Barbara E Corkey

List of Publications by Year
in descending order

124 papers	11,779 citations	30070 54 h-index	27406 106 g-index
125 all docs	125 docs citations	125 times ranked	14261 citing authors

#	Article	IF	Citations
1	The time is now for new, lower diabetes diagnostic thresholds. Trends in Endocrinology and Metabolism, 2022, 33, 4-7.	7.1	4
2	Metabolic cycles and signals for insulin secretion. Cell Metabolism, 2022, 34, 947-968.	16.2	45
3	Acute carbohydrate overfeeding: a redox model of insulin action and its impact on metabolic dysfunction in humans. American Journal of Physiology - Endocrinology and Metabolism, 2021, 321, E636-E651.	3.5	7
4	What Regulates Basal Insulin Secretion and Causes Hyperinsulinemia?. Diabetes, 2021, 70, 2174-2182.	0.6	23
5	Lipid-associated metabolic signalling networks in pancreatic beta cell function. Diabetologia, 2020, 63, 10-20.	6.3	58
6	Acyl-CoA Synthetase Inhibition Protects Clonal Pancreatic Beta-cell from Effects of Chronic Excess Nutrients. Current Developments in Nutrition, 2020, 4, nzaa049_045.	0.3	0
7	The Redox Communication Network as a Regulator of Metabolism. Frontiers in Physiology, 2020, 11, 567796.	2.8	33
8	Targeting Pyruvate Kinase PEPs Up Insulin Secretion and Improves Glucose Homeostasis. Cell Metabolism, 2020, 32, 693-694.	16.2	3
9	Blocking mitochondrial pyruvate import in brown adipocytes induces energy wasting via lipid cycling. EMBO Reports, 2020, 21, e49634.	4.5	31
10	Fatty Acid Metabolites Combine with Reduced Î² Oxidation to Activate Th17 Inflammation in Human Type 2 Diabetes. Cell Metabolism, 2019, 30, 447-461.e5.	16.2	97
11	Hyperinsulinemia: An Early Indicator of Metabolic Dysfunction. Journal of the Endocrine Society, 2019, 3, 1727-1747.	0.2	132
12	Effects of medium chain triglycerides supplementation on insulin sensitivity and beta cell function: A feasibility study. PLoS ONE, 2019, 14, e0226200.	2.5	16
13	Mitochondria Bound to Lipid Droplets Have Unique Bioenergetics, Composition, and Dynamics that Support Lipid Droplet Expansion. Cell Metabolism, 2018, 27, 869-885.e6.	16.2	359
14	Î²-Cell Failure or Î²-Cell Abuse?. Frontiers in Endocrinology, 2018, 9, 532.	3.5	50
15	Cohort profile: The MULTI sTUdy Diabetes rEsearch (MULTITUDE) consortium. BMJ Open, 2018, 8, e020640.	1.9	4
16	Hyperinsulinemia: a Cause of Obesity?. Current Obesity Reports, 2017, 6, 178-186.	8.4	119
17	A Unified Pathophysiological Construct of Diabetes and its Complications. Trends in Endocrinology and Metabolism, 2017, 28, 645-655.	7.1	71
18	Mfn2 deletion in brown adipose tissue protects from insulin resistance and impairs thermogenesis. EMBO Reports, 2017, 18, 1123-1138.	4.5	89

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19	Metabolic fate of glucose and candidate signaling and excess-fuel detoxification pathways in pancreatic Î²-cells. Journal of Biological Chemistry, 2017, 292, 7407-7422.	3.4	47
20	Identification of the signals for glucose-induced insulin secretion in INS1 (832/13) Î²-cells using metformin-induced metabolic deceleration as a model. Journal of Biological Chemistry, 2017, 292, 19458-19468.	3.4	19
21	Type 1 diabetes alters lipid handling and metabolism in human fibroblasts and peripheral blood mononuclear cells. PLoS ONE, 2017, 12, e0188474.	2.5	10
22	Inhibition of Monoacylglycerol Lipase Activity Decreases Glucose-Stimulated Insulin Secretion in INS-1 (832/13) Cells and Rat Islets. PLoS ONE, 2016, 11, e0149008.	2.5	17
23	Metabolomicsâ€guided insights on bariatric surgery versus behavioral interventions for weight loss. Obesity, 2016, 24, 2451-2466.	3.0	45
24	Response to Comment on Schwartz et al. The Time Is Right for a New Classification System for Diabetes: Rationale and Implications of the Î²-Cellâ€"Centric Classification Schema. Diabetes Care 2016;39:179â€"186. Diabetes Care, 2016, 39, e129-e130.	8.6	3
25	The Time Is Right for a New Classification System for Diabetes: Rationale and Implications of the Î²-Cellâ€"Centric Classification Schema. Diabetes Care, 2016, 39, 179-186.	8.6	244
26	BET Bromodomain Proteins Brd2, Brd3 and Brd4 Selectively Regulate Metabolic Pathways in the Pancreatic Î²-Cell. PLoS ONE, 2016, 11, e0151329.	2.5	65
27	Extracellular Redox Regulation of Intracellular Reactive Oxygen Generation, Mitochondrial Function and Lipid Turnover in Cultured Human Adipocytes. PLoS ONE, 2016, 11, e0164011.	2.5	22
28	Direct Stimulation of Islet Insulin Secretion by Glycolytic and Mitochondrial Metabolites in KCl-Depolarized Islets. PLoS ONE, 2016, 11, e0166111.	2.5	9
29	The Extracellular Redox State Modulates Mitochondrial Function, Gluconeogenesis, and Glycogen Synthesis in Murine Hepatocytes. PLoS ONE, 2015, 10, e0122818.	2.5	33
30	The Intra- or Extracellular Redox State Was Not Affected by a High vs. Low Glycemic Response Diet in Mice. PLoS ONE, 2015, 10, e0128380.	2.5	3
31	KCl -Permeabilized Pancreatic Islets: An Experimental Model to Explore the Messenger Role of ATP in the Mechanism of Insulin Secretion. PLoS ONE, 2015, 10, e0140096.	2.5	7
32	Chronic Exposure to Excess Nutrients Left-shifts the Concentration Dependence of Glucose-stimulated Insulin Secretion in Pancreatic Î²-Cells. Journal of Biological Chemistry, 2015, 290, 16191-16201.	3.4	44
33	Fibroblasts From Type 1 Diabetics Exhibit Enhanced Ca2+ Mobilization after TNF or Fat Exposure. PLoS ONE, 2014, 9, e87068.	2.5	4
34	Hormone-induced mitochondrial fission is utilized by brown adipocytes as an amplification pathway for energy expenditure. EMBO Journal, 2014, 33, n/a-n/a.	7.8	185
35	Effects of thiol antioxidant Î²-mercaptoethanol on diet-induced obese mice. Life Sciences, 2014, 107, 32-41.	4.3	10
36	What Are We Putting in Our Food That Is Making Us Fat? Food Additives, Contaminants, and Other Putative Contributors to Obesity. Current Obesity Reports, 2014, 3, 273-285.	8.4	47

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37	Recruitment in a pediatric clinical research trial targeting underserved populations: efforts and challenges (828.9). FASEB Journal, 2014, 28, 828.9.	0.5	0
38	Mitochondrial dynamics regulate brown adiopcyte energy expenditure. FASEB Journal, 2013, 27, 582.4.	0.5	0
39	Redox state as a master regulator of liver function. FASEB Journal, 2013, 27, 565.5.	0.5	0
40	Inhibition of Monoâ€Acylâ€Glycerol Lipase by JZLâ€184 Results in Glucolipotoxicity in Pancreatic Î²â€Cells. FASEB Journal, 2013, 27, 1010.10.	0.5	0
41	Effects of Oleate and Inflammatory Cytokines on Dermal Fibroblasts in Type 1 Diabetics. FASEB Journal, 2013, 27, 1010.9.	0.5	0
42	Iron stimulates insulin secretion in clonal pancreatic Î²â€cells and dissociated rat islets. FASEB Journal, 2013, 27, 1010.13.	0.5	1
43	Metformin relieves oxidative stress and leads to differential modulation of function in key metabolic tissues. FASEB Journal, 2013, 27, lb113.	0.5	1
44	Banting Lecture 2011. Diabetes, 2012, 61, 4-13.	0.6	247
45	Diabetes: Have We Got It All Wrong?. Diabetes Care, 2012, 35, 2432-2437.	8.6	98
46	Metabolic master regulators: sharing information among multiple systems. Trends in Endocrinology and Metabolism, 2012, 23, 594-601.	7.1	34
47	The A2b Adenosine Receptor Modulates Glucose Homeostasis and Obesity. PLoS ONE, 2012, 7, e40584.	2.5	97
48	Reactive Oxygen Species Stimulate Insulin Secretion in Rat Pancreatic Islets: Studies Using Mono-Oleoyl-Glycerol. PLoS ONE, 2012, 7, e30200.	2.5	57
49	Reactive Oxygen Species Facilitate Translocation of Hormone Sensitive Lipase to the Lipid Droplet During Lipolysis in Human Differentiated Adipocytes. PLoS ONE, 2012, 7, e34904.	2.5	48
50	Glucose-6-phosphate isomerase deficiency results in mTOR activation, failed translocation of lipin 1Î± to the nucleus and hypersensitivity to glucose: Implications for the inherited glycolytic disease. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2011, 1812, 1393-1402.	3.8	23
51	Chronic exposure of clonal pancreatic Î²â€cells (INSâ€1 832/13) to acetoacetate inhibits glucoseâ€induced insulin secretion. FASEB Journal, 2011, 25, 914.1.	0.5	0
52	ANTIOXIDANTS DECREASE LIPOLYSIS AND LIPID SYNTHESIS IN HUMAN DIFFERENTIATED ADIPOCYTES. FASEB Journal, 2011, 25, 914.5.	0.5	0
53	ROS signaling, oxidative stress and Nrf2 in pancreatic beta-cell function. Toxicology and Applied Pharmacology, 2010, 244, 77-83.	2.8	291
54	Respiration in Adipocytes is Inhibited by Reactive Oxygen Species. Obesity, 2010, 18, 1493-1502.	3.0	72

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55	Temporal Profiling of the Secretome during Adipogenesis in Humans. Journal of Proteome Research, 2010, 9, 5228-5238.	3.7	100
56	Mitochondrial Networking Protects Î²-Cells From Nutrient-Induced Apoptosis. Diabetes, 2009, 58, 2303-2315.	0.6	339
57	The CB1 Antagonist Rimonabant Decreases Insulin Hypersecretion in Rat Pancreatic Islets. Obesity, 2009, 17, 1856-1860.	3.0	44
58	Persistent Oxidative Stress Due to Absence of Uncoupling Protein 2 Associated with Impaired Pancreatic Î²-Cell Function. Endocrinology, 2009, 150, 3040-3048.	2.8	156
59	Dual role of proapoptotic BAD in insulin secretion and beta cell survival. Nature Medicine, 2008, 14, 144-153.	30.7	285
60	Fission and selective fusion govern mitochondrial segregation and elimination by autophagy. EMBO Journal, 2008, 27, 433-446.	7.8	2,587
61	Metabolic Regulation of Insulin Secretion. , 2008, , 53-74.		3
62	Reactive Oxygen Species as a Signal in Glucose-Stimulated Insulin Secretion. Diabetes, 2007, 56, 1783-1791.	0.6	469
63	Aging results in paradoxical susceptibility of fat cell progenitors to lipotoxicity. American Journal of Physiology - Endocrinology and Metabolism, 2007, 292, E1041-E1051.	3.5	68
64	Ca2+, NAD(P)H and membrane potential changes in pancreatic Î²-cells by methyl succinate: comparison with glucose. Biochemical Journal, 2007, 403, 197-205.	3.7	40
65	Î²-Cell Mitochondria Exhibit Membrane Potential Heterogeneity That Can Be Altered by Stimulatory or Toxic Fuel Levels. Diabetes, 2007, 56, 2569-2578.	0.6	104
66	³Hâ€serotonin as a marker of oscillatory insulin secretion in clonal Î²â€cells (INSâ€1). FEBS Letters, 2007, 581, 4080-4084.	2.8	17
67	The L-type Voltage-Gated Ca²⁺ Channel Is the Ca²⁺ Sensor Protein of Stimulusâ^'Secretion Coupling in Pancreatic Beta Cells. Biochemistry, 2007, 46, 14461-14467.	2.5	40
68	Effects of dietary medium-chain triglyceride on weight loss and insulin sensitivity in a group of moderately overweight free-living type 2 diabetic Chinese subjects. Metabolism: Clinical and Experimental, 2007, 56, 985-991.	3.4	85
69	Glucose-Dependent Insulinotropic Polypeptide Enhances Adipocyte Development and Glucose Uptake in Part Through Akt Activation. Gastroenterology, 2007, 133, 1796-1805.	1.3	103
70	New Scanning Electron Microscopic Method for Determination of Adipocyte Size in Humans and Mice*. Obesity, 2007, 15, 1657-1665.	3.0	10
71	Glucoseâ€Dependent Insulinotropic Polypeptide Modulates Adipocyte Lipolysis and Reesterification. Obesity, 2006, 14, 1124-1131.	3.0	107
72	Oleate-induced formation of fat cells with impaired insulin sensitivity. Lipids, 2006, 41, 267-271.	1.7	26

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73	Glucose-dependent increase in mitochondrial membrane potential, but not cytoplasmic calcium, correlates with insulin secretion in single islet cells. American Journal of Physiology - Endocrinology and Metabolism, 2006, 290, E143-E148.	3.5	75
74	Regulation of Acetyl CoA Carboxylase and Carnitine Palmitoyl Transferaseâ€1 in Rat Adipocytes. Obesity, 2005, 13, 1530-1539.	4.0	34
75	Glucose-dependent Insulin Modulation of Oscillatory Lipolysis in Perifused Rat Adipocytes. Obesity, 2005, 13, 2058-2065.	4.0	11
76	Regulation of lipolytic activity by long-chain acyl-coenzyme A in islets and adipocytes. American Journal of Physiology - Endocrinology and Metabolism, 2005, 289, E1085-E1092.	3.5	32
77	Free Fatty Acid Regulation of Glucose-Dependent Intrinsic Oscillatory Lipolysis in Perifused Isolated Rat Adipocytes. Diabetes, 2005, 54, 629-637.	0.6	30
78	Increased Î²-Oxidation in Muscle Cells Enhances Insulin-stimulated Glucose Metabolism and Protects against Fatty Acid-induced Insulin Resistance Despite Intramyocellular Lipid Accumulation. Journal of Biological Chemistry, 2004, 279, 27177-27186.	3.4	135
79	Hormone-Sensitive Lipase Has a Role in Lipid Signaling for Insulin Secretion but Is Nonessential for the Incretin Action of Glucagon-Like Peptide 1. Diabetes, 2004, 53, 1733-1742.	0.6	67
80	Acyl Coenzyme A Synthetase Regulation: Putative Role in Longâ€Chain Acyl Coenzyme A Partitioning. Obesity, 2004, 12, 1781-1788.	4.0	27
81	Mediumâ€Chain Fatty Acids Attenuate Agonistâ€Stimulated Lipolysis, Mimicking the Effects of Starvation. Obesity, 2004, 12, 599-611.	4.0	24
82	Fatty acid metabolism and insulin secretion in pancreatic beta cells. Diabetologia, 2003, 46, 1297-1312.	6.3	213
83	Greetings from the New Editor-in-Chief ofObesity Research. Obesity, 2003, 11, 1-1.	4.0	1
84	Mediumâ€Chain Oil Reduces Fat Mass and Downâ€regulates Expression of Adipogenic Genes in Rats. Obesity, 2003, 11, 734-744.	4.0	101
85	Metabolic Partitioning of Endogenous Fatty Acid in Adipocytes. Obesity, 2003, 11, 880-887.	4.0	69
86	Glucose-dependent insulinotropic polypeptide (GIP) promotes triglyceride synthesis in adipocytes. Gastroenterology, 2003, 124, A30.	1.3	1
87	Rapid Flip-flop of Oleic Acid across the Plasma Membrane of Adipocytes. Journal of Biological Chemistry, 2003, 278, 7988-7995.	3.4	107
88	Sulfonylureas Rapidly Cross Phospholipid Bilayer Membranes by a Free-Diffusion Mechanism. Diabetes, 2003, 52, 2526-2531.	0.6	22
89	Glucagon-like peptide 1 and fatty acids amplify pulsatile insulin secretion from perifused rat islets. Biochemical Journal, 2003, 369, 173-178.	3.7	20
90	Octanoate Inhibits Triglyceride Synthesis in 3T3-L1 and Human Adipocytes. Journal of Nutrition, 2003, 133, 2512-2518.	2.9	24

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91	Succinate Is a Preferential Metabolic Stimulus-Coupling Signal for Glucose-Induced Proinsulin Biosynthesis Translation. Diabetes, 2002, 51, 2496-2504.	0.6	87
92	Octanoate Attenuates Adipogenesis in 3T3-L1 Preadipocytes. Journal of Nutrition, 2002, 132, 904-910.	2.9	45
93	Potentiation of insulin secretion by phorbol esters is mediated by PKC-Î± and nPKC isoforms. American Journal of Physiology - Endocrinology and Metabolism, 2002, 283, E880-E888.	3.5	31
94	Fat depot origin affects fatty acid handling in cultured rat and human preadipocytes. American Journal of Physiology - Endocrinology and Metabolism, 2001, 280, E238-E247.	3.5	75
95	Fatty Acid Transport: The Diffusion Mechanism in Model and Biological Membranes. Journal of Molecular Neuroscience, 2001, 16, 99-108.	2.3	109
96	Glucose-induced Toxicity in Insulin-producing Pituitary Cells That Coexpress GLUT2 and Glucokinase. Journal of Biological Chemistry, 2001, 276, 36695-36702.	3.4	22
97	Glucose-induced Metabolic Oscillations Parallel Those of Ca2+ and Insulin Release in Clonal Insulin-secreting Cells. Journal of Biological Chemistry, 2001, 276, 36946-36950.	3.4	29
98	Esterification of free fatty acids in adipocytes: a comparison between octanoate and oleate. Biochemical Journal, 2000, 349, 463.	3.7	19
99	Esterification of free fatty acids in adipocytes: a comparison between octanoate and oleate. Biochemical Journal, 2000, 349, 463-471.	3.7	34
100	The Role of Long-Chain Fatty Acyl-CoA Esters in Î²-Cell Signal Transduction. Journal of Nutrition, 2000, 130, 299S-304S.	2.9	147
101	Acute Stimulation with Long Chain Acyl-CoA Enhances Exocytosis in Insulin-secreting Cells (HIT T-15) Tj ETQq1 1 0.784314 rgBT /Overlo	3.4	150
102	Long-Chain Acyl CoA Regulation of Protein Kinase C and Fatty Acid Potentiation of Glucose-Stimulated Insulin Secretion in ClonalÎ² -Cells1. Endocrinology, 2000, 141, 1989-1998.	2.8	96
103	Metabolic control ofÎ²-cell function. Seminars in Cell and Developmental Biology, 2000, 11, 267-275.	5.0	128
104	Long-Chain Acyl CoA Regulation of Protein Kinase C and Fatty Acid Potentiation of Glucose-Stimulated Insulin Secretion in Clonal Â-Cells. Endocrinology, 2000, 141, 1989-1998.	2.8	41
105	Lipid rather than glucose metabolism is implicated in altered insulin secretion caused by oleate in INS-1 cells. American Journal of Physiology - Endocrinology and Metabolism, 1999, 277, E521-E528.	3.5	55
106	Incorporation of [1-13C]oleate into cellular triglycerides in differentiating 3T3L1 cells. Lipids, 1999, 34, 825-831.	1.7	9
107	A 13C nuclear magnetic resonance study of free fatty acid incorporation in acylated lipids in differentiating predipocytes. Lipids, 1998, 33, 449-454.	1.7	5
108	Long Chain Coenzyme A Esters Activate the Pore-forming Subunit (Kir6.2) of the ATP-regulated Potassium Channel. Journal of Biological Chemistry, 1998, 273, 31395-31400.	3.4	96

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109	Mechanism of Cloned ATP-sensitive Potassium Channel Activation by Oleoyl-CoA. Journal of Biological Chemistry, 1998, 273, 26383-26387.	3.4	119
110	A distinct difference in the metabolic stimulusâ€“response coupling pathways for regulating proinsulin biosynthesis and insulin secretion that lies at the level of a requirement for fatty acyl moieties. Biochemical Journal, 1998, 331, 553-561.	3.7	61
111	Evidence for a Unique Long Chain Acyl-CoA Ester Binding Site on the ATP-regulated Potassium Channel in Mouse Pancreatic Beta Cells. Journal of Biological Chemistry, 1997, 272, 17390-17394.	3.4	74
112	Induction by Glucose of Genes Coding for Glycolytic Enzymes in a Pancreatic Î²-Cell Line (INS-1). Journal of Biological Chemistry, 1997, 272, 3091-3098.	3.4	123
113	Î²3-Adrenergic Receptors on White and Brown Adipocytes Mediate Î²3-Selective Agonist-induced Effects on Energy Expenditure, Insulin Secretion, and Food Intake. Journal of Biological Chemistry, 1997, 272, 17686-17693.	3.4	200
114	Mouse white adipocytes and 3T3-L1 cells display an anomalous pattern of carnitine palmitoyltransferase (CPT) I isoform expression during differentiation: Inter-tissue and inter-species expression of CPT I and CPT II enzymes. Biochemical Journal, 1997, 327, 225-231.	3.7	104
115	Temporal patterns of changes in ATP/ADP ratio, glucose 6-phosphate and cytoplasmic free Ca2+ in glucose-stimulated pancreatic Î²-cells. Biochemical Journal, 1996, 314, 91-94.	3.7	114
116	Temporal sequence of metabolic and ionic events in glucose-stimulated clonal pancreatic Î²-cells (HIT). Biochemical Journal, 1996, 315, 1015-1019.	3.7	60
117	Regulation of pancreatic Î²-cell mitochondrial metabolism: influence of Ca2+, substrate and ADP. Biochemical Journal, 1996, 318, 615-621.	3.7	82
118	Reversible Ca2+-dependent Translocation of Protein Kinase C and Glucose-induced Insulin Release. Journal of Biological Chemistry, 1996, 271, 18154-18160.	3.4	48
119	Activation of the ATP-sensitive K+ Channel by Long Chain Acyl-CoA. Journal of Biological Chemistry, 1996, 271, 10623-10626.	3.4	146
120	Selective activation of Ca2+ influx by extracellular ATP in a pancreatic Î²-cell line (HIT). Biochimica Et Biophysica Acta - Molecular Cell Research, 1989, 1012, 107-115.	4.1	46
121	[9] Analysis of acyl-coenzyme A esters in biological samples. Methods in Enzymology, 1988, 166, 55-70.	1.0	77
122	Cyclic AMP raises cytosolic Ca2+and promotes Ca2+influx in a clonal pancreatic Î²-cell line (HIT T-15). FEBS Letters, 1987, 220, 103-107.	2.8	47
123	[23] Assay of citric acid cycle intermediates and related compoundsâ€"Update with tissue metabolite levels and Intracellular Distribution. Methods in Enzymology, 1979, 55, 200-222.	1.0	136
124	[65] Assays of intermediates of the citric acid cycle and related compounds by fluorometric enzyme methods. Methods in Enzymology, 1969, , 434-513.	1.0	664