Strategies for Optimising Performance and Recovery during Multi – Day Competitions

County Pathway Programme Team Manager Conference 2018



Coming Up ...

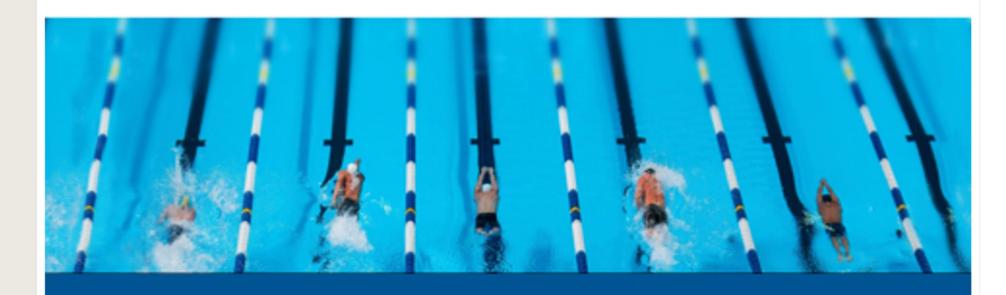
Revisit British Swimming's Principles for Excellence:

Everyday is Day 1: how can the team manager support swimmers to 'perform when it matters'

- Revisit the race day timeline and consider effective nutrition and sleep strategies to enhance performance and recovery
- Further discuss how the strategies above can be used to optimise each performance within a multi – day competition and enable the swimmer to recover effectively between events

WELCOME TO DAY 1





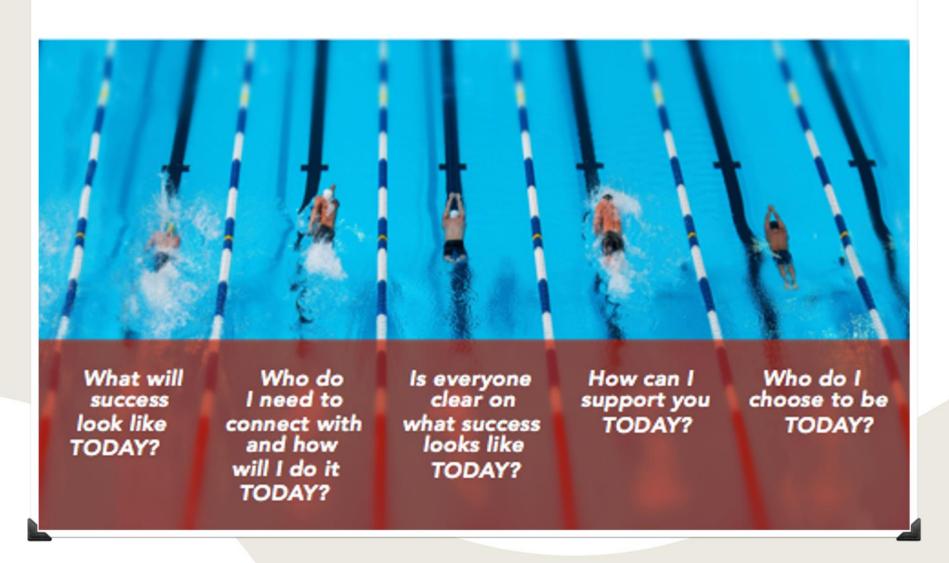
DELIVERING RESULTS STAY CONNECTED SETTING DIRECTION

ENGAGING PEOPLE

CREDIBILITY

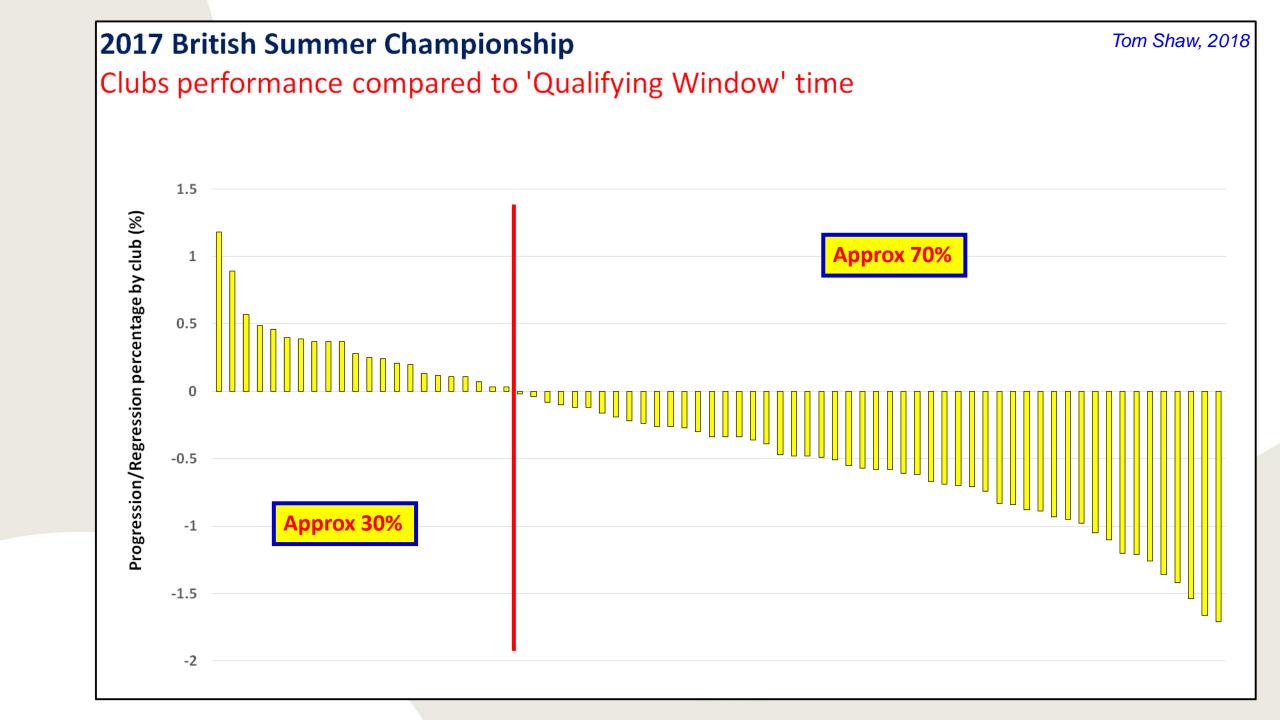
EVERY DAY IS DAY 1

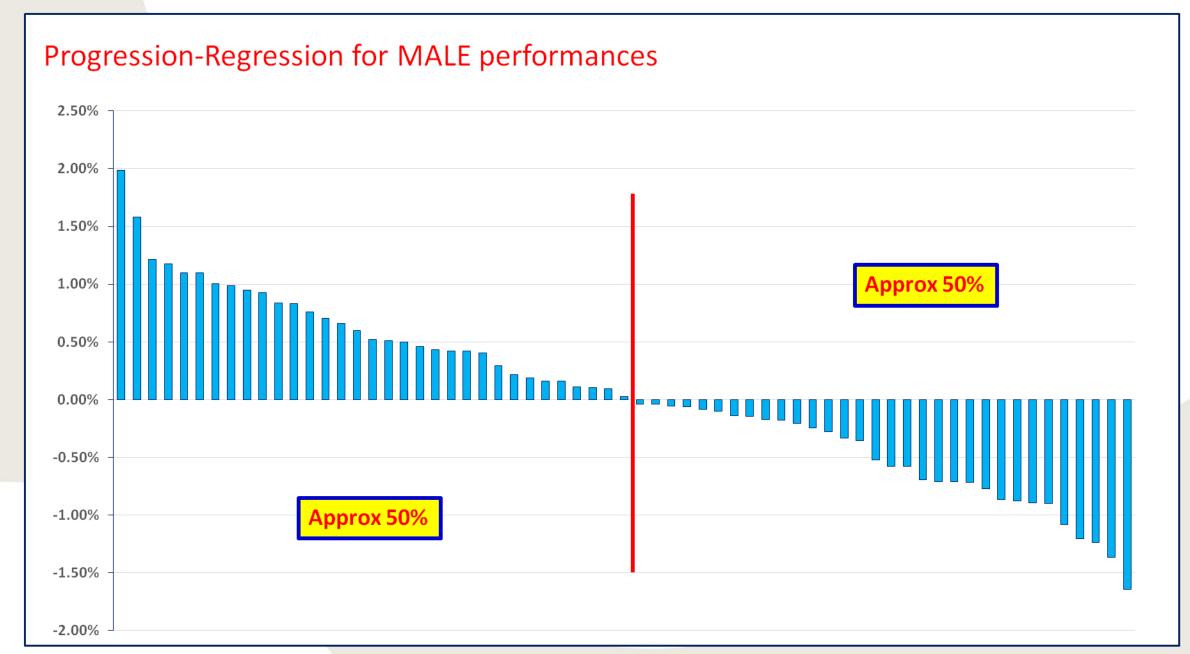


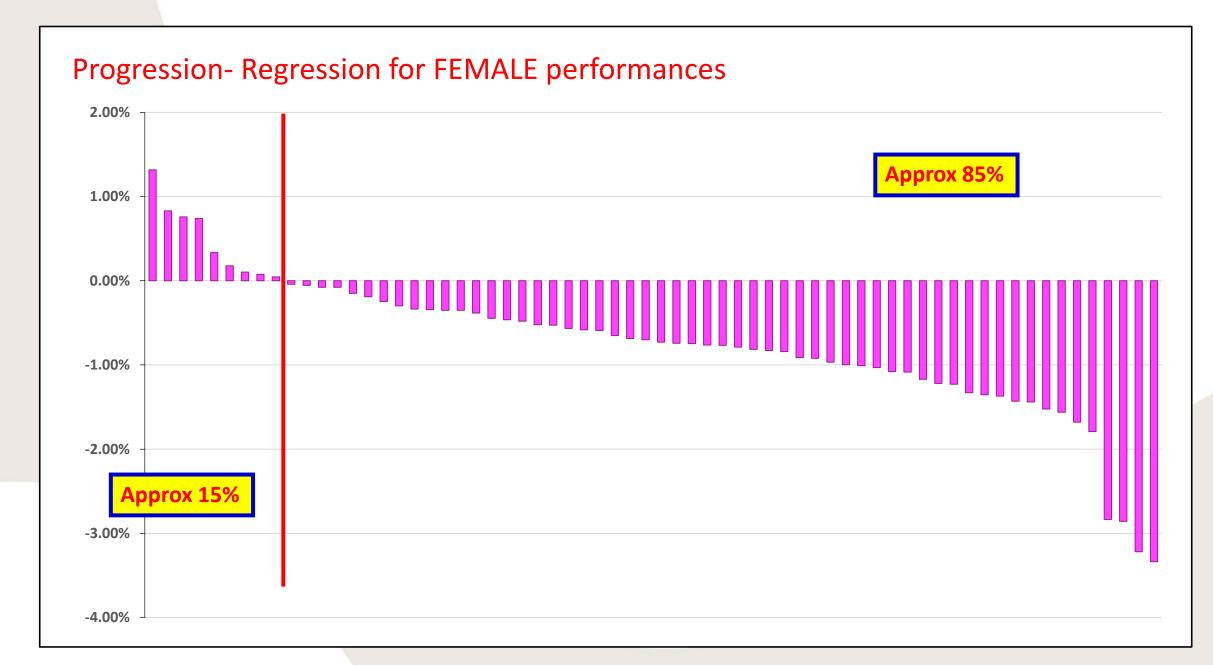


'Performing When It Matters'

- Current issue with swimmers being able to step up their performances from the qualifying window to the British Summer Championships
- Weaker performances are even more obvious when considering female results
- These issues may also be linked to how the swimmers prepare and manage themselves at the British Summer Championships
- The role of the support team is critical to the effective pre competition preparation and in competition management of the swimmers and support team



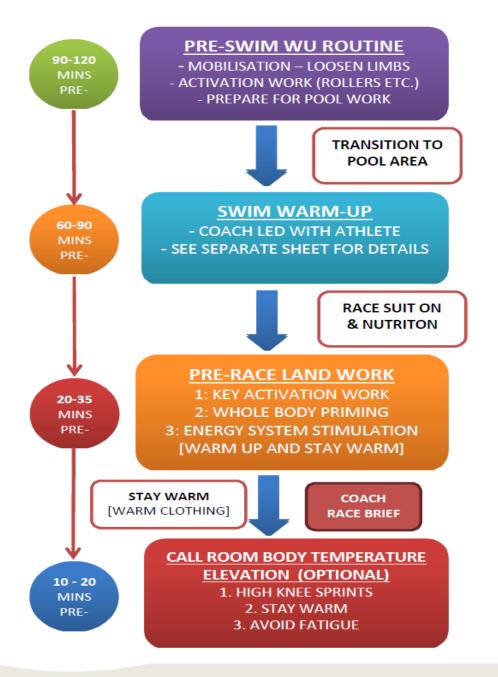




Race Day



Muscle Priming Higher resistance movements selected to prepare the muscular system and whole body for racing. To be completed with emphasis on great technique and maintaining tension throughout the movements. **Upper Body Push Pattern** Level 1: Kneeling Push-Ups [1 x 8] Level 2: Knees Up, Feet Down Push-Up [1 x 8] Level 3: Full Push-Up [1 x 8] PRE-RACE LAND WORK **Lower Body Squat Pattern** Level 1: Zombie Squat (arms out in front) [1 x 8] Level 2: Split Squat (one leg forward/back) [1 x 6+6] **Level 3:** Single Leg Pistol (leg out with support) [1 x 6+6] Power-Up High speed movements which should be completed as explosively as possible to prepare the athlete for maximal race performance Plyometric Push Up (From Knees or Feet) [1 x 5] Jump Squat (Reactive or Countermovement) [1 x 3] **Energy System Stimulation** Rapid movements to activate energy metabolism, increase breathing and Heart Rate ready for racing. High Knee Sprinting with Arms [3 x 15s On with 45s Rest] OR: Fast Skipping [3 x 15s On with 45s Rest]



Post Race Recovery

- Swimmers should keep moving after the race
- Swimmers should aim to get into the swim down pool within 5 minutes of the race finishing
- Team staff should avoid holding lengthy discussions with swimmers before swim down is completed. Brief points only with initial information

 Remove suits fully if time permits (in all circumstances except where races are in close succession)



Swim Down Protocol

Repetitions	Comments	Distance	
200m	Easy, own pace with unrestricted breathing if possible	200m	
4 x 100m + 30s rest	Alternate FC and BC at a steady pace with good technique	600m	
8 x 50m + 20s rest	Use 3 strokes (no Fly) and focus on kicking the legs	1000m	
4 x 100m + 30s rest	Alternate FC and BC and swim at 50-60 BBM	1400m	
Take Heart Rate	If below 100 BPM and feel recovered SD complete If above 100 BPM or not feeling fully recovered continue SD		
4 x 100m + 30s rest	Alternate FC and BC and swim at 50-60 BBM	1800m	
Take Heart Rate	If below 100 BPM and feel recovered SD complete If above 100 BPM or not feeling fully recovered continue SD		
Mike Peyrebrune 2014			

Nutrition Strategies



 What are the key considerations for race day nutrition?

 How can we put our athletes in the best possible position to ensure performance success?

Planning for Race Day Nutrition

- Reccie hotel facilities fridge, microwave, travel to competition venue, timings of meals, option
 of a dedicated team meal room?
- Reccie food/ drink options at the pool café / vending machines / water fountains
- Establish locations for:
 - nearest supermarket
 - local shops for essential supplies
 - restaurants / lunch choices
- Re-write hotel/ restaurant menus for only good foods to limit athlete choice and prevent mistakes

Waking

Check hydration status

V 2-4 Houre Breakfast

Mixed Meal: CHO, Protein, Fats

▼ 1-2 Hours Snack: Lighter options, CHO & Protein

30-60 Minutes

- Snack: Light on stomach
- Fast release e.g. dried fruit

EVENT

- Race
- Swim Down

Post Race

- Snack
- CHO & Protein

Lunch

- Mixed meal
- CHO, Protein, Fats, Vitamins and Minerals

Race Day Nutrition

All timings are related to the event/ race time

Ideally team schedules should plan for this e.g. if the heats racing starts at 08:30, breakfast should be available from 05:30

Timeline starts again in relation to finals event timings

Upon Waking: Check Hydration

 TM's can provide a urine colour chart for each athlete

 Charts could be attached to walls in rooms/ toilets if TM has access prior to athlete arrival



Hahn, Robert G., and Nana Waldréus. "An aggregate urine analysis tool to detect acute dehydration." *Int J Sport Nutr Exerc Metab* 23.4 (2013): 303-11.

Breakfast: 2 - 4 hours prior to event.

Aims to be a mixed meal of:

- Carbs
- Proteins
- Fats
- Vitamins and Minerals

These can help:

- Working with the hotel to provide an athlete catering room / area
- Rewrite the hotel menu's e.g. no fried options

Cold Selection	Condiments	Hot / Pre order selection (24hrs notice)
Weetabix	Jam - various flavours	Soaked oats
Bran Flakes	Marmite	Porridge
Shredded Wheat	Nut butter	Scrambled eggs
Granary / Seeded bread	Cinnamon	Poached eggs
Bagels	Honey	Filled omelettes
Whole milk natural yoghurt		Hard boiled eggs
Greek yoghurt		
Cream cheese		Smoothies to take to the pool?
Smoked salmon		
Cooked and sliced ham		
Sliced fresh fruit		

1 – 2 hours Pre Event

- Light snack options
- Can be taken from hotel breakfast or specifically prepared.

e.g.

- Fresh fruit
- Soreen / Malt Loaf
- Yoghurt
- Flapjack

30 – 60 minutes Pre Event

- Optional
- Not all swimmers can tolerate this without stomach upset

e.g.

- Fruit juice
- Smoothie
- Milk
- Dried Fruit

Recovery





WHEN



Fast absorbed carbohydrate
High quality protein

Aim for the sooner the better immediately post race (within 30 minutes)

After hard intensity exercise feed again within 2-3 hours

Carbohydrate ~ 50 – 70g Protein ~ 20 – 30g

Avoid high fat foods

Example Recovery Snacks

Home

Soreen (2x 1cm slice)
Milk (1 pint)



CHO - 73g | Pro - 25g | Fat - 11g

Home

Longley Farm Pineapple Cottage Cheese (250g)

Homemade flapjack (52g)



CHO – 46.5g | Pro – 26.6g | Fat – 24.4g

Example Recovery Snacks

Competition

Apple (2 x medium)
Orange (2 x medium)
Flavoured tuna pot (80g)
CHO – 57g | Pro – 10g | Fat – 10g





Competition

Mixed dried fruit (30g / 1 x handful)
Mixed nuts (1/2 cup or 60g)

CHO - 26g | Pro - 14g | Fat - 28g





Lunch

Aims to be a mixed meal of:

- Carbs
- Proteins
- Fats
- Vitamins and minerals

These can help:

- Working with the hotel to provide an athlete catering room / area
- Re write the hotel menu's e.g. no fried options

Salad / Self mad	e selection	Prepared Meals	Available at all lunches
Tortilla wraps	Cooked ham	Rotate daily (1 or 2 available each day)	
Tomatoes	Cooked Chicken / Turkey		
Sliced beetroot	Tuna	Asian Chicken Salad	Baked potatoes
Cucumber		Beef, Beetroot, tomato and	Mixed vegetables
Avocado	Dressings	walnut salad	
Onion	Balsamic vinegarette	Steak, roasted peppers and	
Peppers	French dressing	pearl barley salad	
Carrot battons	Housemade (by kitchen) •2 parts oil	Ham and beetroot salad bowl	Water available on all tables
Leaves (rocket / spinach / lettuce)	•1 part acid		

Dinner

Each athlete may need different volumes of:

- Carbohydrate
- Protein
- Fats
- Vitamins and Minerals

Cater for a variety of different eating habits/choices:

- Vegetarian
- Vegan
- Paleo
- IBS / Celiac disease / Crones disease / Nut allergies / Lactose intolerance etc.

Dinner

Offer variety, choice and quantity ...

Try to keep it simple while still tasting good!

- Lots of colour
- Carbohydrate options, e.g. rice, potato, pasta
- Meat dish e.g. whole food not processed steak, chicken
- Fish dish e.g. oily fish where possible salmon, tuna
- · Vegetarian dish e.g. vegetarian lasagne

1 meat dish per evening	1 fish dish per evening	1 vegetarian dish per evening	
Roast shoulder of pork with apple cider vinegar marinade	Salmon & Sweet Potato Tray Bake	Fettuccine alfredo	
	Balsamic glazed salmon	Creamy Asparagus Pasta	
Chilli con carne (served on a day	Baked salmon and asparagus	Curried red lentil and sweet potato stew	
when rice is cooked)	Garlic and Dill salmon Fillet		
Chicken quesadilla	Seafood lasagne	Vegetarian Mexican lasagne	
Bolognese (served on a day with pasta)	Tuna steaks with cucumber relish	Vegetarian paella	
Slow Cooked Korean Beef with Sweet Baby			
Peppers			

Salad Selection	Vegetables	Carbohydrate options (cook 2 choices per day)
Leaves - rocket, spinach etc	Variety of roasted or steamed vegetables	Rice (wholegrain / wild / basmati)
Watercress		Couscous
Tomatoes		Quinoa
Cucumber	At least one portion of the following each evening:	Potato - Steam / boiled / mashed / baked (sweet or white potato)
Radish	Kale	
Avocado	Broccoli	Dressings
Onion	Spinach	Balsamic vinegarette
Peppers		French dressing
Buffalo mozzarella		Housemade (by kitchen) •2 parts oil •1 part acid

Team Sky Catering Truck

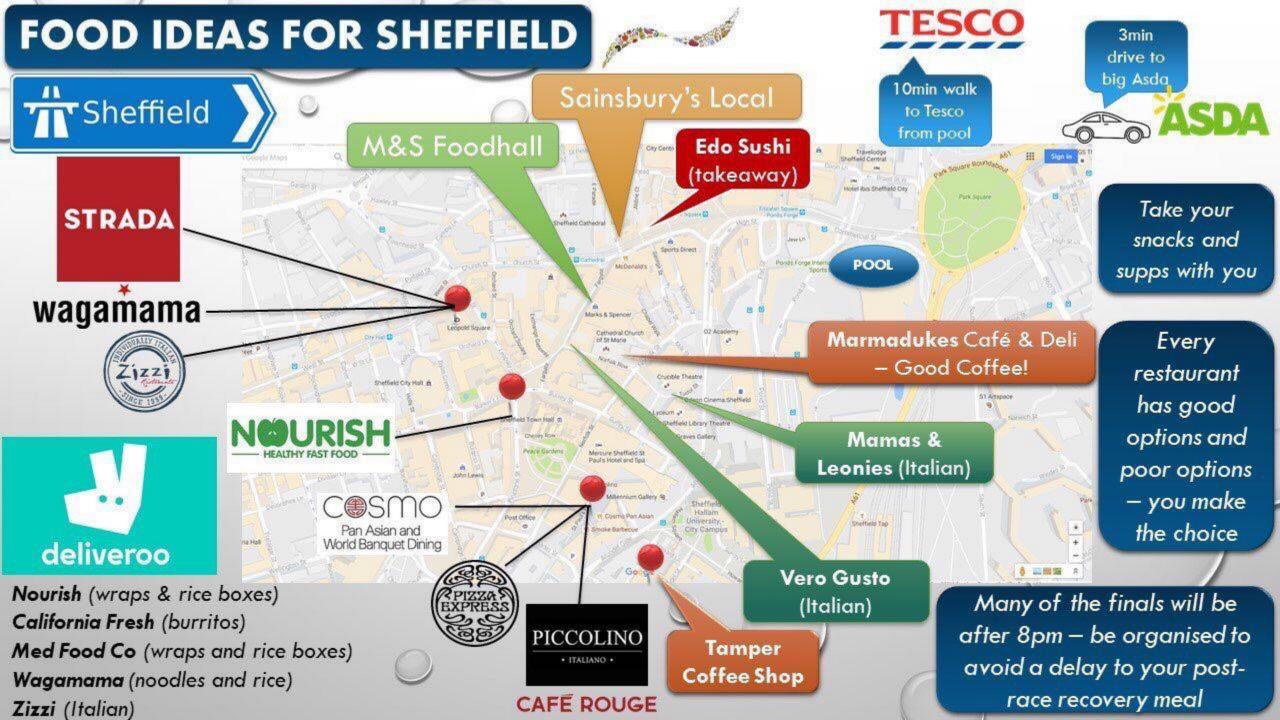
Self Catering

- Multi Cookers
- Slow Cookers
- Rice Cookers
- Juicers / Blender
- Chef / Staff
- Ordering from a meal prep company e.g. box meals
- Use of a hotel fridge or renting a fridge to go in "physio room"



- Renting a mobile kitchen
- Local catering teams e.g. university dining halls?





Sleep Strategies





Sleep

We can't achieve this level of detail other than at major events such as the Olympics, but, what can we do?

Sleep Hygiene

Following these sleep guidelines can help your sleep and subsequently improve your performance:

- Adopt a regular sleep pattern; try to go to bed at the same time every evening (if possible)
- Plan to get 7 9 hours per night of sleep (90 minute cycles)
- Keep the room dark when sleeping i.e. can we request blackout blinds?
- Make your bedroom quiet, comfortable and cool (18°C 24°C)

Planning for Effective Sleep

Reccie hotel facilities to:

- Check quality of the mattress, size of the rooms, cleanliness of the hotel
- Consider travel time to and from the hotel as this will affect daily timings ...
- Book/ request rooms away from the main areas of the hotel or ask for the entire top floor/ corridor just for your team

Encourage swimmers to bring (add to assembly instructions):

- Own pillow
- Ear plugs
- Eye mask
- Any other Items conducive to establishing a normal night time routine e.g. fruit teas

Sleep Hygiene

- Encourage use of rooms for sleep. Working, talking on the phone, or using your laptop in bed has been shown to disrupt sleep quality – use communal areas
- Do not permit swimmers to socialise in each others rooms (even if same gender) to ensure that swimmers have the opportunity to rest etc.
- Avoid caffeine for at least 3 hours before bed
- Introduce strategic daytime naps when necessary
- *** If swimmers consistently have issues sleeping, consult a sleep physician or consult their general practitioner (GP)

Summary

- Prepare early!!!
 - Get in touch with the hotel as soon as possible
 - Liaise with nutritionists / chef best price, most flexibility, adequate portions
- Communicate plans with team staff and athletes (where appropriate) what can they expect, what do they need to organise/ prepare?
- Provide an environment where athletes "will power" doesn't need to be high: limit potential mistakes e.g. re-writing menus

Any Questions ...

