



## Forschungoutput 2022 – «One Health» Metabolische Erkrankungen

Arbex PM, Seehusen F, Morais AP, Guerra MO, Peters VM (2022): Beneficial metabolic effects of probiotic supplementation in dams and offspring following hypercaloric diet during pregnancy *Nutrition Clinique et Métabolisme* 36(2), 138-146 <https://doi.org/10.1016/j.nupar.2022.02.003>.

Arrigoni S, Le Foll C, Cabak A, Lundh S, Raun K, John LM, Lutz TA (2022): A selective role for receptor activity-modifying proteins in subchronic action of the amylin selective receptor agonist NN1213 compared with salmon calcitonin on body weight and food intake in male mice. *Eur J Neurosci.* 54(3):4863-4876. doi: 10.1111/ejn.15376.

Boccia L, Borner T, Ghidewon MY, Kulka P, Piffaretti C, Doebley SA, De Jonghe BC, Grill HJ, Lutz TA, Le Foll C (2022): Hypophagia induced by salmon calcitonin, but not by amylin, is partially driven by malaise and is mediated by CGRP neurons. *Mol Metab.* 2022 Apr; 58:101444. doi: 10.1016/j.molmet.2022.101444.

Boyle CN, Zheng Y, Lutz TA (2022): Mediators of Amylin Action in Metabolic Control. *J Clin Med.* 11(8):2207. doi: 10.3390/jcm11082207.

Coester B, Lutz TA, Le Foll C (2022): Mouse Microglial Calcitonin Receptor Knockout Impairs Hypothalamic Amylin Neuronal pSTAT3 Signaling but Lacks Major Metabolic Consequences. *Metabolites.* 2022 Jan 8;12(1):51. doi: 10.3390/metabo12010051.

Freitag JRB, Wilkens MR, Muscher-Banse AS, Gerstner K, Schnepel N, Torgerson PR, Liesegang A (2022): Effects of diets differing in dietary cation-anion difference and calcium concentration on calcium homeostasis in neutered male sheep- *Journal of Dairy Science* 2021:104 (11), pp. 11537-11552. DOI: 10.3168/jds.2021-20334.

Gamakharia S, Le Foll C, Rist W, Baader-Pagler T, Baljuls A, Lutz TA (2022) : The calcitonin receptor is the main mediator of LAAMA's body weight lowering effects in male mice. *Eur J Pharmacol.* 2021 Oct 5; 908:174352. doi: 10.1016/j.ejphar.2021.174352.

Helbing M, Terranova M, Kreuzer M, Clauss M (2022): Evaluation of the prevalence of stomach ulcers in slaughtered pigs in a Swiss abattoir. *Schweizer Archiv für Tierheilkunde* 164: 625-634.

Honegger M, Lutz TA, Boyle CN (2022): Hypoglycemia attenuates acute amylin-induced reduction of food intake in male rats. *Physiol Behav.* 2021 Aug 1; 237:113435. doi:10.1016/j.physbeh.2021.113435.

Jomard A, Liberale L, Doytcheva P, Reiner MF, Müller D, Visentin M, Bueter M, Lüscher TF, Vettor R, Lutz TA, Camici GG, Osto E (2022): Effects of acute administration of trimethylamine N-oxide on endothelial function: a translational study. *Sci Rep.* 2022 May 23;12(1):8664. doi: 10.1038/s41598-022-12720-5.

Leuthardt AS, Bayer J, Monné Rodríguez JM, Boyle CN (2022): Influence of High Energy Diet and Polygenic Predisposition for Obesity on Postpartum Health in Rat Dams. *Front Physiol.* 12:772707. doi: 10.3389/fphys.2021.772707.

Meier DT, Rachid L, Wiedemann SJ, Traub S, Trimigliozzi K, Stawiski M, Sauter L, Winter DV, Le Foll C, Brégère C, Guzman R, Odermatt A, Böni-Schnetzler M, Donath MY (2022): Prohormone convertase 1/3 deficiency causes obesity due to impaired proinsulin processing. *Nat Commun.* 13(1):4761. doi: 10.1038/s41467-022-32509-4.



Perruzza L, Strati F, Raneri M, Li Hi, Gargari G, Rezzonico-Jost T, Palatella M, Kwee I, Morone Di, Seehusen F, Sonogo P, Donati C, Franceschi P, Macpherson AJ, Guglielmetti S, Greiff V, Grassi F (2022): Apyrase-mediated amplification of secretory IgA promotes intestinal homeostasis. *Cell Rep* 40(3), 111112. <https://doi:10.1016/j.celrep.2022.111112>.

Pretz D, Le Foll C, Rizwan MZ, Lutz TA, Tups A (2022) : Hyperleptinemia as a contributing factor for the impairment of glucose intolerance in obesity. *FASEB J.* 2021 Feb;35(2):e21216. doi: 10.1096/fj.202001147R.

Przybyło M, Flaga J, Clauss M, Szczepanik K, Miltko R, Bełżecki G, Kowalski ZM, Górka P (2022): Increased intake of mono- and disaccharides by Reeves's muntjac (*Muntiacus reevesi*). Effect gastrointestinal tract structure and function and single-time blood parameters. *Journal of Animal Physiology and Animal Nutrition* 106: 922-938.

Ruiz-Serrano A, Boyle CN, Monné Rodríguez J M, Günter J, Jucht AE, Pfundstein S, Bapst AM, Lutz TA, Wenger RH, Scholz CC (2022): The deubiquitinase OTUB1 is a key regulator of energy metabolism. *International Journal of Molecular Sciences* 23(3), 1536. <https://doi:10.3390/ijms23031536>.

Sobecki M, Chen J, Krzywinska E, Nagarajan S, Fan Z, Nelius E, Monné Rodríguez JM, Seehusen F, Hussein A, Moschini G, Hajam EY, Kiran R, Gotthardt D, Debbache J, Badoual C, Sato T, Isagawa T, Takeda N, Tanchot C, Tartour E, Weber A, Werner S, Loffing J, Sommer L, Sexl V, Münz C, Feghali-Bostwick C, Pachera E, Distler O, Snedeker J, Jamora C, Stockmann C (2022): Vaccination-based immunotherapy to target profibrotic cells in liver and lung. *Cell Stem Cell* 29(10), 1459-1474.e9 <https://doi:10.1016/j.stem.2022.08.012>.

Skovbjerg G, Roostalu U, Hansen HH, Lutz TA, Le Foll C, Salinas CG, Skytte JL, Jelsing J, Vrang N, Hecksher-Sørensen J (2022): Whole-brain mapping of amylin-induced neuronal activity in receptor activity-modifying protein 1/3 knockout mice. *Eur J Neurosci.* doi: 10.1111/ejn.15254.

Strunz PP, Vuille-Dit-Bille RN, Fox M, Geier A, Maggiorini M, Gassmann M, Fruehauf H, Lutz TA, Goetze O (2022): Effect of high altitude on human postprandial 13 C-octanoate metabolism, intermediary metabolites, gastrointestinal peptides, and visceral perception. *Neurogastroenterology and Motility* 34 (3), e14225.

Strunz PP, Vuille-Dit-Bille RN, R Fox M, Geier A, Maggiorini M, Gassmann M, Fruehauf H, Lutz TA, Goetze O (2022): Effect of high altitude on human postprandial 13 C-octanoate metabolism, intermediary metabolites, gastrointestinal peptides, and visceral perception. *Neurogastroenterol Motil.* 2022 Mar;34(3): e14225. doi: 10.1111/nmo.14225. Epub 2021 Aug 2.

Wiedemann SJ, Trimigliozzi K, Dror E, Meier DT, Molina-Tijeras JA, Rachid L, Le Foll C, Magnan C, Schulze F, Stawiski M, Häuselmann SP, Méreau H, Böni-Schnetzler M, Donath MY (2022): The cephalic phase of insulin release is modulated by IL-1 $\beta$ . *Cell Metab.* 34(7):991-1003.e6. doi: 10.1016/j.cmet.2022.06.001.

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