



NUTRITION FOR TENNIS COMPETITION

Level II Coaches Course



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



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

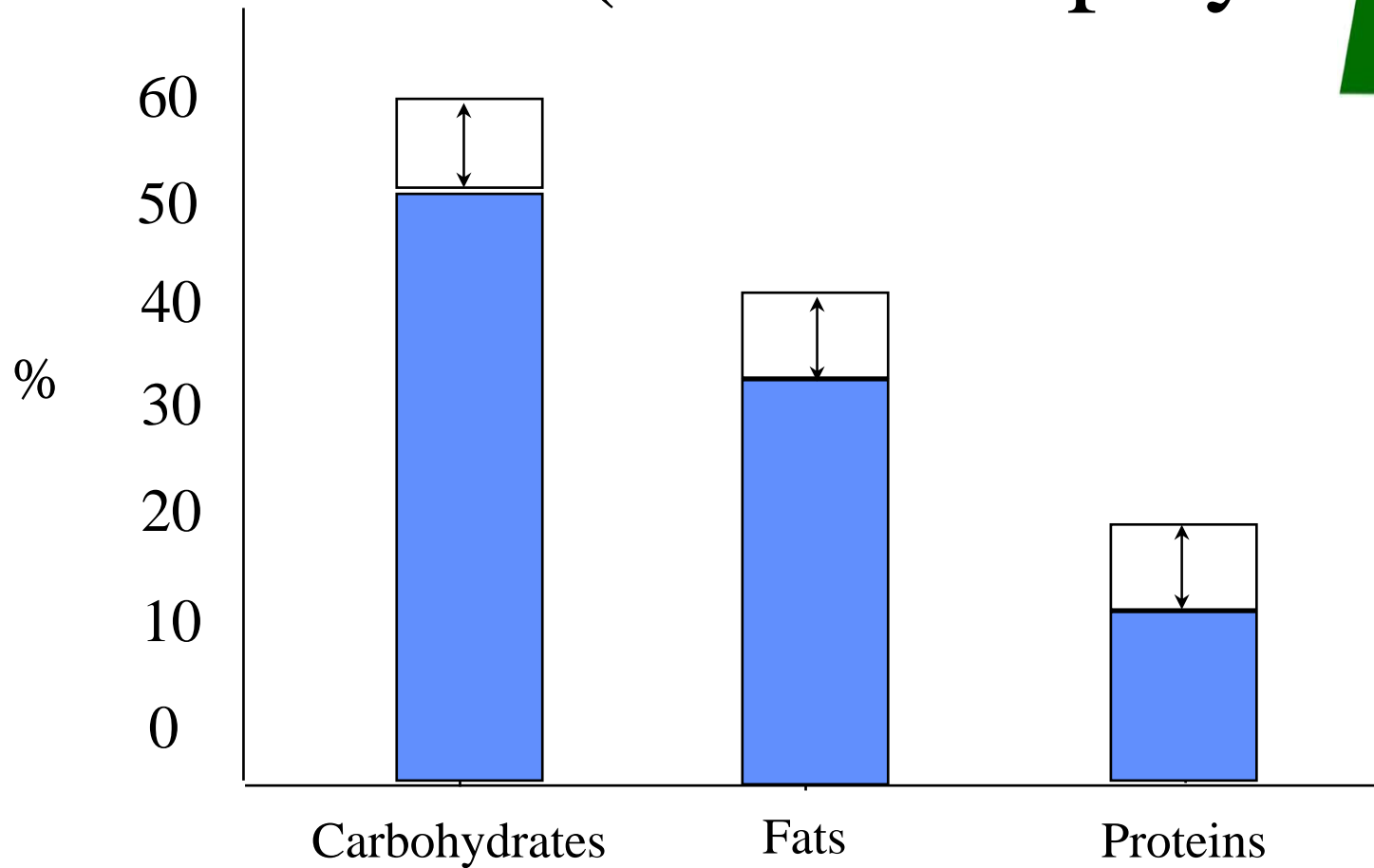


FOOD IS COMPOSED OF THE FOLLOWING NUTRIENTS

- Carbohydrates
- Fats
- Protein
- Vitamins
- Minerals and Trace Elements
- Dietary Fibre
- Water
- Alcohol



RELATIVE CONTRIBUTION of nutrients (for tennis player



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



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 aminoacids 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



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 which 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 bolognaise 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



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



EATING BETWEEN MATCHES

Time between matches	What to choose
Less than one hour between matches	Choose a carbohydrate drink (eg. a commercial or home made sports drink)
One to two hours between matches	In addition to the drink choose a light snack from the sports-bag snack list (eg. fruit, iced bun, biscuit)
Two or more hours between matches	In addition to the drink choose a more substantial snack such as sandwiches as well as other items from the sports-bag snack list



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.



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 milk, 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)

