# Healthy Nutrition for Sports

#### Geoffrey Axiak B.Sc. Nursing, P.G. Dip. Nutrition & Dietetics

**Registered Nutritionist** 



# A Healthy Diet

- At least 5 portions of fruit and vegetables daily.
- Plenty of starchy carbohydrate foods, particularly high fibre varieties.
- Small amounts of protein.
- Small amounts of low fat dairy products.
- A reduction in the amount of fat, fatty foods and sugary foods.
- Plenty of fluids throughout the day.

#### **Optimal Weight & Composition**

- This is individual to the person.
- Body Mass Index
  - Weight (kg) / (height (m) x height (m))
  - Underweight: <20
  - Normal: 20-25
  - Overweight: 25-30
  - Obese: 30-35
  - Very obese: 35+

#### Important Function of Nutrition

- Carbohydrates (60%)
  - Rice, bread, potatoes
  - To carry energy for body movement.
- Fat (20%)
  - Butter, cheese, chocolate, nuts
  - Energy store, to build proteins and cells.
- Protein (20%)
  - Milk, milk products
  - Muscle building, cell growth & repair

#### Hyperhydration

- Means: Loading more water into body to prevent dehydration during games.
- To be practiced during training.
- Approx. 35-45mls per kg body weight.
- For a 70kg player => 2.5-3.2litres daily.
- Preferably drink water
- Sports drinks best during & immediately after training/games.

# Weight Gain Strategy

- Weight gain might increase ability to play the game.
- Build muscle not fat!
- Seek appropriate guidance to gain weight healthily.

#### **Pre-Training Snack**

- Normal diet on training day.
- Carbohydrate based snack/meal 2-3 hours before training, e.g.
  - Vegetable soup with bread roll
  - Cereals with fruit
  - Jacket potato with tuna, beans
  - Sandwich with low fat cheese, chicken, salad
  - Fruit yoghurt
- 200mls water every 15-20 minutes.

#### **Pre-Game Snack**

- Breakfast
- 2-3 hours before game: light carbohydrate snack (like pre-training)
- Sips of water during hours before game
- Weigh players before game

# **Training Diet**

- High in energy
  - 3 meals + regular snacks
  - Muscle gain
- High in carbohydrates
  - Exercise performance, recovery from training, muscle gain.
  - 5 servings of fruit & vegetables daily.
- Moderate in protein
- Low in fat

#### Fluid Replacements

- Normal people: 1.2-2.0litres a day
- 1 glass of water with meals/snacks
- 150-200mls exercise drink every 15-20 minutes during exercise
- Replace losses within first 2 hours after exercise

#### Injury & Rehabilitation

- To reduce risk of injury when training / playing a match
  - Carbohydrates with adequate fluid (e.g. sports drink)

#### **Injury & Rehabilitation**

- To reduce unwanted fat mass gain & prevent loss of muscle mass when injured
  - Energy in should not exceed energy out, i.e. calculate calories
  - Focus on low-fat foods, e.g. low fat dairy, lean meat, vegetables, fresh fruits (contain Calcium, Iron, Vitamin C)

#### **Injury & Rehabilitation**

- Keep to your nutrition plan if mobility is limited
  - If in plaster or crutches stick to nutrition plan
- Head, jaw and neck injuries
  - If chewing/swallowing is difficult take special meal replacements
  - Seek professional help

# Fatigue

- Dietary causes include low intakes of:
  - Energy
  - Carbohydrate
  - Fluid
  - Vitamin
  - Mineral

# Fatigue

- Tips to prevent/treat fatigue:
  - Boost carbohydrate and energy intake
  - Ensure adequate fluid intake
  - Improve iron intake
    - Natural sources meat, dark green leafy vegetables, tomatoes
    - Take Vitamin C (helps Iron absorption)
      - oranges, citrus, strawberries, broccoli, green peppers
    - Avoid tea & coffee with meals
  - Improve vitamin intake

# Cramps

- A cramp is a sudden light intense pain most common in the leg muscles, when a muscle contracts & does not relax.
- Causes could be:
  - Poor fitness
  - Too little stretching
  - High workloads
  - dehydration

#### **Stitches**

- A stitch is a localised pain usually on the side just below the ribs that usually eases a few minutes after stopping exercise.
- Possible causes are:
  - a full stomach
  - inappropriate eating & drinking
  - eating too close to exercise
  - eating fatty foods
  - drinking fluids with too high sugar content
  - dehydration.

#### Cramps & Stitches

- Tips to prevent / treat them:
  - Allow for adequate recovery & rest for muscles after training
  - Stay well hydrated during exercise
  - Sports drinks (5-7% concentrations)
    - Decrease Sodium losses, empty stomach quickly
  - Drink regular small amounts of fluid
  - Eat salty foods
    - Crackers, Marmite

#### Cramps & Stitches

- Tips to prevent / treat them:
  - Breath with diaphragm, strengthen abdominals and stretch progressively increasing intensity and duration
  - Follow pre-match eating guidelines
  - Should a stitch occur:
    - Slow down or drop your intensity
    - Bend forward while pushing the affected area
    - Breathe deeply
    - Lie down while you elevate your hips.

# Summary

- 1. Eat a balanced diet.
- 2. Hydrate yourself well.
- 3. Prepare yourself for training/games.
- 4. Calculate your calorie intake.
- 5. Monitor weight regularly.
- Try to prevent injury, cramps and stitches.
- 7. Try to prevent fatigue.

