

NUTRITIONAL TERMINOLOGY

TERM	DEFINITION
ATP	Adenosine Triphosphate; the energy currency of the body; a nucleotide containing high-energy phosphate bonds which, when broken, release energy to power cellular metabolism.
ADP	Adenosine Diphosphate; a redundant energy compound formed when one phosphate bond is split from ATP in the process of releasing energy.
Amino Acids	The constituent building blocks of proteins. There are 8 essential amino acids, along with 14 non-essential amino acids which together form human protein.
Aerobic	Requiring oxygen to function.
Anabolism	Constructive metabolic processes that build up the body tissues; opposite of catabolism.
Anaerobic	Not requiring oxygen to function.
Catabolism	The breaking-down phase of metabolism, the opposite of anabolism; usually involves the release of energy.
Cholesterol	A fat-related compound; normal constituent of bile and the principle constituent of gallstones. In body metabolism cholesterol is important as a precursor of various steroid hormones.
DHA	Docosahexaenoic Acid; an omega-3 fatty acid found in seafood and fatty fish. Possesses 2 more carbons in its chain than EPA. Assists in prevention of cholesterol build-up in the walls of blood vessels.

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Energy	The ability or power to do work.
EPA	Eicosapentaenoic Acid; an omega-3 fatty acid found in seafood and fatty acid. Assists in prevention of cholesterol build-up in the walls of blood vessels.
FAD	Flavin Adenine Dinucleotide; an electron carrier; derivative of riboflavin - vitamin B2.
Fatty Acid	Structural component of fat.
Glycerol	A liquid alcohol-based carbohydrate which converts to pyruvic acid. The backbone of triglycerides (fats) which binds fatty acids (3 in total) to it when forming a fat molecule.
Glycogen	A polysaccharide; the main storage form of carbohydrate, mainly stored in the liver and muscles.
Glycolysis	The degradation of carbohydrate, both as glucose or glycogen, into smaller compounds which then may enter the mitochondria for oxidation or be converted to lactate.
Glucagon	The pancreatic hormone that raises blood glucose and blood fatty acid levels, by breaking down stored carbohydrate (glycogen) and fats (triglycerides) for energy.
Glycogenolysis	Breakdown of stored glycogen to yield glucose.

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Gluconeogenesis	Formation of glucose from non-carbohydrate sources (protein or fat), to allow the muscles to continue working when they are depleted of all carbohydrate reserves.
Hydrogenation	Process of adding hydrogen to unsaturated fats to produce a solid, saturated fat.
Insulin	The pancreatic hormone that lowers blood levels of glucose, fatty acids, and amino acids and promotes their storage as glycogen, triglycerides and human protein respectively.
Lactic Acid	Produced by anaerobic glycolysis in muscles during exertion; can be converted to glucose by the liver and then redirected to working muscles as a continued source of energy.
Linoleic Acid	An omega-6 essential fatty acid present in vegetable oils, nut and seeds, and required for healthy maintenance at cellular level.
Linolenic Acid	An omega-3 essential fatty acid present in vegetable oils, and required for healthy maintenance at cellular level.
Lipogenesis	Formation of fat. Excess glucose or protein can be converted to fats for storage when a single intake of these nutrients is at a higher level than the liver can effectively deal with.
Lipoproteins	Packages of fat wrapped in water-soluble protein; classified according to density (HDL, LDL, VLDL).
Mitochondria	Specialised structure within the cell with the specific capability to oxidise substrates, releasing energy bound as ATP; the energy furnace of the cell.

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NAD	Nicotinamide Adenine Dinucleotide. An electron carrier; derivative of niacin - vitamin B3.
Pyruvate	Metabolic end product of glycolysis, which may then be converted to lactate or acetyl-CoA, dependent upon whether you are working anaerobically or aerobically.
Substrate	Substrate, in this context, refers to fuels, acted on by enzymes, to provide energy, and usually routed by the liver to the working areas of the body.
Triglycerides	Neutral fats composed of one glycerol molecule with three fatty acid molecules attached.