



Nutrition

Optimising Performance

Aim of session

- Recovery nutrition
 - What & When
 - Are you eating enough ?
- Body composition
 - Do you need to measure it ?
- Supplements
 - Do you need them
 - Suppliers

Fuelling your training

Training Duration	Carbohydrate (g/kg/d)
Up to 1 Hour/Day	4-5
1-2 Hours/Day	5-7
2-4 Hours/Day	7-12
4-6 Hours/Day	10-12

(Burke et al. 2003)

Fuelling your training

Training Duration	Protein (g/kg/d)
Up to 1 hour/day	0.75
1-2 hour/day	1.0-1.2
2-4 hour/day	1.2-1.4
> 4 hour/day	1.4-1.7 ?

(Tipton & Wolfe 2002)

Post exercise window

- Start refuelling as soon as practical
- Carbohydrate & Protein recovery snacks
 - Protein acts as a satiety factor
 - 5:1 Ratio of CHO:PRO
 - CHO: 1.0-1.2g kg of body weight

(Burke et al. 2003)

Are you eating enough to improve performance ?

- Signs that you might not be
 - Training hard / high volumes but not getting 'fitter'
 - Recurrent injuries / illnesses
 - Disrupted menstrual cycle
 - General fatigue

But if I am not eating enough surely I must be losing weight ?

Consistently < 500 kcals per day – disruption to hormonal & metabolic balance (Loucks 2005)

Body composition

- Height / Weight
- Skinfolds
 - Sum of four
 - Bicep, tricep, subscapular, supraspinale
 - Bicep, tricep, subscapular, supraspinale, iliac crest, abdominal, thigh, calf
- Girths
 - Upper arm, waist, hips, thigh, calf
- Who measures
 - Same person for repeated measures
 - ISAK qualification

Supplements



Supplements

- In May 2003, the International Olympic Committee published the results of a study which found that 15% of the 634 supplements it tested contained banned substances, including nandrolone.
- Listed on a country-by-country basis, the Netherlands saw the highest levels of positive products with just over one in four of the tested substances containing a banned substance. The UK had the third highest rate, with 18.9% providing a positive result.

Do you need them ?

- Should be able to get vitamins & minerals from food
- CHO drinks / gels / bars
- Protein replacement products