

CHILD AND TEEN NUTRITION, Swim Ontario and OSCA Conference

Summary notes from presentation given by Sarah Wilkinson, B.Kin, wilkinsb@mcmaster.ca
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A. ENCOURAGING HEALTHY EATING How do we facilitate healthy behaviors?

I. YOUNG, AGE-GROUP SWIMMERS

MODEL the behaviour

- Grocery shop together
- Cook together
- Eat together
- Play together (physical activity)

INVOLVE the child in planning food and activity

EXAMPLE: At grocery store: have child pick out one food item. At home: research TOGETHER what is good and not as good about the food (I.e. nutrients it provides, processed or not etc.). Then together, plan a meal or snack with that food. MAKE IT & EAT IT!

EDUCATION at the pool and at home

Modelling healthy behaviour by:

- the coach
- Other swimmers (older)
- Parents

Educational opportunities

- Invited speakers (nutritionist, exercise physiologists, coaches)
- Grocery shopping at away meets

EXAMPLE: Providing snack options: Coach brings a number of potential snack options to the pool deck (an apple and a chocolate bar). ASKS: "What should I choose to eat before I do my swim today?" Swimmers (hopefully) choose the apple. ASKS: "Why should I choose the apple?" ASKS: "Why shouldn't I choose the chocolate bar"

Above all, try to make healthy eating and cooking: FUN! EVERYDAY! UNDERSTANDABLE!

II. OLDER, HIGH-PERFORMANCE SWIMMERS

AT home:

- Continue to provide healthy food options
- Continue to model healthy lifestyle (eating, cooking, physical activity, sleep)
- Athlete may have less time at home, more time training/homework

ATHLETE SHOULD BEGIN TO TAKE MORE RESPONSIBILITY FOR THEIR CHOICES

EXAMPLES: Responsibility for cooking one meal every week?
 Helping create the grocery list
 PACKING A LUNCH AND SNACKS DAILY instead of giving money to buy food

COACH and Swim club

- provide more educational opportunities with high-performance information

EXAMPLES: National/International level athletes as speakers
 Nutritionist, Exercise physiologists, coaches

Away meet food choices

- Collect a small amount of \$\$\$ before meet for the manager to provide healthy food choices during the meet
- Choose restaurants with HEALTHY options
- Emphasize food timing

ENCOURAGE HEALTHY EATING ALL THE TIME, NOT JUST AT SWIM MEETS

B. GENERAL NUTRITION

- Encourage swimmers and their families to Follow Canada's Food Guide including a variety of foods ACROSS and WITHIN the food groups
- Emphasis on grain and high quality protein

C. NUTRITION SPECIFIC FOR ATHLETES

Fuels Sources

1. Protein

- Important for tissue repair (muscles and tendons) and making new protein (enzymes)
- Following CFG guidelines meets needs

2. Fat

- Fat intake should NOT be restricted to extremely low levels
- Fat provide energy at rest and during low intensity exercise and vitamins
- Important for cells

3. Carbohydrate

- Swimming relies heavily on carbohydrates, the higher intensity the exercise, the higher percentage of carbohydrate is used.
- Stored in two places: liver and muscle

Having sufficient carbohydrate stores before exercise, maintaining blood glucose during exercise allows a person to work harder, longer and feel better during swimming.

- Before practice: have a snack
- During practice: drink Gatorade (0.5-1g per kg per hour i.e. for a 70 kg person 0.5-1 L/h Gatorade)
- After practice: have a snack

Fluids Consumption

- Thirst is not a good indicator of fluid needs
- Dehydration during exercise leads to fatigue, increased heart rate, and increased perceived exertion at a given intensity.
- Consumption of sports drinks can prevent these feelings
- Sports drinks work better than water because they provide carbohydrate, fluid and replace sodium lost in sweat

Guidelines

- Start hydrated (500ml fluid 30min prior to workout)
- During workout (150-350ml of fluid every 20min)
- After workout
 - Weigh self before and after workout
 - 700 ml for every pound lost

Pre-Competition Meal

- Consumed to "top up" muscle stores
- Contains carbohydrate with some protein, low in fat & fibre (digests more slowly)
- Snack/meal: 2-3 h before competition
- Sufficient fluid to maintain hydration
- Familiar foods and well tolerated
- Practice to find out athletes' PERSONAL PREFERENCES (Size, timing, foods) ◊EXPERIMENT during training to find out what is best tolerated by the athlete!