

## Publikationsliste von Prof. Dr. med. Bernd Schultes (Stand: März 2019)

### Originalarbeiten

1. **Fruehwald-Schultes B**, Peters A, Kern W, Beyer J, Pfutzner A (1998) Influence of sex differences in subcutaneous fat mass on serum leptin concentrations. *Diabetes Care* 21:1204-1205
2. **Fruehwald-Schultes B**, Kern W, Deininger E, Wellhoener P, Kerner W, Born J, Fehm HL, Peters A (1999) Protective effect of insulin against hypoglycemia-associated counterregulatory failure. *J Clin Endocrinol Metab* 84:1551-1557
3. **Fruehwald-Schultes B**, Peters A, Kern W, Beyer J, Pfutzner A (1999) Serum leptin is associated with serum uric acid concentrations in humans. *Metabolism* 48:677-680
4. **Fruehwald-Schultes B**, Kern W, Bong W, Wellhoener P, Kerner W, Born J, Fehm HL, Peters A (1999) Supraphysiological hyperinsulinemia acutely increases hypothalamic-pituitary-adrenal secretory activity in humans. *J Clin Endocrinol Metab* 84:3041-3046
5. **Fruehwald-Schultes B**, Kern W, Beyer J, Forst T, Pfutzner A, Peters A (1999) Elevated serum leptin concentrations in type 2 diabetic patients with microalbuminuria and macroalbuminuria. *Metabolism* 48:1290-1293
6. **Fruehwald-Schultes B**, Kern W, Born J, Peters A, Fehm HL (2000) Adaptation of cognitive function to hypoglycemia in healthy men. *Diabetes Care* 23:1059-1066
7. **Fruehwald-Schultes B**, Kern W, Dantz D, Born J, Fehm HL, Peters A (2000) Preserved hypothermic response to hypoglycemia after antecedent hypoglycemia. *Metabolism* 49:794-798
8. **Fruehwald-Schultes B**, Kern W, Born J, Fehm HL, Peters A (2000) Comparison of the inhibitory effect of insulin and hypoglycemia on insulin secretion in humans. *Metabolism* 49:950-953
9. Peters A, Ehlers M, Blank B, Exler D, Falk C, Kohlmann T, **Fruehwald-Schultes B**, Wellhoener P, Kerner W, Fehm HL (2000) Excess Triiodothyronine as a risk factor of coronary events. *Arch Intern Med* 160:1993-1999
10. Wellhoener P, **Fruehwald-Schultes B**, Kern W, Dantz D, Kerner W, Born J, Fehm HL, Peters A (2000) Glucose metabolism rather than insulin is a main determinant of leptin secretion in humans. *J Clin Endocrinol Metab* 85: 1267-1271
11. Deininger E, Oltmanns KM, Wellhoener P, **Fruehwald-Schultes B**, Kern W, Heuer B, Dominiak P, Born J, Fehm HL, Peters A (2001) Losartan attenuates symptomatic and hormonal responses to hypoglycemia in humans. *Clin Pharmacol Ther* 70:362-369
12. **Fruehwald-Schultes B**, Kern W, Born J, Fehm HL, Peters A (2001) Hyperinsulinemia causes activation of the hypothalamus-pituitary-adrenal axis in humans. *Int J Obes Relat Metab Disord* 25 Suppl 1:S38-40
13. **Fruehwald-Schultes B**, Kern W, Oltmanns KM, Sopke S, Toscheck B, Born J, Fehm HL, Peters A (2001) Metformin does not adversely affect hormonal and symptomatic responses to recurrent hypoglycemia. *J Clin Endocrinol Metab* 86:4187-4192,

14. Kern W, Peters A, **Fruehwald-Schultes B**, Deininger E, Born J, Fehm HL (2001) Improving influence of insulin on cognitive functions in humans. *Neuroendocrinology* 74:270-80
15. Oltmanns KM, **Fruehwald-Schultes B**, Kern W, Born J, Fehm HL, Peters A (2001) Hypoglycemia, but not insulin, acutely decreases lh and t secretion in men. *J Clin Endocrinol Metab* 86:4913-9
16. Dantz D, Bewersdorf J, **Fruehwald-Schultes B**, Kern W, Jelkmann W, Born J, Fehm HL, Peters A (2002) Vascular endothelial growth factor: a novel endocrine defensive response to hypoglycemia. *J Clin Endocrinol Metab* 87:835-40
17. **Fruehwald-Schultes B**, Oltmanns KM, Kern W, Born J, Fehm HL, Peters A (2002) The effect of experimentally induced insulin resistance on the leptin response to hyperinsulinaemia. *Int J Obes Relat Metab Disord* 26:510-516
18. **Fruehwald-Schultes B**, Oltmanns KM, Toschek B, Sopke S, Kern W, Born J, Fehm HL, Peters A (2002) Short-term treatment with metformin decreases serum leptin concentration without affecting body weight and body fat content in normal-weight healthy men. *Metabolism* 51:531-6
19. Perras B, **Schultes B**, Schwaiger R, Metz C, Wessler W, Born J, Fehm HL (2002) Growth hormone-releasing hormone facilitates hypoglycemia-induced release of cortisol. *Regul Pept* 110:85-91
20. **Schultes B**, Oltmanns KM, Kern W, Born J, Fehm HL, Peters A (2002) Acute and prolonged effects of insulin-induced hypoglycemia on the pituitary-thyroid axis in humans. *Metabolism* 51:1370-4
21. Gais S, Born J, Peters A, **Schultes B**, Heindl B., Fehm HL, Kern W (2003) Hypoglycemic counterregulation during sleep. *Sleep* 26:55-59
22. Oltmanns KM, Deininger E, Wellhoener P, **Schultes B**, Kern W, Marx E, Dominiak P, Born J, Fehm HL, Peters A (2003) Influence of captopril on symptomatic and hormonal responses to hypoglycemia in humans. *Br J Clin Pharmacol*, 55: 347-353
23. **Schultes B**, Oltmanns KM, Kern W, Fehm HL, Born J, Peters A (2003) Modulation of hunger by plasma glucose and metformin. *J Clin Endocrinol Metab* 88:1131-1141
24. Merl V, Kern W, Peters A, Oltmanns K, Gais S, Born J, Fehm HL, **Schultes B** (2004) Differences between night-time and daytime hypoglycaemia counterregulation in healthy humans. *Metabolism*, 53:894-8
25. Oltmanns K, Gehring H., Rudolf S, **Schultes B**, Rook St., Schweiger U, Born J, Fehm H.L., Peters A. (2004) Hypoxia causes glucose intolerance in humans *Am J Respir Crit Care Med*. 169:1231-7
26. Benedict C, Hallschmid M, Hatke A, **Schultes B**, Fehm HL, Born J, Kern W (2004) Intranasal insulin improves memory in humans. *Psychoneuroendocrinology*, 29:1326-34.
27. Hallschmid M, **Schultes B**, Marshall L, Mölle M, Kern W, Bredthauer J, Fehm HL, Born J (2004) Transcortical direct current potential shift reflects immediate signalling of systemic insulin to the human brain. *Diabetes*, 53:2202-8.

28. Perras B, **Schultes B**, Behn B, Dodt C, Born J, Fehm HL (2004) Intranasal atrial natriuretic peptide (ANP) acts as central nervous inhibitor of the hypothalamo-pituitary-adrenal (HPA) stress system in humans. *J Clin Endocrinol Metab* 89: 4642-4648
29. Merl V, Peters A, Oltmanns KM, Kern W, Hubold C, Hallschmid M, Born J, Fehm HL, **Schultes B** (2004) Preserved circadian rhythm of serum insulin concentration at low plasma glucose during fasting in lean and overweight humans. *Metabolism* 53:1449-1453
30. Hallschmid M, Benedict B, **Schultes B**, Fehm HL, Born J, Kern W (2004) Intranasal insulin reduces body fat in men but not in women. *Diabetes* 53:3024-3029
31. **Schultes B**, Kern W, Oltmanns KM, Peters A, Gais S, Fehm HL, Born J (2005) Differential adaptation of human neurocognitive brain functions to recurrent hypoglycemia in healthy men. *Psychoneuroendocrinology* 30:149-161
32. Kern W, Peters A, Born J, Fehm HL, **Schultes B** (2005) Changes in blood pressure and plasma catecholamine levels during prolonged hyperinsulinaemia. *Metabolism* 54:391-396
33. Oltmanns KM, Peters A, Kern W, Fehm HL, Born J, **Schultes B** (2005) Preserved inhibitory effect of recurrent hypoglycemia on male gonadotropic axis. *Clin Endocrinol* 62:217-222
34. Benedict C, Hallschmid M, Scheibner J, Niemeyer D, **Schultes B**, Merl V, Fehm HL, Born J, Kern W (2005) Gut protein uptake and mechanisms of meal induced cortisol release. *J Clin Endocrinol Metab* 90:1692-1696
35. **Schultes B**, Peters A, Kern W, Gais S, Oltmanns KM, Fehm HL, Born J (2005) Processing of food stimuli is selectively enhanced during insulin-induced hypoglycemia in healthy men. *Psychoneuroendocrinology* 30:496-504
36. Merl V, Peters A, Oltmanns KM, Kern W, Born J, Fehm HL, **Schultes B** (2005) Serum adiponectin concentrations during a 72-hour fast in over-weight and normal-weight humans. *Int J Obes Relat Metab Disord* 29:998-1001.
37. Merl V, Peters A, Oltmanns KM, Kern W, Hubold C, Fehm HL, Born J, **Schultes B** (2005) Antecedent hypoglycaemia attenuates vascular endothelial growth factor response to subsequent hypoglycaemia in healthy men. *Diabetic medicine* 22:1278-81.
38. **Schultes B**, Peters A, Hallschmid M, Benedict C, Merl V, Oltmanns KM, Born J, Fehm HL, Kern W (2005) Modulation of food intake by glucose in patients with type 2 diabetes. *Diabetes Care* 28:2884-2889
39. Bremer JP, Baron M, Peters A, Oltmanns KM, Kern W, Fehm HL, Born J, **Schultes B** (2006) Evaluation of sexual dimorphism in hormonal, subjective, and neurocognitive responses to brief hypoglycemia in patients with type 2 diabetes. *Metabolism* 55:331-8.
40. Oltmanns KM, Dodt B, **Schultes B**, Raspe HH, Schweiger U, Born J, Fehm HL, Peters A (2006) Cortisol correlates with metabolic disturbances in a population study of type 2 diabetic patients. *Eur J Endocrinol* 154:325-31.

41. Oltmanns KM, Gehringm H, Rudolf S, **Schultes B**, Hackenberg C, Schweiger U, Born J, Fehm HL, Peters A (2006) Acute hypoxia decreases plasma VEGF concentration in healthy humans, *Am J Physiol* 290:E434-9.
42. Oltmanns KM, Gehringm H, Rudolf S, **Schultes B**, Schweiger U, Born J, Fehm HL, Peters A (2006) Persistent suppression of resting energy expenditure after acute hypoxia, *Metabolism* 55:669-75.
43. Hubold C, Oltmanns KM, **Schultes B**, Jelkmann W, Born J, Fehm HL, Schweiger U, Peters A (2006) High plasma VEGF relates to low carbohydrate intake in patients with type 2 diabetes. *Int J Obes Relat Metab Disord* 30:1356-61
44. Kern W, Benedict C, **Schultes B**, Plohr F, Moser A, Born J, Fehm HL, Hallschmid M. (2006) Low cerebrospinal fluid insulin levels in obese humans. *Diabetologia* 49:2790-2.
45. Benedict C, Hallschmid M, Schmitz K, **Schultes B**, Ratter F, Fehm HL, Born J, Kern W. (2007) Intranasal Insulin improves memory in humans: Superiority of insulin aspart. *Neuropsychopharmacology* 32:239-43
46. Benedict C, Ghio AJ, Gehring H, **Schultes B**, Peters A, Oltmanns KM (2007) Transient hypoxia downregulates circulating prohepcidin concentrations in healthy young men. *Haematology* 92:125-127
47. Pais I, Hallschmid M, Chara K, Schmid SM, Oltmanns KM, Peters A, Born J, **Schultes B**. (2007) Mood and cognitive functions during acute euglycaemia and mild hyperglycaemia in type 2 diabetic patients. *Exp Clin Endocrinol Diabetes* 115:42-6
48. **Schultes B**, Jauch-Chara K, Gais S, Hallschmid M, Reiprich E, Kern W, Oltmanns KM, Peters A, Fehm HL, Born J. (2007) Defective awakening response to nocturnal hypoglycemia in patients with type 1 diabetes mellitus. *PLoS Med* 4:e69
49. Jauch-Chara K, Hallschmid M, Schmid SM, Oltmanns KM, Peters A, Born J, **Schultes B**. (2007) Plasma glucagon decreases during night-time sleep in Type 1 diabetic patients and healthy control subjects. *Diabet Med.* 24:684-7
50. Jauch-Chara K, Hallschmid M, Gais S, Oltmanns KM, Peters A, Born J, **Schultes B**. (2007) Awakening and counterregulatory response to hypoglycemia during early and late sleep. *Diabetes*; 56:1938-42
51. Jauch-Chara K, Hallschmid M, Gais S, Schmid SM, Oltmanns KM, Colmorgen C, Born J, **Schultes B**. (2007) Hypoglycemia during sleep impairs consolidation of declarative memory in type 1 diabetic and healthy humans. *Diabetes Care* 30:2040-5
52. Schmid SM, Hallschmid M, Jauch-Chara K, Bandorf N, Born J, **Schultes B**. (2007) Sleep loss alters basal metabolic hormone secretion and modulates the dynamic counterregulatory response to hypoglycemia. *J Clin Endocrinol Metab* 92:3044-51
53. Hallschmid M, Benedict C, **Schultes B**, Born J, Kern W. (2008) Obese men respond to cognitive but not to catabolic brain insulin signaling. *Int J Obes Relat Metab Disord* 32:275-82

54. Oltmanns KM, Melchert UH, Scholand-Engler HG, **Schultes B**, Schweiger U, Peters A. (2008) Divergent effects of hyper- and hypoglycemia on circulating vascular endothelial growth factor in humans. *Metabolism* 57:90-4.
55. Oltmanns KM, Melchert UH, Scholand-Engler HG, Howitz MC, **Schultes B**, Schweiger U, Hohagen F, Born J, Peters A, Pellerin L. (2008) Differential energetic response of brain vs. skeletal muscle upon glycemic variations in healthy humans. *Am J Physiol Regul Integr Comp Physiol* 294:R12-6
56. Schmid SM, Jauch-Chara K, Hallschmid M, Oltmanns KM, Born J, **Schultes B**. (2008) Short-term nocturnal hypoglycemia increases morning food intake in healthy humans. *Diabetic medicine* 25:232-5.
57. Jauch-Chara K, Schmid SM, Hallschmid M, Born J, **Schultes B** (2008) Altered neuroendocrine sleep architecture in patients with type 1 diabetes. *Diabetes Care* 31:1183-8.
58. Benedict C, Kern W, **Schultes B**, Born J, Hallschmid M (2008) Differential sensitivity of men and women to anorexigenic and memory improving effects of intranasal insulin. *J Clin Endocrinol Metab* 93:1339-44.
59. Schmid SM, Jauch-Chara K, Hallschmid M, Born J, **Schultes B** (2008) A single night of sleep deprivation increases ghrelin levels and feelings of hunger in normal-weight healthy men. *J Sleep Res* 17:331-4.
60. Pais I, Hubold C, Hallschmid M, Letterer C, Oltmanns KM, **Schultes B**, Born J, Peters A (2008) Blocking NMDA receptor signaling does not decrease hormonal counterregulation to hypoglycemia in humans. *Psychoneuroendocrinology* 33:1069-76
61. Schmid SM, Jauch-Chara K, Hallschmid M, Born J, **Schultes B** (2008) Lactate overrides central nervous but not  $\beta$ -cell glucose sensing in humans. *Metabolism* 57:1733-9.
62. Ernst B, Thurnheer M, Schmid SM, **Schultes B** (2009) Evidence for the necessity to systematically assess micronutrient status prior to bariatric surgery. *Obes Surg* 19:66-73
63. Benedict C, Kern W, Schmid SM, **Schultes B**, Born J, Hallschmid M (2009) Early morning rise in hypothalamic-pituitary-adrenal activity: a role for maintaining the brain's energy balance. *Psychoneuroendocrinology* 34:455-62
64. Ernst B, Thurnheer M, Schmid SM, Wilms B, **Schultes B** (2009) Seasonal variation in the deficiency of 25-hydroxyvitamin D3 in mildly to extremely obese subjects, *Obes Surg* 19:180-3
65. Klement J, Pais I, Hallschmid M, Hubold C, Knispel A, Oltmanns KM, **Schultes B**, Born J, Peters A (2009) Blocking AMPA receptor signalling by caroverine infusion does not affect counter-regulation of hypoglycaemia in healthy men. *Diabetologia* 52:1192-6
66. Ernst B, Thurnheer M, Wilms B, **Schultes B** (2009) Differential changes in dietary habits after gastric bypass versus gastric banding operations. *Obes Surg* 19:274-80
67. Schmoller A, Eberhardt F, Jauch-Chara K, Schweiger U, Zabel P, Peters A, **Schultes B**, Oltmanns KM (2009) Continuous positive airway pressure therapy decreases evening

- cortisol concentrations in patients with severe obstructive sleep apnea. *Metabolism* 58:848-53
68. Ernst B, Thurnheer M, **Schultes B** (2009) Basal serum prolactin levels in obesity – unrelated to parameters of the metabolic syndrome and unchanged after massive weight loss. *Obes Surg* 19:1159-62
69. Bremer JP, Jauch-Chara K, Hallschmid M, Schmid S, **Schultes B** (2009) Hypoglycemia unawareness in older compared with middle-aged patients with type 2 diabetes. *Diabetes care* 32:1513-7
70. Hubold C, Lang UE, Gehring H, **Schultes B**, Schweiger U, Peters A, Hellweg R, Oltmanns KM (2009) Increased serum brain-derived neurotrophic factor protein upon hypoxia in healthy young men. *J Neural Transm* 116:1221-5
71. Schmoller A, Voss M, Gehring H, Rudolf S, Schweiger U, **Schultes B**, Oltmanns KM (2009) Short hypoxia does not affect plasma leptin in healthy men under euglycemic clamp conditions. *Int J Endocrinol* 2009, Article ID 270698, 6 pages
72. Schmid SM, Hallschmid M, Jauch-Chara K, Wilms B, Benedict C, Lehnert H, Born J, **Schultes B** (2009) Short-term sleep loss reduces physical activity under free-living conditions, but does not increase food intake under time-deprived laboratory conditions in healthy men. *Am J Clin Nutr* 94: 1476-82
73. Jauch-Chara K, Hallschmid M, Schmid SM, Bandorf N, Born J, **Schultes B** (2009) Sleep loss does not aggravate the deteriorating effect of hypoglycemia on neurocognitive function in healthy men. *Psychoneuroendocrinology* 35: 624-8
74. Ernst B, Thurnheer M, **Schultes B** (2009) Copper deficiency after gastric bypass surgery. *Obesity* 17: 1980-1
75. **Schultes B**, Ernst B, Schmid F, Thurnheer M (2009) Distal gastric bypass surgery for the treatment of hypothalamic obesity after childhood craniopharyngioma. *Eur J Endocrinol* 161: 201-6
76. Leschka S, Stinn B, Schmid F, **Schultes B**, Thurnheer M, Baumüller S, Stolzmann P, Scheffel H, Flohr TG, Wildermuth S, Alkadhi H (2009) Dual source CT coronary angiography in severely obese patients: trading off temporal resolution and image noise. *Invest Radiol* 44: 720-7
77. Schmid SM, Jauch-Chara K, Hallschmid M, **Schultes B** (2009) Mild sleep restriction acutely reduces plasma glucagon levels in healthy men. *J Clin Endocrinol Metab* 94: 5169-73
78. Wilms B, Schmid SM, Ernst B, Thurnheer M, Mueller MJ, **Schultes B** (2010) Poor prediction of resting energy expenditure in obese women by established equations. *Metabolism* 59: 1181-9
79. Hallschmid M, Jauch-Chara K, Korn O, Mölle M, Rasch B, Born J, **Schultes B**, Kern W (2010). Euglycemic infusion of insulin detemir compared with human insulin appears to increase direct current brain potential response and reduces food intake while inducing similar systemic effects. *Diabetes* 59:1101-7

80. **Schultes B**, Frick J, Ernst B, Stefan N, Fritsche A (2010). The effect of a 6-weeks of aerobic exercise training on serum fetuin-A levels in non-diabetic obese women. *Exp Clin Endocrinol Diabetes* 118: 754-6
81. **Schultes B**, Ernst B, Wilms B, Thurnheer M, Hallschmid M (2010). Hedonic hunger is increased in severely obese patients and is reduced after gastric bypass surgery. *Am J Clin Nutr* 92: 227-83
82. Loebig M, Klement J, Schmoller A, Betz S, Heuck N, Schweiger U, Peters A, **Schultes B**, Oltmanns KM (2010). Evidence for a Relationship between VEGF and BMI Independent of Insulin Sensitivity by Glucose Clamp Procedure in a Homogenous Group Healthy Young Men. *PLoS* 5(9).
83. Wilms B, Meffert K S, **Schultes B** (2010). Procain infusion in pain treatment of acute pancreatitis: a randomized, placebo-controlled double-blind trial. *Dtsch Med Wochenschr*; 135:2290-5
84. Benedict C, Brede S, Schiöth HB, Lehnert H, **Schultes B**, Born J, Hallschmid M (2011). Intranasal insulin enhances postprandial thermogenesis and lowers postprandial serum insulin levels in healthy men. *Diabetes* 60(1): 114-8
85. Schmid SM, Hallschmid M, Jauch-Chara K, Wilms B, Lehnert H, Born J, **Schultes B** (2011). Disturbed glucoregulatory response to food intake after moderate sleep restriction. *Sleep* 34: 371-377
86. Benedict C, Jacobsson JA, Rönnekaa E, Sällman-Almén M, Brooks S, **Schultes B**, Fredriksson R, Lannfelt L, Kilander L, Schiöth HB (2011). The fat mass and obesity gene is linked to reduced verbal fluency in overweight and obese elderly men. *Neurobiol Aging* 32:1159e1-5
87. Benedict C, Hallschmid M, Lassen A, Mahnke C, **Schultes B**, Schiöth HB, Born J, Lange T (2011). Acute sleep deprivation reduces energy expenditure in healthy men. *Am J Clin Nutr*. 93:1229-36
88. Tarantino I, Warschkow R, Steffen T, Bisang P, **Schultes B**, Thurnheer M (2011). Is Routine Cholecystectomy Justified in Severely Obese Patients Undergoing a Laparoscopic Roux-en-Y Gastric Bypass Procedure? A Comparative Cohort Study. *Obes Surg* 21:1870-8.
89. Benedict C, Shostak A, Lange T, Brooks SJ, Schiöth HB, **Schultes B**, Born J, Oster H, Hallschmid M (2012). Diurnal Rhythm of Circulating Nicotinamide Phosphoribosyltransferase (Nampt/Visfatin/PBEF): Impact of Sleep Loss and Relation to Glucose Metabolism. *J Clin Endocrinol Metab* 97:E218-22.
90. Ott V, Friedrich M, Zemlin J, Lehnert H, Schultes B, Born J, Hallschmid M (2012). Meal anticipation potentiates postprandial ghrelin suppression in humans. *Psychoneuroendocrinology* 37:1096-100.
91. Benedict C, Brooks SJ, O'Daly OG, Almèn MS, Morell A, Aberg K, Gingnell M, **Schultes B**, Hallschmid M, Broman JE, Larsson EM, Schiöth HB. Acute Sleep Deprivation Enhances the Brain's Response to Hedonic Food Stimuli: An fMRI Study. *J Clin Endocrinol Metab*. 2012; 97(3):E443-7.

92. **Schultes B**, Schmid SM, Wilms B, Jauch-Chara K, Oltmanns KM, Hallschmid M. Lactate infusion during euglycemia but not hypoglycemia reduces subsequent food intake in healthy men. *Appetite* 2012; 58(3):818-821.
93. Frank S, Sangkyun Lee, Hubert Preissl, **Bernd Schultes**, Niels Birbaumer, Ralf Veit. The Obese Brain Athlete: Self-Regulation of the Anterior Insula in Adiposity. *PLOS* 2012; 8 (7):e42570.
94. Wilms B, Frick J, Ernst B, Mueller R, Wirth B, **Schultes B**. Whole body vibration added to endurance training in obese women - a pilot study. *Int J Sports Med.* 2012 Sep;33(9):740-3.
95. Thurnheer M, Bisang P, Ernst B, **Schultes B**. A Novel Distal Very Long Roux-en Y Gastric Bypass (DVLRYGB) as a Primary Bariatric Procedure-Complication Rates, Weight Loss, and Nutritional/Metabolic Changes in the First 355 Patients. *Obes Surg.* 2012 Sep;22(9):1427-36.
96. Schmid SM, Hallschmid M, Jauch-Chara K, Lehnert H, **Schultes B**. Sleep timing may modulate the effect of sleep loss on testosterone. *Clin Endocrinol (Oxf).* 2012 Nov;77(5):749-54.
97. Warschkow R, Tarantino I, Folie P, Beutner U, Schmied BM, Bisang P, Schultes B, Thurnheer M. C-reactive protein 2 days after laparoscopic gastric bypass surgery reliably indicates leaks and moderately predicts morbidity. *J Gastrointest Surg.* 2012 Jun;16(6):1128-35.
98. Ullrich J, Ernst B, Wilms B, Thurnheer M, **Schultes B**. Roux-en Y gastric bypass surgery reduces hedonic hunger and improves dietary habits in severely obese subjects. *Obes Surg.* 2013 Jan;23(1):50-5.
99. Wilms B, Ernst B, Thurnheer M, Weisser B, **Schultes B**. Differential changes in exercise performance after massive weight loss induced by bariatric surgery. *Obes Surg.* 2013 Mar;23(3):365-71.
100. Ullrich J, Ernst B, Wilms B, Thurnheer M, Hallschmid M, **Schultes B**. The hedonic drive to consume palatable foods appears to be lower in gastric band carriers than in severely obese patients who have not undergone a bariatric surgery. *Obes Surg.* 2013 Apr;23(4):474-9.
101. Ernst B, Wilms B, Thurnheer M, **Schultes B**. Reduced circulating androgen levels after gastric bypass surgery in severely obese women. *Obes Surg.* 2013 May;23(5):602-7.
102. Warschkow R, Tarantino I, Ukegijini K, Beutner U, Güller U, Schmied BM, Müller SA, **Schultes B**, Thurnheer M. Concomitant cholecystectomy during laparoscopic Roux-en-Y gastric bypass in obese patients is not justified: a meta-analysis. *Obes Surg.* 2013 Mar;23(3):397-407.
103. Jauch-Chara K, Schmid SM, Hallschmid M, Oltmanns KM, **Schultes B**. Pituitary-gonadal and pituitary-thyroid axis hormone concentrations before and during a hypoglycemic clamp after sleep deprivation in healthy men. *PLoS One.* 2013;8(1):e54209.



104. Gerig R, Ernst B, Wilms B, Thurnheer M, **Schultes B**. Preoperative nutritional deficiencies in severely obese bariatric candidates are not linked to gastric *Helicobacter pylori* infection. *Obes Surg*. 2013 May;23(5):698-702.
105. Schmid SM, Hallschmid M, Jauch-Chara K, Kück MC, Lehnert H, **Schultes B**. Partial sleep restriction modulates secretory activity of thyrotropic axis in healthy men. *J Sleep Res*. 2013 Apr;22(2):166-9.
106. Gerig R, Ernst B, Wilms B, Thurnheer M, **Schultes B**. Gastric *Helicobacter pylori* infection is associated with adverse metabolic traits in severely obese subjects. *Obesity (Silver Spring)*. 2013 Mar;21(3):535-7.
107. Frank S, Wilms B, Veit R, Ernst B, Thurnheer M, Kullmann S, Fritsche A, Birbaumer N, Preissl H, Schultes B. Altered brain activity in severely obese women may recover after Roux-en Y gastric bypass surgery. *Int J Obes (Lond)*. 2014 Mar;38(3):341-8.
108. Wilms B, Ernst B, Schmid SM, Thurnheer M, **Schultes B**. Enhanced thermic effect of food after Roux-en-Y gastric bypass surgery. *J Clin Endocrinol Metab*. 2013 Sep;98(9):3776-84.
109. Peterli R, Borbély Y, Kern B, Gass M, Peters T, Thurnheer M, **Schultes B**, Laederach K, Bueter M, Schiesser M. Early results of the Swiss Multicentre Bypass or Sleeve Study (SM-BOSS): a prospective randomized trial comparing laparoscopic sleeve gastrectomy and Roux-en-Y gastric bypass. *Ann Surg*. 2013 Nov;258(5):690-4.
110. **Schultes B**. Comment on: Longitudinal trends in hedonic hunger following Roux-en-Y gastric bypass in adolescents. *Surg Obes Relat Dis*. 2014 Jan-Feb;10(1):130-1.
111. Zazai R, Wilms B, Ernst B, Thurnheer M, **Schultes B**. Waist circumference and related anthropometric indices are associated with metabolic traits in severely obese subjects. *Obes Surg*. 2014 May;24(5):777-82.
112. Wilms B, Ernst B, Thurnheer M, Weisser B, **Schultes B**. Correction factors for the calculation of metabolic equivalents (MET) in overweight to extremely obese subjects. *Int J Obes (Lond)*. 2014 Nov;38(11):1383-7.
113. Roden M, Weng J, Eilbracht J, Delafont B, Kim G, Woerle HJ, Broedl UC; EMPAREG MONO trial investigators. Empagliflozin monotherapy with sitagliptin as an active comparator in patients with type 2 diabetes: a randomised, double-blind, placebo-controlled, phase 3 trial. *Lancet Diabetes Endocrinol*. 2013 Nov;1(3):208-19.
114. Waldburger R, Wilms B, Ernst B, Thurnheer M, **Schultes B**. Cardio-respiratory fitness is independently associated with cardio-metabolic risk markers in severely obese women. *Exp Clin Endocrinol Diabetes*. 2014 Mar;122(3):190-4.
115. Ritze Y, Bárdos G, D'Haese JG, Ernst B, Thurnheer M, Schultes B, Bischoff SC. Effect of high sugar intake on glucose transporter and weight regulating hormones in mice and humans. *PLoS One*. 2014 Jul 10;9(7):e101702.
116. Nilsson EK, Ernst B, Voisin S, Almén MS, Benedict C, Mwinyi J, Fredriksson R, **Schultes B**, Schiöth HB. Roux-en y gastric bypass surgery induces genome-wide promoter-specific changes in DNA methylation in whole blood of obese patients. *PLoS One*. 2015 Feb 24;10(2):e0115186.

117. Bandstein M, **Schultes B**, Ernst B, Thurnheer M, Schiöth HB, Benedict C. The Role of FTO and Vitamin D for the Weight Loss Effect of Roux-en-Y Gastric Bypass Surgery in Obese Patients. *Obes Surg*. 2015 Nov;25(11):2071-7.
118. Wilms B, Ernst B, Gerig R, **Schultes B**. Plasma Omentin-1 Levels are Related to Exercise Performance in Obese Women and Increase Upon Aerobic Endurance Training. *Exp Clin Endocrinol Diabetes*. 2015 Mar;123(3):187-92.
119. Hallschmid M, Oster H, **Schultes B**, Schmid SM. [On the detrimental metabolic impact of short, disturbed and erratic sleep]. *Dtsch Med Wochenschr*. 2015 Aug;140(17):1278-83
120. Ernst B, Wilms B, Thurnheer M, **Schultes B**. Eating behaviour in treatment-seeking obese subjects - Influence of sex and BMI classes. *Appetite*. 2015 Jul 3;95:96-100.
121. Ritze Y, Hengelhaupt C, Bárdos G, Ernst B, Thurnheer M, D'Haese JG, Bischoff SC, **Schultes B**. Altered intestinal neuroendocrine gene expression in humans with obesity. *Obesity* 2015 Nov;23(11):2278-85
122. Gralka E, Luchinat C, Tenori L, Ernst B, Thurnheer M, **Schultes B**. Metabolomic fingerprint of severe obesity is dynamically affected by bariatric surgery in a procedure-dependent manner. *Am J Clin Nutr*. 2015 Dec;102(6):1313-22.
123. Wilms B, Ernst B, Thurnheer M, **Schultes B**. Subjective and objective physical activity patterns after Roux-en Y gastric bypass surgery compared with non-operated obese and non-obese control women. *Obes Res Clin Pract*. 2016 Jan-Feb;10(1):49-55.
124. Waldburger R, **Schultes B**, Zazai R, Ernst B, Thurnheer M, Spengler CM, Wilms B. Comprehensive assessment of physical functioning in bariatric surgery candidates compared with subjects without obesity. *Surg Obes Relat Dis*. 2016 Mar-Apr;12(3):642-50.
125. Bandstein M, Voisin S, Nilsson EK, **Schultes B**, Ernst B, Thurnheer M, Benedict C, Mwinyi J, Schiöth HB. A Genetic Risk Score Is Associated with Weight Loss Following Roux-en Y Gastric Bypass Surgery. *Obes Surg*. 2016 Sep;26(9):2183-9.
126. Boström AE, Mwinyi J, Voisin S, Wu W, **Schultes B**, Zhang K, Schiöth HB. Longitudinal genome-wide methylation study of Roux-en-Y gastric bypass patients reveals novel CpG sites associated with essential hypertension. *BMC Med Genomics*. 2016 Apr 22;9:20.
127. Bandstein M, Mwinyi J, Ernst B, Thurnheer M, **Schultes B**, Schiöth HB. A genetic variant in proximity to the gene LYPLAL1 is associated with lower hunger feelings and increased weight loss following Roux-en-Y gastric bypass surgery. *Scand J Gastroenterol*. 2016 Sep;51(9):1050-5.
128. Borovicka J, Krieger-Grübel C, van der Weg B, Thurnheer M, **Schultes B**, Sulz MC, Gutzwiler JP, Bisang P, Pohl D, Fried M, Meyenberger C, Tutuian R. Effect of morbid obesity, gastric banding and gastric bypass on esophageal symptoms, mucosa and function. *Surg Endosc*. 2016;31:552-560.
129. **Schultes B**, Panknin AK, Hallschmid M, Jauch-Chara K, Wilms B, de Courbière F, Lehnert H, Schmid SM. Glycemic increase induced by intravenous glucose infusion fails to

- affect hunger, appetite, or satiety following breakfast in healthy men. *Appetite*. 2016 Oct 1;105:562-6.
130. Narath SH, Mautner SI, Svehlikova E, **Schultes B**, Pieber TR, Sinner FM, Gander E, Libiseller G, Schimek MG, Sourij H, Magnes C. An Untargeted Metabolomics Approach to Characterize Short-Term and Long-Term Metabolic Changes after Bariatric Surgery. *PLoS One*. 2016 Sep 1;11(9):e0161425.
131. Reutrakul S, Thakkinstian A, Anothaisintawee T, Chontong S, Borel AL, Perfect MM, Janovsky CC, Kessler R, **Schultes B**, Harsch IA, van Dijk M, Bouhassira D, Matejko B, Lipton RB, Suwannalai P, Chirakalwasan N, Schober AK, Knutson KL. Sleep characteristics in type 1 diabetes and associations with glycemic control: systematic review and meta-analysis. *Sleep Med*. 2016 Jul;23:26-45.
132. **Schultes B**, Hallschmid M, Oster H, Wilms B, Schmid SM. Hormone, Schlaf, zirkadiane Rhythmen und metabolische Gesundheit. *Gynäkologische Endokrinologie* 2016; 14:180-187.
133. Peterli R, Woelnerhanssen BK, Vetter D, Nett P, Gass M, Borbély Y, Peters T, Schiesser M, **Schultes B**, Beglinger C, Drewe J, Bueter M. Laparoscopic Sleeve Gastrectomy Versus Roux-Y-Gastric Bypass for Morbid Obesity—3-Year Outcomes of the Prospective Randomized Swiss Multicenter Bypass Or Sleeve Study (SM-BOSS). *Ann Surg* 2017;265:466-473.
134. Grasser EK, Ernst B, Thurnheer M, **Schultes B**. QT Interval Shortening After Bariatric Surgery Depends on the Applied Heart Rate Correction Equation. *Obes Surg*. 2017;27:973-982.
135. Wilms B, Ernst B, Thurnheer M, Spengler CM, **Schultes B**. Type 2 Diabetes is Associated with Lower Cardiorespiratory Fitness Independent of Pulmonary Function in Severe Obesity. *Exp Clin Endocrinol Diabetes*. 2017 May;125(5):301-306.
136. Siegmund T, Tentolouris N, Knudsen ST, Lapolla A, Prager R, Phan TM, Wolden ML, **Schultes B**; EU-TREAT study group. A European, multicentre, retrospective, non-interventional study (EU-TREAT) of the effectiveness of insulin degludec after switching basal insulin in a population with type 1 or type 2 diabetes. *Diabetes Obes Metab* 2018;20:689-697.
137. Price H, Blüher M, Prager R, Phan TM, Thorsted BL, **Schultes B**; EXTRA study group. Use and effectiveness of a fixed-ratio combination of insulin degludec/liraglutide (IDegLira) in a real-world population with type 2 diabetes: Results from a European, multicentre, retrospective chart review study. *Diabetes Obes Metab*. 2018;20:954-962.
138. Zazai R, Wilms B, Ernst B, Keppler R, Thurnheer M, Schmid SM, **Schultes B**. Sagittal Abdominal Diameter does not Predict Metabolic Traits Better than Waist Circumference-Related Measures of Abdominal Obesity in Obese Subjects. *Exp Clin Endocrinol Diabetes*. 2018; 14:191-199.
139. Wilms B, Ernst B, Thurnheer M, Schmid SM, Spengler CM, **Schultes B**. Resting energy expenditure after Roux-en Y gastric bypass surgery. *Surg Obes Relat Dis*. 2018;14:191-199.
140. Peterli R, Wölnerhanssen BK, Peters T, Vetter D, Kröll D, Borbély Y, **Schultes B**, Beglinger C, Drewe J, Schiesser M, Nett P, Bueter M. Effect of Laparoscopic Sleeve

- Gastrectomy vs Laparoscopic Roux-en-Y Gastric Bypass on Weight Loss in Patients With Morbid Obesity: The SM-BOSS Randomized Clinical Trial. *JAMA*. 2018;319:255-265.
141. Mathieu C, Dandona P, Gillard P, Senior P, Hasslacher C, Araki E, Lind M, Bain SC, Jabbour S, Arya N, Hansen L, Thorén F, Langkilde AM; DEPICT-2 Investigators. Efficacy and Safety of Dapagliflozin in Patients With Inadequately Controlled Type 1 Diabetes (the DEPICT-2 Study): 24-Week Results From a Randomized Controlled Trial. *Diabetes Care* 2018;41:1938-1946.
142. Kröpfl JM, Wilms B, Ernst B, **Schultes B**, Spengler CM. Letter to the Editor: Circulating Adult Stem and Progenitor Cells After Roux-en-Y Gastric Bypass Surgery in Myotonic Dystrophy. *Obes Surg*. 2019;29:311-315.
143. Wilms B, Keppler R, Ernst B, Schmid SM, Thurnheer M, **Schultes B**. Cardiorespiratory Fitness is Associated with Glycated Hemoglobin and Triglyceride Levels in Severely Obese Men: A Retrospective Clinical Data Analysis. *Exp Clin Endocrinol Diabetes*. 2019 (in press).
144. Wilms B, Chamorro R, Hallschmid M, Trost D, Forck N, **Schultes B**, Mölle M, Sayk F, Lehnert H, Schmid SM. Timing modulates the effect of sleep loss on glucose homeostasis. *J Clin Endocrinol Metab*. 2019 (in press).
145. Russell-Jones D, Dauchy A, Delgado E, Dimitriadis G, Frandsen HA, Popescu L, **Schultes B**, Strojek K, Bonnemaire M, Roborel de Climens A, Davies M. Take Control: A Randomized Trial Evaluating the Efficacy and Safety of Self- Versus Physician-Managed Titration of Insulin Glargine 300 U/mL (Gla-300) in Patients with Uncontrolled Type 2 Diabetes. *Diabetes Obes Metab*. 2019 (in press).
146. Tentolouris N, Knudsen ST, Lapolla A, Wolden ML, Haldrup S, **Schultes B**. Switching "Real-World" Diabetes Patients to Degludec from Other Basal Insulins Provides Different Clinical Benefits According to Their Baseline Glycemic Control. *Adv Ther*. 2019 (in press).

## Rezensionen (Übersichtsarbeiten/Editorials/Kommentare)

1. **Frühwald-Schultes B** (1999) Frühdiagnose der diabetischen Nephropathie: Mikroalbuminurie kann gestoppt werden. Deutsches Ärzteblatt 96:A-1503-4
2. Peters A, Schweiger U, **Fruehwald-Schultes B**, Born J, Fehm HL (2002) The neuroendocrine control of glucose allocation. *Exp Clin Endocrinol Diabetes* 110:199-211
3. **Schultes B**, Kern W (2004) Den Mechanismen der zentralvenösen Adaptation an Hypoglykämien auf der Spur. *Diabetes-Congress-Report* 1:29-33
4. Peters A, Schweiger U, Pellerin L, Hubold C, Oltmanns K, Conrad M, **Schultes B**, Born J, Fehm HL (2004) Selfish brain: Competition for energy resources. *Neurosci Biobehav Rev*, 28: 143-180
5. **Schultes B**, Fehm HL, (2004) Zirkadiane Rhythmen in der Endokrinologie. *Der Internist*, 45:983-93
6. **Schultes B**, (2004) Fördert Schlafmangel das Metabolische Syndrome? *Diabetes-Congress-Report* 6:9-14
7. **Schultes B**, (2005) Das Problem der Adipositas - so einfach und doch so komplex. *Fokus MUL* 22:15-22
8. **Schultes B**. (2005) Herausforderung Adipostas. *Schleswig-Holsteinisches Ärzteblatt* 8:64-68
9. **Schultes B**. (2005) Heil(?)fasten – gesundheitlicher Nutzen ungewiss. *Deutsche Apotheker Zeitung* 145:74-75
10. **Schultes B**, Schmid S, Peters A, Born J, Fehm HL (2005) Sleep loss and the development of diabetes: A review of current evidence, *Exp Clin Endocrinol Diabetes* 113:563-7
11. Schmid S. und **Schultes B** (2006) Schlafmangel – Risikofaktor für Adipositas und Diabetes? *Diabetologie* 1:122-127
12. **Schultes B** (2007) Comment on: Nathan DM, Buse JB, Davidson MB et al (2006) Management of hyperglycaemia in type 2 diabetes: a consensus algorithm for the initiation and adjustment of therapy: A consensus statement from the American Diabetes Association and the European Association for the Study of Diabetes. *Diabetologia* 49: 1711-1721. *Diabetologia*. 50:225-6.
13. Benedict C, Hallschmid M, **Schultes B**, Born J, Kern W (2007) Minireview: Intranasal insulin to improve memory function in humans. *Neuroendocrinolgy*, 86:136-42
14. Schmid S, Hallschmid M, **Schultes B** (2007) Sleep loss, obesity and diabetes: a fetal connection?, *Expert Rev Endocrinol Metab* 2:713-715
15. Hallschmid M, Benedict C, **Schultes B**, Perras B, Fehm HL, Kern W, Born J. (2008) Towards the therapeutic use of intranasal neuropeptide administration in metabolic and cognitive disorders. *Regul Pept* 149:79-83

16. Hallschmid M, **Schultes B** (2009) Central nervous insulin resistance: a promising target in the treatment of metabolic and cognitive disorders? *Diabetologia* 52: 2264-9
17. Ernst B, Thurnheer M, Schmid SM, **Schultes B** (2010) Response to the Letter to the Editor "Bariatric Surgery and the Assessment of Copper and Zinc Nutriture" by Leslie M. Klevay. *Obes Surg* 20: 674-675
18. Schmid SM, Hallschmid M, Lehnert H, **Schultes B** (2010) Response to the Letter to the editor "Short sleep duration is associated with reduced leptin levels and increased adiposity: results from the Quebec family study" by Chaput et al. *Am J Clin Nutr* 91: 823-824
19. **Schultes B**, Ernst B, Thurnheer M (2010) Bariatrische Chirurgie und Schwangerschaft. *Schweizer Medizinisches Forum* 10: 304 – 7
20. Ernst B, Thurnheer M, **Schultes B** (2010). Fertilität und Schwangerschaft nach bariatrischer Chirurgie zur Behandlung der hochgradigen Adipositas. *Aktuel Ernährungsmed* 35: 220 – 226
21. Jauch-Chara K, **Schultes B** (2010). Sleep and the response to hypoglycaemia. *Best Pract Res Clin Endocrinol Metab* 24: 801-815
22. **Schultes B** (2010). Hypoglykämien nach bariatrischen Operationen – Verwandt mit dem Dumping-Syndrom? *Leading Opinions Diabetes & Stoffwechsel* 3: 11 – 14
23. Benedict C, Frey WH 2nd, Schiöth HB, **Schultes B**, Born J, Hallschmid M (2011). Intranasal insulin as a therapeutic option in the treatment of cognitive impairments. *Exp Gerontol* 46(2-3): 112-115
24. Schmid SM, **Schultes B** (2011). Disturbed sleep as a risk factor for metabolic syndrome. *Internist (Berl)* 52: 383-388
25. Ott V, Benedict C, **Schultes B**, Born J, Hallschmid M. (2012). Intranasal administration of insulin to the brain impacts cognitive function and peripheral metabolism. *Diabetes Obes Metab.* 2012 Mar;14(3):214-21
26. Benedict C, Brede S, Schiöth H, Lehnert H, **Schultes B**, Born J, Hallschmid J (2012). Intranasales Insulin steigert die nahrungsinduzierte Thermogenese und mindert die postprandiale Insulinantwort beim Menschen. *Spitzenforschung in der Diabetologie* : 26-32.
27. Schmid SM, Hallschmid M, **Schultes B**. The metabolic burden of sleep loss. *Lancet Diabetes Endocrinol.* 2015 Jan;3(1):52-62.
28. Hallschmid M, Oster H, **Schultes B**, Schmid SM. Kurzer, gestörter und unregelmässiger Schlaf: Die schädlichen Auswirkungen auf den menschlichen Stoffwechsel. *Dtsch Med Wochenschr* 2015; 140:1278-1283.
29. **Schultes B**. Nachsorge nach bariatrischer Chirurgie. *Diabetologe* 2015; 11: 479-489.
30. **Schultes B**. Pharmacological interventions against Obesity: Current status and future directions. *ViscMed* 2016; 32:347-351.

31. **Schultes B.** Increased Trimethylamine-N-Oxide (TMAO) Levels After Roux-en Y Gastric Bypass Surgery-Should We Worry About It? *Obes Surg* 2017; 27:2170-2173.

### **Buchbeiträge**

1. Therapielexikon Endokrinologie und Stoffwechselkrankheiten, Herausgeber G.K. Stalla, Springer Medizin Verlag Heidelberg, 2007
2. Schultes B (2007) Endokrinium. Buchkapitel in Enzyklopädie der Schlafmedizin, Herausgeber H Peter, T Penzel, JH Peter, Springer Medizin Verlag Heidelberg, 2007, S. 349-354
3. Schultes B (2007) Körpergewicht. Buchkapitel in Enzyklopädie der Schlafmedizin, Herausgeber H Peter, T Penzel, JH Peter, Springer Medizin Verlag Heidelberg, 2007, S. 646-650
4. Schultes B (2016) Bariatrische Chirurgie. Buchkapitel in DGIM innere Medizin (Springer Reference Medizin), Herausgeber H Lehnert, Springer Medizin Verlag Heidelberg, 2016, S. 1-7.