lacto-, *comb. form*

**Pronunciation:** /ˈlæktəʊ/

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

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


ˈ*lactocele* *n.* = GALACTOCELE *n.*


ˈ*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 ⅔; 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 ⅓ 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 Howel’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.


lactogenesis 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.

lactogenic 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 ovariecтомized virgin guinea pigs uninjected with the lactogenic hormone.

1946 J. F. Fulton Howel’s Textbk. Physiol. (ed. 15) liv. 1209 The lactogenic activity of pituitary extracts was first shown by Stricker and Grütter 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.

lactogenically 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.


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 11 509 When silicon tetrachloride is heated with mandelonitrile or lactonitrile, silicic acid and complex tarry products are formed.

1935 Chem. Abstr. 29 814 For prepg. 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 alky1 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 algae) or decalcifying specimens.

1970 Watsonia 8 140 Pollen grains stained with cotton blue in lactophenol.

DRAFT ADDITIONS 1997

ˌlactoˌovo-vegeˈtarian 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.

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lacto-, comb. form : Oxford English Dictionary

http://www.oed.com/view/Entry/104940?redirectedFrom=lacto-ovo-vege...