

## Acidosis

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:For acidosis referring to acidity of the urine, see renal tubular acidosis. Acidosis is an increased acidity . If not further qualified, it refers to acidity of the blood plasma. Acidosis is said to occur when arterial pH falls below 7.35, while its counterpart occurs at a pH over 7.45. Arterial blood gas analysis and other tests are required to separate the main causes. The term acidemia describes the state of low blood pH, while acidosis is used to describe the processes leading to these states. Nevertheless, physicians sometimes use the terms interchangeably. The distinction may be relevant where a patient has factors causing both acidosis and alkalosis, where the relative severity of both determines whether the result is a high or a low pH. The rate of cellular metabolic activity affects and, at the same time, is affected by the pH of the body fluids. In mammals, the normal pH of arterial blood lies between 7.35 and 7.50 depending on the species . Blood pH values compatible with life in mammals are limited to a pH range between 6.8 and 7.8. Changes in the pH of arterial blood outside this range result in irreversible cell damage .

### Recent Publications on Acidosis:



- [Sodium bicarbonate: basically useless therapy.](#)  
*Common clinical practices often are unsupported by experimental evidence....*3rd October, 2008  
Department of Pediatrics, Vanderbilt University Medical Center, Nashville,- Pediatrics. 2008 Oct;122(4):831-5. ([DOI Direct Link](#))
- [Expert opinion: fomepizole may ameliorate the need for hemodialysis in methanol poisoning.](#)  
*Fomepizole is now the antidote of choice in methanol poisoning. The use of...*3rd October, 2008  
Department of Acute Medicine, Ullevaal University Hospital, Oslo, Norway- Hum Exp Toxicol. 2008 Jul;27(7):539-46. ([DOI Direct Link](#))
- [Delayed recovery of intracellular acidosis during reperfusion prevents calpain activation and determines protection in postconditioned myocardium.](#)  
*AIMS: Indirect data suggest that delayed recovery of intracellular pH...*3rd October, 2008  
Laboratorio de Cardiologia Experimental, Servicio de Cardiologia, Hospital- Cardiovasc Res. 2008 Oct 1. ([DOI Direct Link](#))
- [\[Compliance with low-protein diet in patients with chronic kidney disease.\]](#)  
*Direct evaluation of the compliance with nutritional therapy is possible...*2nd October, 2008  
Unita' Operativa di Nefrologia e Dialisi, Ospedale "A. Landolfi",- G Ital Nefrol. 2008 Sep-Oct;25(5):45-9.
- [Hyperkalemia in familial mitochondrial cytopathy.](#)  
*Aim: To contribute to understanding the pathogenesis of hyperkalemia that...*2nd October, 2008  
1Department of Medicine, The Japan Self Defense Forces Central Hospital,- Clin Nephrol. 2008 Oct;Volume 70(October):348-353.
- [Non-islet-cell tumor hypoglycemia and lactic acidosis in a child with congenital HIV and Burkitt's lymphoma.](#)

*BACKGROUND: Non-islet-cell tumor hypoglycemia (NICTH) is a rare cause of...* 2nd October, 2008  
King's County Hospital Center and Children's Hospital at Downstate, SUNY- J Pediatr Endocrinol  
Metab. 2008 Aug;21(8):805-10.

- [Tumor hypoxia blocks Wnt processing and secretion through the induction of endoplasmic reticulum stress.](#)  
*Poorly formed tumor blood vessels lead to regions of microenvironmental...* 1st October, 2008  
Division of Radiation and Cancer Biology, Department of Radiation- Mol Cell Biol. 2008 Sep 29. ([DOI Direct Link](#))
- [\[Severe metabolic acidosis in an alcoholic.\]](#)  
*Severe metabolic acidosis is associated with poor prognosis. We present a...* 1st October, 2008  
Anaesthesiologisk Afdeling Z, Bispebjerg Hospital, DK-2400 Kobenhavn NV.- Ugeskr Laeger. 2008 Sep 29;170(40):3150-3152.
- [Mechanical Ventilation Was Associated with Acidemia in a Case Series of Salicylate-poisoned Patients.](#)  
*Objectives: Despite little empiric evidence, mechanical ventilation (MV)...* 30th September, 2008  
Department of Emergency Medicine, Johns Hopkins University, Baltimore, MD;- Acad Emerg Med. 2008 Sep;15(9):866-9. ([DOI Direct Link](#))
- [An experimental evaluation of the lactate concentration following mesenteric ischemia.](#)  
*PURPOSE: Although a diagnosis of mesenteric necrosis can easily be made,...* 30th September, 2008  
Department of Traumatology and Critical Care Medicine, Sapporo Medical- Surg Today. 2008;38(10):926-30. Epub 2008 Sep 27. ([DOI Direct Link](#))
- [Biotinidase Deficiency.](#)  
*A three month old baby presented with refractory seizures, dermatosis and...* 30th September, 2008  
Department of Pediatrics, Topiwala National Medical College and B.Y.L.Nair- Indian Pediatr. 2008 Sep 7;45(9):777-779.
- [Recent advances in modeling nutrient utilization in ruminants1.](#)  
*Mathematical modeling techniques have been applied to study various...* 30th September, 2008  
Department of Animal Science, University of Manitoba, Winnipeg, Manitoba- J Anim Sci. 2008 Sep 26. ([DOI Direct Link](#))
- [Sodium thiosulfate prevents vascular calcifications in uremic rats.](#)  
*Accelerated vascular calcification is a severe complication of chronic...* 27th September, 2008  
1Department of Nephrology and Hypertension, Inselspital, University of- Kidney Int. 2008 Sep 24. ([DOI Direct Link](#))
- [Mechanisms Underlying Erythrocyte and Endothelial Nitrite Reduction to Nitric Oxide in Hypoxia. Role for Xanthine Oxidoreductase and Endothelial Nitric Oxide Synthase.](#)  
*Reduction of nitrite (NO<sub>2</sub><sup>-</sup>) provides a major source of nitric oxide (NO)...* 27th September, 2008  
Centre for Clinical Pharmacology, William Harvey Research Institute, Barts- Circ Res. 2008 Sep 25. ([DOI Direct Link](#))
- [Repeated ruminal acidosis challenges in lactating dairy cows at high and low risk for developing acidosis: feed sorting.](#)  
*An experiment was conducted to determine whether the susceptibility of...* 29th July, 2008  
Agriculture and Agri-Food Canada, Lethbridge, Alberta, Canada.- J Dairy Sci. 2008 Oct;91(10):3958-67. ([DOI Direct Link](#))

## BioNews Results for Acidosis

- [Lactic Acidosis, Hypoglycemia Linked With Use of Oral Antidiabetic Agents](#)  
*Abstracts in Hematology and Oncology: Sep 18 2008 9:15PM Matching: acidosis*
- [Lactic Acidosis, Hypoglycemia Linked With Use of Oral Antidiabetic Agents](#)  
*Medscape: Sep 18 2008 7:57PM Matching: acidosis*



## Acidosis Clinical Trials:



- [Phase III Randomized Study of Sodium Dichloroacetate in Children With Congenital Lactic Acidosis](#)  
*Lactic Acidosis*

## Acidosis Patents:



- 7399278- [Method and system for measuring amniotic fluid volume and/or assessing fetal weight](#)
- 7407955- [8-\[3-amino-piperidin-1-yl\]-xanthines, the preparation thereof and their use as pharmaceutical compositions](#)
- 7407976- [Thiazoles and oxazoles useful as modulators of ATP-Binding Cassette transporters](#)
- 7407978- [Heterocyclic analogs of diphenylethylene compounds](#)
- 7410473- [Blood pump having a disposable blood filter with integrated pressure sensors](#)
- 7410474- [Methods and means for extracorporeal organ perfusion](#)
- 7411037- [Polypeptides encoded by a nucleic acid underexpressed in melanoma](#)
- 7411051- [Antibodies to HDPPA04 polypeptide](#)
- 7411072- [Tricyclic steroid hormone nuclear receptor modulators](#)
- 7413748- [Transdermal buprenorphine to treat pain in sickle cell crisis](#)
- 7414067- [Ophthalmic compositions for treating ocular hypertension](#)
- 7407937- [Therapeutic compositions of oncomodulin](#)
- 7407656- [PSCA: prostate stem cell antigen and uses thereof](#)
- 7405279- [Chimeric proteins for diagnosis and treatment of diabetes](#)
- 7399745- [Peptides acting as both GLP-1 receptor agonists and glucagon receptor antagonists and their pharmacological methods of use](#)
- 7399828- [Secreted and transmembrane polypeptides and nucleic acids encoding the same](#)
- 7402153- [Closed-loop method for controlling insulin infusion](#)
- 7402564- [Synthetic peptide amides](#)
- 7402575- [Methods of treating inflammation](#)
- 7402661- [Secreted and transmembrane polypeptides and nucleic acids encoding the same](#)
- 7402696- [Benzene compounds](#)
- 7405226- [Cycloalkyl-hydroxyl compounds and compositions for cholesterol management and related uses](#)
- 7405268- [Secreted and transmembrane polypeptides and nucleic acids encoding the same](#)
- 7405269- [Secreted and transmembrane polypeptides and nucleic acids encoding the same](#)
- 7414068- [Benzopyran derivatives substituted with secondary amines including tetrazole, method for the preparation thereof and pharmaceutical compositions containing them](#)
- 7414071- [Methods of treatment with selective EP4 receptor agonists](#)
- 7422847- [Human E3.alpha. ubiquitin ligase family](#)
- 7422903- [Multi-analyte reference solutions](#)
- 7423017- [Method for treating cartilage disorders](#)

- 7423119- [Secreted and transmembrane polypeptides and nucleic acids encoding the same](#)
- 7423130- [PRO1158 polypeptides](#)
- 7426441- [Methods for determining renal toxins](#)
- 7427487- [Constitutively active CXCR3 G protein-coupled chemokine receptor and modulators thereof for the treatment of inflammatory disorders](#)
- 7428902- [Humidifier system for artificial respiration](#)
- 7429394- [Ion binding compositions](#)
- 7429568- [Glucopyranosyloxypyrazole derivatives and use thereof in medicines](#)
- 7422844- [Solution for the storage and perfusion of organs awaiting transplantation](#)
- 7420100- [Methods and compositions relating to HDAC 4 and 5 regulation of cardiac gene expression](#)
- 7420033- [Composition of lactoferrin related peptides and uses thereof](#)
- 7414072- [Aryl 5-thio-.beta.-d-glucopyranoside derivatives and therapeutic agents for diabetes containing the same](#)
- 7415358- [Molecular toxicology modeling](#)
- 7416742- [Methods and compositions for controlling microorganism populations in the digestive system of animals](#)
- 7416744- [Extracts, compounds and pharmaceutical compositions having anti-diabetic activity and their use](#)
- 7417032- [D-xylopyranosyl-phenyl-substituted cycles, medicaments containing such compounds, their use and process for their manufacture](#)
- 7417042- [Compounds for enzyme inhibition](#)
- 7417118- [Pharmaceutical composition containing artificial oxygen carrier](#)
- 7417125- [Antibodies that bind a PRO1158 polypeptide](#)
- 7418965- [Multilumen unilimb breathing circuit with detachable proximal fitting](#)
- 7419959- [D-pyranosyl-substituted phenyl derivatives, medicaments containing such compounds, their use and process for their manufacture](#)
- 7429646- [Antibodies to human tumor necrosis factor receptor-like 2](#)

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