Breakfast, the most important meal of the day
The science behind

WHY IT MATTERS

Breakfast is the first meal of the day, but also an opportunity to **nurture** your **body** and **mind**.

In fact, beginning your day with a **nutrient-dense meal** is an important part of a **holistic well-being plan**, in which you should include nutrients that are found in high-quality protein sources, complex carbohydrates like high-fibre fruits and wholegrains, and healthy fats.

THE FOLLOWING RECOMMENDATIONS ARE

Aim to get **15%** to **25%** of total daily energy/calories derived from:[1–2]

FIBRE-RICH WHOLEGRAIN FOODS

FRUITS AND VEGETABLES

LEAN PROTEIN (15-45G) FROM LOW-FAT OR FAT-FREE DAIRY, DAIRY ALTERNATIVES OR OTHER SOURCES OF LEAN PROTEIN.

Meet a minimum of 10% of the Daily Value for as many essential nutrients as possible, aiming for **20%** or more for **calcium**, **vitamin D**, **potassium**, and **fibre**.[1–2]

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WHY ARE PROTEINS IMPORTANT?

It has been suggested that consumption of 1-2 daily meals with **30 g to 45 g high quality protein** per meal may be an **important strategy** for increasing and/or maintaining lean body mass and muscle strength[3], while an increased muscle protein synthesis seems being benefitted by higher protein intakes in the morning[4–5].

WHY FIBRES?

Fibre consumption in the morning is **essential** for promoting **overall health**, particularly through its effects on **satiety**, **digestion**, and **metabolic wellbeing**. By slowing gastric emptying, fibre helps maintain fullness for longer periods. Studies have shown that high-fibre breakfasts significantly increase satiety and reduce hunger between meals [9–10–11], while **moderating calorie intake** throughout the day [12–13]. Incorporation of fibre into your morning meal through foods like wholegrain cereals, fruits, and vegetables provides numerous health benefits that set a positive tone for the rest of the day.

WHY VITAMINS AND MINERALS?

Morning consumption of **essential nutrients** can optimise their absorption and utilisation while **supporting** various **physiological functions**. This includes essential vitamins and minerals such as calcium, iron, folate, vitamin B12, thiamin, niacin, riboflavin, vitamin A, vitamin B6, magnesium, phosphorus, and zinc, which play a critical role in enhancing wellbeing by **aligning nutrient intake** with **metabolic** and **physiological demands**. Calcium supports bone health and muscle function, while iron supports oxygen transport and energy metabolism; morning intake improves absorption due to lower hepcidin levels [14–15]. Folate is crucial for DNA synthesis and cardiovascular wellbeing[16–17–18].

Vitamin B12 aids in **red blood cell formation** and **neurological function**, while thiamin, niacin, and riboflavin are essential for cognitive performance. Additionally, **vitamin B6** supports neurotransmitter synthesis and **mood regulation**[19–20]. Consuming these nutrients in the morning ensures optimal absorption and utilisation throughout the day[16–21–22–23].

Overall, a **balanced breakfast** appears to be associated with **improved metabolic balance**. Specifically, morning meal consumption is linked to a greater feeling of satiety during the day[24–25]and a favourable "second-meal effect," as it reduces the glycaemic response of the lunch meal[26–27]. Furthermore, it impacts ghrelin levels - the hunger hormone that peaks in the morning following a period of fasting. Food intake rapidly lowers ghrelin levels, which means that **those who skip breakfast** may experience elevated ghrelin throughout the morning, leading to **increased feelings of hunger**. In addition to changes in ghrelin oscillations, consuming a morning meal is associated with higher postprandial levels of the satiety hormones PYY and/or GLP-1, contributing to greater feelings of fullness throughout the day compared to breakfast skipping[28–29–30–31].

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