CONTENTS OF VOLUME 115, No. 4, 1969

	PAGE	•	PAGE
The redox state of free nicotinamide—adenine dinucleotide phosphate in the cytoplasm of rat liver.		Studies on the permeability of rat liver lysosomes to carbohydrates. By J. B. Lloyd	703
By R. L. Veech, L. V. Eggleston and H. A. Krebs	609	Distribution, purification and properties of 1-aspartamido- β - N -acetylglucosamine amidohydrolase.	
Kinetic studies of glutamate dehydrogenase with glutamate and norvaline as sub-		By J. Conchie and I. Strachan	709
strates. Coenzyme activation and negative homotropic interactions in allosteric enzymes. By P. C. Engel and K. Dalziel	621	The enzymic degradation of ovalbumin and its glycopeptides. By J. Conchie, A. J. Hay, I. Strachan and G. A. Levvy	717
The nature of carbon dioxide substrate and equilibrium constant of the 6-phosphogluconate dehydrogenase reaction.		The importance of life-time changes in fluorescence depolarization. By P. Johnson and A. C. R. Thornton	725
By R. H. Villet and K. Dalziel	633	Hydrolysis of penicillins and related com- pounds by the cell-bound penicillin acylase	
Purification and properties of 6-phospho- gluconate dehydrogenase from sheep liver. By R. H. Villet and K. Dalziel	639	of Escherichia coli. By M. Cole	733
Calcium ion-induced uptakes and transformations of substrates in liver mitochondria.	645	Deacylation of acylamino compounds other than penicillins by the cell-bound penicillin acylase of <i>Escherichia coli</i> . By M. Cole	741
By E. J. Harris and C. Berent		Penicillins and other acylamino compounds synthesized by the cell-bound penicillin	
Biosynthesis of ethylene. 4-Methylmercapto- 2-oxobutyric acid, an intermediate in the formation from methionine.	Э	acylase of Escherichia coli. By M. Cole	747
By L. W. Mapson, J. F. March and D. A. Wardale	653	Factors affecting the synthesis of ampicillin and hydroxypenicillins by the cell-bound penicillin acylase of <i>Escherichia coli</i> .	
in rat bile. Separation and partial identification of a major metabolite.		By M. Cole	757
By P. A. Bell and E. Kodicek	663	Acid-catalysed dehydration of dehydro- retinol. By P. G. Nayar	765
Inhibitory effect of pH5 enzyme from non- lactating bovine mammary gland on various stages of protein synthesis in the	<u>.</u>	Regulation of synthesis of glutamate dehydrogenase and glutamine synthetase in	
rat liver amino acid-incorporating system. By M. D. Herrington and A. O. Hawtrey		micro-organisms. By J. A. Pateman	769
Nicotinate, quinolinate and nicotinamide as precursors in the biosynthesis of nicotin-		Cytoplasmic effects of cortisol in liver. By R. F. Cox and A. P. Mathias	777
amide-adenine dinucleotide in barley. By I. J. Ryrie and K. J. Scott	679	N -Terminal sequences of α -crystallin. By P. H. Corran and S. G. Waley .	789
Temperature and the regulation of enzyme activity in poikilotherms. Fructose diphosphatase from migrating salmon.	•	The configuration of 2,6-diamino-3-hydroxy- pimelic acid in microbial cell walls. By H. R. Perkins	797
By H. W. Behrisch	687 f	The effect of dietary fat on lipogenesis in mammary gland and liver from lactating	
Bacillus megaterium KM and Escherichia coli. By M. J. Daniels	697	and virgin mice. By S. Smith, H. T. Gagné, D. R. Pitelka and S. Abraham	807

ii CONTENTS

	\mathbf{PAGE}		PAGE
Separation of the bovine colostrum M-1 glycoprotein into two components. By A. Bezkorovainy and D. Grohlich.	817	Some properties of cytochrome b_5 from liver microsomes of man, monkey, pig and chicken. By F. G. Nóbrega, P. S. Araujo, M.	
Stimulation of incorporation of nucleic acid precursors into HeLa cells caused by provaline.		Pasetto and I. Raw	849
By J. W. Watts	823	The stereochemistry of hydrogen elimination at C-7, C-22 and C-23 during the conversion	
Studies on flavonoid metabolism. Metabolism of (+)-[14C]catechin in the rat and guinea pig. By N. P. Das and L. A. Griffiths	831	of cholesterol (cholest-5-en-3β-ol) into cholesta-5,7,22-trien-3β-ol by Tetrahymena pyriformis. By T. Bimpson, L. J. Goad and T. W. Goodwin	857
Disequilibrium in the triose phosphate isomerase system in rat liver. By R. L. Veech, L. Raijman, K. Dalziel		Some properties of two cell-bound β-lactam- ases from <i>Bacillus cereus</i> 569/H. By S. Kuwabara and E. P. Abraham	859
and H. A. Krebs	837	Comparison of the abilities of free and membrane-bound polyribosomes isolated	
Hepatic collagenolytic activity in rats after carbon tetrachloride poisoning. By C. Hirayama, K. Hiroshige and		from exponential-phase cells of <i>Bacillus</i> amyloliquefaciens to incorporate amino acids into protein.	
T. Masuya	843	By G. Coleman	863