




NUTRITION FOR CRICKET PERFORMANCE

Erin Michael
Accredited Sports Dietitian
erinmichael@live.com.au
Sports Performance Dietitian, Cricket NSW

Michael Clarke Academy – September 2014




Why is nutrition important?

Getting it right

- Good energy levels
- Good speed + power
- Growth
- Good concentration
- Improved skill
- Immune Health

Poor Choices



- Tired and run down
- Slow between the wickets
- Poor concentration
- Reduced skill
- Suboptimal growth
- More likely to get sick
- Early Fatigue
- Bowling line and length distortion
- Cramping




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erinmichael@live.com.au

Eating for training


- “Big Ticket” item
- Top up fuel supply before all training sessions (gym or field)
- Especially important for any **key** sessions or timed/performance tasks
- Challenges with eating around training
 - When to fuel - early morning session vs. afternoon session
 - Organisation/planning (eg. straight from school?)
 - Travel time
 - Tired and ? no appetite when you get home

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erinmichael@live.com.au


Getting enough fuel – Early Morning Session

Fuel up light snack before




➡



Keep fuelling the day at breakfast...



➡

...lunch and beyond




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erinmichael@live.com.au


Getting enough fuel – Afternoon Session

Start to prepare at lunch




➡



Top up snack on the way



➡

Replace fuel at dinner





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erinmichael@live.com.au

Carbohydrates

- Fuel for Brain and Muscles (high intensity especially)
- Stored as glycogen, limited quantities
- Need to ensure fuelled before exercise
- Recovery

Healthy carbohydrates

- ?

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erinmichael@live.com.au

Carbohydrates

Healthy carbohydrates

- Breads
- Wholegrain cereals, oats, muesli
- Rice, pasta, noodles, couscous, quinoa
- Starchy vegetables – potato/pumpkin/sweet potato/corn
- Dairy - milk, yoghurt, custard
- Fruit
- Muesli bars
- Crackers



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erinmichael@live.com.au

Carbohydrates

Unhealthy carbohydrates

- ?



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Carbohydrates

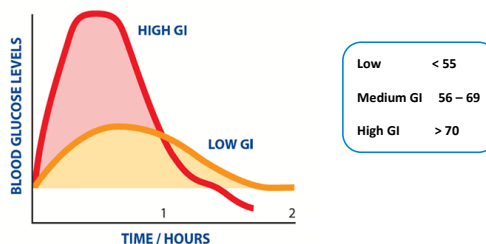
Unhealthy carbohydrates

- Lollies
- Soft drink
- Donuts, cakes, biscuits
- Packets of chips
- Hot chips
- Creamy pasta sauces
- Garlic bread
- Chocolates



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erinmichael@live.com.au

Carbohydrates



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erinmichael@live.com.au

What to BUY when it comes to carbs...

- Bread:
 - Choose a wholemeal base with wholegrains added (bits you can see)
 - Look for whole wheat flour as first ingredient
- Rice/Pasta/Noodles
 - Go for brown rice or brown basmati, basmati rice.
 - Jasmine rice (Thai) is high GI - not the best 'everyday' rice
 - Wholemeal pasta = more fibre
 - Quinoa (pronounced keen-wa) high protein grain/rice substitute
- Breakfast cereals:
 - Choose ones with wholegrains and fibre, less processed (not puffed) eg. oats/m
- Legumes:
 - Canned chickpeas, 4 bean mix, red kidney beans, lentils = Easy, cheap. (rinse)
- Biscuits/Crackers:
 - Choose crackers that have grainy bits you can see/wholemeal/high fibre
- Rice crackers/ cakes with protein toppings (cheese, tuna, chicken etc)



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erinmichael@live.com.au

Protein

Protein Foods

- Lean meat, chicken, fish
- Dairy (cheese, yoghurt)
- Eggs
- Legumes and lentils
- Nuts



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erinmichael@live.com.au

Protein

- Building blocks for muscle building and repair, immune system, metabolism
- Full factor
- Main source of iron, zinc and calcium
- Most athletes eat enough protein by naturally eating a healthy balanced diet that is higher in energy than sedentary people.
- Timing is important eg. Protein rich snack before/immediately after training (<20mins) can help maximise muscle adaptation
- Research shows best to spread intake evenly throughout the day, rather than one big load (eg. 20g at each main meal)



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erinmichael@live.com.au

Fats

Healthy Fats

- Olive oil, canola oil, sunflower oil, margarine – crushed sunflower seeds
- Avocado
- Low fat dairy
- Fish oils
- Nuts
- Lean meat



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erinmichael@live.com.au

Fat

- Small amounts needed for essential body functions
- Every cell membrane in our body is lined by a fat membrane. Fat is also essential for nerve conduction and insulation.
- We also use fat for energy
- Fat under the skin protect our vital organs
- Important to make sensible choices to avoid excessive intakes



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erinmichael@live.com.au

Fat

- Big mac = 2060kJ, 26.9g fat, 10.6g sat fat
- Large fries = 1900kJ, 24.3g fat, 2.9g sat fat
- Large choc thick shake = 2100kJ, 12.4g fat, 7.8g sat fat
- TOTAL = 6060kJ, 63.6g fat, 21.3g sat fat!!



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erinmichael@live.com.au

Fat



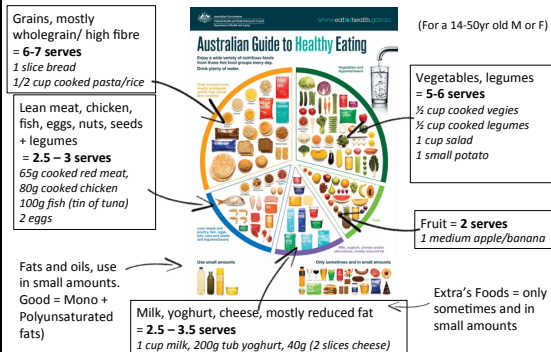
- Grilled Chicken Snack wrap 939kJ, 8.5g fat, 2.7g sat fat
- 10 Chicken McBites = 661kJ, 9g fat, 1.5g sat fat
- Small Banana Berry Bash Smoothie = 767kJ, 1.5g fat, 0.5g sat fat
- TOTAL = 2367kJ, 19g fat, 4.7g Sat Fat



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erinmichael@live.com.au

Australian Guide to Healthy Eating

(depends on age, gender, body size and physical activity level)



Packing your lunch – be organised

1. **Fruit/Veggies**
 - Fruit – Fresh, dried, frozen, tubs
 - Carrot/celery, cherry tomatoes, salad
2. **Snacks:**
 - Low fat muesli bars, Nuts/Nut Bar, Low fat cheese & wholegrain crackers, fruit bread, homemade muffin
3. **Protein:**
 - Yoghurt, Low-fat flavoured milk, cheese, protein muesli bar
4. **Wholegrain sandwich:**
 - Wrap or grain bread + lean protein + salad (eggs/ tuna/cheese/avocado)
 - toasted sandwiches
 - Left over dinner / pasta /rice
5. **Water to drink all day!**



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The Michael Clarke Way

- Correct diet and nutrition is extremely important
- The fuel that you put into your body plays a huge role. Maximum input will give you maximum output
- Basic philosophy
 - Try to eat good foods, consistently
 - Eat as many vegetables/fruit/salad as possible, as often as possible
 - Eat whatever protein that you enjoy – red meat, chicken or fish
 - Healthy foods are the simple ones
 - 3 meals a day with a couple of healthy snacks



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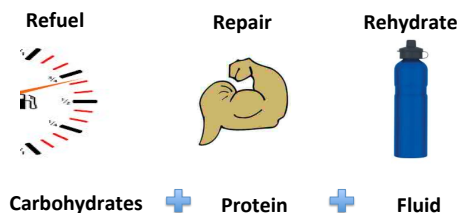
The Michael Clarke Way

- Breakfast and lunch are two biggest meals of the day
- Have water with all meals
- Breakfast
 - Fruit
 - Protein – egg white omelet/protein shake
 - Muesli and yoghurt
- Lunch
 - Sandwiches with meat and salad or a chicken salad
- Dinner
 - A lot of vegetables or salad with a small piece of protein
- When touring, it is important to carry good quality snacks around with you, because you will not always have the time to find good quality food whilst training. This would include:
 - Fruits
 - Nuts
 - Snack Bar/muesli bar
- Snacks more protein based than carbohydrate based



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Recovery – the 3 R's



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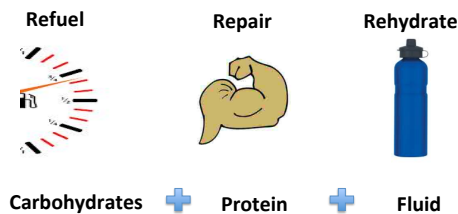
Pre Training Snack

- "Top up" fuel supply 1-2hrs before all training sessions
- If afternoon training don't leave it until just before training – use lunch as well
- Quality carbohydrate (low GI, wholegrain)
- Particularly important when intense, long training/more than once per day
- Snack should be;
 - Convenient & safe
 - Easy to digest
 - Rich in carbohydrate
 - Low in fat
 - Something you enjoy
 - Nutritious (every mouthful counts)



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Recovery – the 3 R's



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erinmichael@live.com.au

Post Training Snack

- Carbs and protein together is best
- Carbohydrate can help to reduce fatigue and illness by aiding recovery after session
- Eat for your training intensity. If you are not training, or very light/skills training you may not need that 'extra' pre- or post- training snack



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Group Activity: Label Reading

Identify 5 snacks that YOU would enjoy eating as a pre- or post- training snack.

The catch: must contain close to 10g of protein and no more than 1000kJ (or less)

- Look at serve column (but also refer to manufacturer specified serve size vs. how much you are going to eat)
- 100g is good for comparing foods



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erinmichael@live.com.au

What about gym sessions?

How to increase lean muscle mass

1. Hard work in the gym!!
2. Always have a carbohydrate containing snack before training
3. Recover with carbohydrates and protein after training (20mins snack window or 1hr main meal)
 - Only need ~15-20g protein
 - Up&Go Energize
 - Sirena Microwave Tuna & rice
 - 1 x wholegrain toast + peanut butter + small tub yoghurt
 - Small tin tuna/chicken + 4 vitaweat crispbreads
 - John West Tuna & Beans
 - Ham, cheese & tomato toasted sandwich
 - Chobani yoghurt + 15 almonds
 - Muscle repair and resynthesis from weight training occurs for 24-48 hours after session – regular spread of protein throughout the day important.
 - No need for protein powders or supplements when there is access to healthy whole foods.



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erinmichael@live.com.au

Post-gym smoothie

- 1 cup reduced fat milk
- 3-4TB natural yoghurt
- 1 frozen banana OR ½ cup frozen berries
- 2 teaspoons honey
- ¼ cup oats
- Cold water to desired consistency
- OPTIONAL 'add ins'
 - 2 tablespoons skim milk powder = 6g protein
 - Small handful almonds = 5g protein
 - 1 raw egg (optional) = 7g protein

~20g protein

PLUS healthy carbs
PLUS antioxidants
PLUS fibre
PLUS vitamins + minerals
PLUS flavour!
and more....

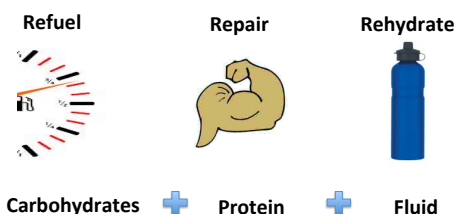


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HOT TOPIC – Supplements

- Definition not always clear:
 - * Powder
 - * Pill/tablet
 - * Injection
 - * Food/drink
- High Risk: health food 'energy' smoothie blends, herbals and botanicals, proprietary blends, pre-workout, poly supplements
- Small but REAL risk of testing positive to a banned substance as a result of taking supplements and sports foods
- Small gains do not add up to super gains
- Commercial opportunity vs Performance outcome
- ASADA stats (2012) over 6,000 tests, 69 positives
 - Mostly inadvertent
 - Almost all were powder in a drink
 - Many didn't think it was a supplement
 - Didn't check the label
 - Low grade banned stimulants have been found in appetite suppressants
 - Jack 3d, Methylhexanamine (geranium oil/geranium), 18 athletes tested positive

Recovery – the 3 R's



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Hydration

- Signs to watch out for
 - Weight
 - Urine colour
 - Thirst
 - Tiredness, lethargy, difficulty concentrating
- Maximise opportunities to consume fluids over the day
 - Water is the priority fluid
 - Carry a drink bottle with you to school and training



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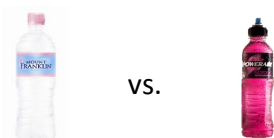
Hydration

- Pre-exercise body weight – Post-exercise body weight = Sweat loss
- Replenish 150% (1.5x) of weight lost with appropriate fluid over the next hour.
- Small sips are better than sculling whole bottle fluid to help water retention.



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erinmichael@live.com.au

Hydration



- Sports drinks only at competition and hard training sessions/hot weather
- Good for hydration and also High GI carbohydrate source
- If training = less than 1 hr/ lower intensity water is better option
- Hydralyte good option \$\$
- Soft drinks, juice or cordial not the preferred fluids



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Match Day Fuelling

Remember: Carbohydrate is stored in the muscle for energy
Inadequate fuel stores can reduce performance

Opportunities to top-up carbohydrate stores

- Dinner the night before
- Breakfast
- Lunch
- Tea Breaks
- Drinks on the field



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The night before a match

- Don't try new foods – stick to what you know works well
- Good source carbohydrate, moderate protein
- Moderate fat, (low saturated fat)



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erinmichael@live.com.au

Breakfast time

- Cereal + low fat milk + fruit
- Toast + baked beans + juice
- Toast or crumpets
- Toast + eggs (scrambled/boiled/poached)
- Up and Go + fruit
- Smoothie
- Yoghurt, Muesli + fruit



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During Play

- Make the most of opportunities to consume fluids
 - Water Vs Sports Drink
 - If your fuel needs are high enough you may benefit from the additional carbohydrate in sports drink
- Choose wisely with snack options
 - Good snack options: Cereal bars, fruit, yoghurt
 - Poor snack options: Lollies, chocolate, soft drink, chips



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If your team is batting

- Avoid unnecessary all day grazing
- Highest fuelling needs
 - Those at the crease and those higher up the order
- Lower fuelling needs
 - Those batting in the bottom half of the order
- Adjust your carbohydrate intake at meal breaks based on your workload in match



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erinmichael@live.com.au

Adjusting intake



HIGH WORKLOAD



HIGH FUELLING NEEDS

During Match/Training 'top up' options

- Good carb options:
 - Cereal bars
 - Fruit
 - Sports drink (also gives fluid)
- Not great carb choices:
 - Lollies
 - Soft drink
 - Energy drinks
- No need to take fancy carbohydrate supplements (eg. gels/ bars)
- Food/drink can provide adequate carbs



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Adjusting intake



LOW WORKLOAD



LOW FUELLING NEEDS



Summary

- Food gives us the energy we need for growth and playing sport
 - The right food choices help us play well and develop
 - Poor food choices leave us tired and more likely to get sick
- Remember to turn up ready to go at training
 - Carbohydrate snack before
 - Don't forget your water bottle
- Kick start recovery as soon as possible after training/matches
 - Quality Carbohydrates (not white, processed junk, not lollies/soft drink)
 - Protein (10-20g)
 - Hydration (replace 1.5x body weight loss)
 - Fluids



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More Information




- AIS website
www.ausport.gov.au/ais/nutrition
- Recipe books
 - Survival For The Fittest
 - Survival From The Fittest
 - Survival Around The World
 - Survival For The Active Family
- Sports Dietitians Australia
www.sportsdietitians.com.au





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Questions?



Erin Michael - Accredited Sports Dietitian
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