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If you want to race like a formula one engine you need the right fuel and plenty of it

Training alone is not enough! You have to refuel, drink and think like a winner.

Food, hydration, mental preparation, warm up and recovery.

Swimming is a high energy demanding sport, to swim well and not only maintain it through the three days of Countries but back it up through to States takes planning. The body needs carbohydrates, fats and proteins to convert to fuel and energy and enough fluid and simple rapidly absorbed carbohydrates to maintain energy levels.

Two weeks prior to Countries start to increase carbohydrate and protein in the diet.

One week prior - Load UP!

Proteins – meat, chicken, fish, shellfish, dairy, nuts, soy products, eggs – teenagers need 2 – 2.5 grams of protein per kg of body weight. So a 50kg teen will need 100g of protein at least daily. While not a primary fuel source in the way that carbs and fats are, protein aids muscle development and repair.

Carbs & more carbs 7 – 12g per kg of body weight – Simple rapidly absorbed such as sweet drinks and jellies/gel lollies during training and competition to rapidly refuel. Complex – pasta, rice, cereals, baked potatoes with a variety of toppings, pizza, fruits, muffins, crumpets with honey or jam, pancakes, meal replacement drinks such as up and go, Sustagen sport, banana sandwiches & breakfast bars.

Hydration – drink a lot! Water, sports drinks, fruit juices, cordials, smoothies. Sweetened drinks allow rapid re-obsorption of glucose. If they don’t like water they won’t drink nearly enough.

Don’t avoids fats in the diet as Free Fatty Acids convert to valuable fuel sources.

Range of Motion – be in the habit of gentle through to dynamic range of motion warm up routines 10 – 15 minutes prior to training or warm up. Swimmers need to warm up through the entire swimming range of motion, flexibility is essential.

Swimming down or range of motion recovery between events – 10 – 20 minutes of gentle swimming 30 – 50% of max or if no warm down pool walking and range of motion – the more you do the better you will swim, the less you do the longer it will take you to recover and the earlier fatigue will set in. Have a glucose or sports drink straight after your race and a protein snack or a couple of gel lollies on the way to active recovery. Then a more substantial snack and drink again after warm down.

DRINK – SNACK – EAT WELL and ENOUGH REST = Recover to race smarter

If you do not recover properly between events your performance will deteriorate – Train Smart, Race Smart, Recover Smart!

Warm up routines

Countries and State Age

* 10 to 15 minutes of gentle through to dynamic range of motion exercises

Pool WORK

30 Minutes and finishing 20minutes prior to your first event

* 10 – 15 minutes easy swimming at 30 to 50% of max– familiarise yourself with the pool and turns, stroke counts and steady pace, drills that focus on technique (feel for the water, balance, stability, visualise the events you are swimming - FOCUS)
* Pace and sprint a few 25s & 50s (stroke count all) with 100 easy active recovery between each 50
* 6 great starts – visualise the events start
* 2 – 5 minutes easy swimming swim down

Turns do not need a separate practice they should be race pace practice throughout the warm up IE during the 10 – 15 minutes easy make every turn a racing turn then settle back to pace.

Drink and snack again!

Mini warm up 10 minutes prior to your event marshal or range of motion – don’t sit like a lump at marshal and expect muscles to be ‘activated’ and ready to move fast.

Marshalling and Blocks – Self talk and visualisation – ‘*feeling great feeling fast’, ‘fast into the turns and streamline, finish hard’ Visualise the event you are about to swim, great start power out, tactics’*  Use your ipod and favourite music, whatever hypes you up, now is not the time for lullaby’s.

Maintain carbohydrate & fuel sources throughout the competition cycle. REST the three days leading to State Age, swim no more than a comp warm up daily.

Burke L, Clinical Nutrition and recovery recommends 1g of carbohydrate/kg of body mass immediately after exercise, and a daily intake of 7 – 12g/kg BM. Table 14.3 P 382 Clinical Nutrition 4th Edition:

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| --- | --- |
|  |  |
| CHO rich snacks (50g CHO serves) providing 10 g of protein | 50g CHO Snacks |
| 250-350ml of liquid meal supplement | 800-1000 ml of sports drink |
| 250-350ml of milk shake or smoothie | 800ml of cordial |
| 500ml flavoured low-fat milk | 500ml of fruit juice, soft drink or flavoured mineral water |
| Many sports bars (check labels for CHO content) | 60 – 70g packet of jelly beans or jube sweets |
| 60g (1 1/2 – 2cups) breakfast cereal with ½ cup milk | 2 sports gels |
| 1 round of sandwiches including cheese/meat/chicken filling, and 1 large piece of fruit or 30ml sports drink | 3 medium pieces of fruit or 2 bananas |
| 1 cup fruit salad with 200g carton fruit flavoured yoghurt | 1 round of thick sliced sandwiches with jam or honey |
| 200g carton fruit-flavored yoghurt or 300ml flavoured milk and 30 -35g cereal bar | 2 large (35g) or 3 small (25g) cereal bars |
| 2 crumpets or English muffins with thick spread of peanut butter or 2 slices of cheese | 1 large chocolate bar (70 – 80g) |
| 200g (cup or small tin) of baked beans on 2 slices of toast |  |
| 250g (large) baked potato with cottage cheese or grated cheese filling |  |
| 150g thick crust pizza with meat/chicken/seafood topping |  |

C. Veldhuyzen December 2010 West Coast Swimming Club SA