

BEGUTACHTETE ORIGINALARBEITEN UND ÜBERSICHTSARBEITEN

1. BRANDSCH C, RINGSEIS R, EDER K: High dietary iron concentrations enhance the formation of cholesterol oxidation products in the liver of adult rats fed salmon oil with minimal effects on the antioxidant status. *Journal of Nutrition* 132: 2263-2269 (2002)
2. RINGSEIS R, EDER K: Insufficient dietary vitamin E increases the concentration of 7 β -hydroxycholesterol in tissues of rats fed salmon oil. *Journal of Nutrition* 132: 3732-3735 (2002)
3. RINGSEIS R, EDER K: Effects of dietary fish oil and oxidized cholesterol on the concentration of 7 β -hydroxycholesterol in liver, plasma, low density lipoproteins and erythrocytes of rats at various vitamin E supply. *European Journal of Lipid Science and Technology* 105: 121-129 (2003)
4. RINGSEIS R, EDER K: Dietary oxidized cholesterol decreases expression of hepatic microsomal triglyceride transfer protein in rats. *Journal of Nutritional Biochemistry* 15: 103-111 (2004)
5. RINGSEIS R, EDER K: Effects of dietary oxidized cholesterol on the antioxidant defence system in rats fed coconut oil or salmon oil. *International Journal for Vitamin and Nutrition Research* 74: 86-92 (2004)
6. RINGSEIS R, SAAL D, MÜLLER A, STEINHART H, EDER K: Dietary conjugated linoleic acids lower the triacylglycerol concentration in the milk of lactating rats and impair the growth and increase the mortality of their suckling pups. *Journal of Nutrition* 134: 3327-3334 (2004)
7. RINGSEIS R, EDER K: Effects of dietary fat and oxidized cholesterol on gene expression in rat liver as assessed by cDNA expression array analysis. *European Journal of Nutrition* 44: 231-241 (2005)
8. RINGSEIS R, MATTHES B, LEHMANN V, BECKER K, SCHÖPS R, ULBRICH-HOFMANN R, EDER K: Peptides and hydrolysates from casein and soy protein modulate the release of vasoactive substances from human aortic endothelial cells. *Biochimica et Biophysica Acta - General Subjects* 1721: 89-97 (2005)
9. MÜLLER A, RINGSEIS R, DÜSTERLOH K, GAHLER S, EDER K, STEINHART H: Detection of conjugated dienoic fatty acids in human vascular smooth muscle cells treated with conjugated linoleic acid. *Biochimica et Biophysica Acta - Molecular and Cell Biology of Lipids* 1737: 145-151 (2005)
10. SCHLESER S, RINGSEIS R, EDER K: Conjugated linoleic acids have no effect on TNF α -induced adhesion molecule expression, U937 monocyte adhesion, and chemokine release in human aortic endothelial cells. *Atherosclerosis* 186: 337-344 (2006)
11. MÜLLER A, DÜSTERLOH K, RINGSEIS R, EDER K, STEINHART H: Development of an alternative eluent system for Ag $^{+}$ -HPLC analysis of conjugated linoleic acid isomers (CLA). *Journal of Separation Science* 29: 358-365 (2006)
12. RINGSEIS R, MÜLLER A, HERTER C, GAHLER S, STEINHART H, EDER K: CLA isomers inhibit TNF α -induced eicosanoid release from human vascular smooth muscle cells a

- PPAR γ ligand-like action. *Biochimica et Biophysica Acta - General Subjects* 1760: 290-300 (2006)
13. RINGSEIS R, MÜLLER A, DÜSTERLOH K, SCHLESER S, EDER K, STEINHART H: Formation of conjugated linoleic acid metabolites in human vascular endothelial cells. *Biochimica et Biophysica Acta - Molecular and Cell Biology of Lipids* 1761: 377-383 (2006)
 14. MÜLLER A, MICKEL M, GEYER R, RINGSEIS R, EDER K, STEINHART H: Identification of conjugated linoleic acid elongation and β -oxidation products by coupled silver-ion HPLC APPI-MS. *Journal of Chromatography B - Analytical Technologies in the Biomedical and Life Sciences* 837: 147-152 (2006)
 15. RINGSEIS R, KÖNIG B, LEUNER B, SCHUBERT S, NASS N, STANGL G, EDER K: LDL receptor gene transcription is selectively induced by trans-10, cis-12 CLA but not by cis-9, trans-11 CLA in human hepatoma HepG2 cells. *Biochimica et Biophysica Acta - Molecular and Cell Biology of Lipids* 1761: 1235-1243 (2006)
 16. RINGSEIS R, GAHLER S, HERTER C, EDER K: Conjugated linoleic acids exert similar actions on prostanoid release from aortic and coronary artery smooth muscle cells. *International Journal for Vitamin and Nutrition Research* 76: 281-289 (2006)
 17. RINGSEIS R, MUSCHICK A, EDER K: Dietary oxidized fat reduces ethanol-induced triacylglycerol accumulation in the liver of rats by an up-regulation of PPAR α target genes. *Journal of Nutrition* 137: 77-83 (2007)
 18. RINGSEIS R, GUTGESELL A, DATHE C, BRANDSCH C, EDER K: Feeding oxidized fat during pregnancy upregulates expression of PPAR α -responsive genes in the liver of rat fetuses. *Lipids in Health and Disease* 6: 6 (2007)
 19. RINGSEIS R, PIWEK S, EDER K: Oxidized fat induces oxidative stress but has no effect on NF- κ B-mediated proinflammatory gene transcription in porcine intestinal epithelial cells. *Inflammation Research* 56: 118-125 (2007)
 20. RINGSEIS R, PÖSEL S, HIRCHE F, EDER K: Treatment with pharmacological peroxisome proliferator-activated receptor α agonist clofibrate causes up-regulation of organic cation transporter 2 in liver and small intestine of rats. *Pharmacological Research* 56: 175-183 (2007)
 21. RINGSEIS R, DATHE C, MUSCHICK A, BRANDSCH C, EDER K: Oxidized fat reduces milk triacylglycerol concentrations by inhibiting gene expression of lipoprotein lipase and fatty acid transporters in the mammary gland of rats. *Journal of Nutrition* 137: 2056-2061 (2007)
 22. RINGSEIS R, SCHULZ N, SAAL D, EDER K: Troglitazone but not conjugated linoleic acid reduces gene expression and activities of matrix-metalloproteinases-2 and -9 in PMA-differentiated THP-1 macrophages. *Journal of Nutritional Biochemistry* 19: 594-603 (2008)
 23. RINGSEIS R, LUCI S, SPIELMANN J, KLUGE H, FISCHER M, GEISSLER S, WEN G, HIRCHE F, EDER K: Clofibrate treatment up-regulates novel organic cation transporter (OCTN)-2 in tissues of pigs as a model of non-proliferating species. *European Journal of Pharmacology* 583: 11-17 (2008)

24. RINGSEIS R, GAHLER S, EDER K: Conjugated linoleic acid isomers inhibit platelet-derived growth factor-induced NF- κ B transactivation and collagen formation in human vascular smooth muscle cells. *European Journal of Nutrition* 47: 59-67 (2008)
25. RINGSEIS R, LÜDI S, HIRCHE F, EDER K: Treatment with pharmacological peroxisome proliferator-activated receptor α agonist clofibrate increases intestinal carnitine absorption in rats. *Pharmacological Research* 58: 58-64 (2008)
26. RINGSEIS R, WEN G, SAAL D, EDER K: Cis-9, trans-11- and trans-10, cis-12-conjugated linoleic acid isomers reduce cholesterol accumulation in acetylated LDL-induced mouse RAW264.7 macrophage foam cells. *Lipids* 43: 913-923 (2008)
27. GUTGESELL A, RINGSEIS R, BRANDSCH C, STANGL GI, HIRCHE F, EDER K: PPAR α and enzymes of carnitine biosynthesis in the liver are down-regulated during lactation in rats. *Metabolism Clinical and Experimental* 58: 226-232 (2009)
28. GUTGESELL A, RINGSEIS R, EDER K: Dietary conjugated linoleic acid downregulates fatty acid transporters in the mammary gland of lactating rats. *Journal of Dairy Science* 92: 1169-1173 (2009)
29. RINGSEIS R, GÖTZE V, EDER K: Tripeptides from dietary proteins inhibit TNF α -induced monocyte adhesion to human aortic endothelial cells. *Regulatory Peptides* 154: 91-96 (2009)
30. FISCHER M, KELLER J, HIRCHE F, KLUGE H, RINGSEIS R, EDER K: Activities of γ -butyrobetaine dioxygenase and concentrations of carnitine in tissues of pigs. *Comparative Biochemistry and Physiology. Part A, Molecular & Integrative Physiology* 153: 324-331 (2009)
31. GUTGESELL A, WEN G, KÖNIG B, KOCH A, SPIELMANN J, STANGL GI, EDER K, RINGSEIS R: Mouse carnitine-acylcarnitine translocase (CACT) is transcriptionally regulated by PPAR α and PPAR δ in liver cells. *Biochimica et Biophysica Acta - General Subjects* 1790: 1206-1216 (2009)
32. RINGSEIS R, WEGE N, WEN G, RAUER C, HIRCHE F, KLUGE H, EDER K: Fasting up-regulates enzymes of carnitine synthesis and increases carnitine concentrations in liver and kidney of pigs as a model of non-proliferating species. *Journal of Nutritional Biochemistry* 20: 840-847 (2009)
33. GUTGESELL A, RINGSEIS R, SCHMIDT E, BRANDSCH C, STANGL GI, EDER K: Down-regulation of peroxisome proliferator-activated receptor α in liver and skeletal muscle mediates the metabolic adaptations during lactation in mice. *Journal of Molecular Endocrinology* 43: 241-250 (2009)
34. WEN G, RINGSEIS R, EDER K: Mouse OCTN2 is directly regulated by peroxisome proliferator-activated receptor α via a PPRE located in the first intron. *Biochemical Pharmacology* 79: 768-776 (2010)
35. RINGSEIS R, HANISCH N, SELIGER G, EDER K: Low availability of carnitine precursors likely contributes to the diminished plasma carnitine concentrations in pregnant women. *BMC Pregnancy and Childhood* 10: 17 (2010)
36. KÄMMERER I, RINGSEIS R, EDER K: Feeding a thermally oxidized fat inhibits atherosclerotic plaque formation in the aortic root of LDL receptor-deficient mice. *British Journal of Nutrition* 105: 190-199 (2011)

37. RINGSEIS R, HELLER K, KLUGE H, EDER K: mRNA expression of genes involved in fatty acid utilization in skeletal muscle and white adipose tissues of sows during lactation. *Comparative Biochemistry and Physiology. Part A, Molecular & Integrative Physiology* 158: 450-454 (2011)
38. KELLER J, RINGSEIS R, PRIEBE S, GUTHKE R, KLUGE H, EDER K: Dietary L-carnitine alters gene expression in skeletal muscle of piglets. *Molecular Nutrition and Food Research* 55: 419-429 (2011)
39. VARADY J, EDER K, RINGSEIS R: Dietary oxidized fat activates the oxidative stress-responsive transcription factors NF- κ B and Nrf2 in intestinal mucosa of mice. *European Journal of Nutrition* 50: 601-609 (2011)
40. WEN G, KÜHNE H, RAUER C, RINGSEIS R, EDER K: Mouse γ -butyrobetaine dioxygenase is regulated by peroxisome proliferator-activated receptor α through two PPRE located in the proximal promoter. *Biochemical Pharmacology* 82: 175-183 (2011)
41. RINGSEIS R, MOOREN FC, KELLER J, COUTURIER A, WEN G, HIRCHE F, STANGL GI, EDER K, KRÜGER K: Regular endurance exercise improves the diminished hepatic carnitine status in mice fed a high fat diet. *Molecular Nutrition and Food Research* 55 Suppl 2: S193-202 (2011)
42. SHIBANI M, RINGSEIS R, ALKAZALI M, KERFAKH O, EDER K: Concentrations of conjugated linoleic acids in milk and tissues from single-humped Arabian camel *Camelus dromedarius*. *African Journal of Agricultural Research* 6: 3470-3474 (2011)
43. KELLER J, RINGSEIS R, PRIEBE S, GUTHKE R, KLUGE H, EDER K: Transcript profiling in the liver of piglets fed L-carnitine. *Nutrition & Metabolism* 8: 76 (2011)
44. KÄMMERER I, RINGSEIS R, BIEMANN R, WEN G, EDER K: 13-hydroxy linoleic acid increases expression of the cholesterol transporters ABCA1, ABCG1 and SR-BI and stimulates apoA-I-dependent cholesterol efflux in RAW264.7 macrophages. *Lipids in Health and Disease* 10: 222 (2011)
45. GESSNER DK, RINGSEIS R, MÜLLER C, EDER K: Increased plasma thyroid hormone concentrations in LDL receptor deficient mice may be explained by inhibition of aryl hydrocarbon receptor-dependent expression of hepatic UDP-glucuronosyltransferases. *Biochimica et Biophysica Acta - General subjects* 1820: 495-502 (2012)
46. KELLER J, RINGSEIS R, KOC A, LUKAS I, EDER K: Supplementation with L-carnitine down-regulates genes of the ubiquitin proteasome system in skeletal muscle and liver of piglets. *Animal* 6: 70-78 (2012)
47. WEN G, RINGSEIS R, RAUER C, EDER K: The mouse gene encoding the carnitine biosynthetic enzyme 4-N-trimethylaminobutyraldehyde dehydrogenase is regulated by peroxisome proliferator-activated receptor α . *Biochimica et Biophysica Acta - Gene regulatory mechanisms* 1819: 357-365 (2012)
48. VARADY J, GESSNER DK, MOST E, EDER K, RINGSEIS R: Dietary moderately oxidized oil activates the Nrf2 signaling pathway in the liver of pigs. *Lipids in Health and Disease* 11: 31 (2012)

49. VARADY J, RINGSEIS R, EDER K: Dietary moderately oxidized oil induces expression of fibroblast growth factor 21 in the liver of pigs. *Lipids in Health and Disease* 11: 34 (2012)
50. SCHLEGEL G, KELLER J, HIRCHE F, GEISSLER S, SCHWARZ FJ, RINGSEIS R, STANGL GI, EDER K: Expression of genes involved in carnitine synthesis and uptake in the liver of dairy cows in the transition period and at different stages of lactation. *BMC Veterinary Research* 8: 28 (2012)
51. SHIBANI M, KELLER J, KLUGE H, KÖNIG B, RINGSEIS R, EDER K: Effects of Activation of Peroxisome Proliferator-Activated Receptor- α by Clofibrate on Carnitine Homeostasis in Laying Hens. *African Journal of Agricultural Research* 7: 1450-1455 (2012)
52. SHIBANI M, SCHLEGEL G, MOST E, SCHWARZ FJ, RINGSEIS R, EDER K: Influence of a rumen-protected conjugated linoleic acid mixture on hepatic lipid metabolism in young Simmental heifers. *Journal of Animal Physiology and Animal Nutrition (Berlin)* 96: 527-534 (2012)
53. SCHLEGEL G, RINGSEIS R, SHIBANI M, MOST E, SCHWARZ FJ, EDER K: Influence of a rumen-protected conjugated linoleic acid mixture on carcass traits and meat quality in young Simmental heifers. *Journal of Animal Science* 90: 1532-1540 (2012)
54. SCHLEGEL G, RINGSEIS R, WINDISCH W, SCHWARZ FJ, EDER K: Effects of a rumen-protected mixture of conjugated linoleic acids on hepatic expression of genes involved in lipid metabolism in dairy cows. *Journal of Dairy Science* 95: 3905-3918 (2012)
55. SCHLEGEL G, RINGSEIS R, KELLER J, SCHWARZ FJ, EDER K: Changes in the expression of hepatic genes involved in cholesterol homeostasis in dairy cows in the transition period and at different stages of lactation. *Journal of Dairy Science* 95: 3826-3836 (2012)
56. ROSENBAUM S, RINGSEIS R, HILLEN S, BECKER S, ERHARDT G, REINER G, EDER K: The stress signalling pathway nuclear factor E2-related factor 2 (Nrf2) is activated in the liver of sows during lactation. *Acta Veterinaria Scandinavica* 54: 59 (2012)
57. SHIBANI M, KELLER J, KÖNIG B, KLUGE H, HIRCHE F, STANGL GI, RINGSEIS R, EDER K: Effects of fish oil and conjugated linoleic acids as natural agonists of peroxisome proliferator-activated receptor α on carnitine homeostasis in laying hens. *British Poultry Science* 53: 431-438 (2012)
58. GESSNER DK, RINGSEIS R, SIEBERS M, KELLER J, KLOSTER J, WEN G, EDER K: Inhibition of the pro-inflammatory NF- κ B pathway by a grape seed and grape marc meal extract in intestinal epithelial cells. *Journal of Animal Physiology and Animal Nutrition* 96: 1074-1083 (2012)
59. ROSENBAUM S, RINGSEIS R, HILLEN S, BECKER S, ERHARDT G, REINER G, EDER K: Differences in hepatic gene expression between lactating and non-lactating sows as assessed by genome-wide transcript profiling. *Comparative Biochemistry and Physiology, Part D* 7: 370-381 (2012)
60. RINGSEIS R, KELLER J, LUKAS I, SPIELMANN J, MOST E, COUTURIER A, KÖNIG B, HIRCHE F, STANGL GI, WEN G, EDER K: Treatment with pharmacological PPAR α agonists stimulates the ubiquitin proteasome pathway and myofibrillar protein

- breakdown in skeletal muscle of rodents. *Biochimica et Biophysica Acta - General subjects* 1830: 2105-2117 (2013)
61. GESSNER DK, SCHLEGEL G, KELLER J, RINGSEIS R, SCHWARZ FJ, EDER K: Expression of target genes of nuclear factor E2-related factor 2 in the liver of dairy cows in the transition period and at different stages of lactation. *Journal of Dairy Science* 96: 1038-1043 (2013)
 62. RINGSEIS R, ROSENBAUM S, GESSNER DK, HERGES L, KUBENS JF, MOOREN FC, KRÜGER K, EDER K: Supplementation with Niacin Induces Muscle Fiber Transition from Glycolytic to Oxidative in Skeletal Muscle of Obese Zucker Rats. *Journal of Nutrition* 143: 125-131 (2013)
 63. GESSNER DK, FIESEL A, MOST E, DINGES J, WEN G, RINGSEIS R, EDER K: Supplementation of a grape seed and grape marc meal extract decreases activities of the oxidative stress-responsive transcription factors NF- κ B and Nrf2 in the duodenal mucosa of pigs. *Acta Veterinaria Scandinavica* 55: 18 (2013)
 64. ROSENBAUM S, RINGSEIS R, MOST E, HILLEN S, BECKER S, ERHARDT G, REINER G, EDER K: Genes involved in carnitine synthesis and carnitine uptake are up-regulated in the liver of sows during lactation. *Acta Veterinaria Scandinavica* 55: 24 (2013)
 65. RINGSEIS R, RAUER C, ROTHE S, GESSNER DK, SCHÜTZ LM, LUCI S, WEN G, EDER K: Sterol regulatory element-binding proteins are regulators of the sodium-iodide symporter gene in thyroid epithelial cells. *Molecular Endocrinology* 27: 781-800 (2013)
 66. COUTURIER A, RINGSEIS R, MOOREN FC, KRÜGER K, MOST E, EDER K: Carnitine supplementation to obese Zucker rats prevents obesity-induced type II to type I muscle fiber transition and favors an oxidative phenotype of skeletal muscle. *BMC Nutrition & Metabolism* 10: 48 (2013)
 67. SCHLEGEL G, RINGSEIS R, KELLER J, SCHWARZ FJ, WINDISCH W, EDER K: Expression of Fibroblast Growth Factor 21 in the liver of dairy cows in the transition period and during lactation. *Journal of Animal Physiology and Animal Nutrition* 97: 820-829 (2013)
 68. KHAN M, RINGSEIS R, MOOREN FC, KRÜGER K, MOST E, EDER K: Niacin supplementation increases the number of oxidative type I fibers in skeletal muscle of growing pigs. *BMC Veterinary Research* 9: 177 (2013)
 69. KRÜGER K, GESSNER DK, SEIMETZ M, BANISCH J, RINGSEIS R, EDER K, WEISSMANN N, MOOREN FC: Functional and muscular adaptations in an experimental model for isometric strength training in mice. *PLoS ONE* 8:e79069 (2013)
 70. KHAN M, COUTURIER A, KUBENS JF, MOST E, MOOREN FC, KRÜGER K, RINGSEIS R, EDER K: Niacin supplementation induces type II to type I muscle fiber transition in skeletal muscle of sheep. *Acta Veterinaria Scandinavica* 55: 85 (2013)
 71. ZHOU X, WEN G, RINGSEIS R, EDER K: Short communication: The pharmacological peroxisome proliferator-activated receptor α agonist WY-14,643 increases expression of novel organic cation transporter 2 and carnitine uptake in bovine kidney cells. *Journal of Dairy Science* 97: 345-349 (2014)

72. GESSNER DK, SCHLEGEL G, RINGSEIS R, SCHWARZ FJ, EDER K: Up-regulation of endoplasmic reticulum stress induced genes of the unfolded protein response in the liver of periparturient dairy cows. *BMC Veterinary Research* 10: 46 (2014)
73. RAUER C, RINGSEIS R, ROTHE S, WEN G, EDER K: Sterol regulatory element-binding proteins are regulators of the rat thyroid peroxidase gene in thyroid cells. *PLoS One* 9: e91265 (2014)
74. SCHOLZ K, KYNAST AM, MOOREN FC, KRÜGER K, MOST E, EDER K, RINGSEIS R: Supplementing healthy rats with niacin has no effect on muscle fiber distribution and muscle metabolic phenotype. *European Journal of Nutrition* 53: 1229-1236 (2014)
75. ZHOU X, RINGSEIS R, WEN G, EDER K: The carnitine transporter OCTN2 and carnitine uptake in bovine kidney cells is regulated by peroxisome proliferator-activated receptor beta/delta. *Acta Veterinaria Scandinavica* 56: 21 (2014)
76. COUTURIER A, KELLER J, MOST E, RINGSEIS R, EDER K: Niacin in pharmacological doses alters microRNA expression in skeletal muscle of obese Zucker rats. *PLoS One* 9: e98313 (2014)
77. KELLER J, RINGSEIS R, EDER K: Supplemental carnitine affects the microRNA expression profile in skeletal muscle of obese Zucker rats. *BMC Genomics* 15:512 (2014)
78. COUTURIER A, RINGSEIS R, MOST E, EDER K: Pharmacological doses of niacin stimulate the expression of genes involved in carnitine uptake and biosynthesis and improve the carnitine status of obese Zucker rats. *BMC Pharmacology & Toxicology* 15:37 (2014)
79. LUO H, ZHANG Y, GUO H, ZHANG L, LI X, RINGSEIS R, WEN G, HUI D, LIANG A, EDER K, HE D: Transcriptional regulation of the human, porcine and bovine OCTN2 gene by PPAR α via a conserved PPRE located in intron 1. *BMC Genetics* 15:90 (2014)
80. WINKLER A, WEBER F, RINGSEIS R, EDER K, DUSEL G: Determination of polyphenol and crude nutrient content and nutrient digestibility of dried and ensiled white and red wine grape pomace cultivars. *Archives of Animal Nutrition* 69: 187-200 (2015)
81. ZHOU X, RINGSEIS R, WEN G, EDER K: The Pro-Inflammatory Cytokine Tumor Necrosis Factor α Stimulates Expression of the Carnitine Transporter Novel Organic Cation Transporter 2 and Carnitine Uptake via Nuclear Factor- κ B in MDBK Cells. *Journal of Dairy Science* 98: 3840-3848 (2015)
82. GESSNER DK, GRÖNE B, ROSENBAUM S, MOST E, HILLEN S, BECKER S, ERHARDT G, REINER G, RINGSEIS R, EDER K: Effect of a negative energy balance induced by feed restriction in lactating sows on hepatic lipid metabolism, milk production and development of litters. *Archives of Animal Nutrition* 69: 399-410 (2015)
83. GESSNER DK, GRÖNE B, ROSENBAUM S, MOST E, HILLEN S, BECKER S, ERHARDT G, REINER G, RINGSEIS R, EDER K: Effect of a negative energy balance induced by feed restriction on pro-inflammatory and ER stress signalling pathways in the liver and skeletal muscle of lactating sows. *Archives of Animal Nutrition* 69: 411-423 (2015)
84. GESSNER DK, GRÖNE B, ROSENBAUM S, MOST E, HILLEN S, BECKER S, ERHARDT G, REINER G, RINGSEIS R, EDER K: Dietary fish oil inhibits pro-inflammatory and ER stress

- signalling pathways in the liver of sows during lactation. *PLoS One* 10: e0137684 (2015)
85. MARDARE C, KRÜGER K, LIEBISCH G, SEIMETZ M, COUTURIER A, RINGSEIS R, WILHELM J, WEISSMANN N, EDER K, MOOREN FC: Endurance as well as resistance training affect high fat diet-induced increase of ceramides, inflammasome expression and systemic inflammation in mice. *Journal of Diabetes Research* 2016: 4536470 (2016)
 86. RINGSEIS R, KYNAST AM, COUTURIER A, MOST E, EDER K: Ingestion of frying fat leads to activation of the endoplasmic reticulum stress-induced unfolded protein response in the duodenal mucosa of pigs. *Molecular Nutrition and Food Research* 60: 957-963 (2016)
 87. WEN G, EDER K, RINGSEIS R: Sterol regulatory element-binding proteins are transcriptional regulators of the thyroglobulin gene in thyroid cells. *Biochimica et Biophysica Acta - Gene regulatory mechanisms* 1859: 994-1003 (2016)
 88. KRÜGER K, ALACK K, RINGSEIS R, MINK L, PFEIFER E, SCHINLE M, GINDLER K, KIMMELMANN L, WALSCHEID R, MUDERS K, FRECH T, EDER K, MOOREN FC: Apoptosis of T cell subsets after acute high-intensity interval exercise. *Medicine and Science in Sports and Exercise* 48: 2021-2029 (2016)
 89. RINGSEIS R, WINDISCH W, EDER K: Transcript profiling in the liver of early-lactating dairy cows fed conjugated linoleic acid. *Genomics Data* 10: 101-103 (2016)
 90. WEN G, PACHNER LI, GESSNER DK, EDER K, RINGSEIS R: The sodium/iodide symporter is regulated by sterol regulatory element-binding proteins in human MCF-7 cells. *Journal of Dairy Science* 99: 9211-9226 (2016)
 91. LIU R, FAN W, KRÜGER K, XIAO Y, PILAT C, SEIMETZ M, RINGSEIS R, BAUMGART-VOGT E, EDER K, WEISSMANN N, MOOREN FC: Exercise affects T cell function via modifying intracellular calcium homeostasis. *Medicine and Science in Sports and Exercise* 49: 29-39 (2017)
 92. GESSNER DK, WINKLER A, KOCH C, DUSEL G, LIEBISCH G, RINGSEIS R, EDER K: Analysis of hepatic transcript profile and plasma lipid profile in early lactating dairy cows fed grape seed and grape marc meal extract. *BMC Genomics* 18: 253 (2017)
 93. CHIAPPISI E, RINGSEIS R, EDER K, GESSNER DK: Effect of endoplasmic reticulum stress on metabolic and stress signaling and kidney-specific functions in Madin-Darby bovine kidney cells. *Journal of Dairy Science* 100: 6689-6706 (2017)
 94. WEN G, RINGSEIS R, EDER K: Endoplasmic reticulum stress inhibits expression of genes involved in thyroid hormone synthesis and their key transcriptional regulators in FRTL-5 thyrocytes. *PLoS One* 12: e0187561 (2017)
 95. KRÜGER K, SEIMETZ M, RINGSEIS R, WILHELM J, PICHL A, COUTURIER A, EDER K, WEISSMANN N, MOOREN FC: Exercise training reverses inflammation and muscle wasting after tobacco smoke exposure. *American Journal of Physiology – Regulatory, Integrative & Comparative Physiology* ajpregu.00316.2017. doi: 10.1152/ajpregu.00316.2017. (Epub ahead of print, 2017)

BEGUTACHTETE ÜBERSICHTSARBEITEN

96. RINGSEIS R, EDER K: Effects of dietary oxidized fats on gene expression in mammals - Examining the central role of peroxisome proliferator-activated receptors. *AOCS Inform 19: 657-659 (2009)*
97. RINGSEIS R, EDER K: Einfluss von konjugierten Linolsäuren (CLA) auf die Funktion von Blutgefäßzellen. *Ernährungsumschau 3: 150-158 (2009)*
98. RINGSEIS R, EDER K: Influence of pharmacological PPAR α activators on carnitine homeostasis in proliferating and non-proliferating species. *Pharmacological Research 60: 179-184 (2009)*
99. RINGSEIS R, EDER K: Influence of conjugated linoleic acids (CLA) on functional properties of vascular cells. *British Journal of Nutrition 102: 1099-1116 (2009)*
100. EDER K, RINGSEIS R: Metabolism and actions of conjugated linoleic acids on atherosclerosis-related events in vascular endothelial cells and smooth muscle cells. *Molecular Nutrition and Food Research 54: 17-36 (2010)*
101. EDER K, RINGSEIS R: The Role of PPAR α in Transcriptional Regulation of Novel Organic Cation Transporters. *European Journal of Pharmacology 628: 1-5 (2010)*
102. RINGSEIS R, EDER K: Fatty acids and signalling in endothelial cells. *Prostaglandins, Leukotrienes and Essential Fatty Acids 82: 189-198 (2010)*
103. RINGSEIS R, EDER K: Regulation of genes involved in lipid metabolism by dietary oxidized fat. *Molecular Nutrition and Food Research 55: 109-121 (2011)*
104. RINGSEIS R, KELLER J, EDER K: Role of carnitine in the regulation of glucose homeostasis: Evidence from studies with carnitine supplementation and carnitine insufficiency. *European Journal of Nutrition 51: 1-18 (2012)*
105. RINGSEIS R, WEN G, EDER K: Regulation of genes involved in carnitine homeostasis by PPAR α across different species (rat, mouse, pig, cattle and chicken). *PPAR Research 2012: 868317 (2012)*
106. RINGSEIS R, KELLER J, EDER K: Mechanisms underlying the anti-wasting effect of L-carnitine supplementation under pathologic conditions - Evidence from experimental and clinical studies. *European Journal of Nutrition 52: 1421-1442 (2013)*
107. RINGSEIS R, EDER K, MOOREN FC, KRÜGER K: Metabolic Signals and Innate Immune Activation in Obesity and Exercise. *Exercise Immunology Reviews 21: 58-68 (2015)*
108. RINGSEIS R, GESSNER DK, EDER K: Molecular insights into the mechanisms of liver-associated diseases in transition dairy cows: Hypothetical role of endoplasmic reticulum stress. *Journal of Animal Physiology and Animal Nutrition 99: 626-645 (2015)*
109. RINGSEIS R, EDER K, KOSANOVIC D, SCHERMULY RT, WEISSMANN N, SEIMETZ M: Is dietary L-carnitine a strategy to combat COPD-induced muscle wasting? *PVRI Chronicle 2: 35-43 (2015)*
110. KRÜGER K, MOOREN FC, EDER K, RINGSEIS R: Immune pathways in exercise, obesity and diabetes. *American Journal of Lifestyle Medicine 10: 268-279 (2016)*

111. GESSNER DK, RINGSEIS R, EDER K: Potential of dietary polyphenols to combat oxidative stress and inflammatory processes in farm animals. *Journal of Animal Physiology and Animal Nutrition* 101: 605-628 (2017)

BEGUTACHTETE KURZBEITRÄGE (ZUSAMMENFASSUNGEN, POSTER, MANUSKRIPTE IN PROCEEDINGS)

112. RINGSEIS R, EDER K: Wirkung von Fischöl auf die Konzentrationen an 7 β -Hydroxycholesterol in Geweben von Ratten bei unterschiedlicher Vitamin E-Versorgung. *Proceedings of the German Nutrition Society* 5: 27 (2003)
113. RINGSEIS R, EDER K: Interactions between dietary fat and oxysterols on gene expression in rat liver as assessed by DNA array technology. *Proceedings of the annual spring meeting of the German Society for Biochemistry and Molecular Biology (GBM)* (2004)
114. EDER K, RINGSEIS R, SAAL D, MÜLLER A, STEINHART H: Effects of dietary conjugated linoleic acids in female rats during pregnancy and lactation on their reproductive performance and the development of the newborn pups. *Proceedings of the Society of Nutrition Physiology* 14: 116 (2005)
115. MATTHES B, GÖTZE V, RINGSEIS R, BECKER K, SCHÖPS R, ULBRICH-HOFMANN R, EDER K: Wirkungen von Peptiden und Hydrolysaten aus Nahrungsproteinen auf Parameter der Endothelfunktion. *Proceedings of the German Nutrition Society* 7: 25-26 (2005)
116. RINGSEIS R, SAAL D, MÜLLER A, STEINHART H, EDER K: Wirkung Konjugierter Linolsäuren auf Milchfettsynthese laktierender Ratten sowie auf Wachstum und Überlebensfähigkeit der Nachkommen. *Proceedings of the German Nutrition Society* 7: 45-46 (2005)
117. MÜLLER A, RINGSEIS R, GAHLER S, EDER K, LEIFHEIT M, LIEBISCH G, NAU H, LAMPEN A, STEINHART H: Metabolisierungsprodukte konjugierter Linolsäureisomere in Aorta-Endothelzellen, glatten Muskelzellen und Caco-2-Zellen. *Tagungsband der Jahrestagung der Gesellschaft Deutscher Chemiker* (2005)
118. RINGSEIS R, GAHLER S, MÜLLER A, STEINHART H, EDER K: Wirkung von CLA-Isomeren auf funktionelle Parameter humaner glatter Gefäßmuskelzellen. *Proceedings of the German Nutrition Society* 8: 8 (2006)
119. SCHLESER S, RINGSEIS R, MÜLLER A, STEINHART H, EDER K: Wirkung von CLA-Isomeren auf die Zytokin-induzierte Chemokin-Freisetzung, Oberflächenexpression von Adhäsionsmolekülen und Monozytenadhäsion in humanen Endothelzellen der Aorta. *Proceedings of the German Nutrition Society* 8: 67 (2006)
120. SAAL D, RINGSEIS R, EDER K: Die Konjugierten Linolsäuren (CLA) c9t11-CLA und t10c12-CLA reduzieren die Cholesterinakkumulierung in RAW264.7 Makrophagen-Schaumzellen. *Proceedings of the German Nutrition Society* 10: 5 (2007)
121. MUSCHICK A, RINGSEIS R, EDER K: Oxidiertes Fett hemmt die Ethanol-induzierte Triglyzeridakkumulierung durch erhöhte Expression von Zielgenen des Peroxisomen

- Proliferator-aktivierten Rezeptors α in der Leber von Ratten. *Proceedings of the German Nutrition Society 10: 40 (2007)*
122. LÜDI S, RINGSEIS R, KOCH A, KÖNIG B, STANGL GI, EDER K: Aktivierung des Peroxisomen Proliferator-aktivierten Rezeptors α stimuliert die Expression des Carnitintransporters OCTN2 im Dünndarm und steigert die Absorption von Carnitin bei Ratten. *Proceedings of the German Nutrition Society 12: 10 (2008)*
 123. RINGSEIS R, GAHLER S, EDER K: Konjugierte Linolsäureisomere hemmen die Kollagensynthese humaner Gefäßmuskelzellen. *Proceedings of the German Nutrition Society 12: 15 (2008)*
 124. RINGSEIS R, MÜLLER A, STEINHART H, EDER K: Conjugated linoleic acid isomers mediate antiatherogenic actions in vascular smooth muscle cells by PPAR γ -mediated inhibition of NF- κ B signalling. *Abstractband zum Leopoldina Symposium on Lipid Signalling in Frankfurt A160, S. 32 (2008)*
 125. GUTGESELL A, RINGSEIS R, EDER K: Konjugierte Linolsäuren bewirken eine Downregulierung von Fettsäuretransportern in der Milchdrüse laktierender Ratten. *Proceedings of the German Nutrition Society 13: 65 (2009)*
 126. RAUER C, RINGSEIS R, WEGE N, HIRCHE F, KLUGE H, WEN G, EDER K: Fasten stimuliert die Carnitinsynthese und die zelluläre Carnitinaufnahme beim Schwein als nicht-proliferierende Spezies. *Proceedings of the German Nutrition Society 13: 29 (2009)*
 127. RINGSEIS R, GUTGESELL A, EDER K: A dietary conjugated linoleic acid mixture downregulates fatty acid transporters in the mammary gland of lactating rats. *Proceedings of the Society of Nutrition Physiology 18, 58 (2009)*
 128. EDER K, GUTGESELL A, SCHMIDT E, BRANDSCH C, STANGL GI, HIRCHE F, RINGSEIS R: Investigations on the role of peroxisome proliferator-activated receptor α (PPAR α) in the metabolic adaptations during lactation. *Proceedings of the Society of Nutrition Physiology 18, 57 (2009)*
 129. RINGSEIS R, WEN G, GUTGESELL A, KÖNIG B, KOCH A, SPIELMANN J, STANGL GI, EDER K: Die Carnitin/Acylcarnitin-Translokase wird transkriptionell durch den Peroxisomenproliferator-aktivierter Rezeptor α reguliert. *Proceedings of the German Nutrition Society 14: 20 (2010)*
 130. WEN G, RINGSEIS R, EDER K: Der Carnitintransporter OCTN2 wird direkt durch den Transkriptionsfaktor PPAR α reguliert. *Proceedings of the German Nutrition Society 15: 9 (2010)*
 131. RINGSEIS R, SHIBANI M, KELLER J, HIRCHE F, KLUGE H, KÖNIG B, STANGL GI, EDER K: Effect of synthetic and native PPAR α agonists on expression of genes involved in carnitine homeostasis and tissue and egg carnitine concentrations in laying hens. *Proceedings of the Society of Nutrition Physiology 19: 87 (2010)*
 132. KELLER J, VARADY J, HIRCHE F, KLUGE H, RINGSEIS R, EDER K: Dietary carnitine supplementation down-regulates components of the ubiquitine-proteasome system in liver and muscle of growing pigs. *Proceedings of the Society of Nutrition Physiology 19: 43 (2010)*

133. EDER K, RINGSEIS R: Hunger und seine Folgen. In: Individuelle und globale Ernährungssituation – gibt es (noch) eine Lösung? In: G. Brem (ed). *Nova Acta Leopoldina NF 108, Nr. 374, 23-36 (2010)*
134. RINGSEIS R, KELLER J, PRIEBE S, GUTHKE R, KLUGE H, EDER K: Investigating the molecular effects of carnitine supplementation in the liver of piglets by DNA microarray analysis. *Proceedings of the Society of Nutrition Physiology 20: 101 (2011)*
135. SCHLEGEL G, RINGSEIS R, SHIBANI M, MOST E, SCHWARZ FJ, EDER K: Influence of a rumen-protected conjugated linoleic acid mixture on carcass traits and meat quality in young Simmental heifers. *Proceedings of the Society of Nutrition Physiology 20: 86 (2011)*
136. EDER K, LUKAS I, WEN G, SPIELMANN J, KÖNIG B, STANGL GI, RINGSEIS R: Untersuchungen zur Bedeutung des PPAR α in der Regulation des Ubiquitin-Proteasom-Systems im Skelettmuskel bei der Maus. *Proceedings of the Society of Nutrition Physiology 20: 134 (2011)*
137. RINGSEIS R, SIEBERS M, KELLER J, STEINBECK A, ECKEL B, EDER K: Inhibition of inflammatory processes in Caco-2 intestinal epithelial cells by an ethanolic extract of a polyphenol-rich grape seed meal. *Journal of Animal Science Vol. 89, E-Suppl. 1/ Journal of Dairy Science Vol. 94, E-Suppl. 1: 271 (2011)*
138. RINGSEIS R, GUTGESELL A, HELLER K, BRANDSCH C, KLUGE H, STANGL GI, EDER K: Different regulation of metabolic adaptations during lactation in rodents and pigs. *Oskar Kellner Symposium 2011, Metabolic Flexibility in Animal and Human Nutrition, Schriftenreihe 19 des Leibnitz-Instituts für Nutztierbiologie, p. 48. (2011)*
139. RINGSEIS R, KÄMMERER I, MUSCHICK A, EDER K: Inhibitory effects of dietary oxidized fat on atherosclerotic plaque formation and alcoholic fatty liver development in rodents is related to PPAR α activation. *Oskar Kellner Symposium 2011, Metabolic Flexibility in Animal and Human Nutrition, Schriftenreihe 19 des Leibnitz-Instituts für Nutztierbiologie, p. 68. (2011)*
140. KRÜGER K, RINGSEIS R, KELLER J, COUTURIER A, GAIPING W, HIRCHE F, STANGL G, EDER K, MOOREN FC: Regelmäßiges Ausdauertraining kompensiert den beeinträchtigten Carnitin-Status der Leber nach einer durch eine Hochfett-Diät induzierten Adipositas. *Deutsche Zeitschrift für Sportmedizin 62(7-8): 193 (2011)*
141. RINGSEIS R, RAUER C, KÜHNE H, WEN G, EDER K: Gene der Carnitinbiosynthese werden durch den Fettsäure-sensitiven Transkriptionsfaktor PPAR α reguliert. *Proceedings of the German Nutrition Society 17: 37 (2012)*
142. RAUER C, RINGSEIS R, ROTHE S, GESSNER DK, WEN G, EDER K: Der hormonelle Regulator der Schilddrüsenhormonfunktion Thyrotropin reguliert die Transkription des Natrium-/Iodidsymporters der Schilddrüse über sterolsensitive SREBP. *Proceedings of the German Nutrition Society 17: 36 (2012)*
143. SCHLEGEL G, KELLER J, HIRCHE F, GEISSLER S, SCHWARZ FJ, RINGSEIS R, STANGL GI, EDER K: Expression of genes involved in carnitine metabolism in the liver of dairy cows in the transition period and in lactation. *Proceedings of the Society of Nutrition Physiology 21: 85 (2012)*
144. SCHLEGEL G, KUPCZYK K, MOST E, SCHWARZ FJ, RINGSEIS R, EDER K: Concentrations of alpha-tocopherol and beta-carotene in the milk of cows supplemented with

- conjugated linoleic acids. *Proceedings of the Society of Nutrition Physiology 21: 78 (2012)*
145. RINGSEIS R, SCHLEGEL G, WINDISCH W, SCHWARZ FJ, EDER K: Response of hepatic genes involved in lipid metabolism to supplementation with rumen-protected conjugated linoleic acids in dairy cows. *Proceedings of the Society of Nutrition Physiology 21: 76 (2012)*
146. GESSNER DK, RINGSEIS R, SIEBERS M, KELLER J, KLOSTER J, WEN G, EDER K: Inhibition of the pro-inflammatory NF- κ B pathway by a grape seed and grape marc meal extract in intestinal epithelial cells. *Proceedings of the Society of Nutrition Physiology 21: 170 (2012)*
147. RINGSEIS R, ROSENBAUM S, HERGES L, MOOREN FC, KRÜGER K, EDER K: Effect of niacin supplementation on muscle fiber composition and fatty acid oxidation capacity of skeletal muscle of obese rats. *Proceedings of the Society of Nutrition Physiology 21: 118 (2012)*
148. GESSNER DK, SCHLEGEL G, KELLER J, SCHWARZ FJ, RINGSEIS R, EDER K: Expression of target genes of nuclear factor E2-related factor 2 (Nrf2) in the liver of dairy cows in the periparturient phase. *Proceedings of the Society of Nutrition Physiology 22: 90 (2013)*
149. GESSNER DK, FIESEL A, DINGES J, RINGSEIS R, WEN G, EDER K: Inhibition of nuclear factor kappa B (NF- κ B) and nuclear factor E2-related factor 2 (Nrf2) in duodenal mucosa of piglets by a grape marc meal extract. *Proceedings of the Society of Nutrition Physiology 22: 153 (2013)*
150. EDER K, RINGSEIS R, SCHLEGEL G, SCHWARZ FJ, GESSNER DK: Induction of stress of the endoplasmic reticulum in the liver of cows after onset of lactation. *Proceedings of the Society of Nutrition Physiology 23: 39 (2014)*
151. GESSNER DK, GRÖNE B, ROSENBAUM S, MOST E, HILLEN S, BECKER S, ERHARDT G, REINER G, RINGSEIS R, EDER K: Dietary fish oil inhibits signalling pathways involved in Inflammation and endoplasmic reticulum stress in the liver of sows during lactation. *Proceedings of the Society of Nutrition Physiology 24: 130 (2015)*
152. RINGSEIS R, KOCH C, WINKLER A, DUSEL G, LIEBISCH G, GESSNER DK, EDER K: Influence of grape seed and grape marc meal extract on the hepatic transcript profile and the plasma lipid profile of early lactating dairy cows. *Proceedings of the Society of Nutrition Physiology 26: 71 (2017)*
153. GESSNER DK, SCHWARZ A, MOST E, RINGSEIS R, BEREZINA N, HUBER A, EDER K: Effect of dietary insect Protein from *Tenebrio Molitor L.* on lipid metabolism in an obese rat model. *Proceedings of the Society of Nutrition Physiology 26: 107 (2017)*

BUCHKAPITEL

154. RINGSEIS R, EDER K: Frying oils – Nutritional aspects: Effects of Frying Oils Mediated by the Activation of Peroxisome Proliferator-Activated Receptors (PPAR). In: William

W. Christie (ed), *The Lipid Library* (URL: <http://www.lipidlibrary.co.uk/frying/n-ppar/index.htm>) (2010)

155. EDER K, RINGSEIS R: Health aspects of oxidized dietary fats. In: E Decker, R Elias, D J McClements (eds), Woodhead Publishing, Oxidation in foods and beverages and antioxidant applications. Vol. 1: *Understanding mechanisms of oxidation and antioxidant activity*. Issue: 199 (ISBN: 9781845696481), pp. 143-180 (2011)
156. RINGSEIS R, EDER K: Peroxisome proliferator-activated receptors. In: FC Mooren (ed), Springer, *Encyclopedia of Exercise Medicine in Health and Disease*. Chapter: *Molecular Mechanisms of Exercise Physiology* (2012)
157. RINGSEIS R, GESSNER DK, EDER K: Dietary oxidized lipids as regulators of intracellular signalling pathways: PPAR and NF- κ B. In: CM Spickett, HJ Forman (eds), CRC Press, Taylor & Francis Group, *Lipid Oxidation in Health and Disease* (ISBN: 978-1-4822-0286-1). pp. 231-254 (2015)