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Food and Diet

CARBOHYDRATE LOADING and DIET

The objective of carbohydrate loading is to maximise the body's energy stores in an effort to manage strenuous physical activity more effectively.

Carbohydrate loading is of benefit before maximum physical effort over one and a half hour duration and is therefore a useful preparation for a summit attempt.

Carbohydrate from food is broken down to sugar (glucose) by the body and part of this glucose is stored in the muscles as glycogen. The muscle glycogen serves as an important source of fuel to the body and by maximising the muscles' glycogen stores strenuous exercise can be maintained for longer at high intensity. During the time of carbohydrate loading physical activity should be low to avoid the metabolising of the glycogen laid down in the muscle. As glycogen binds water you can expect a slight increase in your body weight. The extra water in your body however may help off-set dehydration while climbing, although fluid needs will still be high and therefore a high fluid intake is essential.

On the three days immediately prior to the summit attempt, carbohydrate intake is increase to about 80% of total energy and this can only be achieved if fat intake is kept to an absolute minimum. I appreciate the fact that it is not always known when a summit attempt is made but do realise that you need approximately three days to maximise your glycogen stores.

Practical Hints

- Base all meals on carbohydrate foods such as crackers, cereals, (plain, non toasted ones), porridge, rice, pasta, potatoes, other vegetables and fruit and eat them as your appetite indicates.
- Do not add fats to your meals so avoid using butter, margarine and peanut butter on crackers and do not use oil or butter in cooking. Vegemite is a suitable topping for crackers.
- Avoid high fat snack foods, eg cakes and biscuits (except low fat ones), chocolate, nuts, salami, cheese, (except cottage cheese) etc.
- Use low fat milk products like skim milk.
- Sugar and sweets can be used freely, eg barley sugars and similar lollies, also jam and honey.
- An adequate fluid intake is important and both fruit juice and water are suitable for this purpose. Tea and coffee can also be taken.
- Make sure protein foods consumed are of a low fat nature, eg lean meats, tinned fish (tuna or salmon in brine), low fat milk products, legumes.
- Be aware that sardines, toasted muesli, cocoa, chocolate bars etc are high fat foods and should be avoided during the time of carbohydrate loading.