



Diet and Sport

“More protein = more muscle”

“Carbs are bad for athletes”

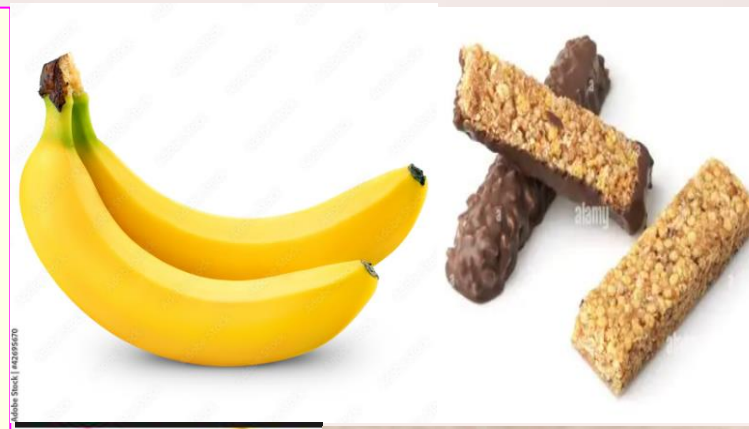
“You need supplements to perform well”

“Sports drinks are always better than water”

Fuel up – carbohydrates

50g of carb looks like...

- Muscles store carbs as glycogen.
- Glycogen stores are limited and need to be topped up each day, especially if exercising daily or at a high intensity
- The best way to do this is to have
 - **regular, healthy balanced meals**
 - Snack or light meal 2-3hr before exercise.
 - After exercise (eg 1 hour) replenish glycogen stores within 30 mins
- Not eating enough → early fatigue during exercise, increased injury risk and delayed recovery.
- **70 kg player** → ~70 g carbs



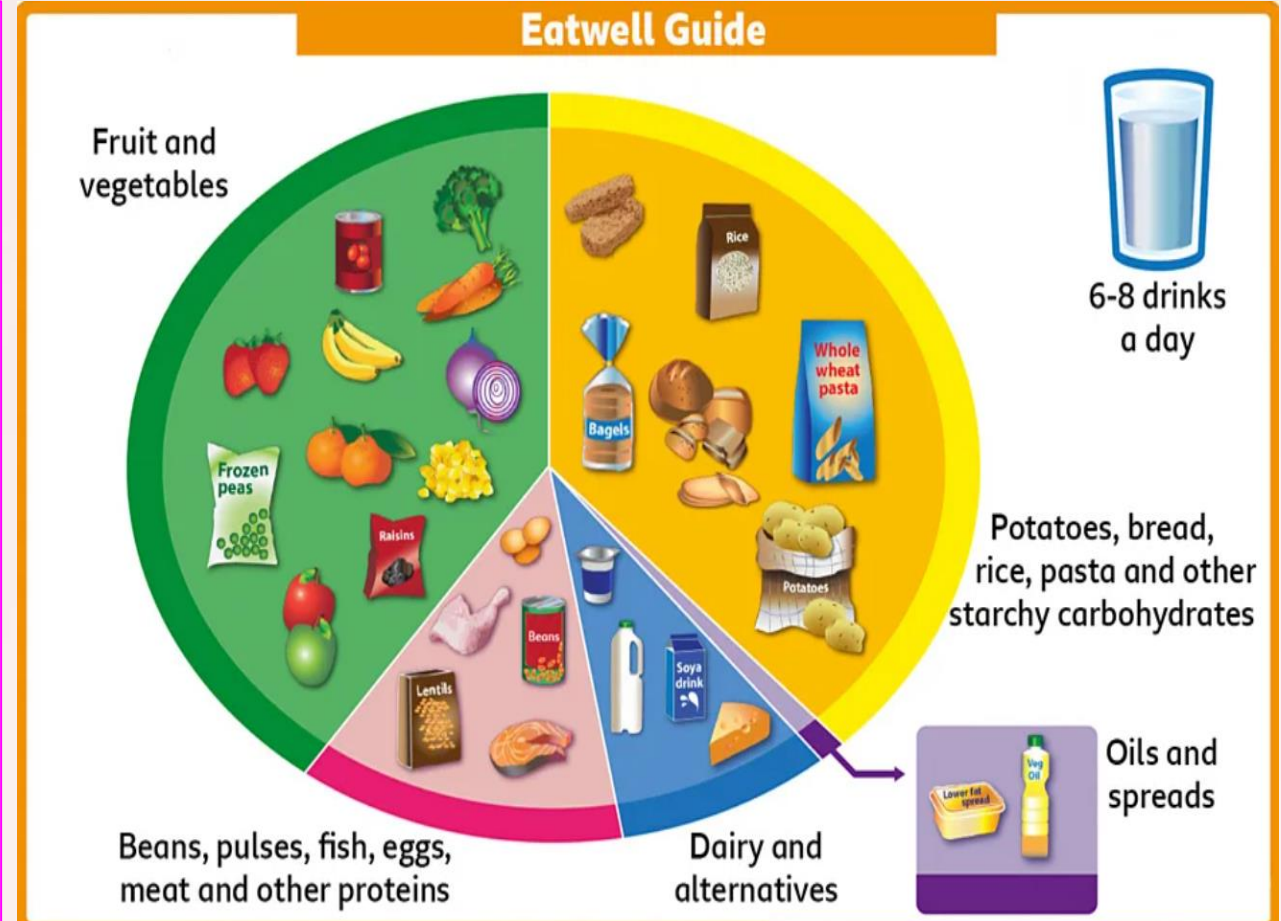
What about protein?

- Required for building and repairing muscle
- Strength and endurance athletes have a higher requirement than people who don't exercise
- However, in most cases, **a healthy, balanced diet should provide enough protein** to meet any increased requirements.
- Aim to evenly distribute your intake throughout the day.
- Studies show that the addition of 15-25g of protein to a post-workout meal or snack can boost glycogen storage, reduce muscle soreness and promote muscle repair- especially if high intensity training – but too much is just waste!



Muscle gain

- Muscle is gained through resistance training and a diet that contains enough protein and carbohydrate.
- A high protein intake without enough carbohydrate → the protein is used for energy instead of to build muscle
- A 1/3 of your diet should be from carbohydrates to keep glycogen stores topped up
- **So you can see that a healthy balanced diet is the best way to develop your body**



Think fluid

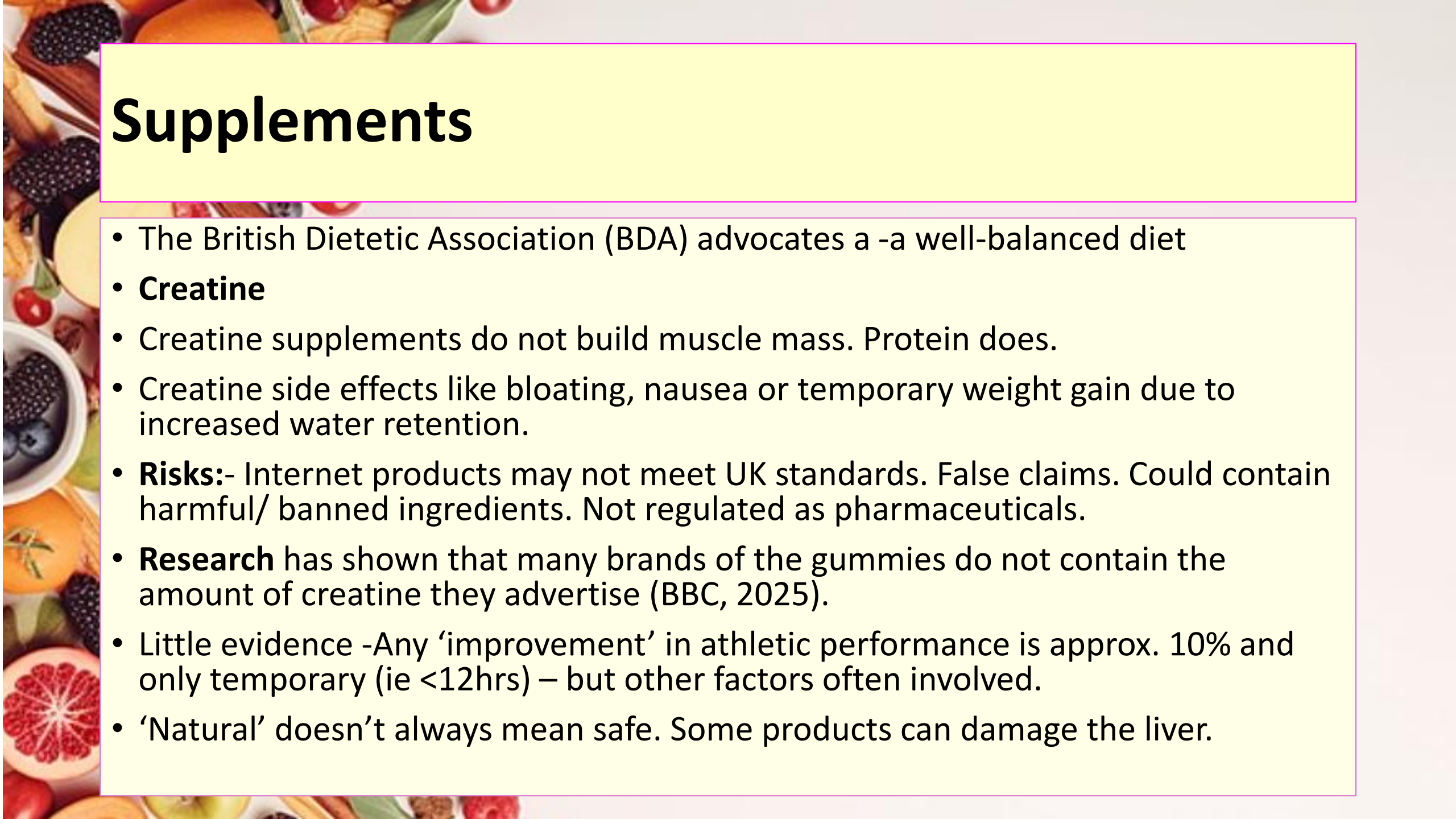
- Dehydration affects physical and mental performance – monitor your urine!
- **Water?**
- Low – mod. intensity exercise (less than an hour) i.e. low sweat loss
- **Sports Isotonic drinks?**
- Moderate - hard sessions (longer than an 1 hour) i.e. large sweat loss
- **Caffeine?**
- Negative mental and physical effects - jitters, GI upset, sleep disruption, poor concentration, headaches, diuretic- even higher risk of suicidal thoughts
- Under-16s cannot buy high-caffeine energy drinks (150 mg/L) (from April 2027).



Fat

Athletes should follow healthy eating guidelines which focus on consuming moderate amounts of mono-unsaturated and omega-3 fats and a reduction in intake of saturated fats.





Supplements

- The British Dietetic Association (BDA) advocates a -a well-balanced diet
- **Creatine**
- Creatine supplements do not build muscle mass. Protein does.
- Creatine side effects like bloating, nausea or temporary weight gain due to increased water retention.
- **Risks:-** Internet products may not meet UK standards. False claims. Could contain harmful/ banned ingredients. Not regulated as pharmaceuticals.
- **Research** has shown that many brands of the gummies do not contain the amount of creatine they advertise (BBC, 2025).
- Little evidence -Any 'improvement' in athletic performance is approx. 10% and only temporary (ie <12hrs) – but other factors often involved.
- 'Natural' doesn't always mean safe. Some products can damage the liver.

Top tips

- **Split carbohydrate and protein intake throughout the day** (so you don't start training with depleted muscle)
- **Refuel after exercise**, especially if training for multiple hours or at a very high intensity (sports drinks and carbohydrate gels)
- **Stay hydrated** – ensure good hydration at all times. Drink throughout the day as well as before, during and after exercise
- **Supplements** -Unlicensed or unregulated websites may not be safe
- **There is no nutritional supplement that can have the same benefits as a healthy balanced diet**
- If you need to see a dietitian, visit your GP
- www.bda.uk.com/foodfacts
- [Explore Food - Calculator \(foodafactoflife.org.uk\)](http://foodafactoflife.org.uk)