Introduction

Dancers take their careers and personal health seriously. There is growing interest in the field of nutrition for dancers and for reliable sources of information pertaining to it. In the interest of maintaining and supplementing your ongoing health as dancers and artists, this article will address the following topics: energy production, vegan and vegetarian dietary options, and common myths about nutrition fads and weight control. The suggestions in this article are to be used as a general guide as they may apply to you!

Dancer Energy and Nutrition

Dancers know that eating healthfully translates into the maintenance of essential energy and stamina. Because you are an athlete as well as an artist, it is critical to supply and respect your “engine” with the fuel it needs to keep your muscles moving and your brain sharp. Dancers may have intense schedules that prevent them from having three square meals a day. However, with a little planning, healthy small meals and snacks can be prepared ahead of time to be eaten during dance training and/or before big performances.

Understand How Your Body Makes Energy

On a daily basis, dancers need a variety of foods most often called macronutrients: carbohydrates, proteins, fats and water. These macronutrients are utilized to make energy for basic functions as well as for dance. We use all 4 macronutrients 24/7; however, dancers should keep in mind that the primary fuel source for the brain, nervous system and working muscles is glucose. Glucose comes from high quality carbohydrates: grains and foods made from grains, whole fruits and veggies, as well as dairy products whose milk sugars provide carbohydrates. Without these essential foods, the body may not be as efficient, and you may experience a lack of energy.
and mental focus during your day. In this situation, your body will then depend on other fuel sources. These include amino acids from proteins and fatty acids from lipids. While sufficient to maintain basic functions, these alternatives are not the body’s preferred fuels, especially for exercise and/or recovery. Chronic glucose deprivation can be very detrimental to a dancer’s health and wellbeing! Eat these foods consistently throughout your day to think and feel your best. Keep in mind that combining your carbohydrates with some protein and some fat will keep your energy even and consistent. It can help to aim for balanced portions on your plate!

**Practical Suggestions**
Consistent daily calorie and food intake is essential for prime bodily function and peak dance performance. It is also helpful to remember that your calorie and protein needs may change from season to season and/or depending upon your physical activity. It can be useful to consult with a registered dietitian to help you navigate your needs as your schedule changes during the year. How do dancers get the calories and nutrients they need to be healthy and to perform well?

Here are a few tips you may find useful.

1. **A nutritious breakfast is essential.** The following suggestions can sustain you for at least 3 hours after breakfast. You may need to adjust according to your meal schedule:

   - Oatmeal (carbohydrate) coupled with a low fat Greek yogurt (protein, carbohydrates and some fat for sustained energy) and a banana or blueberries (carbohydrate).
   - Scrambled eggs (protein and a bit of fat) on whole grain toast (carbohydrate) with sliced avocado and tomato (carbohydrate) and fresh orange juice (carbohydrate).
   - To give your body that much-needed glucose, plan snacks starting every few hours after breakfast if you know that you won’t have time to sit for lunch (e.g., peanut butter on whole grain bread, cottage cheese and berries, string cheese and a pear, yogurt and granola, hard-boiled egg and baby carrots, hummus and whole grain crackers).
   - If you haven’t eaten for several hours and need some quick sustenance without having a full meal, you may choose a good quality carbohydrate like banana bread, a blueberry muffin, applesauce, cereal bar, dried fruit or whole grain cereal.

These suggestions may also help you power yourself through a performance, as long as you have eaten well during the day.

2. **Meals following evening classes or a show.** At this time, most dancers will need a light and satisfying meal in order to have enough energy to perform well the next day and beyond (e.g., an omelet with some soup and toast). It is recommended to replenish carbohydrates with rice, pasta, potato, bread or crackers, and add some protein and good quality fat for balance. Keeping this in mind, eat something you enjoy!

3. **Hydrate.** Dehydration creates exhaustion and can mask itself as hunger. You may not need to reach for a sugary snack if you hydrate properly. Hydration needs may vary from one dancer to another. Dancers with heavy sweat losses may have increased fluid needs. Always make your primary fluid of choice water. However, a sports replacement drink with a 4-6% solution of carbohydrate may be useful as an
addition, especially if you have not had a food or snack break during your activity. Please note: these sports drinks are not recommended for children. One way to tell if you are properly hydrated is to check the colour of your urine: it should be a pale yellow or straw colour. If it appears dark yellow and dense you may need more water!

According to research, the idea that your diet should be perfect can be detrimental to your relationship with food. Conforming to a rigid eating plan that does not take your personal needs into account often has negative effects on the body and mental health.

**Vegetarian and Vegan Diets**

Some dancers may have considered becoming vegetarian or vegan. However, it may be risky to abruptly change your diet, especially during adolescence, without being guided by a qualified health professional. Nutritional guidance, preferably from a registered dietitian who is familiar with the needs of dancers or athletes, is most useful in these cases.

Vegetarians typically eliminate all animal proteins except perhaps dairy and eggs. Vegans generally eliminate all animal proteins completely. Research shows that plant-based diets have many health benefits including lowered risk for ailments such as heart disease, diabetes and high blood pressure. These dietary choices can be healthy if some criteria are met. We will discuss information you need to know before you change your diet.

**What You Need to Consider**

If you are vegetarian or contemplating becoming vegetarian, it is important to stay focused on how you feel. Because personal needs may vary, pay attention to signals given by your body and remain flexible. Any diet that leaves you fatigued can be unhealthy. In the case of fatigue caused by insufficient energy intake, it is advised to change course quickly and readjust your dietary choices. While many vegan or vegetarian dancers may feel very satisfied with their food intake, others will happily have a meat or fish-based meal whenever they feel they need it. Either approach may be used based on the needs of the individual. In other words, you must not become a “follower” of an idea that is not suited to you, your body, or your lifestyle.
Protein
Since vegetarian and vegan diets eliminate meat, poultry, fish and sometimes dairy, there is a concern that this eating style may not provide enough protein. Protein needs may vary from dancer to dancer, but the general recommendation for protein intake in athletic endeavours is anywhere between 1.2-1.5g/kg of body weight per day.

Whether the protein source is animal or vegetable, the important thing is that enough calories are consumed to meet dancers’ daily energy requirements. Remember, we get protein from grains and starchy foods (3 grams per serving) and vegetables (2 grams per serving). In addition, legumes, soy, lentils, nuts and nutritional yeast generally provide 4-7 grams of protein per serving. When relying on plants for sustenance, you need to consume enough volume and calories. Vegan and vegetarian dancers could consider eating a generous breakfast that includes carbohydrates, protein and a bit of fat (e.g., avocado toast topped with vegan cheese and melon) and afterwards plan small snacks through their busy dance day before having a good dinner. All of the suggestions cited above in this article apply here!

Special Considerations
Vegan and vegetarian diets may be lacking in some minerals and vitamins. Instead of trial-and-error use of supplements, it is advised to get a yearly physical and ask your doctor to do blood tests to check vitamin, mineral, and nutrient levels. These tests may only reveal certain possible deficiencies such as ferritin, iron, or B12. However, blood work coupled with a nutritional evaluation will provide a comprehensive look at your health and wellbeing.

Omega-3 fatty acids, usually found in fat-rich fish, are keys in reducing inflammation. Vegetarian sources include flax, chia, canola oil, and walnuts. By topping cereal with walnuts, a banana and almond milk, you are good to go for breakfast or even a great snack!

Hemoglobin is the protein that carries oxygen in our bodies, and iron is the essential mineral that gives hemoglobin the strength to carry this oxygen. Iron is found in its most absorbable form in red meat, therefore vegan and vegetarian dancers should include spinach, fortified breads and cereals, and dried fruit like raisins and apricots to ensure sufficient iron intake.
Zinc is another mineral that is important for immunity, efficient wound healing and recovery. Zinc sources for vegans and vegetarians include soy products, legumes, grains, cheese, seeds, and nuts. Varying your diet helps ensure you are meeting the diverse nutrient needs of your body.

Other vitamins and minerals that might be an issue are iodine (consider adding sea salt to your diet), Vitamin D (check out fortified almond milk and other plant-based beverages), calcium (check out bok choy, broccoli, fortified plant-based beverages, almonds and soy products), and Vitamin B-12 (eggs, dairy and nutritional yeast). Remember, if you are eating the volume, variety and calories you need, you should be getting enough minerals and vitamins.

**Myths about Nutrition Fads and Weight Controls**

In pursuit of healthy nutrition, dancers may unfortunately be susceptible to dubious health and nutrition fads that come and go. This section will address myths and misconceptions that surround popular diet trends with the intent to help dancers make educated decisions about how to fuel up for their strenuous work.

As mentioned before, scientific literature shows that the number one fuel source for the whole body is glucose. The foods that provide this glucose in its most accessible forms are complex carbohydrates: grains, foods made from grains, whole vegetables and fruits. Some carbohydrates come from dairy (milk sugars) and from beans, but they are primarily found in these plant foods. Many fad diets, including the Whole 30, the Paleo diet, the Ketogenic diet, and the Atkins diet, tell us that carbohydrates are toxic and cause weight gain. These diets urge participants to eliminate carbohydrates in the interest of maximizing weight loss. However, this style of dieting can be dangerous; the prime reason that these diets may result in weight loss is because participants end up eating less overall. The same applies to diets based on intermittent fasting. The idea of eating within an 8 to 10 hour window is helpful for some people interested in losing weight because it helps them attain a sense of “control” over their caloric intake. However, fasting is generally not a good idea for dancers who need to maintain a high energy level in order to dance safely and effectively. Furthermore, fasting for 10 to 12 hours daily or more may severely impact their ability to dance and often leads to dangerous habits such as binge eating.

Fad diets and diets in general are usually unsuitable for dancers' unique work and lifestyle requirements. In addition, they are the highest preventable risk factor for eating disorders among the general population. They impose a moralistic, control-focused framework upon eating habits rather than prioritizing the body's self-regulating capability. Furthermore, the inability to conform to the difficult standards set forth by these diets can have negative impacts on the self-image of those who adhere to them.

**Biochemistry for the Dancer**

Given that the human body cannot live without glucose, food deprivation is detrimental to dancers' health. If carbohydrates are not provided, or if too few calories are consumed, the brilliantly adaptive body then relies on amino acids and fatty acids. However, the by-product of protein or fat breakdown is acid, which changes the PH balance of the blood. Humans are alkaline just like carbohydrates! If the blood becomes acidic, this is dangerous for the heart and other organs. The body then resorbs calcium from bones and teeth to buffer the blood by lowering acidity levels. Acid is then flushed out in body waste, causing dehydration and making the skeletal system more brittle due to its loss of calcium. This explains why undernourished dancers are more susceptible to bone fractures and breakages.
The multi-billion dollar weight loss industry promotes the endless pursuit of unattainable goals without thought to health. No diet and no fad diet can produce healthy, meaningful results because they do not teach people the principles of complete nutrition and balanced life habits. A healthy weight comes from a healthy lifestyle. This includes learning about balance, portions, structure, and consistency as well as learning how to deal with stress and emotions in ways that are unrelated to food intake. Dancers should be aware that the perception and pursuit of thinness as a barometer for health opens the door to many mental health issues including poor body image, body dysmorphia, eating disorders and depression.

**Tips for Balanced Nutrition**

1. **Do not follow fad diets.** Learn to determine what is healthy for you from reliable sources like registered dietitians or dance health professionals. Since everyone is slightly different, see what feels good to you. Remember, the body can provide valuable signals to help you understand your nutritional needs.

2. **Establish a consistent eating schedule.** For dancers, this most often includes: a breakfast which includes some good quality protein for sustained energy, some small snacks and/or a smoothie during your classes and rehearsals, and a decent dinner after activity or performance. Always balance proteins, carbohydrates and fats for the best digestion and energy. Quick energy is derived from carbohydrate sources: banana bread, wholesome muffins, fruits, cereal bars, yogurt smoothies, and sports-type drinks.

3. **Most dancers do not need to lose weight.** Many dancers have unrealistic beliefs and perceptions about body fat and the muscle make-up necessary to support dance practice. If you are concerned about your weight, consult a registered dietitian for individual coaching.

4. **Dancers do not need to detox or take dubious supplements.** Fat burning supplements are dangerous because they contain stimulants that can elevate blood pressure and heart rate. Steer clear; our liver, lungs and kidneys detoxify us every second of every day. The best way to detox is to eat plenty of grains, fruits and veggies for fiber, eat lean proteins, and eat quality fat sources like avocado, nuts, fish oils and olive oil. Fiber and good hydration cleanse you naturally and effectively.
Conclusion

If you are feeling especially concerned about the quantity or quality of the food you are eating, it is recommended to seek the guidance of a registered dietitian or mental health professional. They will help craft a sensible intake for your needs and wellbeing.

In order to honor their health, dancers are encouraged to determine what is healthy for them from reliable, reputable sources like registered dietitians or sports medicine doctors and to learn the facts about fads before they cause harm.

Remember, everyone has a unique body with unique nutritional needs. It is important to make nutrition choices that are right for you, not determined by someone else’s ideas of health. Because nutrition is a major component in self-care, you should stay committed to balance in your diet as well as in your lifestyle. Eating well and consistently means you have the energy, stamina, and strength you need to dance optimally and to maintain your weight naturally.

While staying attuned to healthy nutrition habits, seek out what feels good to you and forget the rest. Keep in mind that all foods can fit into your diet and that it is motivating to have your favorite foods often. We invite you to break away from pursuits of perfection and “right and wrong” views about food; make choices for yourself, practice self-acceptance and be at peace with your plate!

References:


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