



Sleep and Recovery

ASA England Programme Phase 2

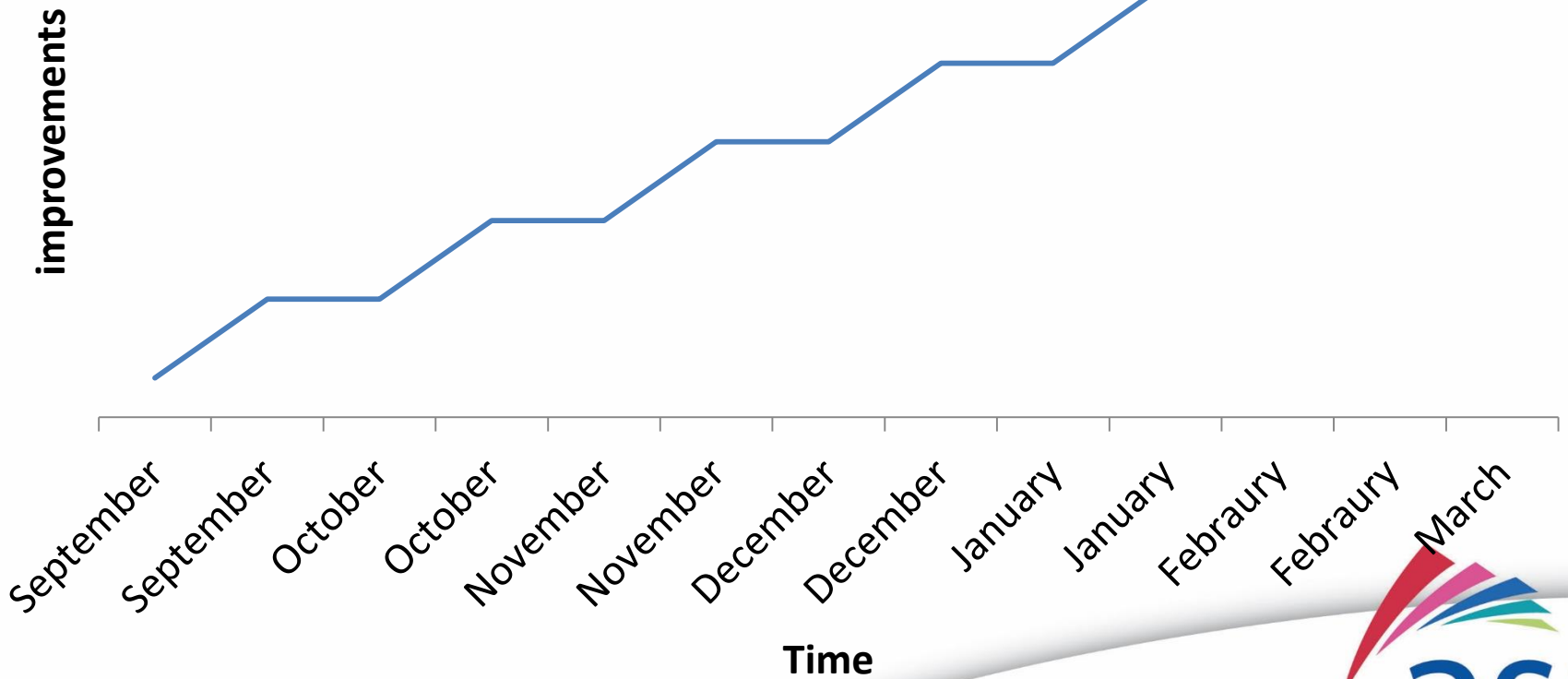
Aims

- Recap on food groups
- Recap on guidelines
- Maintaining health
- Recovery and adaptation
- Sleep

Food Groups – Eatwell Plate



Adaptation



Health and Immunity

- During hard training staying healthy is vital.
- How many of you have been ill during hard training?
- Does eating affect health?
- What should you be eating?
- What else can you do?

Recovery

Adequate recovery is one of the most important parts of an athlete's training regime.

Recovery is:

- Re-fuelling
- Repair
- Adaptation

Essential after every training session and race.

Carbohydrate & Protein

- **Carbohydrates**

- Essential for glycogen resynthesis
- Provide energy for your next bout of exercise
- Fuel adaptation



- **Protein**

- Repair damaged muscle tissue
- Decrease muscle breakdown
- Combined with CHO promotes glycogen resynthesis



Post-Training

- 30 minute window
- Include both fast absorbed carbohydrate & high quality protein.

Recommended servings:

- Approx. 50-70g of carbohydrates.
- Approx. 20-30g of protein.
- Avoid high fat foods
- Avoid any carbonated drinks

Recovery Options

Foods that provide enough protein and carbohydrate



Individualisation

Do you have different recovery strategies after different sessions?

What do you consider and Why?

Individualisation

Factors to consider:

- **Intensity** of session
- **Timing** of next session
- **Training goals**
 - Develop strength / speed
 - Develop endurance
- **Body composition goal**
 - Increase muscle mass
 - Reduce drag profile

Sleep

- Sleep is an essential component of recovery
- During sleep the body;
 - Grows
 - Repairs muscle damage
 - Removes toxins



Sleep Hygiene

Tips to promote high quality sleep;

- **Keep the bedroom for sleep!**
 - Avoid doing homework in your bedroom
 - Avoid using computers / televisions in your bedroom
- **Make your bedroom comfortable**
 - Tidy your room and get rid of clutter
 - Try to make room as dark as possible
- **Clear mind before bed**
 - Write down thoughts / reminders in a notepad
 - Avoid computers games / stressful TV an hour before sleep



Tired habits

Can you think of examples of changes in diet you might make when you are tired and/or fatigued?

Tired habits

Increase caffeine intake

Rely on caffeine to stay awake or wake up for sessions.

Increase carbohydrate intake

Use simple sugar foods for instant energy boosts.

Reduce benefits of CHO supplementation during intense training and competition.



Tired habits



Go for easy unhealthy options

- When you are tired you are more likely to eat quick unhealthy meals due to a lack of motivation to take the time to prepare healthy nutritious meals.
- Crave sugary foods - vending machines.

Feel good foods

- Snack on high fat foods (e.g. chocolate) for a “feel good factor”.



Tired habits

Timing of meals



When you sleep for an extended time during the day you are unable to eat little and often.

Therefore

- Less energy for training
- Reduced recovery

Sleep well ↔ Eat well

Sleep and **nutrition** are closely interlinked

Optimising:

- Sleeping pattern
- Duration
- Quality

will reduce the risk of you making inappropriate choices in your diet.

AND

- Good nutrition will enhance your sleeping patterns

Promote Sleep



Certain foods have been linked to aiding sleep;

- Milk
- Meat
- Fish
- Poultry
- Eggs
- Beans
- Peanuts
- Cheese
- leafy green vegetables
- Bananas
- Tomatoes
- Oatmeal
- Ginger
- sweet corn

Good strategy – Hot milky drink before bedtime

Preventing Sleep

Avoid Caffeine

- Caffeine will decreased sleep quality

Avoid Poor hydration strategies

- Waking frequently during the night to urinate is associated with consuming too high volumes of low-sodium fluids (i.e. Too much water and squash)
- Drink little and often during the day to stay hydrated
- Adding salt to your water bottles or drink electrolyte sports drink during training can prevent this



Key points

- Get the **basics** right!
- Always have suitable **healthy snacks** readily **available**
- **don't get hungry**
- Don't rely on **caffeine** and **high carbohydrate drinks**.
These should be saved for selected intense sessions
and competitions, and especially **not before bed!**



Questions?