



# Isle of Man Cricket

## Nutrition & Hydration



Task:

Why think about sports  
nutrition?



# Importance of sports nutrition?

- Maximises performance - IT IS PERFORMANCE ENHANCING.
- Improves recovery and repair after a game or training.
- It limits illness and injury rate and reduces recovery time after injury.



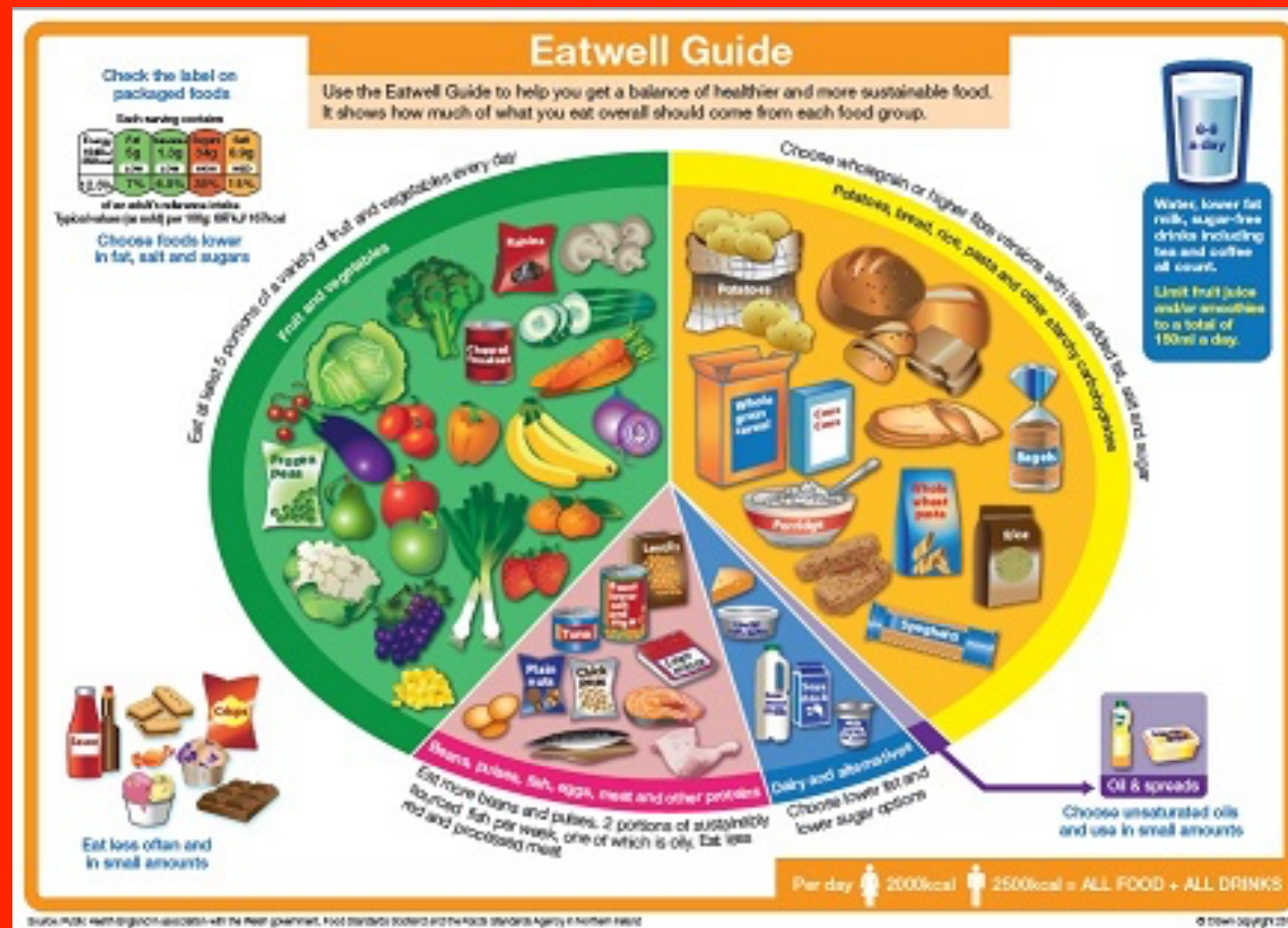
## Task

What does a healthy diet contain.  
What do we already know?



“There is no such thing as  
bad food, only a bad  
diet”

# What does a healthy diet contain?





## Importance of Carbohydrates for Sport

- Exercising muscles rely on carbohydrate as their main source of fuel.
- In general, the more intense your training programme, the more carbohydrate you need.



# Carbohydrate Sources

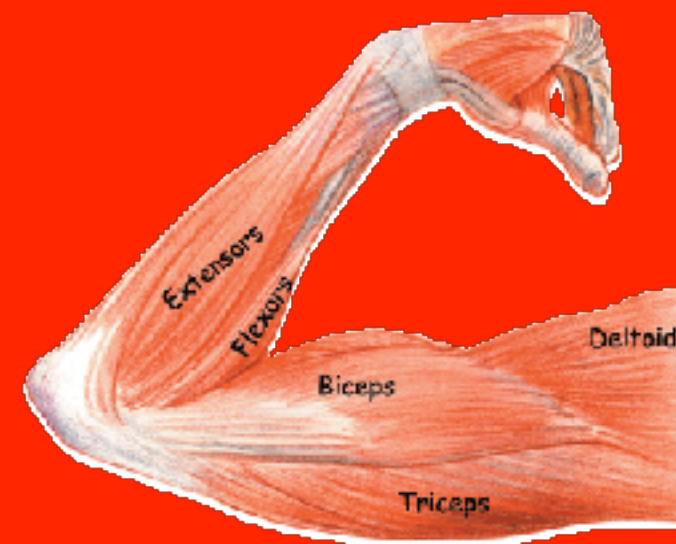




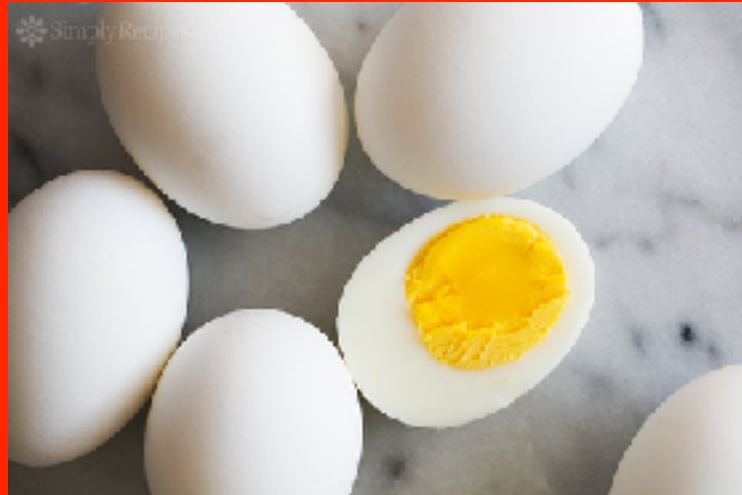


# Protein - What does it do?

- Building and repairing muscle
- Aids recovery



# Protein Sources



# Fruit and Vegetables

- Eat plenty, at least 5 portions a day (2-3 per meal).
- They provide essential vitamins and minerals to aid the immune system in fighting illness and disease and protect against muscle/tissue damage.
- They contain dietary fibre, which aids digestion



# Milk and dairy foods

- Good source of calcium for strong bones and teeth.
- Important for growing teenagers and young people.







## Refuelling After Sport

- Eat a recovery snack containing carbohydrate and protein after exercise to boost glycogen storage, reduce muscle soreness and promote muscle repair.

Can you think of good recovery snack to be consumed after a high intensity fitness and fielding session?





# Iron

- Needed for making red blood cells which transport oxygen.
- Essential role in a healthy immune system.

What foods provide us with iron?



# Hydration in Sport



What is the impact of poor hydration?





# H<sub>2</sub>...OH REALLY?

## THIRST

Thirst is a useful indicator of daily fluid requirements. Unfortunately, it's not fully reliable since the body is already mildly dehydrated by the time an average person starts to notice thirst.<sup>1</sup>

## MENTAL

Dehydration can degrade specific aspects of cognitive performance including visual vigilance, tension, anxiety, fatigue and visual working memory. Dehydration was also linked to negative mood rating, impaired motor performance and short-term memory.<sup>6</sup>

## SKIN

Dehydration results in dry skin and wrinkles.<sup>2</sup>

## DEHYDRATION

A 1% loss of body mass due to fluid loss is defined as dehydration.<sup>7</sup>

## KIDNEYS

Higher water intake is shown to have a protective impact on the kidneys, and there is initial evidence that CKD (Chronic Kidney Disease) may be inversely related to higher water intake.<sup>3</sup>

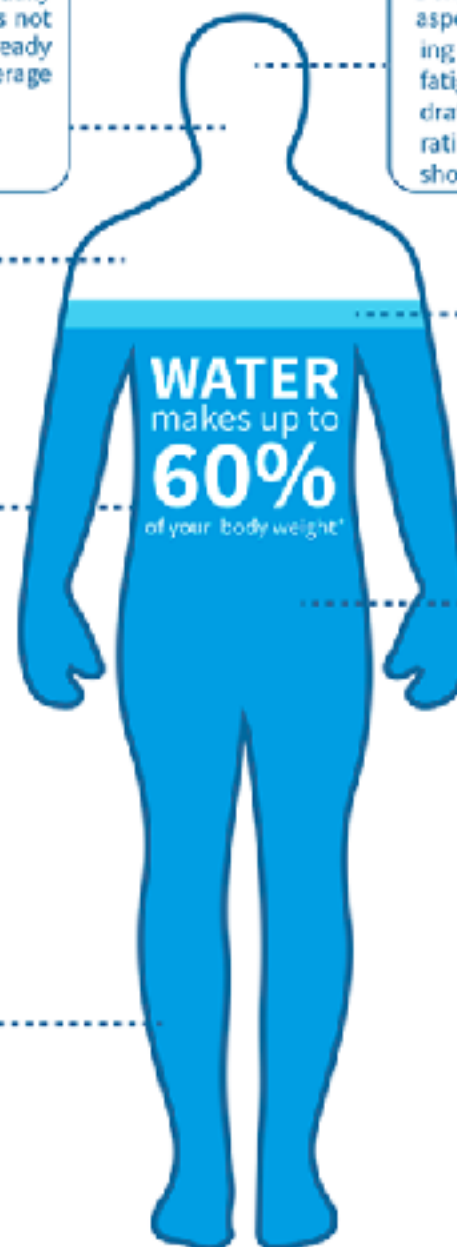
A study by Dai et al found a strong protective effect of fluid intake in preventing kidney stone formation in men.<sup>4</sup>

## WEIGHT LOSS

Opting for water instead of sugary drinks can help reduce body weight and fat levels. According to Stookey,<sup>5</sup> just drinking 500 ml (17 oz) of water increases energy expenditure by 100kJ. Findings in the same study indicate that an absolute increase in drinking water to to  $\geq 1$  l (34 oz)/day was associated with  $\sim 2$  kg or 5 lbs weight loss over 12 months.

## PHYSICAL

Studies have shown that the modest level of dehydration (2% of body mass) can result in around a 20% decrease in physical performance levels in temperate climates and up to a 40% decrease in hot temperatures.<sup>5</sup>



caktus

[www.caktus.me](http://www.caktus.me)

## \*WATER



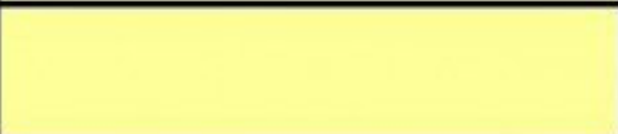





Water plays crucial roles, in transporting nutrients and waste products between our major organs and helping regulate temperature.<sup>9</sup>

1) Kelsoe, K.M., Leakey, C.J. & Grundeman, A.C. Hydration and Health promotion. *Nutrition Today* 2009; 44: 190-201.  
2) Atlanta Dermatologist Kenneth Stookey, MD.  
3) Sontag et al. (2013) *Am. J. Of Nephrology*  
4) Dai et al. (2012). *J. of Renal Nutrition* (21) 2  
5) *Personnel* 7:70 (2014) Healthy hydration for Physical Activity. *Nutrition Today*, volume 49, No. 65  
6) Gaudio et al., 2010; D'Acqui et al., 2009; Sheth et al., 2012  
7) Hoffer SM. Water: An essential but overlooked nutrient. *J. Am Diet Assoc* 1999;99:501-7.  
8) Stookey, J. D., Corbett, T., Popkin, B. M. and Gardner, C. B. (2004) *Obesity*, 14: 3445-3448.  
9) Popkin B & Corbett T (2004) *Brit J Clin Nutr* as an essential nutrient.



# AM I HYDRATED?

## Urine Color Chart

1		If your urine matches these colors, you are drinking enough fluids
2		Drink more water to get the ideal color in Shade 1 and 2.
3		Dehydrated
4		You may suffer from cramps and heat-related problems
5		Health risk! Drink more water.
6		Health risk! Drink more water.
7		Health risk! Drink more water.
8		Health risk! Drink more water.





# Best drinking options

## Water





## Sport Drinks

- Low to moderate intensity exercise that lasts less than an hour i.e. when sweat losses are low - Water
- Moderate to hard sessions that last longer than an hour i.e. when sweat losses are greater - Isotonic sports drink





Scenario -  
Between innings in a 40 over  
Super 2s match. What should you  
bring as your lunch?

