

STEDMAN'S Medical Dictionary

27th Edition

Illustrated in Color

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retrograde i., the invagination of a lower segment of the bowel into one just above.

in-tus-sus-cep-tive (in'tūs-sū-sep'tiv). Relating to or characterized by intussusception.

in-tus-sus-cep-tum (in'tūs-sū-sep'tūm). The inner segment in an intussusception; that part of the bowel which is received within the other part.

in-tus-sus-cip-i-ens (in'tūs-sū-sip'ē-enz). The portion of the bowel, in intussusception, which receives the other portion. [L. *intus*, within, + *suscipiens*, pr. p. of *suscipio*, to take up]

in-u-lase (in'ū-lās). SYN inulinase.

in-u-lin (In) (in'ū-lin). A fructose polysaccharide from the rhizome of *Inula helenium* or *elecampane* (family Compositae) and other plants; used by intravenous injection, where it is filtered by the renal glomeruli but not re-absorbed and thus can be used to determine the rate of glomerular filtration; also used in bread for diabetics. Cf. *inulin clearance*. SYN alant starch, alantin, dahlin.

in-u-lin-ase (in'ū-lin-ās). An enzyme acting upon 2,1-β-D-fructoside links in inulin, releasing D-fructose. SYN inulase.

in-u-lol (in'ū-lol). SYN alantol.

in-unc-tion (in-ūngk'shūn). Administration of a drug in ointment form by rubbing to cause absorption of the active ingredient. [L. *inunctio*, an anointing, fr. *inunguo*, pp. -unctus, to smear on]

in-vac-ci-na-tion (in-vak-si-nā'shūn). Obsolete term for accidental inoculation of some disease, e.g., syphilis, during vaccination.

in vac-uo (in vak'ū-ō). In a vacuum, e.g., under reduced pressure. [L.]

in-vag-i-nate (in-vaj'i-nāt). To ensheathe, infold, or insert a structure within itself or another. [L. *in*, in, + *vagina*, a sheath]

in-vag-i-na-tion (in-vaj'i-nā'shūn). 1. The ensheathing, enfolding, or insertion of a structure within itself or another. 2. The state of being invaginated. SEE ALSO introversion, intussusception. **basilar i.**, SYN platybasia.

in-vag-i-na-tor (in-vag'i-nā-ter, -tōr). An instrument for pushing inward any tissue.

in-va-lid (in'vā-lid). 1. Weak; sick. 2. A person partially or completely disabled. [L. *in-* neg. + *validus*, strong]

in-va-lid-ism (in'vā-lid-izm). The condition of being an invalid.

in-va-sin (in-vā'sin). SYN hyaluronidase (1).

in-va-sion (in-vā'zhūn). 1. The beginning or incursion of a disease. 2. Local spread of a malignant neoplasm by infiltration or destruction of adjacent tissue; for epithelial neoplasms, i. signifies infiltration beneath the epithelial basement membrane. 3. Entrance of foreign cells into a tissue, such as polymorphonuclear leukocytes in inflammation. [L. *invasio*, fr. *in-vado*, pp. -vasus, to go into, attack]

in-va-sive (in-vā'siv). 1. Denoting or characterized by invasion. 2. Denoting a procedure requiring insertion of an instrument or device into the body through the skin or a body orifice for diagnosis or treatment.

in-ven-to-ry (in'ven-tōr-ē). A detailed, often descriptive, list of items.

Millon clinical multi-axial i. (MCMi), SYN Millon Clinical Multi-axial Inventory test.

Minnesota Multiphasic Personality I., SYN Minnesota Multiphasic Personality Inventory test.

personality i., a psychological test for evaluation of habitual modes of behavior, thinking, and feeling based on the comparable characteristics of individuals in one's peer group.

in-ver-mi-na-tion (in-ver-mi-nā'shūn). SYN helminthiasis. [L. *in*, in, + *vermis* (vermin-), worm]

in-ver-sion (in-ver'zhūn). 1. A turning inward, upside down, or in any direction contrary to the existing one. 2. Conversion of a disaccharide or polysaccharide by hydrolysis into a monosaccharide; specifically, the hydrolysis of sucrose to D-glucose and D-fructose; so called because of the change in optical rotation. 3. Alteration of a DNA molecule made by removing a fragment, reversing its orientation, and putting it back into place. 4. Heat-induced transition of silica, in which the quartz tridymite or cristobalite changes its physical properties as to thermal expansion. 5.

Conversion of a chiral center into its mirror image. [L. *inverto*, pp. -versus, to turn upside down, to turn about]

i. of chromosomes, a chromosome aberration resulting from a double break in a segment of the chromosome, with end for end rotation of the fragment between the fracture lines, and refusion of the fragments; this results in reversal of the order of genes in that segment.

paracentric i., i. in a chromosome of a single segment in which the centromere is not included.

pericentric i., i. in a chromosome of a single segment that includes the centromere.

i. of the uterus, a turning of the uterus inside out, usually following childbirth.

visceral i., SYN *situs inversus viscerum*.

in-vert (in'vert). 1. In chemistry, subjected to inversion, e.g., invert sugar. 2. To reverse in direction, sequence, or effect. 3. Rarely used term for a homosexual. SEE inversion.

in-vert-ase (in'ver-tās). SYN β-fructofuranosidase.

In-ver-te-bra-ta (in-ver-tē-brā'tā). A general category of the kingdom Animalia (multicellular animals) including those phyla whose members lack a notochord; i.e., all animals except vertebrates in the phylum Chordata.

in-ver-te-brate (in-ver'tē-brāt). 1. Not possessed of a spinal or vertebral column. 2. Any animal that has no spinal column.

in-vert-ed re-pe-at. A sequence of nucleotides that is repeated nearly without change except in the opposite direction, usually at some point distant from the original sequence; often associated with gene insertion.

in-ver-tin (in'ver-tin). SYN β-fructofuranosidase.

in-ver-tor (in-ver'ter, -tōr). A muscle that inverts or causes inversion or turns a part, such as the foot, inward. [see inversion]

in-vest-ing. 1. In dentistry, covering or enveloping wholly or in part an object such as a denture, tooth, wax form, crown, etc., with a refractory investment material before curing, soldering, or casting. 2. In psychoanalysis, allocating to or charging an object with psychic energy or cathexis.

vacuum i., the i. of a pattern utilizing a vacuum to remove trapped air from the investment material.

in-vest-ment. 1. In dentistry, any material used in investing. 2. In psychoanalysis, the psychic charge or cathexis invested in an object.

refractory i., an i. material which can withstand the high temperatures used in soldering or casting.

in-vet-er-ate (in-vet'er-āt). Long seated; firmly established; said of a disease or of confirmed habits. [L. *in-vetero*, pp. -atus, to render old, fr. *vetus*, old]

in-vis-ca-tion (in-vis-kā'shūn). 1. Smearing with mucilaginous matter. 2. The mixing of the food, during mastication, with saliva. [L. *in*, in, on, + *viscum*, birdlime]

in vit-ro (in vē'trō). In an artificial environment, referring to a process or reaction occurring therein, as in a test tube or culture media. Cf. *in vivo*. [L. in glass]

in vi-vo (in vē'vō). In the living body, referring to a process or reaction occurring therein. Cf. *in vitro*. [L. in the living being]

in-vo-lu-cre (in'vō-loo-ker). SYN involucre.

in-vo-lu-crin (in-vō-loo'krin). A non-keratin-soluble precursor of the highly cross-linked protein known as the corneocyte envelope. [fr. L. *involucrum*, a wrapper]

in-vo-lu-crum, pl. **in-vo-lu-cra** (in-vō-loo'krūm, -loo'krā). 1. An enveloping membrane, e.g., a sheath or sac. 2. The sheath of new bone that forms around a sequester. SYN involucre. [L. a wrapper, fr. *in-volvo*, to roll up]

in-vol-un-tary (in-vol'ūn-tār-ē). 1. Independent of the will; not volitional. 2. Contrary to the will. [L. *in-* neg. + *voluntarius*, willing, fr. *volo*, to wish]

in-vo-lu-tion (in-vō-loo'shūn). 1. Return of an enlarged organ to normal size. 2. Turning inward of the edges of a part. 3. In psychiatry, mental decline associated with advanced age. SYN catagenesis. [L. *in-volvo*, pp. -volutus, to roll up]

senile i., the retrogression of vital organs and psychological processes incident to aging.

in

ox-i-da-sis (ok-si-dā'sis). Oxidation by an oxidase.

ox-i-da-tion (ok-si-dā'shūn). 1. Combination with oxygen. 2. Increasing the valence of an atom or ion by the loss from it of hydrogen or of one or more electrons thus rendering it more electropositive, as when iron is changed from the ferrous (2+) to the ferric (3+) state. 3. In bacteriology, the aerobic dissimilation of substrates with the production of energy and water; in contrast to fermentation, the transfer of electrons in the o. process is accomplished via the respiratory chain, which utilizes oxygen as the final electron acceptor.

alpha-o., **α-oxidation**, a form of o. of fatty acids in which carbons are removed one at a time in the form of CO₂; the α-carbon is first hydroxylated and then converted into a carbonyl; a deficiency of this pathway is associated with Refsum disease.

beta-o., **β-oxidation**, (1) o. of the β-carbon (carbon 3) of a fatty acid, forming the β-keto (β-oxo) acid analog; of importance in fatty acid catabolism; (2) the entire pathway for the catabolism of saturated fatty acids containing an even number of carbon atoms; **beta-o.** (1) is a part of this pathway; acetyl-CoA is a major product of this pathway.

end o., the last o. step in a catabolic pathway. SYN terminal o.

omega-o., **ω-oxidation**, o. at the carbon atom farthest removed (ω-carbon) from the carboxyl group (carbon 1); thus, in this pathway, a dicarboxylic acid is formed; an important pathway in the degradation of prostaglandins.

terminal o., SYN end o.

ox-i-da-tion-re-duc-tion. Any chemical oxidation or reduction reaction, which must, in toto, comprise both oxidation and reduction; the basis for calling all oxidative enzymes (formerly oxidases) oxidoreductases. Often shortened to "redox."

ox-i-da-tive (ok-si-dā'tiv). Having the power to oxidize; denoting a process involving oxidation.

ox-ide (ok'sid). A compound of oxygen with another element or a radical; e.g., mercuric o., HgO.

acid o., an acid anhydride; an o. of an electronegative element or radical; it can combine with water to form an acid.

basic o., a base anhydride; an o. of an electropositive element or radical; it can combine with water to form a base.

indifferent o., SYN neutral o.

neutral o., an o. that is neither an acid nor a base; e.g., water (hydrogen oxide, H₂O). SYN indifferent o.

ox-i-dize (ok'si-dīz). To combine or cause an element or radical to combine with oxygen or to lose electrons.

ox-i-do-re-duc-tase (ok'si-dō-rē-dūk'tās). An enzyme (EC class 1) catalyzing an oxidation-reduction reaction. Trivial names for o.'s include dehydrogenase, reductase, oxidase (where O₂ is the H acceptor), oxygenase (where O₂ is incorporated into the substrate), peroxidase (H₂O₂ is the acceptor; catalase is an exception), and hydroxylase (coupled oxidation of two donors). SEE ALSO oxidase.

ox-ime (ok'sēm). A compound resulting from the action of hydroxylamine, NH₂OH, on a ketone or an aldehyde to yield the group =N-OH attached to the former carbonyl carbon atom.

amide o.'s, SYN amidoximes.

ox-im-e-ter (ok-sim'ē-ter). An instrument for determining photoelectrically the oxygen saturation of a sample of blood.

cuvette o., an o. that reads the percentage of oxygen saturation of the blood as it passes through a cuvette outside the body.

ox-im-e-try (oks-īm-a-tree). Procedure using a device to measure oxygen saturation by fluctuations of light absorption in well-vascularized tissue during systole and diastole. The underlying principle is Beer law, or the relationship between the amount of light absorbed by a solute in solution and the concentration of the unknown solute.

pulse o., o. performed noninvasively, usually on the finger or ear lobe, in which the small increase in absorption of light during the systolic pulse is used to calculate oxygen saturation.

oxi-rane (oks'ē-rān). SYN ethylene oxide.

Δoxo-. Prefix denoting addition of oxygen; used in place of keto- in systematic nomenclature. SEE ALSO hydroxy-, oxa-, oxy-.

oxo-ace-tic ac-id (ok'sō-a-sē'tik). SYN glyoxylic acid.

oxo ac-id (ok'sō). SYN keto acid.

3-ox-o-ac-id-CoA trans-fer-ase. An enzyme catalyzing the reversible conversion of acetoacetyl-CoA and succinate into acetyl-CoA and acetoacetate; malonyl-CoA can substitute for succinyl-CoA and a few other 3-oxo acids for the acetoacetate in extrahepatic tissues. SYN 3-ketoacid-CoA transferase, acetoacetyl-succinic thiophorase.

3-ox-o-ac-yl-ACP re-duc-tase (ok'sō-as'il). A part of the fatty acid synthase complex; an enzyme reversibly reacting 3-oxoacyl-ACP (ACP = acyl carrier protein) with NADPH to form 3-hydroxyacyl-ACP and NADP⁺. SYN β-ketoacyl-ACP reductase.

3-ox-o-ac-yl-ACP syn-thase. An enzyme condensing malonyl-oxoacyl-ACP + Cys-protein + CO₂, and similar reactions, as steps in fatty acid synthesis; Cys-protein is also a part of the fatty acid synthase complex. SYN acyl-malonyl-ACP synthase, β-ketoacyl-ACP synthase.

2-ox-o-glu-tar-ate de-hy-dro-gen-ase (ok'sō-gloo-tar'āi). SYN α-ketoglutarate dehydrogenase.

2-ox-o-glu-tar-ic ac-id (oks'ō-gloo-tar-ik). SYN α-ketoglutaric acid.

2-oxo-5-guanidovaleric ac-id (gwan-ē'dō-va-ler'ik). The deaminated derivative of arginine.

ox-ol-a-mine (ok-sol'ā-mēn). Used for treatment of bronchopulmonary infections.

ox-o-lin-ic ac-id (ok-sō-lin'ik). A quinolone antibacterial agent used in the treatment of urinary tract infections.

ox-o-phen-ar-sine hy-dro-chlo-ride (ok'sō-fen-ar'sēn). An antisyphilitic and antitrypanosomal agent.

5-ox-o-pro-lin-ase. An enzyme that catalyzes the ATP-dependent hydrolysis of L-5-oxoproline (ATP + L-5-oxoproline → ADP + orthophosphate + L-glutamate); a deficiency of this enzyme will result in 5-oxoprolinuria.

5-ox-o-pro-line (Glp) (oks'ō-prō'lēn). A keto derivative of proline that is formed nonenzymatically from glutamate, glutamine, and γ-glutamylated peptides; it is also produced by the action of γ-glutamylcyclotransferase; elevated levels of 5-o. are often associated with problems of glutamine or glutathione metabolism. SYN 5-pyrrolidone-2-carboxylic acid, pyroglutamic acid, pyrrolidone-5-carboxylate.

4-ox-o-pro-line re-duc-tase. SYN 4-hydroxyproline oxidase.

5-ox-o-pro-lin-ur-ia (oks'ō-prō'lēn-ūr-ē-ā). Elevated levels of 5-oxoproline in the urine.

17-ox-o-ste-roids (ok-sō-stēr'oydz). SYN 17-ketosteroids.

ox-o-suc-cin-ic ac-id (ok'sō-sūk-sin'ik). SYN oxaloacetic acid.

ox-o-tre-mo-rine (ok'sō-trem'er-ēn). An active metabolite of tremorine. Used as a pharmacologic tool for producing a Parkinsonian tremor.

ox-pren-o-lol hy-dro-chlo-ride (oks-pren'ō-lol). A β-receptor blocking agent with coronary vasodilator activity.

OXT Abbreviation for oxytocin.

ox-tri-phyll-line (oks-trī'fī-lin, oks-trī-fil'in). A true salt of theophylline; it has mild diuretic, myocardial stimulating vasodilator, and bronchodilator actions, with the same uses as theophylline but is better absorbed and less irritating. SYN choline theophyllinate.

Δoxy-. 1. Combining form denoting shrill; sharp, pointed; quick (incorrectly used for ocy-, from G. *ōkys*, swift). 2. In chemistry, combining form denoting the presence of oxygen, either added or substituted, in a substance. SEE ALSO hydroxy-, oxa-, oxo- [G. *oxys*, keen]

ox-y-a-coia, ox-y-a-koia (ok'sē-ā-koy'ā). Increased sensitivity to sounds, occurring in facial paralysis, especially when the superficial muscle is paralyzed. [G. *oxys*, acute, + *akōē*, hearing]

ox-y-a-phia (ok-sē-ā'fē-ā). SYN hyperaphria. [G. *oxys*, acute, + *haphē*, touch]

ox-y-bar-bi-tu-rates (ok'sē-bar-bir'ūr-āts). Hypnotics of the barbiturate group in which the atom attached at the carbon-2 position is oxygen; virtually all hypnotic barbiturates are o.'s.