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Nutrition for the Dancer

Fueling the Dancer

(www.DanceMedicine.org)

- “All dancers need to ingest sufficient energy to meet the rigors of hard training. Consuming the right amounts and types of food and fluid will provide the body with ‘high performance fuel’ necessary to achieve optimal training benefits and peak performance”

Clarkson, P. 2003-2005

Why?

- Poor nutrition, disordered eating and excessive training can lead to hormone imbalance, fatigue, and amenorrhea, which can cause a decrease in bone mineral density.
- A low caloric intake will not only compromise energy availability, it can also lead to an under-ingestion of many nutrients that can affect performance, growth and health.

How many calories?

- When in **heavy** training:
 - 45-50 calories per kilogram of body weight
 - 50-55 calories per kilogram of body weight
- For example a 55 kilogram female dancer would need between 2475-2750 calories per day
- For example a 70 kilogram male dancer would need between 3500-3850 calories per day.

Remember

- On less intense training days you do not need that many calories. Koutedakis (1999) suggests 40 calories per kilogram of body weight for a female dancer and 45 calories per kilogram of body weight for a male dancer.
- On a day off from intense training a dancer can have less than this as weight management can be very important.
- Task – find out your Basal Metabolic Rate!

How much of what?

- 55-60% Carbohydrate
 - (bagels, cereal, bread, pasta, rice)
 - Estimated 6-10g per kg of body weight
 - Carbohydrates should especially be consumed 1-2 hours before exercise, during long periods of exercise (sports drink specially formulated with carbohydrates/6-8% glucose), and as soon as possible after exercise to refill muscle stores.

How much of what?

- 12-15% Protein = ESSENTIAL!
 - (chicken/turkey without skin, tofu, beans, rice)
 - Estimated 1.4-1.6 grams of protein per kg of body weight
 - Protein powders are not necessary, even for male dancers, if they are following the recommendations above.
 - If a protein supplement is warranted, the best choice is milk powder, expensive products on the market are no better!

How much of what?

- 20-30% Fat (unsaturated!)
 - Liquid at room temperature – oils. Nuts and seeds are also good!
 - Estimated 1.2 g per kg of body weight
- Less than 10% should be saturated
- Fatty acids are used as an energy source in the muscles for endurance activities.

How much of what?

- Micronutrients – Vitamins A,B,C,D,E and K, iron, zinc and calcium.
- To obtain all important micronutrients, dancers should increase their amount of fresh fruit and vegetables, whole grains, dairy products and lean red meat (if not a vegetarian)
- Because not all vitamins and minerals occur in all foods, dancers need variety.

Warning!

- Supplements can do more harm than good! Too much of one can interfere with the absorption of another.
- There are many supplements on the market to apparently enhance performance or decrease body weight. These are ineffective and sometimes dangerous. They can be sold without proof that they are effective or safe!

Fluid

- During a hard session a dancer could lose up to 2 litres of water in an hour.
- Fluid loss results in dehydration, impaired performance and decreased mental functioning.
- In hard sessions 250ml is recommended every 15 minutes to decrease the risks of dehydration effects.

Fluid

- Following class, rehearsal or performance a dancer should continue to re-hydrate and increase fluid consumption for the next few hours.
- Hydration can be monitored by checking the colour of urine.
 - Clear to light yellow = hydrated
 - Yellow to dark yellow = dehydrated

References

- Clarkson, P (2003-2005) *Fueling the Dancer* – fact sheet www.iadms.org
- Robson, B & Chertoff, A (2008) *Bone Health and Female Dancers: Physical and Nutritional Guidelines* – fact sheet www.iadms.org
- Koutedakis & Sharp (1999) *The Fit and Healthy Dancer*. Wiley:UK