

HARRIET WALLBERG-HENRIKSSON

Original Scientific Publications

1982

1. Wallberg-Henriksson H, Gunnarsson R, Henriksson J, DeFronzo R, Felig P, Östman J, and Wahren J. Increased peripheral insulin sensitivity and muscle mitochondrial enzymes but unchanged blood glucose control in type I diabetics after physical training. *Diabetes* 31:1044-1050, 1982.
2. Gunnarsson R, Wallberg-Henriksson H, Henriksson, J, Östman J, and Wahren J. Exercise and physical training in type I diabetes. *Recent Trends in Diabetes Research*, 101-111, 1982.

1984

3. Wallberg-Henriksson H, Gunnarsson R, Henriksson J, Östman J, and Wahren J. Influence of physical training on formation of muscle capillaries in type I diabetes. *Diabetes* 33:851-857, 1984.
4. Wallberg-Henriksson H, and Holloszy JO. Contractile activity increases glucose uptake by muscle in severely diabetic rats. *J. Appl. Physiol.* 57:1045-1049, 1984.

1985

5. Young DA, Wallberg-Henriksson H, Cranshaw J, Chen M, and Holloszy JO. Effect of catecholamines on glucose uptake and glycogenolysis in rat skeletal muscle. *Am. J. Physiol.* 248:C406-C409, 1985.
6. Wallberg-Henriksson H, and Holloszy JO. Activation of glucose transport in diabetic muscle: Responses to contraction and insulin. *Am. J. Physiol.* 249:C233-C237, 1985.

1986

7. Wallberg-Henriksson H, Gunnarsson R, Rössner S, and Wahren J. Long-term physical training in female type I (insulin-dependent) diabetic patients: absence of significant effect on glycaemic control and lipoprotein levels. *Diabetologia* 29:53-57, 1986.
8. Wallberg-Henriksson H. Repeated exercise regulates glucose transport capacity in skeletal muscle. *Acta Physiol. Scand.* 127:39-43, 1986.
9. Wallberg-Henriksson H. Insulin treatment normalizes decreased glucose transport capacity in streptozotocin-diabetic rats. *Acta Physiol. Scand.* 128:647-659, 1986.

1987

10. Wallberg-Henriksson H, Zetan N, and Henriksson J. Reversibility of decreased insulin-stimulated glucose transport capacity in diabetic muscle with *in vitro* incubation: Insulin not required. *J. Biol. Chem.* 262:7665-7671, 1987.
11. Young DA, Wallberg-Henriksson H, Sleeper MD, and Holloszy JO. Reversal of the exercise-induced increase in muscle permeability to glucose. *Am. J. Physiol.* 253:E331-E335, 1987.

12. Gunnarsson R, Wallberg-Henriksson H, Rössner S, and Wahren J. Serum lipid and lipoprotein levels in female type I diabetics: Relationships to aerobic capacity and glycaemic control. *Diabete & Metabolism* 13:43-47, 1987.
13. Campaigne BN, Wallberg-Henriksson H, and Gunnarsson R. 12 hour glucose and insulin responses in relation to insulin dose and caloric intake after acute physical exercise in men with IDDM. *Diabetes Care* 10:716-721, 1987.

1988

14. Wallberg-Henriksson H, Campaigne BN, and Henriksson J. In vitro reversal of insulin resistance in diabetic skeletal muscle is independent of extracellular Ca^{2+} and Mg^{2+} . *Acta Physiol. Scand.* 133:127-128, 1988.
15. Wallberg-Henriksson H, Constable SH, Young DA, and Holloszy JO. Glucose transport into rat skeletal muscle: interaction between exercise and insulin. *J. Appl. Physiol.* 65:909-913, 1988.
16. Zetan N, Wallberg-Henriksson H, and Henriksson J. The rat epitrochlearis muscle. Metabolic characteristics. *Acta Physiol. Scand.* 134:155-156, 1988.
17. Hirshman MF, Wallberg-Henriksson H, Wardzala LJ, Horton ED, and Horton ES. Acute exercise increases the number of plasma membrane glucose transporters in rat skeletal muscle. *FEBS Lett.* 238:235-239, 1988.

1989

18. Boström M, Zetan N, Goertz G, Henriksson J, and Wallberg-Henriksson H. Indirect effect of catecholamines on development of insulin resistance in skeletal muscle from diabetic rats. *Diabetes* 38:906-910, 1989.
19. Zetan N, Wallberg-Henriksson H, Johansson S, and Henriksson J. Effects of adrenaline and prior exercise on the release of alanine, glutamine and glutamate from incubated rat skeletal muscle. *Acta Physiol. Scand.* 136:395-401, 1989.
20. Wallberg-Henriksson H, and Wahren J. Effects of nutrition and diabetes mellitus on the regulation of metabolic fuels during exercise. *Am. J. Clin. Nutr.* 49:938-943, 1989.
21. Cartee GD, Young DA, Sleeper MD, Zierath J, Wallberg-Henriksson H, and Holloszy JO. Prolonged increase in insulin-stimulated glucose transport in muscle after exercise. *Am. J. Physiol.* 256:E494-E499, 1989.

1991

22. Galuska D, Zierath J, Thörne A, Sonnenfeld T, and Wallberg-Henriksson H. Metformin increases insulin-stimulated glucose transport in insulin-resistant human skeletal muscle. *Diabete et Métabolisme* 17:159-163, 1991.
23. Andréasson K, Galuska D, Thörne A, Sonnenfeld T, and Wallberg-Henriksson H. Decreased insulin-stimulated 3-O-methylglucose transport in *in vitro* incubated muscle strips from type II diabetic subjects. *Acta Physiol. Scand.* 142:255-260, 1991.

Harriet Wallberg-Henriksson

24. Zierath JR, Galuska D, Johansson B-L, and Wallberg-Henriksson H. Effect of human C-peptide on glucose transport in *in vitro* incubated skeletal muscle. *Diabetologia* 34:899-901, 1991.

1992

25. Zierath JR, Galuska D, Engström Å, Johnson KH, Betsholtz C, Westermark P, and Wallberg-Henriksson H. Human islet amyloid polypeptide at pharmacological levels inhibits insulin and phorbol ester-stimulated glucose transport in *in vitro* incubated human muscle strips. *Diabetologia* 35:26-31, 1992.

26. Zierath JR, Bang P, Galuska D, Hall K, and Wallberg-Henriksson H. Insulin-like growth factor II stimulates glucose transport in human skeletal muscle. *FEBS Lett.* 307:379-382, 1992.

1993

27. Norgren S, Zierath J, Galuska D, Wallberg-Henriksson H, and Luthman H. Differences in the ratio of RNA encoding two isoforms of the insulin receptor between control and NIDDM patients: The RNA variant without exon 11 predominates in both groups. *Diabetes* 42:675-681, 1993.

1994

28. Johansson U, Eriksson LS, Galuska D, Zierath JR, and Wallberg-Henriksson H. Insulin action on glucose transport in isolated skeletal muscle from patients with liver cirrhosis. *Scand. J. Gastr.* 29:71-76, 1994.

29. Zierath JR, Galuska D, Nolte LA, Smedegaard-Kristensen J, and Wallberg-Henriksson H. Effects of glycaemia on glucose transport in isolated skeletal muscle from patients with NIDDM: *In vitro* reversal of muscular insulin resistance. *Diabetologia* 37:270-277, 1994.

30. Nolte LA, Galuska D, Martin IK, Zierath JR, and Wallberg-Henriksson H. Elevated levels of free fatty acids selectively inhibit glucose phosphorylation in slow-twitch rat skeletal muscle independent of glucose 6-phosphate levels. *Acta Physiol. Scand.* 150:51-59, 1994.

31. Norgren S, Zierath J, Wedell A, Wallberg-Henriksson H, and Luthman H. Regulation of human insulin receptor RNA splicing *in vivo*. *Proc. Natl. Acad. Sci. USA.* 91:1465-1469, 1994.

32. Galuska D, Nolte LA, Zierath JR, and Wallberg-Henriksson H. Effect of metformin on glucose transport in isolated skeletal muscle obtained from type 2 diabetic patients and healthy individuals. *Diabetologia* 37:872-879, 1994.

33. Galuska D, Nolte LA, Smedegaard-Kristensen J, Wallberg-Henriksson H, and Zierath JR. Effects of non-esterified fatty acids on insulin-stimulated glucose transport in isolated skeletal muscle from patients with type 2 (non-insulin-dependent) diabetes mellitus. *Acta Diabetologia* 31:169-171, 1994.

1995

34. Gumà A, Zierath JR, Wallberg-Henriksson H, and Klip A. Insulin induces translocation of GLUT4 glucose transporters in human muscle. *Am. J. Physiol.* 268:E613-E622, 1995.

35. Nolte LA, Abdel-Halim SM, Martin IK, Zierath JR, Östenson C-G, and Wallberg-Henriksson H. Development of insulin resistance in skeletal muscle of impaired glucose tolerant hybrid GK rats. *Clin. Sci.* 88:301-306, 1995.
36. Zierath JR, Nolte LA, Wahlström E, Galuska D, Shepherd PR, Kahn BB, and Wallberg-Henriksson H. Carrier-mediated fructose uptake significantly contributes to carbohydrate metabolism in human skeletal muscle. *Biochem. J.* 311:889-894, 1995.
37. Nolte LA, Rincón J, Ödegaard Wahlström E, Craig BW, Zierath JR, and Wallberg-Henriksson H. Hyperglycemia activates glucose transport in rat skeletal muscle via a Ca^{2+} dependent mechanism. *Diabetes* 44:1345-1348, 1995.

1996

38. Zierath JR, Handberg A, Tally M, and Wallberg-Henriksson H. C-peptide stimulates glucose transport in isolated human skeletal muscle independent of insulin receptor and tyrosine kinase activation. *Diabetologia* 39:306-313, 1996.
39. Rincon J, Holmäng A, Wahlström E, Lönnroth P, Björntorp P, Zierath JR, and Wallberg-Henriksson H. Mechanisms behind insulin resistance in rat skeletal muscle following oophorectomy and additional testosterone treatment. *Diabetes* 45:415-421, 1996.
40. Moller DE, Chang PY, Yaspelkis BB, Flier JS, Wallberg-Henriksson H, and Ivy JL. Evidence from transgenic mice that muscle-specific insulin resistance develops to increased adiposity, impaired glucose tolerance, and dyslipidemia. *Endocrinology* 137:2397-2405, 1996.
41. Zierath JR, He L, Gumà A, Wahlström E, Klip A, and Wallberg-Henriksson H. Insulin action on glucose transport and plasma membrane GLUT4 content in skeletal muscle from patients with NIDDM. *Diabetologia* 39:1180-1189, 1996.
42. Aksnes AK, Wahlström E, Hjeltnes N, Katz A, Zierath JR, and Wallberg-Henriksson H. Compensatory adaptation of the glucose transport system in centrally denervated, morphologically altered skeletal muscle from patients with complete cervical cord lesions. *Am. J. Physiol.* 271:E593-E600, 1996.

1997

43. Shepherd PR, Nave BT, Rincon R, Nolte LA, Bevan AP, Siddle K, Zierath JR, and Wallberg-Henriksson H. Differential regulation of phosphoinositide 3-kinase adapter subunit variants by insulin in human skeletal muscle. *J. Biol. Chem.* 272:19000-19007, 1997.
44. Krook A, Kawano Y, Song XM, Efendic S, Roth R, Wallberg-Henriksson H, and Zierath JR. Improved glucose tolerance restores insulin-stimulated Akt kinase activity and glucose transport in skeletal muscle from diabetic Goto-Kakizaki (GK) rats. *Diabetes* 46:2110-2114, 1997.
45. Hjeltnes N, Aksnes AK, Birkeland KI, Johansen J, Lannem A, and Wallberg-Henriksson H. Increased lean body mass and reduced body fat following eight weeks of electrically stimulated leg cycling in subjects with long standing tetraplegia. *Am. J. Physiol.* 273:R1072-R1079, 1997.
46. Lund S, Holman GD, Zierath JR, Rincon J, Nolte LA, Clark AE, Schmitz O, Pedersen O, and Wallberg-Henriksson H. Effect of insulin on GLUT4 translocation and turnover rate in human

skeletal muscle as measured by the exofacial bismannos photolabeling technique. *Diabetes* 46:1965-1969, 1997.

47. Shepherd PR, Nave BT, Rincon R, Haigh RJ, Foulstone E, Proud C, Zierath JR, Siddle K, and Wallberg-Henriksson H. Involvement of phosphoinositide 3-kinase in insulin stimulation of MAP-kinase and protein kinase-B in human skeletal muscle: Implication for glucose metabolism. *Diabetologia* 40:1172-1177, 1997.

1998

48. Strömmér L, Perment J, Koehler C, Arnelo U, Isaksson B, Lundqvist I, Kawano Y, Wallberg-Henriksson H, and Zierath JR. Skeletal muscle insulin resistance after trauma. *Am. J. Physiol.* 275:E351-E358, 1998.
49. Hjeltnes N, and Wallberg-Henriksson H. Lack of improvement in peak oxygen uptake during primary rehabilitation in tetraplegic patients. *Spinal Cord* 36:691-698, 1998.
50. Krook A, Roth RA, Jiang XJ, Zierath JR, and Wallberg-Henriksson H. Insulin-stimulated Akt kinase activity is reduced in skeletal muscle from non-insulin-dependent diabetic subjects. *Diabetes* 47:1281-1286, 1998.
51. Krook A, Digby J, O’Rahilly S, Zierath JR, and Wallberg-Henriksson H. Uncoupling protein 3 is reduced in skeletal muscle from non-insulin-dependent diabetic subjects. *Diabetes* 47:1528-1531, 1998.
52. Widegren U, Jiang XJ, Krook A, Chibalin AV, Björnholm M, Tally M, Roth RA, Henriksson J, Wallberg-Henriksson H, and Zierath JR. Divergent effects of exercise on metabolic and mitogenic signaling pathways in human skeletal muscle. *FASEB J.* 12:1379-1389, 1998.
53. Hjeltnes N, Galuska D, Björnholm M, Aksnes A-K, Lannem A, Zierath JR, and Wallberg-Henriksson H. Exercise-induced overexpression of key regulatory proteins involved in glucose uptake and metabolism in tetraplegic persons: Molecular mechanism for improved glucose homeostasis. *FASEB J.* 12:1701-1712, 1998.

1999

54. Rincon, J., A. Krook, D. Galuska, H. Wallberg-Henriksson, and J.R. Zierath. Altered skeletal muscle glucose transport and blood lipid levels in habitual cigarette smokers: Evidence for insulin resistance. *Clin. Physiol.* 19:135-142, 1999.
55. Song XM,* Kawano* Y, Krook A, Ryder JW, Efendic S, Roth RA, Wallberg-Henriksson H, and Zierath JR. Muscle fiber-type specific defects in insulin signal transduction to glucose transport in diabetic Goto-Kakizaki rats. *Diabetes* 48:664-670, 1999.
56. Kawano Y, Rincon J, Soler A, Ryder JW, Nolte L, Zierath JR, and Wallberg-Henriksson H. Hyperglycemia-induced changes in glucose transport and protein kinase CB₂ in rat skeletal muscle. *Diabetologia* 42:1071-1079, 1999.

57. Ryder JW, Kawano Y, Galuska D, Fahlman R, Wallberg-Henriksson H, Charron MJ and Zierath JR. Postexercise glucose uptake and glycogen synthesis in skeletal muscle from GLUT4-deficient mice. *FASEB J.* 13:2246-2256, 1999.
58. Rincón J, Galuska D, Ryder JW, Kawano Y, Wallberg-Henriksson H, Garrod J, and Zierath JR. Effect of the nicotine metabolite 5'-hydroxycortinine on glucose transport and glycogen synthase activity in rat skeletal muscle. *Pflügers Archiv.* 439:130-133, 1999.
59. Oskarsson PR, Lins PE, Wallberg-Henriksson H, and Adamson UC. Metabolic and hormonal responses to exercise in type 1 diabetic patients during continuous subcutaneous, as compared to continuous intraperitoneal, insulin infusion. *Diabetes Metab* 25:491-497 1999.

2000

60. Chibalin AV, Yu M, Ryder JW, Song XM, Galuska D, Krook A, Wallberg-Henriksson H, and Zierath JR. Exercise-induced changes in expression and activity of proteins involved in insulin signal transduction in skeletal muscle: Differential effects on IRS-1 and IRS-2. *Proc. Natl. Acad. Sci. USA.* 97:38-43, 2000.
61. Ryder JW, Fahlman R, Wallberg-Henriksson H, Alessi DR, Krook A, and Zierath JR. Effect of contraction on mitogen-activated protein kinase signal transduction in skeletal muscle: Involvement of the mitogen- and stress-activated protein kinase 1. *J. Biol. Chem.* 275:1457-1462, 2000.
62. Krook A, Björnholm M, Galuska D, Jiang XJ, Fahlman R, Myers Jr. M, Wallberg-Henriksson H, and Zierath JR. Characterization of signal transduction and glucose transport in skeletal muscle from Type 2 (non-insulin-dependent) diabetic patients. *Diabetes* 49:284-292, 2000.
63. Ryder JW, Yang J, Galuska D, Rincón J, Björnholm M, Krook A, Lund S, Pedersen O, Wallberg-Henriksson H, Zierath JR, and Holman GD. Defects in GLUT4 traffic and translocation account for impaired insulin-stimulated glucose transport in skeletal muscle from Type II diabetic subjects. *Diabetes* 49:647-654, 2000.
64. Krook, A., U. Widegren, X-J. Jiang, J. Henriksson, H. Wallberg-Henriksson, D. Alessi, and J.R. Zierath. Effects of exercise on mitogen and stress activated kinase signal transduction in human skeletal muscle. *Am. J. Physiol.* 279:R1716-R1721, 2000.

2001

65. Yu, M., E. Blomstrand, A.V. Chibalin, H. Wallberg-Henriksson, J.R. Zierath and A. Krook. Exercise-associated difference in an array of proteins involved in signal transduction and glucose transport. *J. Appl. Physiol.* 90:29-34, 2001.
66. Jiao, Y., P. Shashkin, N. Hjeltnes, H. Wallberg-Henriksson, and A. Katz. Altered glycogen synthase and phosphorylase activities in skeletal muscle of tetraplegic patients. *Exp. Physiol.* 86:205-209, 2001.
67. Chibalin, A.V., M.V. Kovalenko, J.W. Ryder, E. Féralle, H. Wallberg-Henriksson, and J.R. Zierath. Insulin- and glucose phosphorylation of the Na^+ , K^+ -ATPase α -subunits in rat skeletal muscle. *Endocrinology* 42:3474-3482, 2001.

68. Kawano, Y., J.W. Ryder, J. Rincon, J.R. Zierath, A. Krook and H. Wallberg-Henriksson. Evidence against hyperglycaemia as an activator of Map kinase or p38 in rat skeletal muscle. *Am. J. Physiol.* 281:E1225-E1259, 2001.
69. Fiedler, M., J.R. Zierath, G. Selén, H. Wallberg-Henriksson, Y. Liang, and K.S. Sakariassen. AICAR treatment ameliorates hyperglycemia and hyperinsulinemia but not dyslipidemia in KKA^y-CETP mice. *Diabetologia* 44:2180-2186, 2001.

2002

70. Song, X.M., M. Fiedler, D. Galuska, J. W. Ryder, M. Fernström, A. V. Chibalin, H. Wallberg-Henriksson, and J. R. Zierath. 5-aminoimidazole-4-carboxamide ribonucleoside treatment improves glucose homeostasis in insulin-resistant diabetic (*ob/ob*) mice. *Diabetologia* 45:56-65, 2002
71. Tsuchida, H., M. Björnholm, M. Fernström, P.X. Johansson, H. Wallberg-Henriksson, J. R Zierath, S. Lake, and A. Krook. Gene expression of the p85 α regulatory subunit of phosphatidylinositol 3-kinase in skeletal muscle from type 2 diabetic subjects. *Pfügers Archiv. Eur. J. Physiol.* 445:25-31, 2002.

2003

72. Krook, A., I. Holm, S. Pettersson, and H. Wallberg-Henriksson. Reduction of risk factors following lifestyle modification programme in subjects with type 2 (non-insulin dependent) diabetes mellitus. *Clin Physiol Funct Imaging* 23:21-30, 2003.
73. Isaksson, B., L. Strommer, H. Friess, M.W. Buchler, M.K. Herrington, F. Wang, J.R. Zierath, H. Wallberg-Henriksson, J. Larsson, and J. Permert. Impaired insulin action on phosphatidylinositol 3-kinase activity and glucose transport in skeletal muscle of pancreatic cancer patients. *Pancreas* 26:173-177, 2003.
74. Koistinen, H.A., D. Galuska, A.V. Chibalin, J. Yang, J.R. Zierath, G.D. Holman, and H. Wallberg-Henriksson. AICAR (5-amino-imidazole carboxamide riboside) increases glucose transport and cell-surface GLUT4 content in skeletal muscle from Type 2 diabetic subjects. *Diabetes* 52:1066-1072, 2003.
75. Bach, D., S. Pich, F.X. Soriano, N. Vega, B Baumgartner, J. Oriola, J.R. Daugaard, J. Lloberas, M. Camps, J.R. Zierath, R. Rabasa-Lhoret, H. Wallberg-Henriksson, M. Laville, M. Palacin, H. Vidal, F. Rivera, M. Brand, and A. Zorzano. Mitofusin-2 determines mitochondrial network architecture and mitochondrial metabolism: a novel regulatory mechanism altered in obesity. *J. Biol. Chem.* 278:17190-17197, 2003.
76. Al-Khalili, L., A.V. Chibalin, B. B. Zhang, J. Permert, G.D. Holman, H. Wallberg-Henriksson, V.D.H. Ding, J.R. Zierath and A. Krook. Insulin action in cultured human skeletal muscle cells during differentiation: Assessment of cell surface GLUT4 and GLUT1 content. *Cell Mol. Life Sci.* 60:991-998, 2003.

2004

77. Koistinen, H.A., M. Forsgren, H. Wallberg-Henriksson, and J.R. Zierath. Insulin action on expression of novel adipose genes in healthy and Type 2 diabetic subjects. *Obesity Res.* 12: 25-31, 2004.

2005

78. Krämer, D., L. Al-Khalili, S. Perrini, J. Skogsberg, P. Wretenberg, K. Kannisto, H. Wallberg-Henriksson, E. Ehrenborg, J.R. Zierath and A. Krook. Direct activation of glucose transport in primary human myotubes following activation of PPAR δ . *Diabetes* 54: 1157-1163, 2005.

79. Karlsson, H.K.R., J.R. Zierath, S. Kane, A. Krook, G.E. Lienhard, and H. Wallberg-Henriksson. Insulin-stimulated phosphorylation of the Akt substrate AS160 is impaired in skeletal muscle of Type 2 diabetic subjects. *Diabetes* 54: 1692-1697, 2005.

80. Bach, D., D. Naon, S. Pich, F.X. Soriano, N. Vega, J. Rieusset, M. Laville, C. Guillet, Y. Boirie, H. Wallberg-Henriksson, M. Manco, M. Calvani, M. Castagneto, M. Palacin, G. Mingrone, J.R. Zierath, H. Vidal, and A. Zorzano. Expression of Mfn2, the Charcot-Marie-Tooth Neuropathy Type 2A gene, in human skeletal muscle: effects of type 2 diabetes, obesity, weight loss, and the regulatory role of tumor necrosis factor α and interleukin-6. *Diabetes* 54: 2685-2693, 2005.

81. Long, Y.C., B.R. Barnes, M. Mahlapuu, T.L. Steiler, S. Martinsson, Y. Leng, H. Wallberg-Henriksson, L. Andersson, and J.R. Zierath. Role of AMP-activated protein kinase in the coordinated expression of genes controlling glucose and lipid metabolism in mouse white skeletal muscle. *Diabetologia* 48:2354-2364, 2005.

2006

82. Karlsson, H.K.R., M. Ahlsén, J.R. Zierath, H. Wallberg-Henriksson, and H.A. Koistinen. Insulin signaling and glucose transport in skeletal muscle from first-degree relatives of type 2 diabetic patients. *Diabetes*, 55: 1283-1288, 2006.

2008

83. Chibalin, A.V., Y. Leng, E. Vieira, A. Krook, M. Björnholm, Y.C. Long, O. Kotova, Z. Zhong, F. Sakane, T. Steiler, C. Nylén, J. Wang, M. Laakso, M.K. Topham, M. Gilbert, H. Wallberg-Henriksson, and J.R. Zierath. Down-regulation of diacylglycerol kinase delta contributes to hyperglycemia-induced insulin resistance. *Cell*, 132: 375-386, 2008.

2009

84. Karlsson H.K., A.V. Chibalin, H.A. Koistinen, J. Yang, F. Koumanov, H. Wallberg-Henriksson, J.R Zierath, and G.D. Holman. Kinetics of GLUT4 Trafficking in Rat and Human Skeletal Muscle. *Diabetes* 58: 847-854 2009.

2010

85. Deshmukh A.S., Y.C. Long, T. de Castro Barbosa, H.K.R. Karlsson, S. Glund, W.J. Zavadoski, E.M. Gibbs, H.A. Koistinen, H. Wallberg-Henriksson, and J.R. Zierath. Nitric oxide increases cyclic GMP levels, AMP-activated protein kinase (AMPK) $\alpha 1$ -specific activity and glucose transport in human skeletal muscle. *Diabetologia* 53: 1142-1150, 2010.

2015

86. Osler M.E., T. Fritz, K. Caidahl, A. Krook, J.R. Zierath, and H. Wallberg-Henriksson. Changes in gene expression in responders and nonresponders to a low-intensity walking intervention. *Diabetes Care* 38: 1154-1160, 2015.

2016

87. Mudry, J.M., P.S. Alm, S. Erhardt, M. Goiny, T. Fritz, K. Caidahl, J.R. Zierath, A. Krook, and H. Wallberg-Henriksson. Direct effects of exercise on kynurenone metabolism in people with normal glucose tolerance or type 2 diabetes. *Diabetes Metab Res Rev.* 32:754-761, 2016.jj

2018

88. Lassiter, D.G., C. Nylén, R.J.O. Sjögren, A.V. Chibalin, H. Wallberg-Henriksson, E. Näslund, A. Krook, and J.R. Zierath. FAK tyrosine phosphorylation is regulated by AMPK and controls metabolism in human skeletal muscle. *Diabetologia* 61:424-432, 2018.
89. Nylén, C, W. Aoi, A.M. Abdelmoez, D.G. Lassiter, L.S. Lundell, H. Wallberg-Henriksson, E. Näslund, N.J. Pillon, and A. Krook. IL6 and LIF mRNA expression in skeletal muscle is regulated by AMPK and the transcription factors NFYC, ZBTB14 and SP1. *Am J Physiol Endocrinol Metab.* 315:E995-E1004, 2018.

2019

90. Savikj, M. B.M. Gabriel, P. Alm, J. Smith, K. Caidahl, M. Björnholm, T. Fritz, A. Krook, J. R. Zierath, and H. Wallberg-Henriksson. Afternoon exercise is more efficacious than morning exercise at improving glycemia in patients with type 2 diabetes. *Diabetologia.* 62:233-237, 2019.

2022

91. Savikj, M., B. Stocks, S. Sato, K. Caidahl, A. Krook, A.S. Deshmukh, J.R. Zierath, and H. Wallberg-Henriksson. Exercise timing influences multi-tissue metabolome and skeletal muscle proteome profiles in type 2 diabetic patients - A randomized crossover trial. *Metabolism* 135:55268, 2022.

REVIEWS and BOOK CHAPTERS

1. Wahren J, Gunnarsson R, Hagenfeldt L, and Wallberg-Henriksson H. Diabetes and physical exercise. In *Frontiers of Diabetes*, Vol. 4, pp 181-192, Karger, Basel, 1984.
2. Wallberg-Henriksson H. Glucose transport into skeletal muscle. Influence of contractile activity, insulin, catecholamines and diabetes mellitus. Academic Thesis. *Acta Physiol. Scand.* 131:Suppl. 564:1-80, 1987.
3. Wallberg-Henriksson H. Cellulär glukotransport: Ett förbisett regleringssteg vid hormonella och nutritionella sjukdomstillstånd. *Droppjournalen* 1:7-9, 1988.
4. Wallberg-Henriksson H, and Wahren J. Clinical implications of exercise in diabetes mellitus. Proceedings from the 13th International Diabetes Federation Congress. 44-46, 1988.
5. Wallberg-Henriksson H. Diabetes och Motion. Svensk Medicin. *Svenska Läkaresällskapet och Spri.* 215-225, 1989.

6. Wallberg-Henriksson H. Acute exercise: Fuel homeostasis and glucose transport in insulin-dependent diabetes mellitus. *Med. Sci. Sports Exerc.* 21:356-361, 1989.
7. Wallberg-Henriksson H. Exercise and diabetes mellitus. *Sport Med. Rev.* 20:339-368, 1992.
8. Wallberg-Henriksson H, and Wahren J. Kapitel i Diabetes Mellitus. Eds Agardh, Berne and Östman. Nordstedts förlag. pp. 97-107, 1992.
9. Wallberg-Henriksson H. Interaction of exercise and insulin in type II diabetes mellitus. *Diabetes Care* 15:1777-1782, 1992.
10. Zierath JR, and Wallberg-Henriksson H. Exercise training in obese diabetic patients: Special considerations. *Sports Med.* 14:171-189, 1992.
11. Wallberg-Henriksson H, and Zierath JR. Interaction of insulin and skeletal muscle contraction on glucose uptake. Smith-Gordon and Company Ltd, *Diabetes mellitus and exercise* 5:69-80, 1992.
12. Wahren J, Johansson B-L, Zierath J, Wallberg-Henriksson H, and Linde B. Physiological effects of C-peptide in Type 1 diabetes mellitus. In: *Frontiers in Insulin Pharmacology*, M Berger and FA Gries, eds. Georg Thieme Verlag Stuttgart. pp. 149-160, 1993.
13. Wahren J, Johansson B-L, and Wallberg-Henriksson H. Does C-peptide have a physiological role? *Diabetologia* 37:S99-S107, 1994.
14. Wallberg-Henriksson H. Glucose transporters and peripheral insulin resistance in connection with surgical stress. *Droppjournalen. Suppl.* 3:6-9, 1994.
15. Wahren J, Johansson B-L, and Wallberg-Henriksson H. Does C-peptide have a role in the pathophysiology of type 1 diabetes? Smith-Gordon and Company Ltd, *Glucose Fluxes, Exercise and Diabetes* 29:201-209, 1995.
16. Wahren J, Johansson B-L, Wallberg-Henriksson J, Linde B, Fernqvist-Forbes E, and Zierath JR. C-peptide revisited – new physiological effects and therapeutic implications. *J. Int. Med.* 240:115-124, 1996.
17. Zierath JR, Krook A, and Wallberg-Henriksson H. Insulin action in insulin resistant skeletal muscle from NIDDM subjects. *Mol. Cell. Biochem.* 182:153-160, 1998.
18. Wallberg-Henriksson H, Rincón J, and Zierath J. Exercise in the management of NIDDM patients. *Sports Med.* 25:25-35, 1998.
19. Zierath, J. R., A. Krook and H. Wallberg-Henriksson. Insulin action and insulin resistance in human skeletal muscle. *Diabetologia* 43: 821-835, 2000.
20. Wallberg-Henriksson, H. and J. R. Zierath. GLUT4: A key player regulating glucose homeostasis? Insights from transgenic and knockout mice. *Molecular Membrane Biology*, 18:205-211, 2001.

Harriet Wallberg-Henriksson

21. Zierath, J. R. and H. Wallberg-Henriksson. From receptor to effector: Insulin signal transduction in skeletal muscle from type II diabetic patients. *Ann. N. Y. Acad. Sci.* 967:120-134, 2002.
22. Krook, A., Wallberg-Henriksson, H. and J.R. Zierath. Sending the signal: Molecular Mechanisms regulating glucose uptake. *Med Sci Sports Exercise.* 36: 1212-1217, 2004.
23. Wallberg-Henriksson H. Gender equality at the Karolinska Institutet. *Gend Med.* 2: 62-64, 2005.
24. Wallberg-Henriksson, H. and J.R. Zierath. A new twist on brown fat metabolism. *Cell* 137: 22-24, 2009.
25. Wallberg-Henriksson, H. and J.R. Zierath. Metabolism. Exercise remodels subcutaneous fat tissue and improves metabolism. *Nat Rev Endocrinol.* 11: 198-200, 2015.
26. Zierath, J.R., and H. Wallberg-Henriksson. Looking Ahead Perspective: Where Will the Future of Exercise Biology Take Us? *Cell Metab.* 22: 25-30, 2015.

Books Edited

1. Frontiers in Animal Diabetes Research. Volume 4 Muscle Metabolism. Edited by Juleen R. Zierath and Harriet Wallberg-Henriksson. Taylor & Francis Inc. New York, NY, USA (2002)
2. Koll på Diabetes typ 2. Authors Kerstin Brismar, Harriet Wallberg. Bonniers Fakta, Stockholm, Sweden (2021)

Patents

World intellectual property organization, international publication number WO 03/004695 A1, international publication date January 16, 2003. Methods for identifying agents that modulate diacylglycerol kinase delta activity.