

## **Glossary**

**ACID BASE BALANCE** - The state of equilibrium between production and excretion of acid or alkali by the body, resulting in a stable concentration of H+ in body fluids and tight control of the pH. **AEROPHAGIA** - Swallowing of air.

**AHVLA** - Animal Health and Veterinary Laboratories Agency. Branch of DEFRA.

**ASCITES** - The accumulation of fluid in the peritoneal cavity, causing abdominal swelling.

**AVMA** - American Veterinary Medical Association. Published an anti-raw food policy.

**BALANCED DIET** - A diet supplying all the key nutrients and energy required to meet the daily needs of the animal at its particular life stage.

**BARF** - Bones and Raw Food diet or Biologically Appropriate Raw Food diet

**BORBORYGMUS** - Rumbling noise produced by the propulsion of gas through the intestines.

**CACHEXIA** - Weakness and wasting of the body due to severe chronic illness, protein and fat stores are lost in equal measures.

**CALORIE** - The energy needed to raise the temperature of 1 gram of water through 1 °C.

**CARMINATIVES** - Medical, herbal of botanical preparations to relieve flatulence.

**CATECHINS** - Antioxidants found in green tea extract capable of limiting cellular damage.

**CO-ENZYMES** - A non-protein compound that is necessary for the functioning of an enzyme.

**COVALENT CHEMICAL BOND** - The stable balance of attractive and repulsive forces between atoms when they share electrons.

**DEFRA** - Department for Environment, Food and Rural Affairs. Branch of the UK government.

**DHA** - Docosahexaenoic acid is an omega-3 fatty acid found in oily fish and fish oils.

**DISACCHARIDASES** - Intestinal enzymes responsible for breaking down disaccharides into monosaccharides. Genetic defects in these enzymes can lead to lactose intolerance.



**DISACCHARIDES** - Class of simple sugars containing two monosaccharide residues. They are faster to digest and absorb and can result in blood glucose spikes e.g.lactose.

**ENTEROCYTE** - Intestinal absorptive cells. Simple columnar epithelial cells found in the small intestine, colon and appendix.

**ENTEROTOXIGENIC** - Describes a bacteria, e.g. E.coli, capable of producing an enterotoxin - a toxin specifically targeting the intestinal mucosal cells or arising within the intestines.

**EPA** - Eicosapentaenoic acid is an omega-3 fatty acid found in oily fish and fish oils.

**EPI** - Exocrine pancreatic insufficiency.

**ERUCTATION** - Noisy voiding of gas from stomach through mouth.

**EXTRUSION** - The process by which moistened, expansible, starch and/or proteinous materials are plasticised and cooked in a tube by a combination of moisture, pressure, temperature and mechanical shear.

**FAWC** - Farm Animal Welfare Council. Est. in 1979 and published the five freedoms of animal welfare.

**FEDIAF** - European Pet Food Industry Federation. Responsible for establishing nutritional guidelines for pet foods within Europe.

**FLATUS** - Gas expelled through the anus.

**FOS** - Fructo-oligosaccharides used as a completely natural sweetener.

**GDV** - Gastric dilatation- volvulus

**GUT MICROBIOTA** - Microbe population living in the intestine, formerly known as gut flora.

**HACCP** - Hazard Analysis and Critical Control Points.

**HE** - Hepatic encephalopathy.

**HYPERCATABOLIC STATE** - Excessive metabolic breakdown of body tissue leading to weight loss and wasting.

**HYPERINSULINAEMIA** - Excess levels of insulin circulating in the blood.

**HYPERPLASIA** - Increase in number.



**HYPERSALIVATION** - Excess production of saliva, as seen in drooling.

**HYPERTROPHY** - Increase in size.

**HYPOALBUMINAEMIA** - Reduced levels of albumin in the blood stream.

**HYPOALLERGENIC** - Refers to a diet not containing an allergen an individual has a dietary sensitivity to.

**HYPOPROTHOMBINAEMIA** - Blood disorder in which a deficiency of prothrombin (Factor II) results in impaired blood clotting.

**INTESTINAL PERMEABILITY** - Facility with which the intestinal epithelium allows molecules to pass through.

**KETOSIS** - A metabolic state where most of the body's energy supply comes from ketone bodies in the blood as opposed to glucose.

**KILOJOULES** - A kilojoule is a unit of energy. It also refers to the energy value of food.

**LEAN BODY MASS** - Is a component of body composition, calculated by subtracting body fat weight from total body weight.

**LEGISLATION** - Is law produced by a governing body to aid in the regulation and authorisation of a particular process, e.g. pet food production.

**MACRONUTRIENT** - Components in food that an organism utilises to survive and grow. These provide the bulk energy for metabolism.

**METABOLITES** - The intermediates and products of metabolism.

**MICRONUTRIENT** - Components in food that an organism utilises to survive and grow. These provide the necessary cofactors for metabolism.

**MITOCHONDRIAL DNA** - DNA present in mitochondria which are the structures within cells responsible for converting energy from food into a form the cell can utilise. It is often used for evolutionary studies as it is only passed on from the mother and does not recombine as does nuclear DNA.

**MONOSACCHARIDES** - Class of simple sugars that cannot be hydrolysed to a simpler sugar e.g. glucose.



**MOS** - Prebiotic MOS (mannan-oligosaccharides) contribute to a balanced bacterial growth within the intestine and can help prevent diarrhoea and digestive related issues. MOS has a direct and an indirect effect on the health of the digestive tract and can inhibit pathogen colonisation.

**OSMOREGULATION** - The physiological processes that an organism uses to maintain water balance; that is, to compensate for water loss, avoid excess water gain, and maintain the proper osmotic concentration.

**PALATABILITY** - Refers to perception of taste, smell and texture of foods.

**PAR-BOILED RICE** - Rice that has been soaked, steamed, and dried before milling to improve the cooking quality, retain the water-soluble vitamins, and reduce the breakage in milling.

**PATHOGEN** - A micro-organism capable of causing disease

**PHARMACOKINETICS** - The action of drugs in the body over a period of time.

**PHYTONUTRIENTS** - Natural compounds found in plants. While not essential, they can promote better health.

**PLATELET AGGREGATION** - The clumping together of platelets in the blood. Part of the sequence of events leading to the formation of a thrombus (clot).

**POLYSACCHARIDES** - A carbohydrate (e.g. starch, cellulose, or glycogen) whose molecules consist of three or more sugar molecules bonded together.

**PORTAL HYPERTENSION** - Abnormally high pressure in the hepatic portal vein.

**POST-PRANDIAL** - Occurring after a meal.

**PRECIPITATE** - Deposited in solid form from a solution.

**PRECURSORS** - A substance, cell, or cellular component from which another substance, cell, or cellular component is formed especially by natural processes.

**PROSTAGLANDINS** - A group of hormone-like lipid compounds that are derived enzymatically from fatty acids (e.g. arachidonic acid) and have important functions in the animal body e.g. smooth muscle contraction and control of inflammation.

**PURINE** - Naturally occurring organic compound derived from RNA and DNA.



**RENDERING** - The process by which abattoir offal and carcasses are cooked in vats, the fat is skimmed off and the residue is dehydrated to produce 'meatmeal'.

**SIBO** - Small intestinal bacterial overgrowth.

**STEATORRHOEA** - Pale, fatty stools commonly seen in EPI.

**SUBLIMATION** - The transition of a substance directly from the solid to the gas phase without passing through an intermediate liquid phase.

**SUBSTRATE** - The substance on which an enzyme acts.

**TRACEABILITY** - The ability to reconstruct the course taken by a foodstuff during the production, processing and distribution stages, often achieved using bath numbers.

**TREMATODE** - A parasitic flatworm, also known as flukes.

**UROLITHIASIS** - The formation of stones in the urinary tract.

**WSAVA** - World Small Animal Veterinary Association