

Oxford English Dictionary | The definitive record of the English language

lacto-, *comb. form*

Pronunciation: /'læktəʊ/

captured 4/4/12

1. Used as combining form of Latin *lact-*, *lac* milk.

'lactobutyrometer *n.* an instrument for estimating the amount of butter in a given quantity of milk.

1884 *Health Exhib. Catal.* 25/1 Graduated Cream Glasses, Lactobutyrometer.

'lactocele *n.* = GALACTOCELE *n.*

1855 R. G. MAYNE *Expos. Lexicon Med. Sci.* (1860), *Lactocele*.

'lactochrome *n.* *Biochem.* a yellow-orange pigment orig. extracted from milk and now identified with riboflavin.

1879 A. W. BLYTH in *Jrnl. Chem. Soc.* XXXV. 532 After the liquid from which the galactin has been removed had been freed from the excess of lead by hydrogen sulphide, an alkaloidal colouring matter, for which I propose the name of 'lactochrome', may be separated by the addition of nitrate of mercury solution.

1914 *Jrnl. Biol. Chem.* **17** 261 The facts brought out by this investigation point very clearly to a very close relationship existing between the yellow lactochrome of milk whey and the urochrome of urine.

1936 W. L. DAVIES *Chem. Milk* xi. 218 Milk from other species of mammals also contains lactochrome. It is present in human milk.

1953 J. S. FRUTON & S. SIMMONDS *Gen. Biochem.* xiii. 319 In 1879 Blyth described the isolation from milk of a yellow pigment (named lactochrome) which showed a striking green fluorescence. ·· By 1936 the chemical nature of the yellow pigment of egg yolk and of milk had been established ··; it was shown that this pigment, named riboflavin, is identical with vitamin B₂.

'lacto'flavin *n.* [*<* German *lactoflavin* (Ellinger & Koschara 1933, in *Berichte der Deutsch. Chem. Ges.* **66** B. 808)] *Biochem.* = RIBOFLAVIN *n.*

1933 *Brit. Chem. Abstr.* A. 847/2 (*heading*) Lactoflavin, the pigment of milk.

1938 *Encycl. Brit. Bk. of Year* 651/1 Recently it has been found that vitamin B₂ consists of three components, lactoflavin, vitamin B₆ ·· and pellagrous preventing or p.p. factor.

1943 J. B. SUMNER & G. F. SOMERS *Chem. & Methods of Enzymes* xiii. 244 Various flavins were

described, *e.g.*, lactoflavin of milk, hepatoflavin of liver. ·· The flavin of these workers was the same substance which is called today 'riboflavin', or sometimes, 'lactoflavin'.

'lactogen *n.* *Physiol.* any lactogenic hormone; *spec.* = PROLACTIN *n.*

- 1946 J. F. FULTON *Howell's Textbk. Physiol.* (ed. 15) liv. 1209 Both the onset and maintenance of lactation require lactogen.
- 1952 S. J. FOLLEY in A. S. Parkes *Marshall's Physiol. Reproduction* (ed. 3) II. xx. 558 When first discovered it [*sc.* an anterior-pituitary protein hormone] was variously named prolactin (Riddle), galactin (Turner) and mammotropin (Lyons). Recent American practice tends to favour the terms lactogen or lactogenic hormone; the name prolactin is adopted in this chapter in accordance with English usage.
- 1962 *Endocrinology* LXXI. 218/2 The Raben preparation ··, although quite potent as a lactogen in the pseudopregnant rabbit, ·· has little activity in the local intradermal pigeon crop assay.
- 1967 *Proc. National Acad. Sci. U.S.A.* **58** 2307 The recent identification of human placental lactogen (HPL), a polypeptide hormone which shares both biological and immunological properties with pituitary growth hormone (HGH).

lacto'genesis *n.* *Physiol.* the initiation of milk secretion.

- 1939 RIDDLE & BATES in E. Allen *Sex & Internal Secretions* xx. 1089 Lactogenesis is a *response* to this hormone which excites also—in both sexes—additional responses more ancient phylogenetically and perhaps more significant generally.
- 1948 *New Biol.* **4** 127 A distinction has ·· been drawn between lactogenesis—the power of initiating milk secretion—and galactopoiesis—the power of maintaining the flow of milk once it has been started.
- 1969 S. R. WELLINGS in Reynolds & Folley *Lactogenesis* 5 Lactogenesis may be defined as the process by which full lactation is initiated in an already prepared mammary gland.

lacto'genic *adj.* [-GENIC *comb. form*] *Physiol.* pertaining to or having the ability to initiate the secretion of milk.

- 1933 *Proc. Soc. Exper. Biol. & Med.* **21** 300 We have never observed milk secretion in normal or ovariectomized virgin guinea pigs uninjected with the lactogenic hormone.
- 1946 J. F. FULTON *Howell's Textbk. Physiol.* (ed. 15) liv. 1209 The lactogenic activity of pituitary extracts was first shown by Stricker and Grüter in 1928.
- 1952 Lactogenic [see *lactogen n.*].
- 1969 A. T. COWIE in Reynolds & Folley *Lactogenesis* 159, I now turn to the rabbit, the species in which the lactogenic role of the anterior pituitary was first discovered.

lacto'genically *adv.*

- 1969 R. DENAMUR in Reynolds & Folley *Lactogenesis* 60 Thus, lactogenically prolactin modifies the polyribosomes by increasing their number in the cell.

lacto-'phosphate *n.* a salt of lactic and phosphoric acids in combination.

1878 A. M. HAMILTON *Nerv. Dis.* 335 The syrup of the lacto~phosphate of lime.

lacto-'protein *n.* a normal albuminous constituent of milk.

1864 *Reader* No. 86. 239/2 A new albuminoidal substance found in milk ·· lacto-proteine.

'lactoscope *n.* [see -SCOPE *comb. form*] an instrument for ascertaining the purity of milk from the amount of resistance it offers to the passage of light.

1858 P. L. SIMMONDS *Dict. Trade Products, Lactoscope*, ·· an instrument invented by M. Donne, of Paris, for ascertaining the opacity of milk, and thus estimating the richness of the fluid in cream.

lacto-thermometer *n.* an instrument for ascertaining the temperature of milk.

1884 *Health Exhib. Catal.* 25/1 Milk Thermometers ·· Lacto-Thermometer.

lacto-vege'tarian *adj.* consisting of milk and vegetables.

1907 *Practitioner* June 845 The lacto-vegetarian diet ·· lessens auto-intoxication.

1929 *Encycl. Brit.* VII. 359/1 A lacto-vegetarian diet which permits the free use of milk and eggs.

1951 *News Chron.* 13 Dec. 3/2 Man was not designed for a purely vegetable diet. There was no objection whatever to lacto-vegetarian diet (this includes milk and eggs).

lacto-vege'tarianism *n.*

1940 *Nature* 7 Dec. 726/2 It ·· looks as if the Briton's dietary will gradually shift, at least during the war years, towards lactovegetarianism.

2. Used as comb. form of LACTIC *adj.* *acid* or LACTOSE *n.*

lacto'bionate *n.* a salt of lactobionic acid.

1927 *Jrnl. Chem. Soc.* 546 Barium lactobionate was methylated in a manner similar to that already mentioned.

1964 *Chem. Abstr.* **61** 16697 Ca lactobionate ·· may be used under the Federal Food, Drug, and Cosmetic Act as a firming agent in dry pudding mixes.

lactobi'onic *adj.* [tr. German *lactobionsäure* (Fischer & Meyer 1889, in *Berichte der Deutsch. Chem. Ges.* **22** 362)]

lactobionic acid *n.* 4-(β-D-galactosido)-D-gluconic acid, C₁₂H₂₂O₁₁: a syrup produced by oxidation of lactose.

- 1889 *Jrnl. Chem. Soc.* **56** 485 Lactobionic acid, C₁₂H₂₂O₁₂, is obtained when milk-sugar (1 part) dissolved in water (7 parts) is treated with bromine (1 part).
- 1889 *Jrnl. Chem. Soc.* **56** 486 Lactobionic acid is decomposed into galactose and gluconic acid when warmed with dilute mineral acids.
- 1967 *Kirk-Othmer Encycl. Chem. Technol.* (ed. 2) XIII. 571 The sequestrant and emulsifying properties of lactobionic acid suggest a commercial potential, especially in the food industry, for this product.

lacto'nitrile *n.* a yellow liquid, CH₃·CH(OH)·CN, that is the nitrile of lactic acid and is used in a method of manufacturing acrylonitrile; acetaldehyde cyanohydrin.

- 1898 *Jrnl. Chem. Soc.* **74** II. 509 When silicon tetrachloride is heated with mandelonitrile or lactonitrile, silicic acid and complex tarry products are formed.
- 1935 *Chem. Abstr.* **29** 814 For prep. an aliphatic cyanohydrin such as lactonitrile, reaction is effected between HCN and an aliphatic aldehyde or ketone such as acetaldehyde.
- 1961 *Chem. Abstr.* **55** 8268 The alkyl and aralkyl α-hydroxy nitriles, i.e. lactonitrile, [etc.] ··, are effective reagents for the extn. of Au and Ag by cyanidation. ·· Crude lactonitrile which is a by~product from the manuf. of acrylonitrile is inexpensive and very efficient.

lacto'phenol *n.* a mixture of approximately equal weights of phenol and lactic acid dissolved in glycerol and distilled water, used for mounting biological specimens.

- 1896 *Jrnl. Royal Microsc. Soc.* 481 M. J. Amann recommends the following fluids for preserving and imbedding mosses ·· (1) Lactophenol.
- 1929 W. R. TAYLOR in C. E. McClung *Handbk. Microsc. Technique* iv. 139 A solution (Lactophenol) composed of lactic acid [etc.] ·· is very serviceable and may be used for mounting various materials, softening dried material (especially algæ) or decalcifying specimens.
- 1970 *Watsonia* **8** 140 Pollen grains stained with cotton blue in lactophenol.

DRAFT ADDITIONS 1997

lacto-,ovo-vege'tarian *adj.* and *n.* (*a*) *adj.* (of a diet) consisting only of dairy products, eggs, and vegetables; (*b*) *n.* a person who eats such a

diet.

- 1940 *Jrnl. Amer. Dietetic Assoc.* **16** 222/1 Meat was not served, and the diets were essentially lacto-ovo vegetarian.
- 1975 *New Yorker* 17 Mar. 32/3 Technically, I'm a lacto-ovo-vegetarian, which means that I eat milk products and eggs as well as vegetables.
- 1977 *Washington Post* 23 June E1/5 The low-calorie, low-sodium, low-cholesterol diet at the 40-acre ranch is lacto-ovo-vegetarian, made up of lots of whole grains, fresh fruits and vegetables with some eggs and milk products.
- 1987 *Times* 6 Feb. 11/6 Even people who are lacto-ovo vegetarians fail to meet normal dietary goals.

DRAFT ADDITIONS 1997

lactope'roxidase *n.* *Biochem.* a peroxidase occurring in milk and saliva.

- 1943 H. THEORELL & Å. ÅKESON in *Arkiv för Kemi, Mineral. och Geol.* **17** B. VII. 1 Agner's peroxidase, that occurs in cells belonging to the myeloic system, should be referred to as 'myelo-peroxidase', while the milk peroxidase should be called 'lacto-peroxidase'.
- 1970 *Biochem. Jrnl.* **117** 779 Lactoperoxidase ··, an enzyme present in various mammalian glands and in their secretions, catalyses the oxidation of thiocyanate by hydrogen peroxide.
- 1987 *Biochem. Jrnl.* **247** 147 The haem prosthetic group of lactoperoxidase can be prepared from the enzyme in high yield by reductive cleavage with mercaptoethanol in 8 M urea.

DRAFT ADDITIONS 1997

lacto-vege'tarian *adj.* also as *n.*, a person who eats only dairy products and vegetables; also, †a lacto-ovo-vegetarian.

- 1912 STEDMAN *Med. Dict.* (ed. 2) 475/2 *Lactovegetarian*, one who lives on a mixed diet of milk and milk products, eggs and vegetables, but eschews meat.
- 1977 C. MCFADDEN *Serial* xv. 37/1 Marsha Wilson had become a lacto-vegetarian since Kate had last seen her.
- 1987 *Bodybuilding* Oct. 85/2 There's the lacto vegetarian who includes all dairy products in his/her diet except eggs.

lacto-, comb. form

Second edition, 1989; online version March 2012. <<http://www.oed.com/view/Entry/104940>>; accessed 04 April 2012. Earlier version first published in *New English Dictionary*, 1901.

Oxford University Press

Copyright © 2012 Oxford University Press . All rights reserved.

Your access is brought to you by:
Admin. Office%2C US Courts