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# DORLAND'S

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# ILLUSTRATED

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# MEDICAL 30th EDITION

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# DICTIONARY

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**SAUNDERS**  
*An Imprint of Elsevier*



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The Curtis Center  
Independence Square West  
Philadelphia, PA 19106

Dorland's illustrated medical dictionary.  
Philadelphia: Saunders

v.: ill.; 27 cm.

Irregular.

Began publication with 23rd ed.

Description based on: 26th ed.

Continues: American illustrated medical dictionary.

1. Medicine—Dictionaries. I. Dorland, W.A. Newman  
(William Alexander Newman), 1864–1956.

[DNLN: 1. Dictionaries, Medical. 2. Reference Books,  
Medical]

R121.D73

610 <sup>9</sup>.3<sup>0</sup>21—dc19

0-6383

AACR 2 MARC-S

Library of Congress

[8607r85]rev6

Chief Lexicographer Douglas M. Anderson, MA  
Senior Lexicographer Patricia D. Novak, PhD  
Lexicographer Jefferson Keith, MA  
Assistant Lexicographer Michelle A. Elliott, BA

Listed here are the latest translated editions of this book together with the languages for the translations and the publishers.

Chinese (28th Edition)—Xi'an World Publishing Corp., Xi'an, China

Indonesian (26th Edition)—E.G.C. Medical Publishers, Jakarta, Indonesia

Italian (28th Edition)—Edizioni Scientifiche Internazionali (ESI), Milan, Italy

Japanese (28th Edition)—Hirokawa Publishing Company, Tokyo, Japan

Portuguese (28th Edition)—Editoria Manole Ltda., São Paulo, Brazil

Spanish (28th Edition) (Adaption)—McGraw-Hill-Interamericana de España, Madrid, Spain

Dorland's Illustrated Medical Dictionary

ISBN 0-7216-0146-4 (Standard)

0-7216-0281-9 (Deluxe)

0-7216-0414-5 (Trade)

0-8089-2288-2 (International)

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Library of Congress catalog card number 78-50050

Last digit is the print number: 9 8 7 6 5 4 3 2

**oxalate** (ok'sā-lāt) a salt of oxalic acid; see also *oxalate poisoning*, *under poisoning*.  
**balanced o.** a mixture of ammonium and potassium oxalates in a 3:2 ratio, used as an anticoagulant in the collection of blood for laboratory examination.

**oxo-lāt-ed** (ok'sā-lāt'əd) treated with oxalate solution.

**oxo-lāt-ion** (ok'sā-lā'shən) treatment with oxalate solution.

**oxo-lāt-mia** (ok'sā-le'me-ə) [*oxalate* + *-emia*] an excess of oxalates in the blood.

**oxo-lāt-ic acid** (ok-sal'ik) HOOC-COOH, a strong dicarboxylic acid found in foods such as spinach and rhubarb or produced in the body by metabolism of glyoxylic acid or ascorbic acid; it is not metabolized but excreted in the urine. Ingestion of a diet rich in oxalates or a genetic disorder of glycine metabolism (primary hyperoxaluria) may lead to the formation of oxalate calculi in the urinary tract. See also *oxalate poisoning*, *under poisoning*.

**oxo-lāt-ism** (ok'sal-iz-əm) oxalate poisoning.

**oxo-lāt-ic acid** (ok'sā-lo-as'ā-tāt) an anionic form of oxaloacetic acid.

**oxo-lāt-ic acid** (ok'sā-lo-a-se'tik) an intermediate in the tricarboxylic acid cycle (q.v.); it is convertible to aspartic acid by a transamination reaction.

**oxo-lāt-osis** (ok'sā-lo'sis) generalized deposition of calcium oxalate in renal and extrarenal tissues, as may occur in primary hyperoxaluria.

**oxo-lāt-uria** (ok'sā-lū-re-ə) hyperoxaluria.

**oxo-lāt-ic acid** (ok'sal-ūr'ik) the amide of oxalic acid and urea, which occurs in urine.

**oxo-lāt-yl** (ok'sā-lāl) the divalent group, (C:O)<sub>2</sub>, formed from oxalic acid by the loss of two hydroxyl groups.

**oxo-lāt-urea** (ok'sā-lāl-ūr-ē) 1. oxaluric acid. 2. parabanic acid.

**oxo-lāt-ide** (ok-sam'id) the diamide of oxalic acid; it will give the biuret reaction.

**oxo-lāt-quinine** (oks-am'nī-kwin) an antischistosomal especially effective against *Schistosoma mansoni*.

**Oxan-drin** (ok-san'drin) trademark for a preparation of oxandrolone.

**oxo-lāt-olone** (ok-san'dro-lōn) [USP] an androgenic and anabolic steroid that promotes retention of nitrogen, potassium, and phosphorus, and is administered orally in the treatment of catabolic or tissue-wasting diseases or states.

**oxo-lāt-pam-o-ate** (oks'an-tāl) an anthelmintic effective against *Trichuris*.

**oxo-lāt-zin** (ok'sā-pro'zin) a nonsteroidal antiinflammatory drug, used in the treatment of rheumatoid arthritis and osteoarthritis.

**oxo-lāt-pam** (ok-saz'ā-pam) [USP] a benzodiazepine used as an anxiolytic agent in the treatment of anxiety disorders and anxiety associated with depression, for short-term relief of anxiety symptoms, especially in the elderly, and for the treatment of the symptoms of acute alcohol withdrawal; administered orally.

**oxo-lāt-din-one** (ok'sā-zo-lid'ī-nōn) any of a class of synthetic, heterocyclic antibacterial agents effective against gram-positive organisms; they bind to the bacterial 50S ribosomal subunit and prevent formation of the 70S ribosomal initiation complex, thus preventing bacterial RNA translation and protein synthesis.

**oxo-lāt-baz-o-pine** (oks'kahr-baz'ā-pēn) an anticonvulsant used in the treatment of partial seizures; administered orally.

**oxo-lāt-rone fu-mar-ate** (ok-set'ō-rōn fu'mā-rāt) an analgesic specific in migraine.

**oxo-lāt-da-zole** (oks-fen'dā-zōl) [USP] a benzimidazole anthelmintic used to treat ruminant infestations by either roundworms or tapeworms.

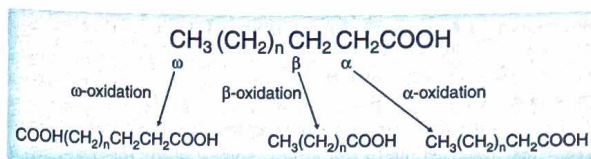
**oxo-lāt-ben-da-zole** (ok'sī-ben'dā-zōl) a benzimidazole anthelmintic used to treat roundworm and lungworm infestations in horses and other ruminants.

**oxo-lāt-con-a-zole ni-trate** (ok'sī-kon'ā-zōl) an imidazole antifungal used typically in the treatment of tinea pedis, tinea corporis, and tinea cruris; it inhibits biosynthesis of ergosterol, a component of the fungal cell membrane.

**oxo-lāt-dant** (ok'sī-dənt) the electron acceptor in an oxidation-reduction (redox) reaction.

**oxo-lāt-dase** (ok'sī-dās) a term used in the recommended names of some oxidoreductases to denote those in which molecular oxygen is the hydrogen acceptor.

**mixed function o.** monooxygenase.



■ Oxidation of a saturated fatty acid having  $(n + 4)$  carbon atoms;  $\alpha$ -oxidation yields a saturated fatty acid of one fewer carbons,  $\beta$ -oxidation a saturated fatty acid of two fewer carbon atoms, and  $\omega$ -oxidation a dicarboxylic acid with no loss of carbon atoms.

**oxi-lā-tion** (ok'sī-dā'shən) the act of oxidizing or state of being oxidized. Chemically it consists of the increase of positive charges on an atom or the loss of negative charges. Most biological oxidations are accomplished by the removal of a pair of hydrogen atoms (dehydrogenation) from a molecule. Such oxidations must be accompanied by reduction of an acceptor molecule. *Univalent o.* indicates loss of one electron; *divalent o.*, the loss of two electrons.

**alpha o.** oxidation of a fatty acid at the alpha carbon, that adjacent to the carboxyl group, as occurs in the metabolism of phytanic acid. Written also *α-oxidation*.

**beta o.** oxidation of a fatty acid at the beta carbon atom, the second carbon from the carboxyl group, with the result that the two end carbons are split off as acetic acid (acetylcoenzyme A) and with the formation of a fatty acid containing two fewer carbon atoms. Written also *β-oxidation*.

**biological o.** the enzymatic process by which food is metabolized, resulting in the release of energy. See also *oxidation*.

**coupled o.** the enzymatic oxidation of two donor molecules, with the incorporation of oxygen into one of the donors.

**omega o.** a minor pathway of fatty acid oxidation in which the  $\omega$ -carbon is oxidized, forming an  $\alpha,\omega$ -dicarboxylic acid. Written also *ω-oxidation*.

**oxi-lā-tion-re-duc-tion** (ok'sī-dā'shən-re-duk'shən) the chemical reaction whereby electrons are removed (oxidation) from atoms of the substance being oxidized and transferred to atoms being reduced (reduction). Called also *redox*.

**oxi-lā-tive** (ok'sī-dā-tiv) referring to the process of oxidation; being capable of an oxidizing reaction.

**ox-ide** (ok'sīd) [L. *oxidum*] any compound of oxygen with an element or radical.

**ox-i-dize** (ok'sī-dīz) to combine or cause to combine with oxygen, or to lose electrons. See *oxidation*.

**ox-i-do-re-duc-tase** (ok'sī-do-re-duk'tās) [EC 1] any member of a class of enzymes that catalyze the reversible transfer of electrons from a substrate that becomes oxidized (hydrogen or electron donor) to a substrate that becomes reduced (hydrogen or electron acceptor). The class includes dehydrogenases, hydroxylases, oxidases, oxygenases, peroxidases, and reductases.

**ox-i-do-sis** (ok'sī-do'sis) acidosis.

**ox-i-dro-nate (HDP, HMDP)** (ok'sī-dro'nāt) a hydroxymethylene-substituted diphosphonate compound having an affinity for sites of osteoid mineralization; complexed with technetium 99m it is used in bone imaging. See table at *technetium*.

**ox-im** (ok'sim) oxime.

**ox-ime** (ok'sēm) any of a series of compounds containing the CH(=NOH) group, formed by the action of hydroxylamine on an aldehyde or a ketone.

**ox-im-e-ter** (ok-sim'ā-tər) a photoelectric device for determining the oxygen saturation of the blood.

**CO-o.** a device that uses spectrophotometry to measure relative blood concentrations of oxyhemoglobin, carboxyhemoglobin, methemoglobin, and reduced hemoglobin.

**ear o.** a pulse oximeter for attachment to the ear, by which oxygen saturation of the blood flowing through the ear can be determined.

**finger o.** a pulse oximeter whose sensor is attached to a finger, so that the oxygenation of blood flowing through the finger can be determined.

**intracardiac o.** an instrument for measuring the concentration of oxygen or dye in blood within the heart; see also *oxygen gas analyzer*, *under analyzer*.

**pulse o.** an oximeter that measures the oxygen saturation of arterial blood by passing a beam of red and infrared light through a pulsating capillary bed, the ratio of red to infrared transmission varying with the oxygen saturation of the blood; because it responds only to pulsatile objects, it does not detect nonpulsating objects like skin and venous blood.

**whole blood o.** an oximeter for determination of oxygen saturation of removed specimens of blood.



## intussusceptum

**appendiceal i.** invagination of one part of the vermiform appendix into an adjoining part, ranging in severity from invagination of the tip into the distal appendix to prolapse of the entire appendix into the cecum.

**postmortem i.** intussusception occurring at the time of death.

**retrograde i.** the invagination of a distal part of the bowel into a proximal part.

**in-tus-sus-cep-tum** (in'tə-sə-sep'təm) [L.] the portion of intestine that has been invaginated within another part in intussusception.

**in-tus-sus-cip-i-ens** (in'tə-sə-sip'e-əns) [L.] the portion of intestine into which another portion has invaginated in intussusception.

**In-u-la** (in'u-lə) [L.] a genus of composite-flowered plants (family Compositae), whose rhizomes contain inulin. The root has numerous uses in folk medicine.

**in-u-lase** (in'u-lās) inulinase.

**in-u-lin** (in'u-lin) an indigestible polysaccharide vegetable starch found in the rhizome of certain plants (Compositae). It is a polymer of fructofuranose, yields fructose on hydrolysis, and is used in a test for determining glomerular filtration rate. See *inulin clearance*, under *clearance*.

**in-u-lin-ase** (in'u-lin-ās) [EC 3.2.1.7] an enzyme of the hydrolase class that catalyzes the cleavage of specific linkages between fructose residues in inulin, releasing fructose. The enzyme occurs in a variety of fungi and in higher plants.

**in-unc-tion** (in-ungk'shən) [in-<sup>1</sup> + *unction*] the act of anointing or of applying an ointment with rubbing.

**in utero** (in u'tər-o) [L.] inside the uterus.

**Inv** [from part of the name of the propositus] see *Km allotypes*, under *allotype*.

**in vac-uo** (in vak'u-o) [L.] in a vacuum.

**in-vag-i-nate** (in-vaj'i-nāt) to infold one portion of a structure within another portion.

**in-vag-i-na-tion** (in-vaj'i-na'shən) [L. *invaginatio*, from *in* within + *vagina* sheath] 1. the state of being or the process of becoming invaginated. 2. in embryology, a process by which (a) one region of a hollow, single-walled, spherical blastula caves in to form and line a new cavity in the now cup-shaped, double-walled gastrula, or (b) an ever-deepening pit develops into a diverticulum or tube from the surface into the tissues below. 3. intussusception.

**basilar i.** a developmental deformity of the occipital bone and upper end of the cervical spine in which the latter appears to have pushed the floor of the occipital bone upward; see also *platybasia*. Called also *basilar impression*.

**in-va-lid** (in'və-lid) [L. *invalidus*; *in* not + *validus* strong] 1. not well and strong. 2. a person who is disabled by illness or infirmity.

**in-va-sin** (in-və'zin) hyaluronidase.

**in-va-sion** (in-və'shən) [L. *invasio*; *in* into + *vadere* to go] 1. the attack or onset of a disease. 2. the simple harmless entrance of bacteria into the body or their deposition in the tissues, as distinguished from infection. 3. the infiltration and active destruction of surrounding tissue, a characteristic of malignant tumors.

**in-va-sive** (in-və'siv) 1. having the quality of invasiveness. 2. involving puncture or incision of the skin or insertion of an instrument or foreign material into the body; said of diagnostic techniques.

**in-va-sive-ness** (in-və'siv-nəs) 1. the ability of a pathogenic microorganism to enter and spread throughout the tissues of the body. 2. the ability to infiltrate and actively destroy surrounding tissue; said of malignant tumors.

**in-ven-to-ry** (in'vən-tor'e) a comprehensive list of personality traits, aptitudes, and interests.

**Beck Depression I.** a self-report questionnaire for measuring the symptoms of depression, focusing on the cognitive symptoms.

**California Personality I. (CPI)** a self-report, true-false test designed to measure aspects of personality style; generally used in counseling situations or for less than severe psychopathology.

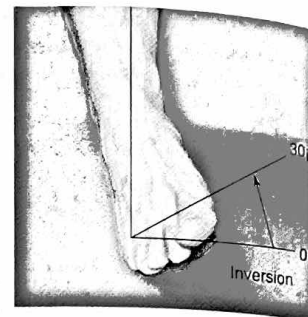
**Millon Clinical Multiaxial I. (MCMI)** a self-report inventory designed to produce a profile of the personality style and structure underlying mental disorders.

**Minnesota Multiphasic Personality I. (MMPI)** a self-report, true-false test designed to evaluate personality and particularly to assess psychopathology.

**in-ver-mi-na-tion** (in-vər'mī-na'shən) vermination.

**in-ver-sine** (in-vər'sēn) trademark for a preparation of mecamlamine hydrochloride.

**in-ver-sion** (in-vər'zhən) [L. *inversio*; *in* into + *vertere* to turn] 1. a turning inward, inside out, upside down, or other reversal of the normal relation of a part. 2. in psychiatry, a term used by Freud for



■ Inversion and eversion of the foot.

homosexuality. 3. in genetics, a chromosomal aberration caused by the inverted reunion of a chromosome segment after breakage of the chromosome at two points, resulting in a change in sequence of genes or nucleotides; e.g., the sequence *abcdefg* may be inverted to *gfedcba*. See Plate 1.

**carbohydrate i.** hydrolysis of disaccharides or polysaccharides to monosaccharides.

**paracentric i.** inversion in which the inverted chromosome segment is on one side of the centromere, i.e., both breaks occur in one arm. See Plate 1.

**pericentric i.** inversion in which the inverted chromosome segment includes the centromere. See Plate 1.

**thermic i.** the state in which the body temperature is highest in the morning.

**i. of uterus** a turning of the uterus inside out, whereby the fundus is forced through the cervix and protrudes into or outside of the vagina.

**visceral i.** the more or less complete right and left transposition of the viscera; see *situs inversus viscerum*.

**in-ver-sus** (in-vər'səs) [L., past participle of *invertere* to invert] opposite to, or inverted from, the normal; see *situs inversus viscerum*.

**in-ver-te-bra-ta** (in-vər'tə-brā'tə) a former division of the animal kingdom, including all forms that have no spinal column.

**in-ver-te-brate** (in-vər'tə-brāt) 1. any animal that has no spinal column; a nonvertebrate animal. 2. having no spinal column.

**in-ver-tor** (in-vər'tor) a muscle that turns a part inward.

**in-vest** (in-vest') 1. to envelop in or cover another tissue or part (as fascia). 2. to surround, envelop, or embed in an investment material.

**in-vest-ing** (in-vest'ing) 1. the act or process of covering or enveloping wholly or in part an object, such as a denture, tooth, wax form, or crown with a refractory investment material before curing, soldering, or casting. 2. the covering or enveloping of a tissue or part by another tissue, such as a fascia.

**i.** the pattern surrounding the wax pattern with an investment material, such as a mix of a plaster, for low temperature casting, or a mix consisting of dental stone and a silica refractory for high temperature casting; the investment hardens to form a mold into which casting materials are poured.

**vacuum i.** subjecting the water-investment mixture to a vacuum during the investing procedure in order to remove air bubbles from the mixture.

**in-vest-ment** (in-vest'mənt) 1. any tissue, such as fascia, that envelops or covers other tissues or parts. 2. a material applied as a soft paste to a pattern that hardens to form a mold for casting.

**gypsum-bonded i.** an investment bonded by gypsum or one of its derivatives, used with metals or alloys that have low fusion temperatures.

**phosphate-bonded i.** an investment bonded by phosphate and a metallic oxide, used with metals or alloys that have high fusion temperatures.

**silica-bonded i.** an investment bonded by silica, used with metals or alloys that have high fusion temperatures.

**in-vert-er-ate** (in-vet'ər-ət) [L. *inverteratus*; *in* intensive + *vertere* to turn] chronic and confirmed; long established and of difficult cure.

**In-vi-rase** (in'vī-rās) trademark for a preparation of saquinavir mesylate.

**in-vis-ca-tion** (in'vis-kā'shən) [L. *in* among + *viscum* slime] the mixing of the food with the mucous secretion of the mouth in mastication.

**in vi-tro** (in v'e'trō) [L.] within a glass; observable in a test tube; in an artificial environment.

**in vi-vo** (in v'e'vō) [L.] within the living body.

**in-vo-lu-cre** (in'vō-loo'kər) an involucre.