

Cellular Aspects

Contents of Volume 186, No. 1, 1980

Biosynthesis and Degradation

Microbial metabolism of amino alcohols. Biosynthetic utilization of ethanolamine for lipid synthesis by bacteria	S. D. SHUKLA & J. M. TURNER	13-19
Protein degradation in hepatocyte monolayers. Effects of glucagon, adenosine 3':5'-cyclic monophosphate and insulin	M. F. HOPGOOD, M. G. CLARK & F. J. BALLARD	71-79
The catabolism of prostaglandins by rat skin	R. CAMP & M. W. GREAVES	153-160
Surface-labelling studies on skeletal-muscle cells <i>in vitro</i> . Heterogeneity of iodinated cell-surface proteins	G. A. CATES & P. C. HOLLAND	211-216
The identification of the folate conjugates found in rat liver 48 h after the administration of radioactively labelled folate tracers	M. J. CONNOR & J. A. BLAIR	235-242
Substrate-specificity studies on protochlorophyllide reductase in barley (<i>Hordeum vulgare</i>) etioplast membranes	W. T. GRIFFITHS	267-278
Degradation of [³ H]chondroitin 4-sulphate and re-utilization of the [³ H]hexosamine component by the isolated perfused rat liver	A. D. MACNICHOLL, F. S. WUSTEMAN, P. J. WINTERBURN, G. M. POWELL & C. G. CURTIS	279-286
Transacylation as a chain-termination mechanism in fatty acid synthesis by mammalian fatty acid synthetase. Synthesis of butyrate and hexanoate by lactating cow mammary gland fatty acid synthetase	J. K. HANSEN & J. KUDSEN	287-294
Insulin degradation by adipose tissue. Studies at several levels of cellular organization	B. J. GOLDSTEIN & J. N. LIVINGSTON	351-360
Contribution of rat liver and gastrointestinal tract to whole-body protein synthesis in the rat	M. A. McNURLAN & P. J. GARLICK	381-383

Bioenergetics

Energy transduction in intact synaptosomes. Influence of plasma-membrane depolarization on the respiration and membrane potential of internal mitochondria determined <i>in situ</i>	I. D. SCOTT & D. G. NICHOLLS	21-33
An analysis of some thermodynamic properties of iron-sulphur centres in site I of mitochondria	W. J. INGLEDEW & T. OHNISHI	111-117
Respiration-dependent calcium ion uptake by two preparations of cardiac mitochondria. Effects of palmitoyl-coenzyme A and palmitoylcarnitine on calcium ion cycling and nicotinamide nucleotide reduction state	P. E. WOLKOWICZ & J. McMILLIN-WOOD	257-266
Nature of the effect of adenosine 5'-monophosphate on the cyanide-insensitive respiration in mitochondria of <i>Moniliella tomentosa</i>	J. VANDERLEYDEN, E. VAN DEN EYNDE & H. VERACHTERT	309-316
Metabolism of hydrogen peroxide in <i>Euglena gracilis</i> z by L-ascorbic acid peroxidase	S. SHIGEOKA, Y. NAKANO & S. KITAOKA	377-380

Subcellular Structures

- Polyribosomes in isolated liver cells. Preparative procedures, effects of incubation and correlation with protein synthesis
A. J. DICKSON & C. I. POGSON 35-45
- Subcellular distribution and movement of 5'-nucleotidase in rat cells
K. K. STANLEY, M. R. EDWARDS & J. P. LUZIO 59-69
- Sodium ion/L-lactate co-transport in rabbit small-intestinal brush-border-membrane vesicles
B. HILDMANN, C. STORELLI, W. HAASE, M. BARAC-NIETO & H. MURER 169-176
- A simple and fast method for the isolation of basolateral plasma membranes from rat small-intestinal epithelial cells
V. SCALERA, C. STORELLI, C. STORELLI-JOSS, W. HAASE & H. MURER 177-181
- The mother-cell-membrane adenosine triphosphatase of sporulating *Clostridium pasteurianum*
D. J. CLARKE & J. G. MORRIS 191-199
- Mechanisms of loss of latency of lysosomal enzymes. Effects of incubation on the properties of lysosomal membranes
R. C. RUTH & W. B. WEGLIICKI 243-256
- Induction of peroxisomal β -oxidation in rat liver by high-fat diets
C. E. NEAT, M. S. THOMASSEN & H. OSMUNDSEN 369-371

Cellular Interactions and Control Processes

- Inhibition of urea-cycle activity by high concentrations of alanine
H. E. S. J. HENSGENS & A. J. MEIJER 1-4
- The size of collagen fibrils that stimulate platelet aggregation in human plasma
P. KRONICK & S. A. JIMENEZ 5-12
- A comparative study of the early effects of phenobarbital and 3-methylcholanthrene on the synthesis and transport of ribonucleic acid in rat liver
A. KUMAR, M. R. SATYANARAYANA RAO & G. PADMANABAN 81-87
- Binding of aldolase to actin-containing filaments. Evidence of interaction with the regulatory proteins of skeletal muscle
T. P. WALSH, D. J. WINZOR, F. M. CLARKE, C. J. MASTERS & D. J. MORTON 89-98
- Interaction of aldolase with actin-containing filaments. Structural studies
M. STEWART, D. J. MORTON & F. M. CLARKE 99-104
- Effect of electrical stimulation *post mortem* of bovine muscle on the binding of glycolytic enzymes. Functional and structural implications
F. M. CLARKE, F. D. SHAW & D. J. MORTON 105-109
- The swift increase in alcohol metabolism. Time course for the increase in hepatic oxygen uptake and the involvement of glycolysis
T. YUKI & R. G. THURMAN 119-126
- Differential effect of L-thyroxine on phospholipid biosynthesis in mitochondria and microsomal fraction
J. M. PASQUINI, I. FARYNA DE RAVEGLIA, N. CAPITMAN & E. F. SOTO 127-133
- 2-Oxocarboxylic acids and function of pancreatic islets in obese-hyperglycaemic mice. Insulin secretion in relation to ^{45}Ca uptake and metabolism
S. LENZEN & U. PANTEN 135-144
- Non-esterified cholesterol-rich adrenal lipid fractions. Preparation, properties and preferential utilization for cholesterol side-chain cleavage by corticotropin-stimulated adrenal mitochondria
R. V. FARESE, W. J. PRUDENTE & L. T. CHUANG 145-152
- The stimulus-secretion coupling of glucose-induced insulin release. Metabolism of glucose in K^+ -deprived islets
A. SENER, S. KAWAZU & W. J. MALAISSE 183-190
- Oestrogen-induced synthesis of thiamin-binding protein in immature chicks. Kinetics of induction, hormonal specificity and modulation
K. MUNIYAPPA & P. R. ADIGA 201-210

The effect of ascorbic acid on the nature and production of collagen and elastin by rat smooth-muscle cells	Y. A. DE CLERCK & P. A. JONES	217-225
Hydrophobic interaction between the monomer of mitochondrial malate dehydrogenase and phospholipid membranes	K. A. WEBSTER, K. B. FREEMAN & S. OHKI	227-233
Characterization of rat hypothalamic progesterin binding by spheroidal hydroxylapatite chromatography	S. THROWER & L. LIM	295-300
Triacylglycerol metabolism in isolated rat kidney cortex tubules	G. WIRTHENSOHN & W. G. GUDER	317-324
The effect of nitrofurantoin on deoxyribonucleic acid synthesis in plant mitochondria	S. PALIT, B. B. GOSWAMI & D. K. DUBE	325-329
Metabolic adaptation in phosphorylase kinase deficiency. Changes in metabolite concentrations during tetanic stimulation of mouse leg muscles	Z. H. A. RAHIM, D. PERRETT, G. LUTAYA & J. R. GRIFFITHS	331-341
Effect of tunicamycin on the metabolism of low-density lipoproteins by control and low-density-lipoprotein-receptor-deficient human skin fibroblasts	I. FILIPOVIC & K. VON FIGURA	373-375
Development		
Hormone-initiated maturation of rat liver mitochondria after birth	R. SUTTON & J. K. POLLAK	361-367
Metabolism in Whole Organisms		
Net hepatic and splanchnic metabolism of lactate, pyruvate and propionate in dairy cows <i>in vivo</i> in relation to lactation and nutrient supply	G. D. BAIRD, M. A. LOMAX, H. W. SYMONDS & S. R. SHAW	47-57
Glucose metabolism and recycling of radioactively labelled glucose in the Zucker genetically obese rat (<i>fa/fa</i>)	A. J. WADE	161-168
The utilization of glucose for the synthesis of milk components in the fed and starved lactating goat <i>in vivo</i>	N. CHAIYABUTR, A. FAULKNER & M. PEAKER	301-308
Purine metabolism in mesophyll photoplasts of tobacco (<i>Nicotiana tabacum</i>) leaves	J. BARANKIEWICZ & J. PASZKOWSKI	343-350

PHOTOCOPYING

The appearance of the code at the bottom of the first page of an article in this journal indicates the copyright owner's consent that copies of the article may be made in the U.S.A. for personal or internal use, or for the personal or internal use of specific clients. This consent is given on the condition, however, that the copier pay the stated per-copy fee through the Copyright Clearance Center Inc. (P.O.

Box 765, Schenectady, New York 12301, U.S.A.) for copying beyond that permitted by Sections 107 or 108 of the U.S. Copyright Law. This consent does not extend to other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale.