

H₂, V-ATPase, pH

H₂ = Protonen = pH, V-ATPase http://en.wikipedia.org/wiki/Vacuolar_H%2BATPase
https://en.wikipedia.org/wiki/Hydrogen_potassium_ATPase

„Der Stoffwechsel von V-ATPasen benötigt keine Proteinsynthese. Der Stoffwechsel benötigt ein intaktes **Mikrotubuli-Netzwerk (Zytoskelett)**

Disassembly and reassembly of V-ATPases does not require new protein synthesis but does need an intact **microtubular network**” (Holliday LS et al., 2000).
<http://www.xerlebnishaft.de/zytoskelett.pdf>

PH <http://de.wikipedia.org/wiki/PH-Wert>
Säure-Base-Theorien http://www.gym1.at/chemie/pdf7kl/saer_bas.pdf

H₂ = Protonen = PH Verhältnisse extrazellulär, an Zelloberflächen, sind zu unterscheiden gegenüber den intrazellulären PH-Verhältnissen.

Die intrazellulären PH-Verhältnisse folgen der Blutversorgung und dem intrazellulären Atmungszyklus. Sie entsprechen den intrazellulären ATP (Adenosintriphosphat) Verhältnissen. Optimal: Intrazellulär neutral (pH7), in den Lysosomen sauer.

Die extrazellulären PH-Verhältnisse folgen der Nahrungsaufnahme (Urin PH von 5 bis 9). Der PH-wert des Blutes wird bei Gesunden durch die Lungen und Nieren unabhängig von der Nahrungsaufnahme auf PH 7,37 bis 7,45 strikt einreguliert. Körperoberflächen sind optimal leicht sauer (PH 3 bis PH 5), Magen und Vagina haben optimal PH-Werte von 1 bis 3.

H₂ = proton = PH ratios extracellular, on cell surfaces are to be distinguished from the intracellular pH conditions.

The intracellular pH of the blood supply and conditions follow the intracellular respiratory cycle. They correspond to the intracellular ATP (adenosine triphosphate) conditions. Optimal: Intracellular neutral (PH7) sour in the lysosomes.

The extracellular pH conditions follow food intake (urine pH of 5 to 9). PH value of blood in healthy people are strictly regulated through the lungs and kidneys between pH 7.37 and 7.45. Body surfaces are slightly acidic (pH 3 to pH 5), stomach and vagina pH values are optimal at pH 1 to pH 3.

„Säugetiere produzieren NO, CO₂, H₂S mit Hilfe von Enzymen, es fehlt ihnen aber ein Enzym zur Produktion von H₂.

Alle vier Gase modulierten bestimmte Signalwege. Sie sind therapeutisch aktiv.

Mammals produce NO, CO₂, and H₂S by their native enzymes; however, mammals lack an enzyme to produce H₂.

All four gases modulate signaling pathways and have some therapeutic effects”.

„**Kurkuma**, Topinambur, Hülsenfrüchte, Kohlartern und **Acarbose**, und evtl.auch **Metformin** vermehren die H₂ Produktion durch Darmbakterien beim Menschen.

Turmeric, Topinambur, legumes, brassicas and **Acarbose** and possibly **Metformin** increase hydrogen production by intestinal bacteria in humans” (Ohta, 2011).

Acarbose / Glucobay®: „Zusatztherapie bei Diabetes mellitus in Verbindung mit Diät“.

Probiotics, Lactulose, Vitamin C, Pioglitazon (Actos®), pH 3-5 Hautpflegemittel

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[**A Brønsted acid is a hydron donor and a Brønsted base is a hydron acceptor**]

Wasserstoff - Isotope: Protium (stabil, 99,98% aller irdischen Wasserstoffatome) – **Deuterium** = „schwerer Wasserstoff“ <https://de.wikipedia.org/wiki/Deuterium> <https://en.wikipedia.org/wiki/Deuterium> (stabil, 0,015% aller Wasserstoffatome) – **Tritium** (radioaktiv, sehr selten, Halbwertszeit 12,32 Jahre) <https://de.wikipedia.org/wiki/Wasserstoff>

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