Protein

Module's Habit: Add a protein source to every meal.

Protein in every meal will remain constant in your diet whether you are on an exercise or non-exercise day.

Animal protein sources such as eggs, fish, chicken and beef are complete protein sources because they contain all the **9 essential amino acids** needed by your body.

Vegetarians can of course use tofu or Quorn but you need to consume much larger quantities to get your protein intake up to the required level.

Protein is a **macronutrient**, along with fats and carbohydrates.

Macronutrients are energy sources for the body, and the body uses them at different times for different of the day depending on your personal activity levels.

Your gorgeous body converts these macronutrients (foods) into efficient energy sources and of course the better quality the source the better you fuel your body:

- **Protein** is broken down in the body to form **amino acids**.
- **Carbohydrates** are broken down to form **glycogen**.
- **Fats** are broken down to form **fatty acids**.

As I said, you need these energy sources at varying times of your day, dependent on your activity levels.

For instance whilst watching telly or maybe gently strolling down to the shops, your body uses fats to fuel itself. You are using fatty acids the broken down version of fats, to keep your body functioning.

However your body only access *'fatty acids'* when insulin has been mopped up in your body. **Insulin** is the hormone released when you eat carbohydrates. So simply put you want to keep your insulin levels low so you can burn fatty acids instead of **glycogen**.

I will talk more about that in the Carbohydrate module.

When you are working at high intensity *(when you get out of breath)* your body uses stored carbohydrates or glycogen for energy. This means if you are drinking a can of Lucozade or Gatorade whilst working out the body doesn't need to access stored *'glycogen'*, because the fizzy drink is providing the energy for you to exercise.

What that means is that your exercise is simply burning of the calories from the drink.

Back to the **proteins**...

? The big question is what does your body need, on a cellular level, to convert your food into glycogen/fatty acids or more amino acids for the body to then use?

Answer (there was a clue in the question):
Your hero 'amino acids' or otherwise commonly known as protein!

Proteins are required for everything you do inside your body – on a cellular level.

Amino acids, the broken down proteins, are **ESSENTIAL FOR LIVING CELLS**.

They are called **'essential amino acids'** because the **body can't make them** *(synthesis them)*. Therefore you need to eat them everyday so the body can fulfill its function.

So proteins are important because of the job they do and essential that you eat them every day. Think of protein as *'dietarily essential'* or *'essential in the diet'*

Protein is needed every day for repair and growth of your body cells.

A complete protein source *(like animal protein)* is a source of protein that contains all nine essential amino acids.

Avoid:

- Processed meats such as chicken dippers and nuggets.
  Choose butchers sausages and burgers or the highest quality you can afford.
- Avoid processed meat products such as salamis and pork pies.

Include:

- Meat and poultry
- Fish without crumbs or batter.
- Beans and pulses

Animal fat, saturated fat - is one of the best source of amino acids, however environmentally, ethically and importantly for variety you may want to consider other protein sources:

1. **Eggs** – Not only are eggs an incredible source of protein, but they also contain several B vitamins responsible for energy.
2. **Nuts** – Brazil nuts, walnuts, crushed and added to your salads.
3. **Chia Seeds** – despite their tiny size, chia seeds are among the most nutritious foods on the planet. They are loaded with fibre, protein, Omega-3 fatty acids and various micronutrients.
4. **Quinoa** – although a carbohydrate is known for its high protein content and it's considered a complete protein, meaning it packs all 9 essential amino acids that your body needs.
5. **Lentils** – not only are they good for protein they also contain iron. Most women are iron deficient which is not a good sign for your waist measurement. If your body is deficient it can't work as well, metabolize as well, or burn fat efficiently.
6. **Tofu**, **quorn** and **soya**.
7. **Fish** – frozen or fresh like tuna and sardines. Aim to eat two portions of fish per week, including a portion of oily fish like mackerel.
8. **Greek Yogurt** – Fage Total Greek Natural Yogurt.
9. **Kidney beans**.
10. **Cheese** like Parmesan cheese, Cheddar, Edam, Mozzarella and cottage cheese have the best protein source.

As usual if you have any questions chat on the private Facebook group or let me know on your adherence sheet at the end of the module.

Adele x