CityU SCOPE Running Class 2017-2018

Coach: **Wong Tak Shing**

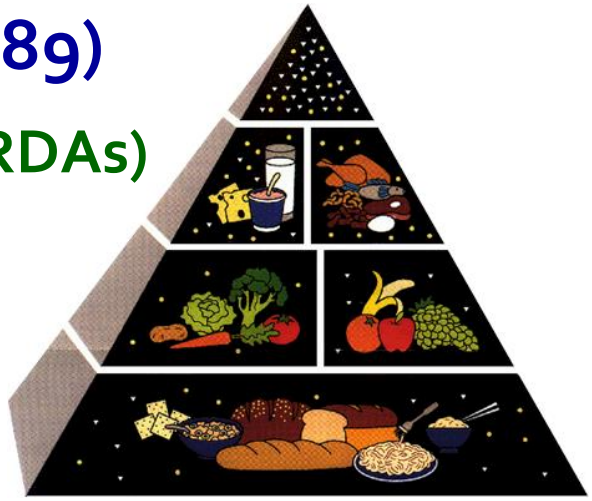
Nutrition for Athletes

Fox, Bowers, & Foss (1993)

- The biggest difference in food requirements for the athlete versus the non-athlete is the **total** number of **calories** consumed; and the athlete will require more.

US National Research Council (1989)

- **Recommended Dietary Allowances (RDAs)**
  - **Male:** 2,900 kcal/day
  - **Female:** 2,200 kcal/day



Nutrition for Athletes

American College of Sports Medicine, American Dietetic Association, and Dietitians of Canada (2000)

- Unless athletes restrict themselves from energy intake or eliminate one or more food groups from their diet, **supplementation** of **vitamins** and **minerals** is generally **not** required.

Pregame Meal

ACSM, ADA, & DC (2000)

- **Sufficient** in **fluid** to maintain hydration.
- **Low** in **fat** and **fiber** to facilitate gastric emptying and minimize gastrointestinal distress.
- **High** in **carbohydrate** to maintain blood glucose and maximize glycogen stores.
- **Moderate** in **protein**, and composed of foods **familiar** to the athlete.

Pregame Meal

Wilmore & Costill (1994)

- **Carbohydrates** consumed either **5 minutes** or **2 hours before**, or **during** exercise enhance endurance performance (lasting over 1 hour).
- However, athletes should keep away from **carbohydrates 15 to 45 minutes before** exercise to avoid the secretion of **insulin**, which reduces blood glucose level and leads to premature fatigue.

Pregame Meal

Competition in the Morning

- High-carbohydrate dinner the night before.
- Light breakfast or some snacks in the morning on race day.

Competition in the Afternoon

- High-carbohydrate diets the night before and in the morning of race day.
- Light meal or some snacks only for lunch.

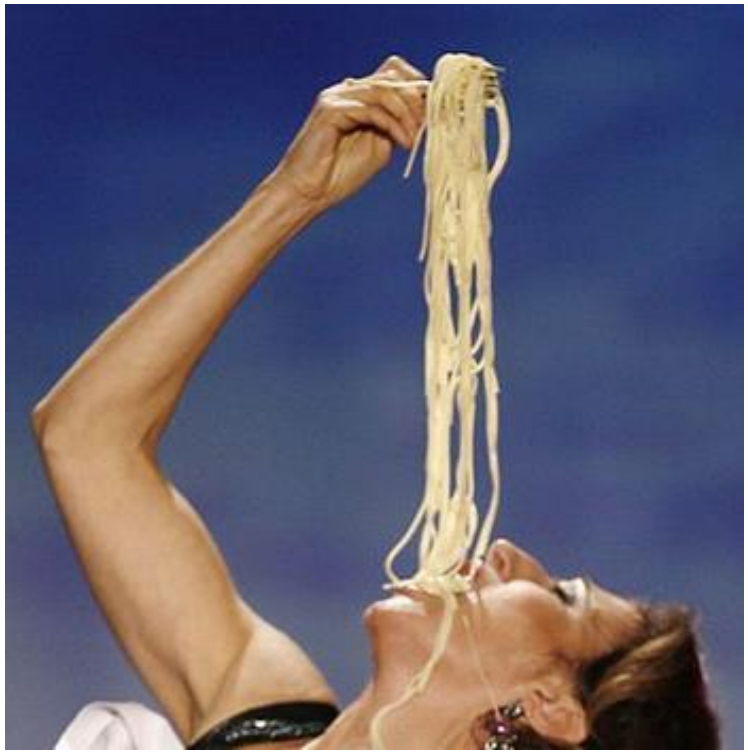
Competition in the Evening

- High-carbohydrate breakfast and lunch on race day.
- Some snacks only in the afternoon.

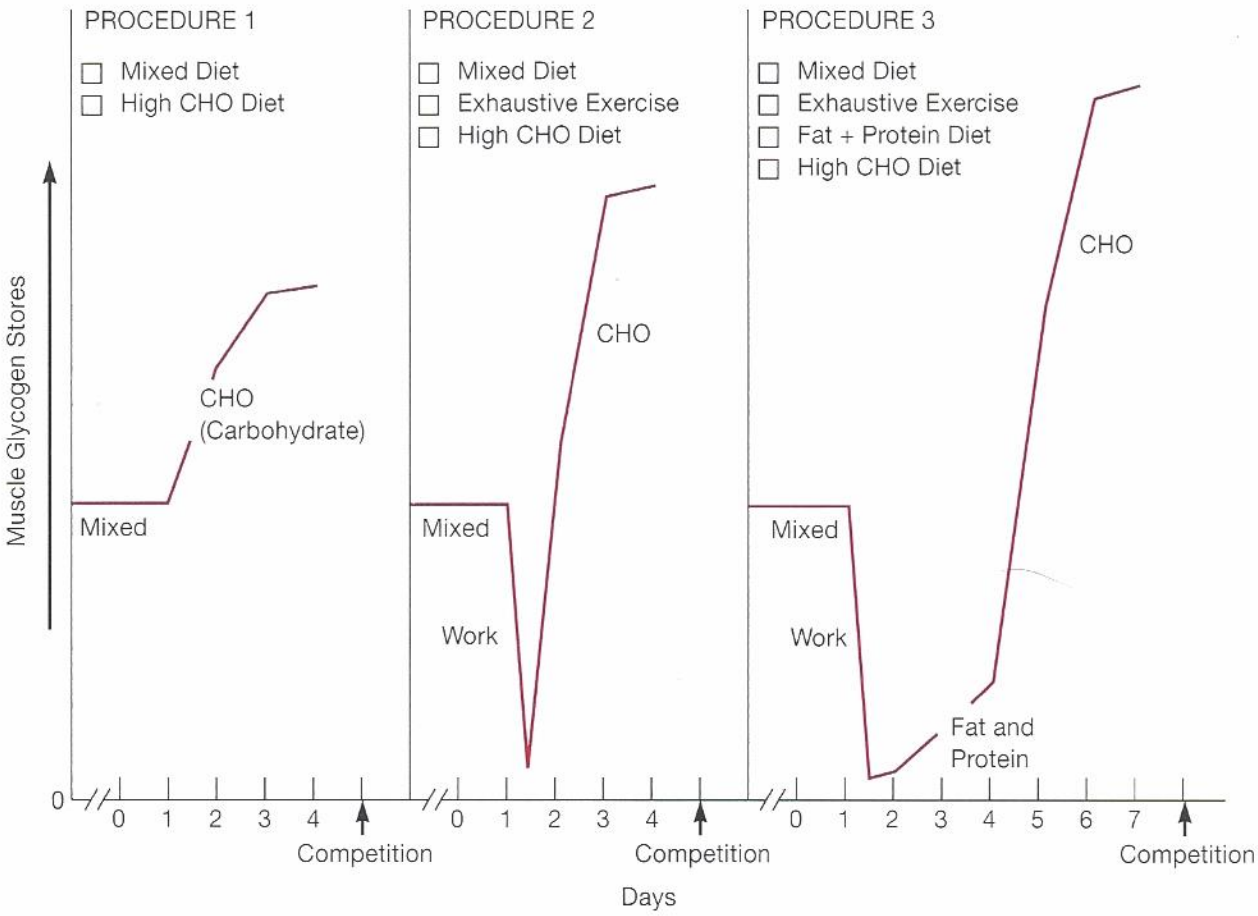
Carbohydrate Loading

Purpose

- To increase total amount of carbohydrates stored in the body before competition.
  - Normally, total amount of carbohydrates stored in the body is sufficient for about 1.5 hours of continuous running.
  - The faster the running speed, the faster carbohydrates are used up.



Carbohydrate Loading



Hydration and Dehydration

- **Water** makes up almost **40 to 60%** of body weight.
- A **Marathon** runner may lose **6 to 10%** of her body weight simply due to **perspiration** in a race.

Wilmore and Costill (1994)

- Found that a runner, who had finished the 10,000 m in 35 minutes before, could run **2:48 slower** (i.e., by 4%) due to dehydration.

Hydration and Dehydration ACSM, ADA, & DC (2000)

Before Exercise

- Drink an **extra 400 to 600 ml** of water within the **2 to 3 hours before** exercise starts.

During Exercise

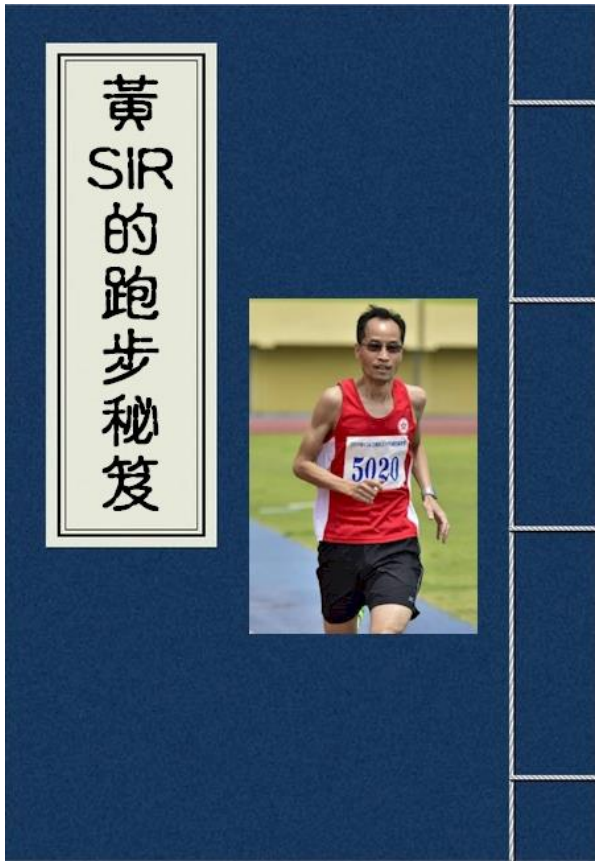
- Consume **150 to 350 ml** of water at **15- to 20-minute intervals**, beginning at the start of exercise.
- also better for the drink to contain **4 to 8%** of **carbohydrate** if the event lasts over one hour.

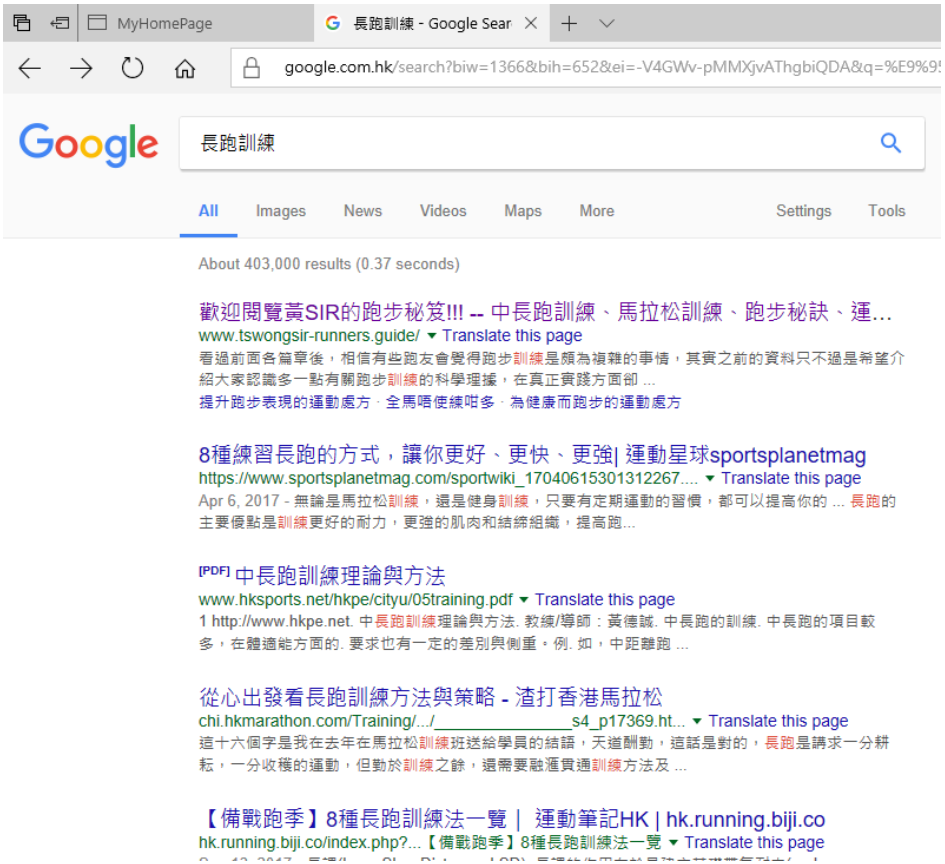
After Exercise

- Continue to drink water up to **150%** of their **body weight loss**.

Running Training Q&A

Want to know more...





http://www.tswongsir-runners.guide