SUBJECT INDEX

	166
Bacillus megaterium, inhibition of phage	
production by 2-thiouracil and 8-aza-	
guanine in induced lysogenic	166
, nature of material released from cell	
	254
	٠,
	т
	_
	166
	100
	a = .
Pone gire and shape of anotite orrestallites	454
	46
	422
on dark — in etiolated barley	
leaves	540
Carotenoids, energy transfer between —	
and bacteriochlorophyll in chromato-	
phores of purple bacteria	1
Catalase, oxidation of ribose 5-phosphate	
by ferricyanide in presence of prepa-	
rations of ——	130
	_
	180
	53
Chondroitinase, action of —— of Proteus	33
vulgaris on hvaluronic acid	532
	33-
	9
	100
concentration of parathyroid hor-	- , -
	500
	J-9
	т
Counter-current dialysis, apparatus for	•
	548
	57-
	guanine in induced lysogenic —

Creatine phosphate, comparison of ion shifts with ATP and —— levels in muscle	tein: an insulin stimulation not involving —— or amino acid transport ——, metabolism in normal and thiamine	556
Cryptoporphyrin, of heart muscle 496 Cysteic acid amide, detection and identification in squid nerve axoplasm 334	deficient pigeons, conversion into glycogen, fatty acids and respiratory	4772
Cytochrome, a —— from the b group from	—, metabolism of — and butyrate by	473
Micrococcus lysoderkticus	omasum of sheep	422
aerobically grown yeast during growth phases	genase, studies on digestibility of	237
Cytochrome oxidase, forms of — 282 Cytochrome system, interaction of non-	Glycolysis, a direct study of intracellular	
specific reducing and oxidizing agents	—— in Ehrlich ascites tumour. Haemoglobin, heam-globin equilibrium	
with — in heart-muscle preparations		
Desoxyribonuclease, see Nuclease	serting enzyme in duck erythrocytes	569
Desoxyribonucleic acid, see Nucleic acid Desoxyriboside, studies of DNA synthesis	, studies on structure, properties of reconstituted protohaemoglobin and	
and cell growth in Lactobacillus acido-	protoporphyrin-globin	93
philus requiring — 434	Haemolysis, the salt sensitive step in im-	
Desoxyribonucleoside triphosphates, stud-	mune ——,	291
ies on biosynthesis of DNA by ex-	Haem-protein link, cleavage by acid	
tracts of mammalian cells, enzymic formation of ——	methylethylketon	543
3,4-Dihydroxyphenylacetaldehyde, oxi-	of Proteus vulgaris on ——	522
dation of —		332
Dimethylethanolamine, isolation from rat-	of Spirostomum ambiguum	33
liver phospholipids 287		-
Diphosphopyridine nucleotide, stereospe-	24.	270
cific lactic dehydrogenases inde-	Insulin, incorporation of [14C]amino acid	
pendent of —— of Lactobacillus	precursors into adipose-tissue pro-	
arabinosus 17.5 574	tein: an — stimulation not in-	
Disulphide groups, oxidation of —— in	volving glucose or amino acid trans-	
Phyliph arrives turnour and Turnour		550
Ehrlich ascites tumour, see Tumour Electrophoresis, zone —, studies on	Lactate, enzymic mechanism of metabolism in Acetobacter peroxydans	T = 4
soluble RNA from rat-liver cytoplasm 244		134
Enzyme systems, spectrophotometric in-	forms of —	212
vestigations on —— in living objects,	Lactic dehydrogenases, stereospecific DPN-	
kinetic of the steady states 340		
Erythrocytes, mechanism of haemoglobin	arabinosus 17.5	574
formation: iron-inserting enzyme in	Lactic oxidase, of Tetrahymena pyriformis:	
duck —		57I
Escherichia coli, effect of metal ions and	Lactobacillus acidophilus, studies on DNA	
proteins on β -galactosidase of — . 122		
, formation of 5-aminoimidazole ribo-	riboside requiring —	434
side by ——, evidence for its struc- ture and metabolic relationship to	Lactobacillus arabinosus 17.5, stereospecific DPN-independent lactic dehydro-	
purines		574
-, isolation of thymidine diphospho-	Mercaptalbumin, optical-rotatory changes	317
sugar compounds from — 552	associated with dimerization of	
, studies on synthesis of 5-amino-4-	bovine — with mercurials	262
imidazolecarboxamide by cell-free	Methionine, synthesis by enzymic trans-	
extracts of —		515
—, variations in amount of ribonucleo-	Methylethanolamine, isolation from rat-	- 0
protein particles in — 248		207
Flavin, activation of thyroxine deiodinase by ferrous ions and — 567	*Micrococcus lysodeikticus, a cytochrome of the b group from ——	76
β -Galactosidase, Escherichia coli, effect of	Microsomal particles, rat liver, in vitro in-	75
metal ions and proteins on stability	corporation of [14C]amino acids into	
of ——		554
Glucose, incorporation of [14C]amino acid	Microsomes, transfer of RNA-bound amino	
precursors into adipose-tissue pro-	acids to proteins of ——	275

Mitochondria, metabolic mechanisms in-	Nucleoprotein, ribo ——, variations of —	_
volved in swelling of isolated —	particles in Escherichia coli 2.	48
and its prevention 358	Octopine, biosynthesis of —— and distri-	
Monofluoromalate, a possible lethal syn-	bution of enzyme in invertebrates . 4.	46
thesis of ——	Oestradiol, comparison of the in vivo regu-	
Mycoplasma mycoides, on probable absence	lation by —— of two decarboxylases	
of "mucocomplex" from — 260	in rat liver	26
L-Myosin, studies on "active centers" of	, influence of and thyroxine on	
	two decarboxylases in rat liver, evi-	
Nitrate reductase, Aerobacter aerogenes, ex-	dence for the existence of two inde-	
traction and properties 537	pendent regulations	31
——, properties of a particulate —— from	Organic dyes, oxido-reductive properties	
nodules of soybean plant 140	of — of biological importance 5	35
Nuclease, desoxyribo —— II, new method	Oxidative phosphorylation, tri- and tetra-	
for determination, comparison with	iodothyroacetic acid and 50	62
two other assay procedures 197	Parathyroid hormone, concentration of	
—, ribo —, new observations on mode	—— activity by chromatography on	
of action of —— on living root-tips 580	carboxymethylcellulose 56	og
Nuclei, isolated rabbit liver, appendix and	Penicillin, isolation of a tripeptide con-	
thymus —, effect of X-irradiation	taining a -aminoadipic acid from my-	
on uptake of nucleic acids and pro-	celium of Penicillium chrysogenum	
tein precursors by —	and its possible significance in bio-	
Nucleic acid, desoxyribo —, denatu-	synthesis of —— 50	61
ration or dissociation of ——in dilute	Penicillium chrysogenum, D-xylose metabo-	
solution	lism by cell-free extracts of — 4.	54
,, shape of sedimenting boundary	, isolation of a tripeptide containing	٠.
of sodium —— 309	α-aminoadipic acid from mycelium	
—, —, studies on biosynthesis and cell	and its possible significance in peni-	
growth in desoxyriboside requiring	cillin biosynthesis 50	61
Lactobacillus acidophilus 434	Peroxidase, effect of —— on reconstructed	
—, —, studies on biosynthesis by ex-	succinoxidase system 5	78
tracts of mammalian cells 389, 405	Phospholipid, effect of neoplasia and	•
—, —, synthesis of — in relation to	fasting on — turnover rate in rat	
RNA and protein synthesis, studies	liver	57
with desoxyriboside requiring Lacto-	, mono- and dimethylethanolamine	
bacillus acidophilus 434	isolated from rat liver — 2	87
, effect of some adenine derivatives on	Photosynthetic phosphorylation, relation	
in vitro incorporation of labelled	between — and reduction of TPN	
compounds into of Ehrlich as-	by chloroplasts	53
cites tumour cells 412	Poliomyelitis virus, see Virus	
, effect of X-irradiation on uptake of	Polycytidylic and polyinosinic acids, infra-	
precursors by rabbit-liver, ap-	red spectra and tautomeric structure	
pendix and thymus nuclei 251	in D_2O solution	74
, ribo, as index of metabolic ac-	Polystictus versicolor, reduction of certain	
tivity of pea leaves 550	aromatic acids to aldehydes and	
,, countercurrent distribution of	alcohols by ——	02
rat liver "soluble"-fraction — 272	Porphyra lacineata, pigment system of,	
,, DNA synthesis in relation to	studies 3	16
- and protein synthesis, studies	Protein, activity of a cofactor form of	
with desoxyriboside requiring Lacto-	vitamin B ₁₂ on amino acid incorpo-	
bacillus acidophilus 434	ration into ——	86
,, incorporation of labelled ribo-	, amino acid sequence of a pentadeca-	
nucleoside-5'-monophosphates into	peptide obtained from tryptic digest	
—— in cytoplasmic fraction of rat	of TMV ——	57
liver homogenates	, cross- β configuration in supercon-	
, occurrence of fifth nucleotide		17
in soluble —— in yeast 266	—, DNA synthesis in relation to RNA	
—, —, preliminary study on kinetics	and — synthesis, studies with	
of ³² P incorporation into —— of Hela	desoxyriboside requiring Lactobacil-	_
cells infected with poliovirus 268	lus acidophilus 4.	34
, transfer of amino acids bound	, effect of X-irradiation on uptake of	
to —— to microsomal proteins 275	—— precursors by rabbit-liver, ap-	
, zone-electrophoretic studies on	pendix and thymus nuclei 2	51
soluble —— from rat-liver cytoplasm 244	—, incorporation of [14C]amino acid pre-	

glucose or amino acid transport
acids into — of rat-liver microsomal particles
—, oxidation of disulphide groups in — 280 DNA by extracts of mammalian cells, incorporation of —
infected with poliovirus
to microsomal ——
of —— on hyaluronic acid 532 Purple bacteria, energy transfer between carotenoids and bacteriochlorophyll ions and flavin
in chromatophores of —— I Tissue culture, polarographic measure- Ribonuclease, see Nuclease ments of endogenous respiration of
Ribonucleic acid, see Nucleic acid Ribonucleoprotein, see Nucleoprotein Ribonucleoside-5'-monophosphates, in- Cells in ——
corporation of labelled —— into phosphorylation
Ribose 5-phosphate, oxidation by ferri- cyanide in presence of catalase prepa- ation and reduction of — by chloroplasts
rations
other amines on active transport of sodium through isolated short-cir- 324 Tumour, a direct study of intracellular glycolysis in Ehrlich ascites —— 464
cuited frog —
of — through isolated short-circuited frog-skin
a developmental feature of — 33 protein and RNA of Hela cells infected with —
on reconstructed ——
actinometry
fication in squid nerve axoplasm
Tetraiodothyroacetic acid, and oxidative Yeast, anaerobically grown, variations of phosphorylation
Thetin-homocysteine methylpherase, phases
zation of —— and its relation to the genase