Nutrition Strategies for Endurance Athletes

THE “LOW-RESIDUE” DIET

Prior >90min endurance events, athletes should ingest 10–12 g/kg/day during 36-48h to maximize their muscle glycogen stores. This strategy should be undertaken in conjunction with a low residue (fiber) diet.

ADVANTAGES

- To reduce the risk of gut issues during the race
- To reduce the bowel content (~500 g)
- To partially offset the mass of the additional muscle glycogen & stored water

DISADVANTAGES

- Lack of food variety
- (Short-term) reduction in dietary quality/micronutrient density
- Discomfort due to lower satiety/hunger

IMPLEMENTATION

'White' bread
'White' breakfast cereals
'White' rice, pasta, noodles & potato*

- Pulp-free fruit juice & sugary drinks
- Confectionary & honey
- Cakes & desserts (white flour & sugar)
- Sports products (e.g., sports drinks)

- Meat, milk, cheese, poultry, fish, eggs, & other protein-rich foods
- Uncooked fruits & vegetables should be avoided

Cooked versions can be added in modest amounts to make up meals or menu items (pureed fruit and apple sauce & mashed/pureed vegetables)

- *well cooked and consumed hot to avoid the creation of resistant starch with cooling

The optimal period of implementation of the prerace low-fiber diet is also highly variable and ranges from 24 to 72 hr depending on individual gut transit times

Reference: Burke et al. IJSNEM 2019

Designed by @YLMSportScience