ITF Coaches
Education Programme
Level 2 Coaching Course

Nutrition for
tennis
competition
By the end of this session you should be able to:

- Identify the categories of nutrients, their relative contribution to tennis and a sample of diet plan
- Understand and use the basics of food intake before, during and after a tennis match
- Understand the importance of adequate fluid intake for tennis performance
- Understand and use the basics of fluid intake before, during and after a tennis match
Introduction

• Food is comfort...
• Comfort is a sense of well-being...
• Well being is peace of mind...
• Peace of mind is what you need to be a....

TOP PERFORMER!!!
Nutrition: Definition and importance

• Nutrition is the process by which chemicals from the environment are taken in by the body to provide the energy and nutrients needed to keep you alive and healthy

• Helps to:
  – Achieve high performance
  – Recover more efficiently
  – Have better health
Constituents of food and drink

- Carbohydrates
- Fats
- Protein
- Vitamins
- Minerals and Trace Elements
- Dietary Fibre
- Water
- Alcohol
Relative contribution of nutrients

- Carbohydrates: Highest contribution
- Fats: Moderate contribution
- Proteins: Lowest contribution
Carbohydrates

• The most important component of a tennis player’s diet
• It fuels the muscles and avoids early fatigue
• Types:
  – Complex: Bread, cereals, potatoes, rice, pasta
  – Simple: Sugar, preserves, confectionery
• Take them within 2 hours after exercise
Carbohydrates

- Needs of a tennis player
- 7-10 gr./kg. body weight per day
Fat

- Very important nutrient, but:
  - Be careful about fat intake, it limits performance
- Types:
  - Saturated (animal fats)
  - Unsaturated/Polyunsaturated (vegetable)
- Avoid greasy, fried foods, cream, fast food, rich sauces, pastries, crisps, chocolate, etc.
- Have a maximum of: 1 go-slow snack a day, 1 serving of fried/fast food a week
Protein

• Broken down into amino acids used for the manufacture of muscle, haemoglobin, etc.

• Types:
  – Animal: meat, fish and dairy produce
  – Vegetable: Cereals, legumes and nuts

• Deficiency of protein is rare. Excess is converted and stored as fat
Protein

- Needs of tennis players:
- 1.2 - 1.4 gr./kg. body weight per day
Vitamins

- Chemical compounds needed by the body in minute amounts to perform specific functions
- Types: A, B1, B2, B6, B12, C, D, E, K
- Signs of vitamin deficiency in sportsmen are rare
- A varied diet should provide all the vitamins needed
Minerals and trace elements

- Essential for life
- Important components of connective tissue, haemoglobin, hormones and enzymes
- Types: Iron, sodium, potassium, calcium, magnesium, phosphorus, copper, zinc, etc.
- Excess consumption can result in toxic accumulation
Dietary fibre

• Non-digestive carbohydrates form the skeleton of plants
• Functions:
  – Adds bulk to the food
  – Is essential to the proper functioning of the gut
  – Assists in the absorption of minerals
• Insufficient fibre is related to constipation, gallstones and diabetes
Water

• One of the most important substances required by the body

• Its functions include the following:
  – To transport nutrients, waste metabolites and internal secretions to the target tissues
  – To hold oxygen, hydrogen ions and carbon dioxide
  – To be the prime component of many cells
  – To regulate the body temperature by transporting heat to the skin for dissipation and by excreting it as sweat
Alcohol

• Product of the fermentation of carbohydrate by yeast
• Slowly metabolised, cannot provide a rapid release of energy on demand
• Alcohol consumption:
  – Can cause damage to the liver
  – Should be avoided by high performance athletes
Pre-match day eating 2 days preceding the match

- During the 2 days preceding the match, a player should gradually increase the complete carbohydrate intake to ensure that the level of glycogen stored is high.
Pre-match day eating
what to eat the night before

MAIN MEALS
• Pasta/rice with tomato or vegetable or bolognaisse sauce, chilli con carne.
• Jacked potato with low fat fillings
• Pizza with side salad - use less cheese or a low fat topping

PUDDINGS
• Low fat milk pudding with jam
• Tinned fruit and low fat custard
• Fruit salad, fresh fruit
• Low fat yoghurt/low fat trifle
• Scone/fruit bun/malt loaf
Match day eating
first match in the morning

• Have a light, high-carbohydrate breakfast:
  – Cereal/porridge with low fat milk
  – Toast/bread with jam, marmalade or honey
  – Fruit juice/fresh fruit

• It should be light yet high in complex carbohydrates

• It is always important to have breakfast, as before breakfast, the body’s blood sugar is low
Match day eating first match at mid day

- In addition to breakfast the players should have a mid-morning snack of fresh fruit, iced buns, teacakes or dried fruit
- For more ideas see the section on sport-bag snack choices
Match day eating
first match in the afternoon

• Have a light, high-carbohydrate breakfast, a snack and an early mid-day meal

• For the mid-day meal choose from:
  – Sandwich/roll with banana, chicken, turkey
  – Pasta/rice with bread rolls
  – Low fat yoghurt, low fat rice puddings
  – Low fat milk drink
Getting ready

- Have a high carbohydrate/low fat diet during training
- Start taking extra drinks the day before the tournament.
- Practise eating and drinking routine during training
- Never try something new before a tournament
- Take a cool box of suitable foods and drinks
- Check up on the eating facilities at the tournament venue before hand.
- Get enough sleep the night before
Sports-back snack choices

- Try and have a snack within 30-60 min. after training and competition
- Carry snacks and drinks in the sports bag
- Eat carbohydrate snacks lower in fat
- Avoid chocolate snacks close to exercise
- Types:
  - High-energy
  - Go-slow
High-energy snacks

- Fresh fruit - bananas, apples, satsumas,
- Dried Fruit - apricots, sultanas, dates
- Banana, honey or jam sandwiches/rolls
- Buns, cakes, pancakes

- Use a small amount of low fat spread - if any!
- Crunchy or chewy cereal bar
- Biscuits
- Breakfast cereal and low-fat milk
## Go-slow snacks

### SNACKS
- A maximum of one a day!
- 1 packet of crisps (28g)
- 1 standard chocolate bar (50-60g)
- 1 small packet nuts (28g)

### FOODS
- No more than once a week a serving of:
  - Chicken nuggets or a burger or fried chicken or a fried meal
  - Chips or fried potatoes or waffles
Player’s packed lunch

• Wholemeal bread sandwiches with the following fillings: tuna (canned in brine or water), low fat cottage cheese, chicken or turkey, salad, e.g. tomatoes, lettuce, etc.
• Fresh fruit, e.g. banana, pear, etc. Dried fruit, e.g. apricots, tropical fruit mix - Plain yoghurts or low fat fruit flavoured yoghurts
• N.B. Be careful not to layer the bread with too much butter or margarine
# Eating between matches

<table>
<thead>
<tr>
<th>Time between matches</th>
<th>What to choose</th>
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<tbody>
<tr>
<td>Less than one hour between matches</td>
<td>Choose a carbohydrate drink (e.g. a commercial or home made sports drink)</td>
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<tr>
<td>One to two hours between matches</td>
<td>In addition to the drink choose a light snack from the sports-bag snack list (e.g. fruit, iced bun, biscuit)</td>
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<tr>
<td>Two or more hours between matches</td>
<td>In addition to the drink choose a more substantial snack such as sandwiches as well as other items from the sports-bag snack list</td>
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Post match/training

- Eat a high carbohydrate meal within 2 hours of the match/training
- It takes approximately 20 hours to fully restore the muscle glycogen stores
- A normal, well-balanced diet, i.e. high in carbohydrate and low in fat, should then be adhered to in every day eating.
Eating away from home

- Take as much food and drink with you as possible
- Stick to simple dishes you are used to
- Choose high starch/low fat dishes
- Choose grilled, poached or roasted foods
- Eat plenty of vegetables and salad
Eating away from home

• Replace cream cakes and rich puddings with fresh fruit, yoghurts, iced buns
• Drink plenty of fluids especially if you are travelling by air
• Look for local dishes based on low fat starchy foods
• Beware of seafood and ice-cream which are common causes of food poisoning abroad
Summary of a tennis player’s diet

• CEREAL & STARCHY VEGETABLES (6 serv/day): bread, rice, pasta, potatoes, oats...
• FRUIT & VEGETABLES (6 serv/day)
• MEAT & ALTERNATIVES (2 serv/day): meat, fish, beans, lentils, eggs, nuts, etc.
• MILK (2 serv/day): skimmed mild, low fat cheese and low fat yoghurt
Diet planning

• To help players plan their diet you may have considered:
  • Writing a basic nutrient check list for participants
  • Giving examples of balanced meals
  • Compiling a weekly dietary record
  • Changing the timing of sessions to blend with normal meal times
  • Keeping sessions regular and at a specific time
  • Discussing diets with participants
  • Seeking more informed advice (a nutritionist, courses, books)