Preparation for match play

** Macronutrient intake**

- **Aim**: Maintain euhydration
- **Start match play fully hydrated**

**Measurement**

- Daily BM measurements
- Degree of thirst
- Urine colour
- Osmolality & urine-specific gravity

**Euhydration**

- Urine osmolality <700 mOsmol/kg
- Specific gravity <1.020

**Hypohydration**

- Urine osmolality >900 mOsmol/kg

45-50 ml/kg spread throughout day

Pre-match (CHO & fluids)

**Carbohydrate intake**

- **Aim**: Ensure players begin match-play with Adequate glycogen stores

- Consume a CHO rich meal

- 1–3g/kg BM

- 3–4 hours before kick-off

- Easily digestible

↓ the risk of gastrointestinal problems

Consider comfort

Make players ‘feel better’

Rather than rigid strategies focused solely on Meeting CHO intake guidelines

**Hydration intake**

- **Aim**: Start the match euhydrated

- 5–7 mL/kg BM of fluid

- 2–4 hours prior to kick-off

Target urine colour

Pale yellow

During match play (CHO & fluids)

**Carbohydrate intake**

- **Aim**: Rapidly replenish CHO stores

- ~1g/kg BM/hour for 4 hours post-activity

- Resume normal daily intake 6–8g/kg BM/day

**Hydration intake**

- **Aim**: Reduce fluid & electrolyte deficit

Recovery from match play (CHO, fluids, protein)

**Carbohydrate intake**

- **Day prior (MD-1)**

- 6–8g/kg body mass (BM)

- Elevates muscle & liver glycogen stores

**Protein intake**

- **0.3-0.4 g/kg per meal across 4–5 meals**

- Support tissue growth & repair

↑ muscle protein synthesis (MPS)

↓ muscle protein breakdown (MPB)

**Recommendations**

- **Immediate**

- **General**

- **Pre-sleep**

- 0.3 g/kg coupled with CHO

- 0.3-0.4 g/kg at 3–4 hour intervals

- 30–60g of casein protein

**Supplementation**

- Large doses of antioxidant compounds during recovery

- May interfere with adaptive processes in muscle

- Use is discouraged

**Alcohol**

- Can interfere with recovery

↓ liver & glycogen resynthesis

↓ muscle myofibrillar protein synthesis

↓ rehydration

↓ immune function

↓ bone mineral density

↓ anaerobic power

↓ anaerobic capacity

**Glycogen cost of match play**

- ~50% of muscle fibres classified as Fully glycogen depleted

- Partially glycogen depleted

- Beginning match play with Low muscle glycogen stores leads to

↓ total distance

↓ high-intensity activities

Particularly in the second half