



A GUIDE TO SUPPLEMENTS

BY PAUL DICKINSON



WWW.PDFITNESSANDNUTRITION.CO.UK

If it seems too good to be true, it often is...

When considering the use of supplements, it's easy to get drawn in by advertising campaigns that prey on your insecurities, your impatience and lack of knowledge, giving you the belief that these are the magic pills that will fast track your physique to look like the handpicked ripped models used to market them



WWW.PDFITNESSANDNUTRITION.CO.UK

First and foremost it's important to understand that supplements are just that. They can't replace the benefits of exercise and a balanced diet. There are certain supplements that will improve general health, others which will improve performance and some which are useless to everyone. We are going to solely focus on ones which we know are beneficial



WWW.PDFITNESSANDNUTRITION.CO.UK

FISH OIL

What is fish oil? Fish oil is a common term used to refer to two kinds of omega-3 fatty acids: eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA). These omega-3 fats are usually found in fish, animal products, and phytoplankton. The fatty acids EPA and DHA are involved in regulating various biological processes such as the inflammatory response, various metabolic signaling pathways, and brain function. They can be synthesized in the body from alpha-linolenic acid (ALA), but in small amounts for most people.



WWW.PDFITNESSANDNUTRITION.CO.UK

FISH OIL

WHO

- Anyone who doesn't consume much oily fish

WHY?

- Cardiovascular benefits
- Reduces inflammation
- May increase strength and size
- May improve fat loss

What?

- Dose is goal and individual dependant
- 300-1800mg combined EPA & DHA per day



WWW.PDFITNESSANDNUTRITION.CO.UK

VITAMIN D

Vitamin D is a fat-soluble nutrient. It is one of the 24 micronutrients critical for human survival. The sun is the major natural source of the nutrient, but vitamin D is also found naturally in fish and eggs. It is also added to dairy products. Supplemental vitamin D is associated with a wide range of benefits, including increased cognition, immune health, bone health and well-being. Supplementation can also reduce the risks of cancer, heart disease, diabetes and multiple sclerosis.



WWW.PDFITNESSANDNUTRITION.CO.UK

VITAMIN D

People deficient in vitamin D may also experience increased testosterone levels after supplementation. The body produces vitamin D from cholesterol, provided there is an adequate amount of UV light from sun exposure. There is only a sufficient amount of UV light coming from the sun when the UV index is 3 or higher, which only occurs year-round near the equator, between the 37th parallels. Most people are not deficient in vitamin D, but they do not have an optimal level of vitamin D either. Due to the many health benefits of vitamin D, supplementation is encouraged if optimal levels are not present in the body.



WWW.PDFITNESSANDNUTRITION.CO.UK

VITAMIN D

The recommended daily allowance for Vitamin D is currently set at 400-800IU/day, but this is too low for adults.

The safe upper limit is 4,000IU/day.

For moderate supplementation, a 1,000-2,000IU dose of vitamin D3 is sufficient to meet the needs of most of the population.

This is the lowest effective dose range. Higher doses, based on body weight, are in the range of 20-80IU/kg daily. Take with fats for optimal absorption



WWW.PDFITNESSANDNUTRITION.CO.UK

CREATINE

Creatine is a molecule that's produced in the body from amino acids. It's primarily made in the liver and to a lesser extent in the kidneys and pancreas. It stores high-energy phosphate groups in the form of phosphocreatine which are donated to ADP, regenerating it to ATP, the primary energy carrier in the body. This role in energy production is particularly relevant under conditions of high energy demand such as intense physical or mental activity. Creatine can be found in some foods and is most prevalent in meat and fish. Athletes commonly take it as a powder or in capsules.



WWW.PDFITNESSANDNUTRITION.CO.UK

CREATINE



WHY

- Increased muscle strength
- Increased muscle size
- Improved intermittent sprint performance
- Improved recovery and glycogen storage

WHEN

- Ideally taken with food/carbs
- After training tends to be the best time

WHAT

- 5G per day of creatine monohydrate



WWW.PDFITNESSANDNUTRITION.CO.UK

CAFFEINE

Caffeine comes from coffee beans, but it can also be synthesized in a laboratory. It has the same structure whether it's in coffee, energy drinks, tea or pills. Caffeine is a powerful stimulant, and it can be used to improve physical strength and endurance. It is classified as a nootropic because it sensitizes neurons and provides mental stimulation..



WWW.PDFITNESSANDNUTRITION.CO.UK

CAFFEINE

Habitual caffeine use leads to tolerance. This means the effects of caffeine will be diminished, often to the point where the only benefit a user experiences is caffeine's anti-sleep effect. This is an 'insurmountable' tolerance, which means more caffeine will not overcome it. A month-long break from caffeine will reduce tolerance



WWW.PDFITNESSANDNUTRITION.CO.UK

CAFFEINE

WHY

- Improved endurance performance
- Improved anaerobic performance
- Improved reaction speed/concentration
- May increase strength

WHEN

- Taken 60 minutes before competition/training

WHAT

- Research tends to use a dosage of 4-6mg/kg of bodyweight
- Coffee/energy drinks/pre workouts



WWW.PDFITNESSANDNUTRITION.CO.UK