



codarts



hogeschool voor de kunsten

# Food for dance

A guide to better dancing and  
more energy

rotterdamse dansacademie





balance  
energy  
variety

# Dancing demands strength and energy

In this guide, you will read about what you should eat and drink to dance better and longer. You will find practical tips on how to plan your meals and what food is best before or after your daily training sessions or a performance.

## The 'pyramid' of excellence

A well-planned, energy-balanced diet is the foundation for performing as a dancer. A dancer's diet needs to be energy-balanced, high in carbohydrates and low in fat. Because of their constant physical activity, dancers need more carbohydrates (starch and sugar are carbohydrates!) than other people. Insufficient carbohydrates results in a loss of performing capacity.

Dancers must make sure that they keep their energy level and muscle power balanced and that they keep eating throughout the day. We call this the 'pyramid' of excellence: a healthy diet is the foundation of the pyramid, on top of that comes the dancer's energy-specific food, while good meal planning ensures top performance. If you eat according to this 'pyramid' you will get through the day's training and/or performance, be less vulnerable to injuries and reach your own peak of excellence.



### Training and energy consumption

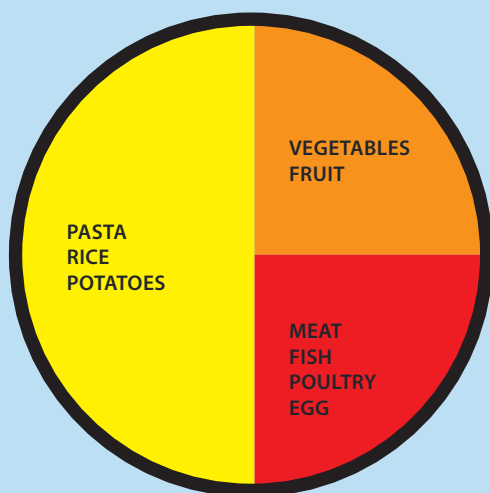
Coordination, muscle strength and stamina are important qualities for a dancer. These qualities are built through dance-specific training and technique classes. In a dance education environment, a training session can last for 1 1/2 hours and be repeated 3 times a day, 5-6 days a week, which adds up to about 25-35 training hours a week. On top of that, many students teach classes to other people in the evenings or the weekends. A professional dancer can reach up to 40 hours of dance practice every week! In a normal training session, usually half the time is spent on actual physical work, while the rest is dedicated to following instructions from the teachers. Proper nutrition is needed for both the physical activities and the concentration required for listening.

Research has shown that the daily energy consumption of female dance students with 2 1/2 hours training is 2500-3000 calories, and male students use an even greater amount of 3000-3700 calories. The exact amount of energy that is used depends, of course, on the number of hours and the type of training. The higher the tempo, the more glycogen (stored carbohydrates) is used as fuel.

### Food for energy

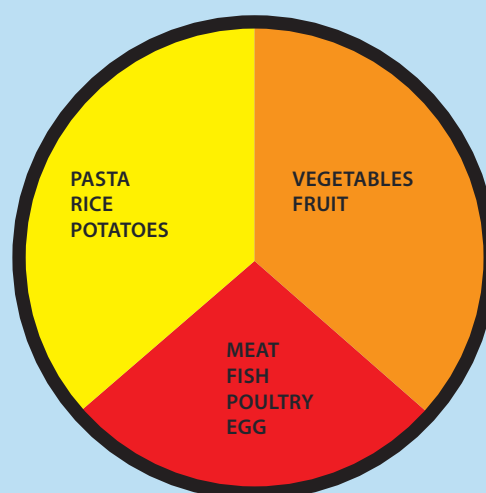
There are three main energy-giving nutritive substances: carbohydrates, protein and fat. Carbohydrates are stored in the muscles and the liver as glycogen, which gives easily accessible energy while you dance. Good carbohydrates can be found in grains, rice, pasta and fruit. Protein is not only a source of energy, but also builds and maintains body cells. There is good protein in fish, meat, dairy products, pulses and unroasted nuts. Fat also provides energy and is needed for taking in vitamins. The problem with fat is that it is stored as body fat when the energy is not immediately needed. Another problem is that fat can give you a saturated feeling, while you might need to eat some carbohydrates to 'feed' your muscles. Good fat can be found in fish, dairy products, liquid margarines and nuts. When using your muscles, it is mainly your glycogen and stored body fat that is used as fuel. A well-filled glycogen stock makes it possible for you to keep on dancing better and longer.

### A healthy diet for dancers



Eat everyday from all three sections. Make sure that half of your meals come from the carbohydrate section, like bread, pancakes, potatoes, rice and pasta. The other half needs to be meat, fish or good substitutes, eggs, vegetables and fruit. Watch your protein intake (milk, yoghurt, kwark). Eat some more if you need the energy. And make sure that you always drink enough.

### A healthy diet



Eat every day from all three sections: meat, fish, eggs or a good substitute like Quorn or tofu, nuts, pulses, potatoes, pasta, bread and vegetables and fruit. Fat is needed, but choose the liquid types. Make sure you get enough fluids.

### Charging and recovery

Food that is rich in carbohydrates is important for replenishing your body's supply of glycogen. Every training session demands energy and depletes the store of glycogen in the muscles. Because dancers train so regularly, even a short training session uses up their glycogen supply. Therefore, it is important to keep your supply in balance and to charge it whenever necessary. The time needed to charge your glycogen battery may vary from 10 to 36 hours. In the first 2 hours immediately after training the muscles are most capable of replenishing the supply. Eat or drink something rich in carbohydrates shortly after your training session ends. If you have more than an hour until your next real meal, a well-filled sandwich and/or some fruit are the best way to recover. A ripe banana provides easily accessible carbohydrates, while a glass of milk gives you high-quality protein, which is also needed. The banana is good, because it contains more carbohydrates than any other fruit. When your training ends, eat a meal as soon as possible, using the dancer's food plate model.

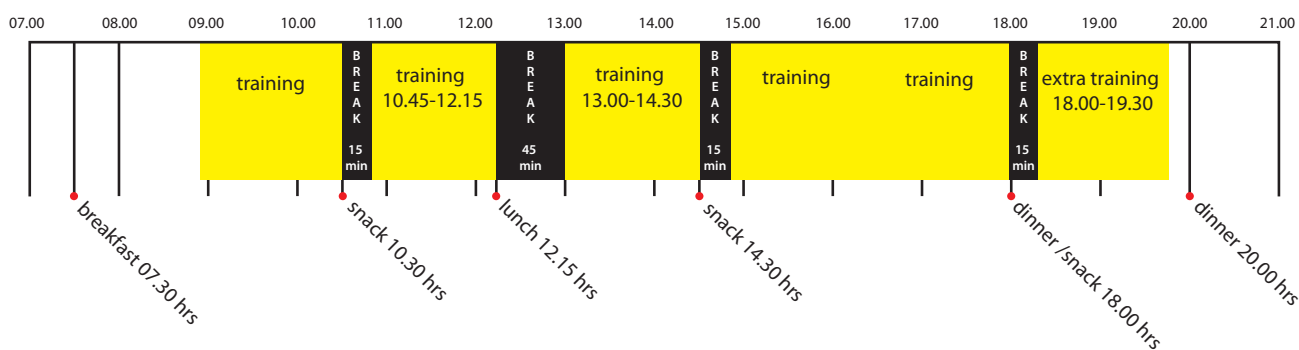
### Regular meals and planning

It is necessary to refill your energy regularly. Planning your own personal energy balance is important to prevent feeling 'spent' and to prepare yourself for the activities that await you. Plan your meals (breakfast, lunch, dinner and at least two snacks between meals) according to your day's schedule. Breakfast should always contain both carbohydrates and protein, for example (brown) bread, muesli, yoghurt, fruit and something to drink. The other two meals should consist of products from the dancer's plate shown above. The snacks between meals can be fruit, a sandwich and drink or something more substantial, depending on your energy needs. The order of your meals is not important, as long as you take care that your energy intake balances your energy output of that day.

### Planning your meals

The order of meals should be adjusted to your schedule of the day. Keeping your energy balance is extremely important for professional dancers and dance students. To keep your energy balance, you need to plan your meals, even on days with very heavy schedules, and make sure that you do not develop any shortages. Here is an example:

### meal order adapted for training



### **Glycogen supply**

Carbohydrates are an accessible source of energy. The carbohydrates you eat after your daily training and other physical exercise will be stored in your muscles as glycogen to be used as fuel the next day. If you know that you will have a training session in the morning, make sure you have a good evening meal. But even if you had a good meal, breakfast should never be skipped. If you do not have much time before your first morning class, at least have something to eat. And be sure that you have something good and nutritious after your first training. It is especially important to keep your glycogen storage balanced when you have more than one training session. This can be done by having snacks between meals.

### **The importance of fluids**

A body that moves a lot needs more fluids, so dancers need more fluids than other people. The need for fluids is not only determined by physical activity, but also by the air in the studio or the theatre; dry air has a dehydrating effect, thereby increasing the need for fluids. If your body does not contain enough water, your performance will decrease immediately; you can do less and it is more difficult to continue with your exercises. Constipation is another effect of dehydration.

The average fluid requirement is 2-3 litres per day. Eating regularly from the carbohydrate-rich foods mentioned in the plate model will supply you with about one litre. The rest needs to come from drinking. Be aware that your body never gets used to doing without the necessary fluids! You can make your drinking part of your daily schedule by drinking little amounts at regular intervals.

Water is most often the best during your training, but for a performance you might need the bit of extra energy provided by the energy drinks that are available now. Isotonic drinks are good for quenching thirst; they contain about 7% sugar, and supply you not only with fluids but also with carbohydrates. Energy drinks also give energy; they contain more sugar, which make them, like fruit drinks, more difficult to digest. You can dilute the energy drinks or make your own by adding dextrose to some water. A little bit of sugar in the water makes it easier for the body to accept. Keep an eye out for the colour of your urine; if the colour is light, your fluid balance is good.

### **Energy in balance**

Many dancers are concerned about their weight. Female dancers strive to reach or keep as low a weight as possible, often for aesthetic reasons. The frequent lifting in dance also makes it necessary for a dancer to be light. Too little food always leads to less energy and other deficits that can cause serious health problems in the long run. If a dancer wants to lose weight, it is better not to eat less, but to have a closer look at what you eat. Endurance training can also help you to lose weight. A body weight that is too low can be a serious threat to your muscle power and your stamina. It can also increase your risk of injury and slow down your recovery. Dancers need to keep their energy balanced. A period of energy loss threatens the immune system and makes the dancer vulnerable to injuries. For a dancer, the right balance between energy output and energy intake and correct meal planning is literally life-saving.

*This guide is an activity of the readership  
Excellence and well-being in the performing arts.*



balance  
energy  
variety

A close-up photograph of a clear glass filled with water. A slice of lemon is floating on the surface, and a straw is inserted into the water. The water is slightly yellowish, suggesting the lemon juice. The background is a soft, out-of-focus blue. In the bottom left corner, there is a white logo consisting of a triangle with the words "balance", "energy", and "variety" inside its sides.

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