energy deficiency can contribute to fatigue, increased injuries, and affects other physiological functions such as metabolic rate, bone mass and hormonal functioning for both male and female dancers.

A dancer's daily nutrition needs are based on meeting these demands while being able to adjust his/her intake as needed. Consuming nutrient dense foods and plenty of water or fluids at 3 meals and 2-3 snacks will meet the daily energy needs for most dancers.

# Carbohydrate

The amount of carbohydrate in the dancer's diet is especially important because carbohydrate is the major energy source for the muscle. About half of a dancer's daily energy needs need to come from carbohydrate-containing foods, such as fruit, yogurt, bread, pasta, cereal, and rice. Carbohydrate from foods is broken down into glucose in the digestive tract and then stored in the form of glycogen in muscle so that it is ready to be used as fuel for energy. Dancers who do not have enough carbohydrate in their diet often feel more fatigued during class or rehearsals and compromise their ability to advance their skills because of low muscle glycogen levels.

#### **Protein**

It is essential for dancers to eat enough protein. Protein is needed for muscle growth and to repair muscle fibers that are stressed by constant use. The estimated protein a dancer needs



per day is about 0.5 to 0.8 grams per pound of body weight. Most individuals are able to meet their protein needs by including protein-containing foods (i.e. meat, fish, poultry, legumes, nuts and dairy products) at each of their meals and snacks during the day.

#### Fat

A dancer's body needs fat to function properly. In addition to being an energy source, fat provides structure for every cell membrane in your body. It is essential for making hormones that help you grow and develop; for making nerve cells; for the absorption of fat soluble vitamins; and is an important fuel for muscles. A diet too low in fat can have serious health consequences and can ultimately impair a dancer's performance. To achieve the proper balance of fat in your diet, it is important to consume a variety of foods every day in moderation.

## **Additional Key Nutrients**

Eating a variety of foods will ensure an adequate intake of key vitamins and minerals that have an important role in energy production, muscle repair, and bone health. Wholesome fruits and vegetables, for example, are an indispensable part of the dancer's diet. These foods contain important chemicals called antioxidants that have anti-inflammatory properties to help with repair and recovery. Other key nutrients for the dancer include calcium (yogurt, milk, cheese, collard greens, broccoli, and almonds), iron (red meat, poultry, fish, beans, spinach and ironfortified cereals) and vitamin D (milk, yogurt, salmon, tuna, and eggs).

## When and What to Eat Before, During and After Dance

Following are some tips to help you plan your day and get in the 3 meals and 2-3 snacks recommended for dancers.

### **Before Dance**

- Before class: plan to have a moderate-sized meal 3-4 hours before class. Include a balance of wholesome carbohydrates, lean protein and healthy fat (such as oatmeal, Greek yogurt, berries and walnuts).
- Right before class or rehearsal: enjoy a small, easily digestible snack rich in carbohydrates 30 to 60 minutes before dance. Fresh or dried fruit, dry cereal, granola, crackers, pretzels are easy to pack in your bag and have ready to eat.
- Before an evening performance: plan to have a balanced meal with plenty of water 3-4 hours before performing. Familiar foods are best while limiting spicy, high fiber and high fat foods.
   Fish with rice and veggies is a simple example. The closer the dancer is to the event, depend on smaller, easily digestible snacks for energy.



# **During Long Periods of Dancing:**

- For classes, rehearsals or performances longer than two hours: try to eat small, frequent bites
  of carbohydrate-containing food with water. Dried cherries, an orange, crackers or yogurt are
  a few examples.
- If unable to eat solid food: sipping on fluids containing electrolytes and carbohydrates (such as sports drinks formulated with 4 to 8% carbohydrate) are a good source of fuel and rehydration to help replace energy lost and prevent mental and muscular fatigue during periods of intense dancing. Artificially sweetened drinks or fluids containing other ingredients, such as caffeine, are not effective forms of fuel or hydration.

## After Class, Rehearsal or Performance:

 After a period of long and/or intense activity: eat a snack with carbohydrate along with some protein within 30 to 60 minutes. Examples include low-fat chocolate milk; almonds + dried fruit; nut butter + apple; string cheese + crackers. This is especially important for dancers who will dance within 24 hours of their previous activity.

# Sample Meal Plan for Advanced or Professional Dancer.

Time	Meal/Schedule	Food	Fluids
7:00 am	Breakfast	Omelet with spinach Whole-wheat toast and banana	Glass of milk and water
9:30 am	Class		Water/Sports Drink
11:00 am	(15 minute break) Snack	Orange slices	Water
11:15 am	Rehearsal		Water/Sports Drink
2:00 pm	(30 minute break) Lunch	Chicken Caesar wrap with romaine; Carrots and hummus	Water and/or Herbal Tea
2:30 pm	Rehearsal		Water/Sports Drink
4:30 pm	PM Snack	Greek yogurt, berries and nuts	Water
6:00 pm	Dinner	Salmon, sweet potato and roasted asparagus	Glass of milk and water
8:00 pm	Evening Snack	Dark chocolate and Blackberries	Herbal Tea

<sup>\*</sup> Amounts vary based on individual needs



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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