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## Animal feeding stuffs — Vocabulary

*Aliments des animaux — Vocabulaire*

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## Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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This document was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 10, *Animal feeding stuffs*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

## Introduction

This document provides definitions of generic terms related to animal feeding stuffs. It aims to encourage a mutual and consistent understanding and use of uniform terms in processes and frameworks dealing with the management of risk. This vocabulary document, which contains some common technical terms used in feed industry, is compiled for proper understanding of special language words or terms associated with the technical field.

This document can be applied as a reference by competent authorities, as well as specialists involved in standardization systems, to better and more accurately understand relevant text, correspondences and communications.

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# Animal feeding stuffs — Vocabulary

## 1 Scope

This document defines terms relating to animal feeding stuffs.

NOTE It includes the most common and frequently used terms in the field of animal feeding stuffs.

## 2 Normative references

There are no normative references in this document.

## 3 Terms and definitions

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

### 3.1 General terms

#### 3.1.1

##### **antibiotic**

antimicrobials produced by, or derived from, a micro-organism which destroys or inhibits the growth of other micro-organisms

#### 3.1.2

##### **antimicrobial agent**

substance of natural, semi-synthetic or synthetic origin that at in vivo concentrations kills or inhibits the growth of microorganisms by interacting with a specific target

#### 3.1.3

##### **antioxidant**

substance prolonging the storage life of *feed* (3.2.17) and *feed ingredients* (3.2.21) by protecting them against deterioration caused by oxidation

#### 3.1.4

##### **buffer**

substance used in livestock *rations* (3.2.42) to help resist changes in the acidity of the digestive tract

EXAMPLE Sodium bicarbonate.

#### 3.1.5

##### **carrier**

material to which *feed ingredients* (3.2.21) are added (e.g. absorbed, impregnated, coated) to facilitate their uniform distribution in *feed* (3.2.17)

#### 3.1.6

##### **chelated mineral**

organic mineral complex formed between an organic molecule and a mineral

### 3.1.7

#### **diluent**

substance mixed with *feed ingredients* (3.2.21) to reduce their concentration and make them more acceptable to animals, safer and easier to *mix* (3.4.18) uniformly in a *feed* (3.2.17)

Note 1 to entry: Diluent may also be a *carrier* (3.1.5).

### 3.1.8

#### **emulsifier**

substance that makes it possible to form or maintain a homogeneous mixture of two or more immiscible phases in *feed* (3.2.17)

Note 1 to entry: Emulsifier is commonly added to *milk replacers* (3.2.36) to prevent fat from separating.

### 3.1.9

#### **flavouring compound**

#### **flavouring enhancer**

substance included in *feed* (3.2.17) or *feed ingredients* (3.2.21) to improve smell or palatability

### 3.1.10

#### **macro-mineral**

#### **major mineral**

mineral required by animals in relatively large amounts

EXAMPLE Calcium (Ca), phosphorus (P), magnesium (Mg), potassium (K), chlorine (Cl), sulfur (S), sodium (Na).

Note 1 to entry: Macro-minerals are generally required in gram quantities per head per day.

### 3.1.11

#### **micro-ingredient**

vitamin, mineral or other material usually required in *feed* (3.2.17) in small amounts

### 3.1.12

#### **micro-mineral**

#### **trace mineral**

mineral required by animals in small amounts

EXAMPLE 1 Manganese (Mn), copper (Cu), zinc (Zn), selenium (Se), iron (Fe), cobalt (Co), iodine (I).

EXAMPLE 2 Micro-minerals are required in units of mg/kg or smaller.

### 3.1.13

#### **non-structural carbohydrate**

#### **NSC**

simple carbohydrate, such as starch and sugar, stored inside the cell that serves as a cellular energy source

Note 1 to entry: Non-structural carbohydrates are rapidly and easily digested by an animal.

### 3.1.14

#### **nutrient allowance**

recommendation for the nutrient amounts necessary for maintenance, growth, gestation, yield, work or performance that includes a safety margin to account for variability in *feed ingredients* (3.2.21), environment, animal health, storage losses and waste in the feeding process

### 3.1.15

#### **nutrient requirement**

minimum amount of nutrients (such as protein, minerals and vitamins) and energy necessary to meet animals' needs for maintenance, growth, reproduction, yield or performance

Note 1 to entry: Nutrient requirement does not include a safety margin in *ration* (3.2.42) formulation.



**3.1.16****prebiotic**

non-digestible compounds in *feed* (3.2.17) that beneficially affect animals by selectively stimulating the growth and/or activity of one or a limited number of non-pathogenic bacteria population(s) in the colon

**3.1.17****preservative**

substance or, when applicable, micro-organism that protects *feed* (3.2.17) against deterioration caused by micro-organisms or their metabolites

**3.1.18****probiotic****direct-fed microbial****DFM**

live micro-organisms that, when administered in adequate amounts, confer a health benefit on the host

EXAMPLE Lactic acid producing strains, e.g. *Lactobacillus*.

**3.1.19****undesirable substance**

substance or product, with the exception of pathogenic agents, that is present in and/or on the product intended for animal *feed* (3.2.17) and causes a potential danger to animal or human health or to the environment or could adversely affect livestock production

**3.1.20****veterinary drug**

substance applied or administered to animals, whether used for therapeutic, prophylactic, metaphylactic or diagnostic purposes or for modification of physiological functions or behaviour

**3.2 Terms related to feed and feeding**

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**3.2.1****ad libitum feeding****ad lib feeding**

feeding system by which animals can eat from a prepared *diet* (3.2.15) as much as they desire

**3.2.2****aquatic feed**

*feed* (3.2.17) that is fed to animals living in water

**3.2.3****balanced diet****balanced ration**

*feed* (3.2.17), *diet* (3.2.15) or *ration* (3.2.42) that contains all known required nutrients in proper amounts and proportions based upon recommendations of recognized authorities in animal nutrition for a given set of physiological requirements

**3.2.4****barn-dried hay**

*hay* (3.2.31) dried indoors by blowing air through it

Note 1 to entry: It is usually more nutritious than field-dried hay.

**3.2.5****bran**

milling fraction obtained from the removal of the outer layer of cereals

**3.2.6****canned pet food**

*feed* (3.2.17) for pets, which has been processed, packaged, sealed and sterilized for preservation in cans or similar containers

3.2.7

**chaff**

*hulls* (3.2.33) or other seed coverings, together with other plant parts separated from seeds during threshing or processing

3.2.8

**coccidiostat**

antiprotozoal agent used to prevent and/or control coccidial infections

EXAMPLE Lasalocid, monensin, narasin, salinomycin.

3.2.9

**complementary feed**

*compound feed* (3.2.11) that has a high content of certain substances but is not sufficient for a *ration* (3.2.42) and so is used in combination with other *feed* (3.2.17)

Note 1 to entry: Complementary feed is a form of compound feed.

3.2.10

**complete feed**

nutritionally adequate *feed* (3.2.17) compounded by a specific formula that is used as the sole *ration* (3.2.42) and that is capable of maintaining life and/or promoting production without any additional substance except water

Note 1 to entry: Complete feed is a form of *compound feed* (3.2.11).

3.2.11

**compound feed**

**formula feed**

**feed mixture**

mixture of at least two *feed materials* (3.2.23), whether or not containing *feed additives* (3.2.18), for oral animal feeding in the form of a *complementary feed* (3.2.9) or a *complete feed* (3.2.10)

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3.2.12

**concentrate**

*feed* (3.2.17) that contains high amounts of a nutrient or nutrients (usually rich in energy and/or protein but low in fibre) and mixed with other ingredients [usually *micro-ingredients* (3.1.11)] intended to be diluted or mixed to produce a *complementary feed* (3.2.9) or a *complete feed* (3.2.10)

EXAMPLE Concentrate may be unsafe if fed *free choice* (3.2.27) or alone.

3.2.13

**crumble**

pelleted *feed* (3.2.17) that has been broken into smaller granular pieces

3.2.14

**cured feed**

*feed* (3.2.17) that has been preserved, for example, by drying, chemical additives or other preservation methods

3.2.15

**diet**

*feed ingredient* (3.2.21) or a mixture of ingredients, including water, that is consumed by animals

3.2.16

**distillers' grain**

residual grain or by-product of a fermentation process in alcohol production from grains (especially corn), which may be fed wet or dry

**3.2.17****feed****feed stuff****feeding stuff**

single or multiple materials, whether processed, semi-processed or raw, and whether or not containing additives, for oral animal feeding

**3.2.18****feed additive**

substance intentionally added to *feed* (3.2.17) and/or water, not consumed as feed by itself, whether or not it has a nutritional value, that affects the characteristics of feed including organoleptic properties, animal products, animal production or performance or welfare, or the environment

Note 1 to entry: Microorganisms, enzymes, acidity regulators, trace elements, vitamins and other products fall within the scope of this definition, depending on the purpose of use and the method of administration.

Note 2 to entry: *Coccidiostats* (3.2.8) and histomonostats are a category of feed additives.

Note 3 to entry: Feed additive does not include *feed materials* (3.2.23) and *premixtures* (3.2.39).

**3.2.19****feed conversion ratio****FCR**

ratio describing the amount of *feed* (3.2.17) consumed per unit of production, e.g. weight gain, milk, eggs production

**3.2.20****feed grade**

quality of *feed* (3.2.17) suitable for animal, but not human, consumption

**3.2.21****feed ingredient**

component part or constituent of any mixture making up a *feed* (3.2.17), whether or not it has a nutritional value in the animal's *diet* (3.2.15), including *feed additives* (3.2.18)

Note 1 to entry: Ingredients are of plant, animal or aquatic origin, or other organic or inorganic substances.

**3.2.22****feed intended for a particular nutritional purpose****functional feed**

*feed* (3.2.17) that can satisfy a particular nutritional purpose by virtue of its particular composition or method of manufacture, which clearly distinguishes it from ordinary feed

Note 1 to entry: Feed intended for a particular nutritional purpose does not include *medicated feed* (3.2.34).

**3.2.23****feed materials**

products of vegetable or animal origin and products derived from industrial processing, either organic or inorganic substances, whether or not containing *feed additives* (3.2.18), that are intended for use in oral animal feeding to meet animals' nutritional needs

Note 1 to entry: Feed materials can be in their natural state, fresh or preserved.

Note 2 to entry: Feed materials may be fed to animals either directly as such, or after processing, or in the preparation of *compound feed* (3.2.11), or as *carrier* (3.1.5) of *premixtures* (3.2.39).

**3.2.24****feed supplement****supplementary feed**

*feed ingredient* (3.2.21) used with another to improve the nutrient balance or performance of the animal and that can be fed undiluted, diluted and mixed to produce a *complete feed* (3.2.10) or as *free choice* (3.2.27) with other parts of the *ration* (3.2.42)