



How to fuel your body
to maximize results

Archery nutrition for training and competitions

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What we know.....

- Carbohydrates are **ENERGY** foods that fuel our brain and muscles for exercise, work and everyday life

- What are some carbohydrate foods?



- Proteins are foods that **REPAIR** and **BUILD** your muscles strength, endurance and your ability to increase shot length/draw weight

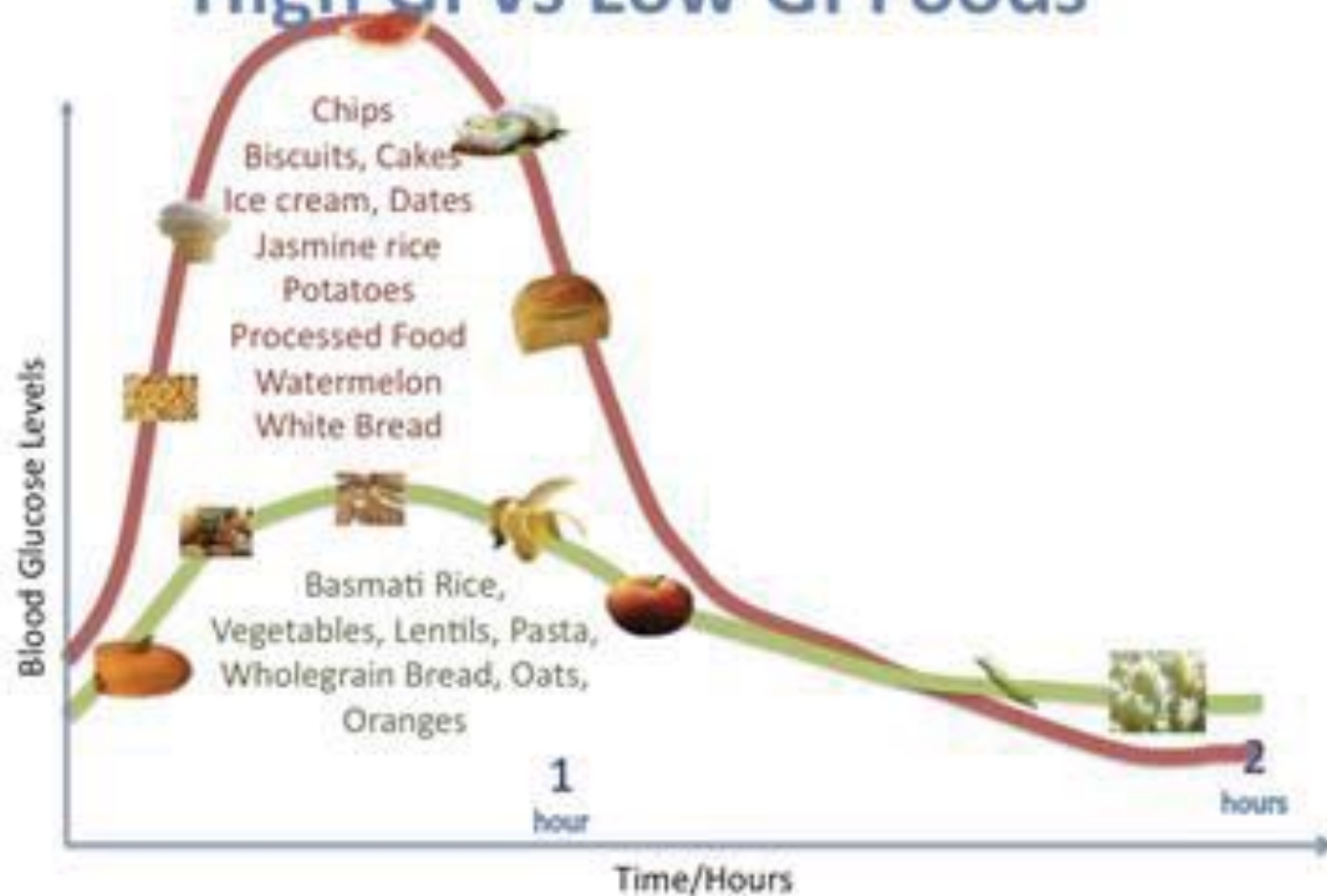
- What are some protein foods?



Carbohydrate Rich Foods

- Breads, bread rolls, wraps
- Breakfast cereals
- Pasta, rice, noodles, quinoa, cous cous
- All fruit (whole, juiced, tinned)
- Starchy Vegetables – potatoes, taro and corn
- Legumes – baked beans, kidney beans, lentils
- Cereal, muesli and breakfast bars
- Low fat dairy foods (milk, yoghurt, custard)
- Pancakes, crumpets, scones, muffins

High GI vs Low GI Foods



WHY focus on carbohydrates for training and competition:

- Stores must be both **maximized** and **replaced** or fatigue will result.
 - **Questions to ask yourself:** Do you finish as strong as you started? Does your bow arm drop? Do you collapse at full draw? Do you fatigue during shoots?
- **Fatigue** = poor concentration, muscles inability to compete, mental attitude, ability to hold form.
- Inadequate carbohydrate will result in the use of protein as a fuel source= **muscle breakdown** = **decrease strength and muscular endurance**

When should I eat CARBS to maximise my performance?

Timing	Carbohydrate intake
Before exercise (2-3 hours before)	Low GI Moderate fibre Pasta, multigrain sandwich/wrap, fruit salad and yogurt, fruit
During Exercise	If going over 90mins continuous then YES High GI Sports drinks, cereal bars, jellybeans (95g), rice cakes/crackers**
After Exercise (first 30 mins)	As soon as exercise finishes High GI preferably Sports drinks, watermelon, cereal bars, white bread, white rice
After Exercise (within 24 hours after)	Low GI Small amount (~1/2 cup) every meal/snack after moderate exercise Large amount (~1 cup) every meal/snack after heavy exercise Enough to refill your petrol tank!

PREPARE for Training.....

- **PREPARATION** (a few hours before training starts)
 - fuel up by eating **energy foods**
 - **hydrate** with fluids
- **Plan** meals and snacks to fit training – you may have to take them to school/uni/work with you
- Think about your **recovery after training** – you may have to **pack** snacks for after training too
- Remember to pack plenty of water



How much carbohydrate?

- High volume training days
- Intense training sessions

Carbohydrate portions of meals may need to be increased
Carbohydrate snacks for training may need to be increased

- Rest days
- Light training sessions
- Coming into a competition i.e. taper training load

Carbohydrate intake may need to be reduced -
especially from less nutritious carbohydrate sources



How does this change for competition day?

**YOU NEVER TRY ANYTHING NEW ON
COMP DAY!**

*If you haven't trained with it, you don't
compete with it!!*

PREPARE for Competitions.....

- **PREPARATION** (Should start the day before your competition)
 - fuel up by eating **energy foods (think about location /availability of food)**
 - **hydrate** with fluids
 - Provide your body with some **muscle repairing foods**
- **Plan** meals and snacks for the 24hrs before a **competition!!**
- Think about your **travel, time of warm up/how many rounds/ how long are the rounds, recovery after the competition**— you may have to **pack** snacks that are non-perishable or in an esky
- Remember to pack plenty of water (Minimum 2-3L day before a competition)

Quality fuelling foods for training and competitions





We also find them in drinks, snacks and desserts



If you are too nervous to eat too much....



What **NOT** to choose while competing and/or travelling

Sugary carbohydrate foods

- Sugar
- Confectionary
- Low-fat ice-cream
- Soft drinks
- Cordials
- Jelly
- Sports Drinks***



High fat carbohydrate foods

- Pastries
- Crisps and chips
- Chocolates
- Cakes
- Sweet biscuits
- Savoury cracker biscuits
- Chocolate-coated muesli / health bars
- Full-fat milk and ice-cream



Travel Food

- ✓ Easy to store
- ✓ Packaged
- ✓ Small
- ✓ Appetising
- ✓ Carbohydrate rich
- ✓ Solid or liquid?



At the competition

- **Be prepared!**
- Don't rely on the canteen or vending machines – often not available anyway
- 2 drink bottles each
 - 1 water
 - 1 sports drink
 - Even more if it is all day
 - Freeze bottles overnight to keep cool



Snack comparison



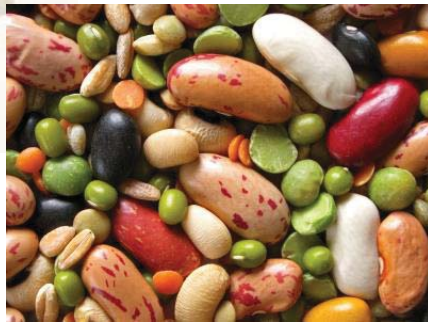
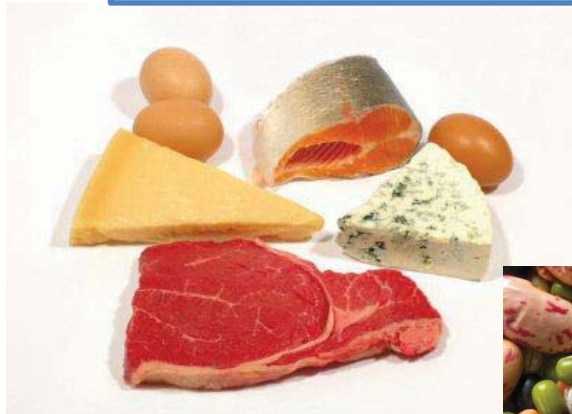
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2 200 kJ
7 g protein
33 g fat
50 g carbohydrate

2 200 kJ
25 g protein
5 g fat
95 g carbohydrate

Protein foods = muscle foods



Protein for your muscles

- Very important nutrient for growth and strength gains
- Helps to maintain, rebuild and repair all of our muscle tissues
- Children require more protein than adults
- Athletes require slightly more protein, especially those who are growing (adolescents) or undertaking a strength program



How much protein does any athlete need?

**Minimum 1-2
serves per day**

BUT!

You must take into
account the amount of
exercise and its
intensity

One serve is equal to:
65-100g cooked meat or chicken
80-120g cooked fish
2 eggs
1/3 cup cooked beans, lentils or chick peas
1/3 cup almonds

Where do you find protein?

Animal Sources

2 small eggs
1 cup low fat milk
35g lean beef, lamb or pork
40g lean chicken
200g reduced fat yoghurt
50g grilled fish
30g reduced fat cheese

Plant Sources

4 slices wholemeal bread
3 cups wholegrain cereal
2 cups cooked pasta
3 cups cooked rice
200g baked beans
60g nuts or seeds
 $\frac{3}{4}$ cup lentils or kidney beans

~ 10g protein

How can I ensure a healthy protein intake?

- ✓ Spread your protein intake over the day-choose a protein source at every main meal
- ✓ Use your palm as a guide
- ✓ Choose lean sources and trim off excess fat
- ✓ Nothing deep fried, crumbed or covered in pastry



Tips for the gym

Goal: increase strength and power

Support training through:
— ‘GROWING’ foods

30-60 minutes after ALL sessions:

- 300ml Sustagen/liquid meal replacement
- 300ml milk
- 1 tub YoPro or Chobani FIT yoghurt
- 350ml Up & Go ‘Energize’
- 2 eggs or slice of lean meat
- A MAIN MEAL with 100g protein



The Plate – for after hard training, competition day and pre-comp day

PROTEIN

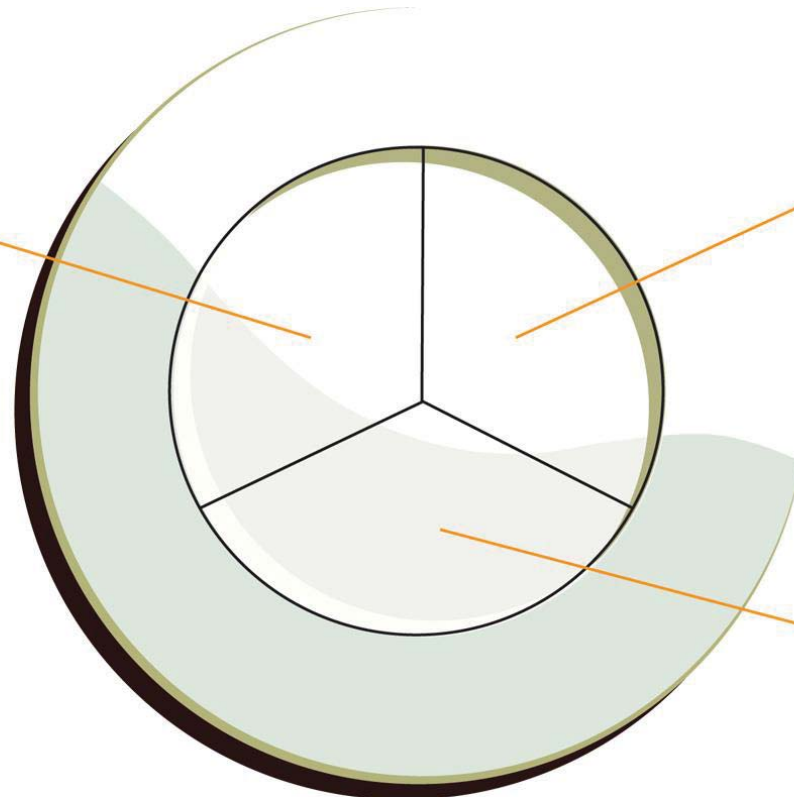
Meat/chicken/fish/eggs
/vegetarian proteins

IMMUNE FOODS

Veggies or salad –
choose as many colours
as possible

CARBOHYDRATE

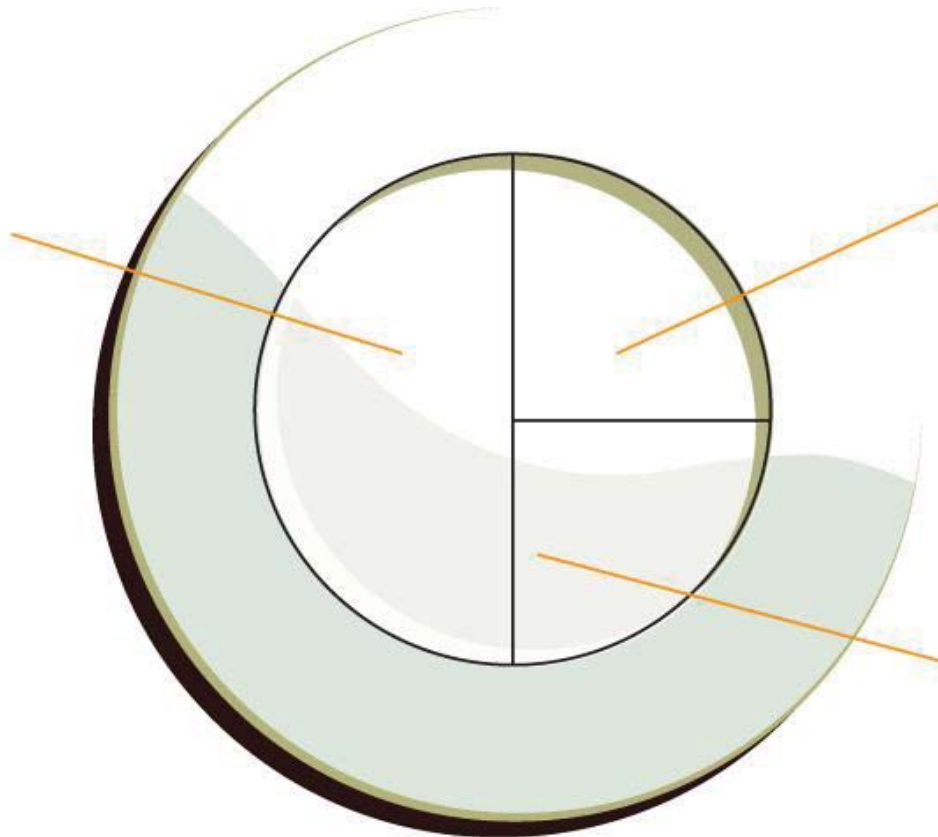
Rice, pasta, noodles,
quinoa, couscous, bread,
wraps, potato, sweet
potato, corn



The Plate – for after easy/mod training, during taper or rest days

PROTEIN

Meat/chicken/fish/eggs
/vegetarian proteins



IMMUNE FOODS

Veggies or salad –
choose as many colours
as possible

CARBOHYDRATE

Rice, pasta, noodles,
quinoa, couscous,
bread, wraps, potato,
sweet potato, corn

Breakfast at competitions

- Eat similar to what you would at home:
 - A snack before training/competition
 - Cereal with milk/yoghurt +/- fruit OR eggs with toast OR fruit with yoghurt + toast
 - Eat a similar amount to at home – you don't need to have fruit + cereal + toast + eggs + juice if usually you only eat a few weetbix!
 - **There may be options to take some snacks from breakfast e.g. fruit, muesli bars for later in the day**

Lunch/Dinner at competitions

- ✓ Yes you still have to eat veg or salad!
- ✓ You need some energy foods such as rice, pasta, bread, potato or sweet potato (particularly important if you are competing the next day)
- ✓ You will need a protein food such as meat, chicken, fish or a vegetarian protein AT EACH of these meals

Pre-comp meal

- **Plan** a meal with plenty of **ENERGY FOODS and fluid** for the night before
- **Avoid** too much **fat, fibre, spicy foods etc**
- **Choose** foods that make you **feel good** and ready to compete (don't try something new)



Nutrition goals

1. **Prepare** (at least the day before)
 - fuel up **glycogen stores** by eating **CARBOHYDRATE FOODS**
 - **hydrate** with fluids
2. **Plan** meals and snacks to fit the time you are competing
3. Think about your **recovery** – you may have to **pack** your own!

Remember to get enough sleep the night before your competition – 8 hours is ideal

Cut out unnecessary extras – save the treats for after your competition!

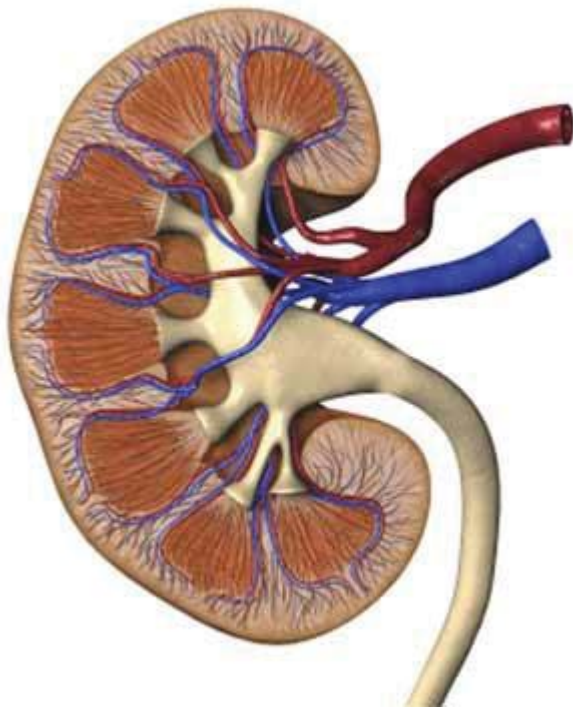


DO YOU DRINK ENOUGH?

- Ever checked your weight before and after a training session?
- Do you drink only when you're thirsty?
- Ever look at the colour of your urine?



What does the colour of my urine tell me?



Your **kidneys** control the water in your body and get rid of **waste products**....they try to conserve water when you haven't drunk enough and all the waste products are **concentrated to a darker colour**

Dangers of dehydration

- Increased heart rate
- Overheating
- **Reduced concentration and reaction time**
- Reduced gut absorption
- **Fatigue / tiredness**



What signs should you take notice of?

- Muscle cramps
- Fatigue
- Feeling hot and thirsty
- Headache
- Nausea (feeling sick)
- Concentrated urine colour



TAKE AWAY FOODS

Poor Choices



eat
smart
nutrition

Better Choices





Want to Know More?

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