Planning a training diet
Introduction

Here is what you will learn in this unit:

- How to plan a training diet
- Why the Eatwell Guide is not relevant to your client
- The Training Food Pyramid™ (and how to use it)
- How to calculate portions
- Tips for each nutrient group

Includes the following downloadable documents for immediate use with your client:

- Training Food Pyramid™ (with recommendations table)
- Current Food Pyramid (blank template)

Downloadable reference materials:

- Copy of the Swiss Food Pyramid for Athletes
- Copy of “Fuelling the Vegetarian Athlete” by the American College of Sports Medicine
- Copy of the Eatwell Guide
What your client eats and drinks during the week before a competition can make a big difference to their performance, particularly for *endurance events* and *competitions lasting more than 90 minutes*!

The aim of your client’s pre-competition eating strategy is to *maximise muscle glycogen stores* and ensure proper hydration.

This can be achieved by *decreasing the training* while *maintaining or increasing carbohydrate intake* (7 to 10 grams per kilogram of body weight a day).

Small frequent meals are better than big meals.

Make sure that your client drinks *1 or 2 litres of fluids* a day, and add between *400ml to 800ml per hour of exercise*.

Your client should *avoid unfamiliar foods and drinks* and stick to a well-rehearsed eating plan on the day of the event.
How to plan a training diet

- There are numerous food pyramids and pictorial representations around the world, such as the **Eatwell Guide** in the UK.
- However, these are rough guidelines for the **general public** and don’t take into consideration the nutritional requirements of an athlete.
- At The Health Sciences Academy, we have engineered **The Training Food Pyramid™**, which is appropriate for athletes and exercisers who train 5+ hours weekly.
  - Use The Training Food Pyramid™ as a starting point before developing a more tailored daily exercise diet for your client!
The Training Food Pyramid™ can help as a basic guidance or starting point. You will learn how to engineer and personalise a training diet for **different kinds of athletes** in greater detail and by using the **advanced strategies** taught in future modules, particularly from Module 4 onwards.
Using the Training Food Pyramid™

The Training Food Pyramid™ is divided into 8 groups:

1. Water and fluids at the base
2. Vegetables
3. Fruit
4. Carbohydrates in the middle
5. Calcium-rich foods
6. Protein foods
7. Healthy oils and fats
8. Non-essential optional calories at the top

Take time to examine the pyramid featured in next page. Look at the group distribution as well as the number of portions for each of them.
The Training Food Pyramid™

5+ hours of weekly training

- **Extras**
  - optional calories

- **Fats | Seeds**
  - 1-2 portions

- **Protein | Calcium**
  - 2-4 portions

- **Grains | Legumes | Potatoes**
  - 4-6 portions

- **Vegetables | Fruit**
  - 2-4 portions

- **Water | Fluids**

Add 400ml per hour of exercise

Source: TheHealthSciencesAcademy.org
How to use the pyramid

The foods in the lower layers of the pyramid should form the main part of your client’s diet, while those at the top should be eaten in smaller quantities.

Here’s some basic pointers for your client:

- Include nutrients from each essential group in the pyramid daily.
- Make sure you consume a variety of foods within each group.
- Try to include the recommended number of portions from each food group daily.

Study the table in the next page. Look at the foods contained in each group and identify what constitutes a portion.
## What’s a portion?

<table>
<thead>
<tr>
<th>Nutrient Group</th>
<th>Portions a Day</th>
<th>Foods</th>
<th>Portion Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fats</td>
<td>1 to 2&lt;br&gt;(1 portion = 1 tablespoon)</td>
<td>Nuts and seeds&lt;br&gt;Seed and nut oils&lt;br&gt;Avocado</td>
<td>25gr (2 tablespoons)&lt;br&gt;15ml (1 tablespoon)&lt;br&gt;Half avocado</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Seed and nut oils&lt;br&gt;Avocado</td>
<td></td>
</tr>
<tr>
<td>Protein</td>
<td>2 to 4&lt;br&gt;(1 portion = 70gr)</td>
<td>Lean meat&lt;br&gt;Poultry (chicken, turkey, eggs)&lt;br&gt;Fish&lt;br&gt;Soya burger or sausage, Quorn</td>
<td>Half a fillet&lt;br&gt;1 small breast or 2 eggs&lt;br&gt;1 fillet (140gr)&lt;br&gt;150gr</td>
</tr>
<tr>
<td>Calcium</td>
<td>2 to 4&lt;br&gt;(1 portion = 200ml milk)</td>
<td>Milk&lt;br&gt;Cheese&lt;br&gt;Tofu&lt;br&gt;Yougurt</td>
<td>200ml (1 medium cup)&lt;br&gt;40gr (or 4 dices)&lt;br&gt;60gr (or 4 dices)&lt;br&gt;150 gr (small pot)</td>
</tr>
<tr>
<td>Grains</td>
<td>4 to 6&lt;br&gt;(1 portion = fist size)</td>
<td>Roll, bagel, bread slice, wrap&lt;br&gt;Cooked pasta, rice, porridge oats&lt;br&gt;Cooked legumes (lentils, beans)&lt;br&gt;Potatoes, sweet potatoes</td>
<td>1 item (60gr)&lt;br&gt;5 tablespoons (180gr)&lt;br&gt;5 tablespoons (150gr)&lt;br&gt;1 medium item (150gr)</td>
</tr>
<tr>
<td>Legumes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potatoes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fruit</td>
<td>2 to 4&lt;br&gt;(1 portion = 80gr - or tennis ball size)</td>
<td>Apple, pear, peach, orange, banana&lt;br&gt;Kiwi, plum, apricot, Satsuma&lt;br&gt;Strawberries, cherries&lt;br&gt;Grapes</td>
<td>1 medium&lt;br&gt;1 and ½ - or 2 small&lt;br&gt;8 to 10&lt;br&gt;12 to 16</td>
</tr>
<tr>
<td>Vegetables</td>
<td>3 to 5&lt;br&gt;(1 portion = 80gr – or 2 fists)</td>
<td>Broccoli, cauliflower&lt;br&gt;Carrots&lt;br&gt;Tomatoes</td>
<td>3 florets&lt;br&gt;1 medium&lt;br&gt;1 large - or 5 cherry</td>
</tr>
</tbody>
</table>
Tips for each nutrient group (a)

- **WATER AND FLUIDS:** 1 or 2 litres of fluids a day, preferably unsweetened (water, herbal teas). Caffeinated drinks (coffee, green tea, black tea) in moderation. For each hour of exercise, add **400ml** of water or sports drinks. Sports drinks should be consumed only shortly before and during exercise or between heats. During exercise lasting 1 hour a day or less, in particular activities targeting fat metabolism (such as low- to moderate-intensity training), **water is preferred** over sports drinks. Additional water can be consumed before, during and after exercise, up to **800ml** per hour of activity.

- **FRUIT AND VEGETABLES:** 5 to 9 portions a day. Fruit and vegetables contain vitamins, minerals, fibre, antioxidants and other phytonutrients, which are vital for health, immunity and optimum performance.

- **GRAINS, LEGUMES AND POTATOES:** 4 to 6 portions a day. A diet rich in grain foods (bread, breakfast cereals, rice, pasta, porridge oats), potatoes and legumes (lentils, beans) maintains high glycogen (stored carbohydrate) levels, needed to fuel hard training. Your client should aim for at least half of all grains eaten to be wholegrains. **Note:** The portion sizes for this layer of The Training Food Pyramid™ (e.g. 60gr bread) are twice as large as those recommended by the UK Food Standards Agency (25gr bread), as these are more realistic for active people!
Tips for each nutrient group (b)

- **CALCIUM-RICH FOODS:** 2 to 4 portions a day. Including dairy products such as milk, yogurt and cottage cheese is the easiest way to get calcium, which relieves aching in muscles and bones, promotes healthy nerves, aids muscle contraction, improves skin, bone and teeth health.

- **PROTEIN FOODS:** 2 to 4 portions a day. Athletes, beginners and regular exercisers need more protein than inactive people (we’ll cover that in more detail throughout the course), and so their diet should include lean meat, poultry, fish, eggs, soya or Quorn in their daily regime. Beans, lentils, dairy foods and protein supplements may also be counted towards the daily protein target.

- **FATS AND SEEDS:** 1 to 2 portions a day. The oils found in nuts, seeds, rapeseed oil, olive oil, flax seed oil, sunflower oil and coconut oil may improve endurance and recovery as well as protect against heart disease. This group doesn’t include fats from dairy, meat and other dietary sources.

- **OPTIONAL CALORIES (EXTRAS):** These are non-essential optional calories that your client has left after they have eaten all the fruit, vegetables, grains, protein-rich foods, calcium-rich foods and healthy fats recommended for the day. The more active your client is, the more discretionary calories are allowed. For most regular exercisers, this is likely to be around 200 to 300 calories worth of treats such as biscuits, cakes, puddings, alcoholic drinks, chocolate or crisps. But these extra calories also need to account for any added sugar in sports drinks and energy bars, or the jam, Nutella or sugary spread on a toast, or sugar added to coffee or tea!
Analyse Your Own Food Pyramid!

⇒ Now retrieve your Daily Food Diary (previous unit) and complete the blank pyramid template (next page) with that information.

⇒ How does Your Current Food Pyramid compare with the Training Food Pyramid™? What can be changed? What should you eat more of/less of?

---

ientes Tip! Follow this same process with your client to show them how their current diet looks like compared to their “ideal” training food pyramid. This visual representation is an excellent way to motivate athletes to embrace new habits that are supportive of their fitness and performance goals!
Your Current Food Pyramid

Name: __________________________  Date: __ / __ / __     Make notes at the side of the pyramid identifying the number of portions per food group

Weekly hours of training? ___ hours

Food Groups
1. Water and Fluids
2. Fruit and Vegetables
3. Grains, Legumes and Potatoes
4. Calcium
5. Protein
6. Fats and Seeds
7. Extras

Source: TheHealthSciencesAcademy.org
Additional Resources

- PDF. Swiss Food Pyramid for Athletes (also included in your downloadable reference materials)
- PDF. Fuelling the Vegetarian Athlete, by the American College of Sports Medicine (also included in your downloadable reference materials)
- Food Pyramids Around the World (slideshow). Huffington Post.
Additional Resources (continued)

No Content Sharing. You must NOT share this or any other of our proprietary content, downloads, or materials with anyone. These are ONLY for students of this course with The Health Sciences Academy. If you violate or display any likelihood of violating any of our intellectual property rights, we will take immediate legal action.

Prohibition to Copy, Re-write or Reproduce Our Content, Methodologies and Trade Secrets. You must NOT copy, blog, re-sell, re-write, adapt, distribute, and/or reproduce our materials, our forms, our confidential and proprietary methodologies, our trade secrets, our work, our research, our content, our ideas, our health questionnaires, and/or our plans. This constitutes plagiarism and is an egregious violation of our intellectual property and trademarks. If you violate or display any likelihood of violating any of our proprietary intellectual rights, we will take legal action to prohibit such violations and seek compensation for damages.