Q10 und L-Carnitinm, Mitochondrienfunktion

Mitochondrien http://www.xerlebnishaft.de/mitochondrien.pdf

Leitbefund: Lactazidose – Sonderform der metabolischen Azidose. http://de.wikipedia.org/wiki/Laktazidose Bestimmung der organischen Säuren im Urin und der Aminosäuren im Serum, evtl. Muskelbiopsie. ATP intrazellulär.

Main findings: lactic acidosis – as a special form of metabolic acidosis. http://en.wikipedia.org/wiki/Lactic_acidosis. Determination of organic acids in urine and determination of serum amino acids, possibly muscle biopsy. Measurement of the intracellular ATP.

Arafa HM, Abd-Allah AR et al. (2003) Immunomodulatory effects of L-carnitine and q10 in mouse spleen exposed to low-frequency high-intensity magnetic field. Toxicology 187(2-3), 171-81 http://www.ncbi.nlm.nih.gov/pubmed/12699906

Feher J, Kovacs B, rt al. (2005) Improvement of visual functions and fundus alterations in early age-related macular degeneration treated with a combination of acetyl-L-carnitine, n-3 fatty acids, and coenzyme Q10. Ophthalmologica 219(3), 154-66 http://www.ncbi.nlm.nih.gov/pubmed/15947501

Virmani A, Gaetani F, Binienda Z (2005) Effects of metabolic modifiers such as carnitines, coenzyme Q10, and PUFAs against different forms of neurotoxic insults: metabolic inhibitors, MPTP, and methamphetamine. Ann N Y Acad Sci 1053, 183-91 http://www.ncbi.nlm.nih.gov/pubmed/16179522

DiMauro S, Hirano M, Schon EA (2006) Approaches to the treatment of mitochondrial diseases. Muscle Nerve 34(3), 265-83 http://www.ncbi.nlm.nih.gov/pubmed/16810684

DiMauro S, Mancuso M (2007) Mitochondrial diseases: therapeutic approaches. Biosci Rep 27(1-3), 125-37 http://www.ncbi.nlm.nih.gov/pubmed/17486439 http://www.orifund.org/doc/mt_disease_therapy.pdf

Miller JL, Lynn CH et al. (2011) Carnitine and coenzyme Q10 levels in individuals with Prader-Willi syndrome. Am J Med Genet A 155A(3), 569-73 http://www.ncbi.nlm.nih.gov/pubmed/21337696

Golbidi S, Ebadi SA, Laher I (2011) Antioxidants in the treatment of diabetes. Curr Diabetes Rev 7(2), 106-25 http://www.ncbi.nlm.nih.gov/pubmed/21294707

DiNicolantonio JJ (2012) CoQ10 and L-carnitine for Statin Myalgia? Expert Rev Cardiovasc Ther. 10(10), 1329-1333. http://www.medscape.com/viewarticle/776243?src=wnl_edit_medp_imed&spon=18

Cordero MD, Alcocer-Gómez E, Culic O et al. (2013) NLRP3 Inflammasome is activated in Fibromyalgia: the effect of Coenzyme Q10. Antioxid Redox Signal. [Epub ahead of print] http://www.ncbi.nlm.nih.gov/pubmed/23886272

Shill DD, Southern WM, Willingham TB et al. (2016) Mitochondria-specific antioxidant supplementation does not influence endurance exercise training-induced adaptations in circulating angiogenic cells, skeletal muscle oxidative capacity or maximal oxygen uptake. The Journal of Physiology 594(23) 7005-7014 https://physoc.onlinelibrary.wiley.com/doi/abs/10.1113/JP272491

« In conclusion, endurance exercise training induced increases in multiple CAC types, and this adaptation is not modified by MitoQ supplementation. Furthermore, we demonstrate that a

mitochondrial-targeted antioxidant does not influence skeletal muscle or whole-body aerobic adaptations to exercise training. »

Rossman MJ, Santos-Parker JR, Steward CAC et al. (2018) Chronic Supplementation With a Mitochondrial Antioxidant (MitoQ) Improves Vascular Function in Healthy Older Adults. https://doi.org/10.1161/HYPERTENSIONAHA.117.10787 Hypertension.HYPERTENSIONAHA.117.10787 http://hyper.ahajournals.org/content/early/2018/04/13/HYPERTENSIONAHA.117.10787
„These findings in humans extend earlier preclinical observations and suggest that MitoQ and other therapeutic strategies targeting mitochondrial reactive oxygen species may hold promise for treating age-related vascular dysfunction.“

Pfuhlmann K, Schriever SC, Baumann P et al. (2018) Celastrol Induced Weight Loss is Driven by Hypophagia and Independent From UCP1. Diabetes. pii: db180146. doi: 10.2337/db18-0146. [Epub ahead of print] https://www.ncbi.nlm.nih.gov/pubmed/30158241
„Celastrol ist eine chemische Verbindung, die aus den Wurzelextrakten von Tripterygium wilfordii und Celastrus relelii isoliert wird. Celastrol ist ein pentacyclisches Triterpenoid und gehört zur Familie der Chinonmethide. Wikipedia (Englisch)“
https://www.google.de/search?q=Celastrol&hl=de&btnG=Google+Search

Medline search

http://www.unboundmedicine.com/medline?in=kw%257CAnaplasma%2520phagocytophilum&in=jn%257C&in=au%257C