

## Which foods supplement performance?

### Learning Outcomes

- ★ Outline the need to consider food as the first option before using supplements
- ★ Give an example of how & why supplements are at risk from contamination
- ★ State the UKAD core Supplement message (ANARAC)
- ★ Show use of risk minimisation schemes such as Informed-Sport programme to check supplements

**Food First** brings together the clean sport rules alongside the exploration of supplement use, athlete choices and real food alternatives. Evidence shows that for many athletes their nutrition intake can be met by **eating a well-balanced diet**, in the optimal quantities, at the right time, to support their performance requirements. Food First matters because it helps athletes understand their **own nutritional requirements** through a sound base of nutrition understanding of the **potential anti-doping rule violations** of supplement use.

Supplement products can pose a significant risk to athletes in terms of **unintentional doping**. Athletes and athlete support personnel (ASPs) should be fully aware of what supplements are, what the risks associated with them are and how they can **reduce those risks**. Although there is no specific definition, supplements can be regarded as products used alongside diet to enhance general health, wellbeing or sporting performance. In many cases the presence of a prohibited substance in a supplement arises from **unintentional contamination**. UKAD's core message on supplements is that diet, lifestyle and training

should all be optimised before considering the use of supplements. To support athletes, UKAD uses the acronym **ANARAC** to guide an athletes choices:













- **Assess the need**
- **Assess the risk**
- **Assess the consequence**





In assessing the risk, **Informed-Sport** is a supplement **testing and certification programme** which aims to assure athletes that products carrying this mark have been regularly **tested** for prohibited substances and manufactured to **strict standards**.

- Review the [Eatwell Guide](#) and then analyse the **last meal eaten** in **Activity 6.1**.
- Complete the **Cannabidiol** research **Activity 6.2** in conjunction with the [CBD Info Sheet](#).
- Use **Resource 6.1** to support the application of the **ANARAC** principle while completing **Activity 6.3's** protein supplementation of a diet.
- In **Activity 6.4** use the [Informed Sport](#) website to **batch check** three different supplements.

### Quick Links:

-  [Food First Video](#)
-  [Smoothie Recipe](#)
-  [Eatwell Guide](#)
-  [Cannabidiol Information Sheet](#)
-  [Hero to Zero Video](#)
-  [UK Athletics Statement](#)
-  [British Triathlon Statement](#)
-  [Managing Supplement Risks](#)
-  [Informed Sport](#)
-  [Supplements Hub](#)
-  [Testing Precision](#)
-  [Trust Me, I'm a Doctor Video](#)

### You will need:

-  Paper Plates (or paper circles)
-  Internet Access

### Assessment Options

**Scaffold:** Analyse the diet requirements of a performance athlete.

**Task:** Evaluate the diet of a performance athlete and how food first can meet their performance requirements.

**Challenge:** Evaluate a performance athlete's diet and how Informed Sport can be used in risk mitigation.

# Eatwell Guide

Check the label on packaged foods

Each serving (150g) contains

Energy 1046kJ 250kcal	Fat 3.0g LOW	Saturated 1.3g LOW	Sugars 34g HIGH	Salt 0.9g MED
13%	4%	7%	38%	15%

of an adult's reference intake  
Typical values (as sold) per 100g: 697kJ/ 167kcal

Choose foods lower in fat, salt and sugars

Use the Eatwell Guide to help you get a balance of healthier and more sustainable food. It shows how much of what you eat overall should come from each food group.



Water, lower fat milk, sugar-free drinks including tea and coffee all count.

Limit fruit juice and/or smoothies to a total of 150ml a day.

Eat at least 5 portions of a variety of fruit and vegetables every day

Fruit and vegetables



Eat less often and in small amounts

Choose wholegrain or higher fibre versions with less added fat, salt and sugar



Beans, pulses, fish, eggs, meat and other proteins

Eat more beans and pulses, 2 portions of sustainably sourced fish per week, one of which is oily. Eat less red and processed meat



Dairy and alternatives

Choose lower fat and lower sugar options



Choose unsaturated oils and use in small amounts

Per day 2000kcal 2500kcal = ALL FOOD + ALL DRINKS

Source: Public Health England in association with the Welsh Government, Food Standards Scotland and the Food Standards Agency in Northern Ireland

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# A N A R A C

## **Assess the need**

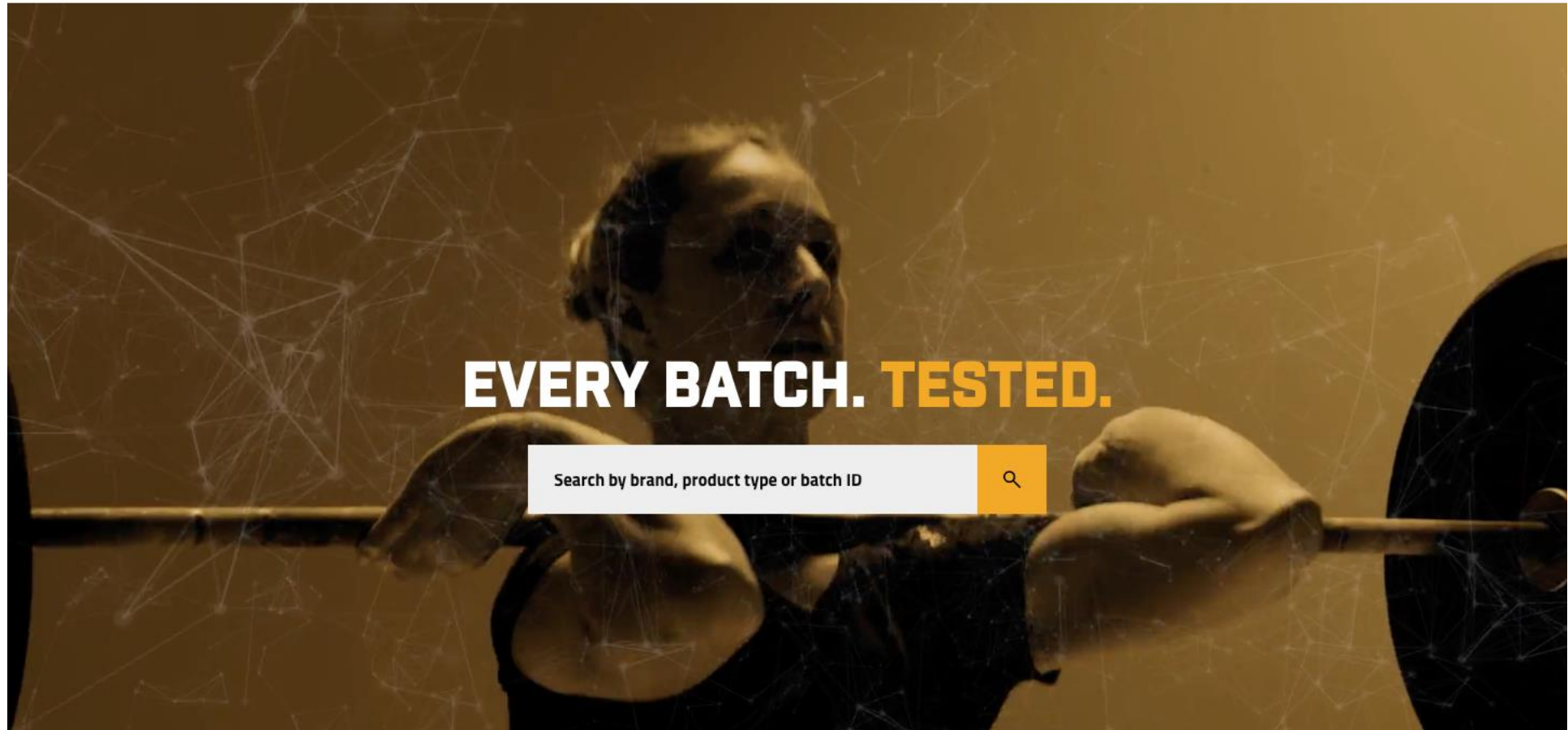
Seek advice from a qualified medical professional to determine whether you need to use a supplement.

## **Assess the risk**

If you choose to use a supplement product, only use batch-tested supplement products to minimise the risks of contamination. Make sure you check the actual batch numbers prior to use.

## **Assess the consequence**

Consider the consequences to your career prior to using any supplement product. You could receive a four-year ban.



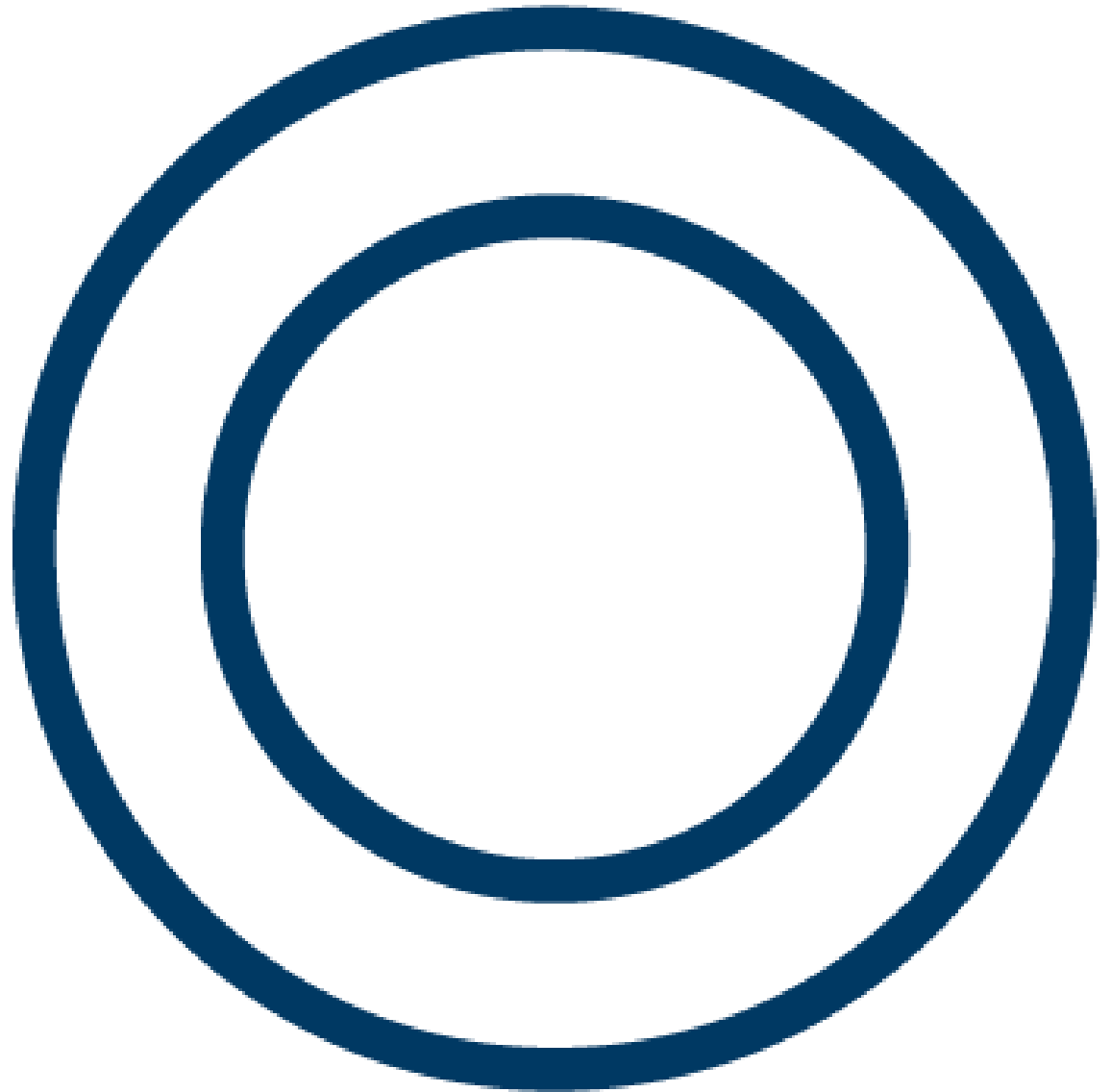


## Activity 6.1: Eatwell Plate

The mixture of different **food groups** on a plate is important in order to **maintain a balanced diet**.

View the [Eatwell Guide](#) in Resource 6A for more information.

1. On a paper plate (or paper circle) draw out the last meal you ate and label the different food groups that the meal contains.
2. Break the meal down into percentages of each food group. Does this meal constitute a balanced diet or does one food group dominate the plate?
3. Why might particular food groups dominate an athlete's plate during different phases of a training plan?
4. Where might athletes wish to use supplements in their diet instead of eating a range of foods?



## ✓ Activity 6.2: Cannabidiol Plant Research

**Cannabidiol (CBD)** is one of around 110 known **cannabinoids** produced by the **cannabis** plant. It has a different chemical structure to  $\Delta$ 9-tetrahydrocannabinol (**THC**), which is the **psychoactive compound** that illicit drug users use to get “high”. CBD does not have this effect.

CBD is not currently listed on **WADA’s Prohibited List** and as a result, it is permitted to use in sport. All other cannabinoids (including but not limited to cannabis, hashish, marijuana, and THC) are **prohibited in-competition**.

1. Conduct some internet research into the **psychoactive components of cannabis** and determine an argument for why they are banned in sport.
2. What does your research tell you about the **potential danger of using CBD based products as a supplement?**
3. **Extension Activity:** Should CBD be added to the list of prohibited substances in order to protect athletes?





**Protein** plays an important role in an athlete's diet as it helps **repair and strengthen muscle tissue**, complimenting the physical training programme they are undertaking. UKAD's core message on supplements is that **diet, lifestyle and training** should all be **optimised** before considering the use of supplements.

1. **Make a list of high protein foods that would be suitable for an athlete's diet and could provide them with the nutritional content required to strengthen and repair muscle tissues.**

*Then in the table...*

2. **Assess the need: make a list of the reasons why an athlete would need to increase their protein intake.**
3. **Assess the risk: make a list of the risks associated with using a powder based protein supplement such as a protein shake.**
4. **Assess the consequences: if the protein supplement was found to contain a prohibited substance, what could the consequences be for the athlete?**
5. **Why are athletes concerned that supplements could lead to inadvertent doping?**



Assess the need	Assess the risk	Assess the consequences

There are many different **supplement** producers all over the world who produce and sell supplements via a range of different online, supermarket and specialist stores.

1. Use the internet to find a sports drink, protein bar and CBD oil that can be purchased in the UK.
2. Use the [www.informed-sport.org](http://www.informed-sport.org) website to check your three chosen supplements for batch testing.
3. What are your results?
4. If you have chosen a similar product to one of your peers, has their brand shown a different outcome on Informed Sport? If so, why do you think this is?



# SPORT



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### Scaffold:

Analyse and evaluate the energy, nutrition, hydration and diet requirements of a performance athlete in a sport of your choice.



### Task:

Choose a performance athlete from a specific sport and analyse the energy, nutrition, hydration and diet requirements to meet the training and performance demands of this sport. Indicate where this athlete may choose to use supplements and where a Food First strategy could be employed in order to remove the potential for unintentional doping.

### Challenge:

Evaluate the diet of a performance athlete in a specific sport in order for them to meet their training and performance targets. Where can an athlete adopt a food first approach in order to reduce supplement use and the risk of unintentional doping, and how does Informed Sport provide athletes with a level of risk mitigation in supplement use.