



NUTRITION

Here is a quick guide to nutrition basics

If you would like to ask our fitness team a question then send it to us
at fcon@liv.ac.uk

3 KEY AREAS OF A HEALTHY DIET: CALORIE BALANCE, HYDRATION & MACRONUTRIENTS

Calorie Balance

If you want to lose weight you need to use more calories than you consume on a daily basis. There are many factors involved in calculating your recommended calorie intake. Height, weight, sex, age and activity levels will all play a part. A consultant can work out your basal metabolic rate, amount of calories you need without including activity levels, and then use this to determine your total energy expenditure, overall calories needed to maintain your bodyweight. You can then adjust your daily calories based on your goals. For instance, if you want to lose weight you would take 5-10% off your total energy expenditure.

Hydration

Water plays so many key roles in the human body. It helps remove toxins, improves brain function, is important for joint health and can help boost your energy levels. It's recommended to drink 2-3 litres of water per day.

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PART 2



Macronutrients

There are 3 macronutrients you get from your food. Protein, Carbohydrates and fats.

Protein

Protein is important for everyone to maintain a healthy bodyfat percentage. It is more vital for those who are training in the gym, playing sports or doing any other form of exercise as it helps you recover from your workouts.

Proteins are made up of amino acids. There are 20 different types of amino acids that can be combined to make a protein. Amino acids are the building blocks of proteins, so the foods with the highest amount of amino acids are those that are highest in protein. Of the 20 amino acids, nine are essential because your body can't make them. Animal-based foods contain all of the essential amino acids, while most plant-based protein sources are low in one or more of the essential amino acids. Eating from a variety of high protein foods such as; lean meat, poultry, seafood, eggs and dairy, nuts and seeds will help you get the full range of amino acids.

Depending on your training, it's recommended you have between 1.5 and 2.2 grams of protein per kilogram of bodyweight. This will help with skin, hair and nail health as well as being vital for muscle and cartilage recovery from training.

Carbohydrates

There are 3 types of carbohydrates:

- Simple carbohydrates (sugar)-High Glycemic index which means a higher spike in blood glucose levels.
- Complex carbohydrates-Lower on the Glycemic Index meaning a gradual increase in blood glucose levels & maintains at a more consistent energy level
- Fibre-Found in plant based foods such as grains, fruit, vegetables, nuts and legumes

Carbohydrates are the body's main source of energy. They provide 4 calories of energy per gram. Simple carbohydrates are found in refined foods like the white bread or pasta, sweets and treats. You'll also find simple sugars in more nutritious foods, such as fruit and milk but it's better to consume these nutritious foods as they also contain vitamins, fiber, and important nutrients like calcium. Just make sure you don't over eat them as they will still be stored as excess bodyfat if you take in too many calories overall.

Complex carbohydrates include grain products, such as bread, oats, pasta, and rice. As with simple sugars, some complex carbohydrate foods are better choices than others. Refined grains, such as white flour and white rice, have been processed, which removes nutrients and fiber. But unrefined grains still contain these vitamins and minerals. Unrefined grains are rich in fiber, which helps your digestive system function better. Fiber helps you feel full, so you are less likely to overeat these foods.

Fats

There are four main types of fats:

- Monounsaturated fats
- Polyunsaturated fats
- Saturated fats
- Trans fats

Fat is essential to a healthy, balanced diet. It plays many roles in the body such as;

- Builds healthy cells.
- Provides energy - Each gram of fat provides 9 calories of energy.
- Helps the body use vitamins - Vitamins A, D, E, and K are fat-soluble vitamins.
- Fat and cholesterol for hormones-Good fats are essential in your diet to help regulate your hormones
- Monounsaturated and polyunsaturated fats help to maintain healthy cholesterol levels-These are found in extra virgin olive oil, avocados, nuts and seeds.
- Polyunsaturated fats provide us with essential fatty acids like omega-3-This plays a key role in brain development and function.
- Trans fats and saturated fats are known as bad fats-They are found naturally in small amounts in meat and dairy products which is fine. Much larger amounts are found in many processed foods and should be kept to a minimum.