

CONTENTS

VOL. 43, No. 1

JULY 1972

Blood group incompatibility between mother and foetus. C. A. CLARKE	1
Serum bactericidal activity in patients with upper and lower urinary tract infections. P. E. GOWER, P. W. TAYLOR, K. G. KOUTSAIMANIS and A. P. ROBERTS	13
An antibactericidal factor in the serum of two patients with infections of the upper urinary tract. P. W. TAYLOR	23
The influence of two diphosphonates on calcium metabolism in the rat. A. B. GASSER, D. B. MORGAN, H. A. FLEISCH and L. J. RICHELLE	31
The ventilatory response to CO ₂ after administration of frusemide in normal man. H. W. IFF and D. C. FLENLEY	47
The ventilatory response to CO ₂ of patients with diffuse pulmonary infiltrations or fibrosis. J. M. S. PATTON and S. FREEDMAN	55
The 24-hour plasma thyrotrophin profile. Y. C. PATEL, F. P. ALFORD and H. G. BURGER	71
The effect of glucocorticoid withdrawal on body water and electrolytes in hypopituitary patients with adrenocortical insufficiency as investigated with ⁷⁷ Br, ⁴³ K, ²⁴ Na and ³ H ₂ O. F. SKRABAL, R. N. ARNOT, G. F. JOPLIN and T. R. FRASER	79
Relationships between calcium and oxalic acid intake in the diet and their excretion in the urine of normal and renal-stone-forming subjects. R. W. MARSHALL, M. COCHRAN and A. HODGKINSON	91
The interrelations of faecal ammonia, pH and bicarbonate: evidence of colonic absorption of ammonia by non-ionic diffusion. P. F. DOWN, L. AGOSTINI, J. MURISON and O. M. WRONG	101
Effect of exercise on the renal clearance of amylase and lysozyme in humans. J. R. POORTMANS	115
Serum immunoglobulins in systemic lupus erythematosus. D. ALARCÓN-SEGOVIA and EUGENIA FISHBEIN	121
SHORT COMMUNICATION	
Movement of sodium and cholesterol across porcine aortic intima. I. R. EDWARDS and SANDRA A. SMITH	133
MEDICAL RESEARCH SOCIETY (Meeting held on 12 May 1972)	
Communications	1P

VOL. 43, No. 2

AUGUST 1972

The effect of upper abdominal surgery on the relationship of airway closing point to end tidal position. J. I. ALEXANDER, P. W. HORTON, W. T. MILLAR, R. K. PARIKH and A. A. SPENCE	137
Plasma disappearance and cerebral effects of chlorpromazine in cirrhosis. J. D. MAXWELL, M. CARRELLA, J. D. PARKES, R. WILLIAMS, G. P. MOULD and S. H. CURRY	143
Observations on the mechanism of thiamine hydrochloride absorption in man. A. D. THOMSON and C. M. LEEVY	153

Plasma volume and extracellular fluid volume during long-term treatment with propranolol in essential hypertension. P. SEDERBERG-OLSEN and H. IBSEN	165
Initial increase of plasma radioactive calcium after intravenous injection of calcitonin in man. A. CANIGGIA, C. GENNARI, F. PIANTELLI and A. VATTIMO	171
A study of the acid dose-response curve to small doses of pentagastrin in duodenal ulcer patients. J. B. ELDER, G. GILLESPIE, E. H. G. CAMPBELL, I. E. GILLESPIE, G. P. CREAN and A. W. KAY	181
The effect of vagotomy on the lower part of the acid dose-response curve to pentagastrin in man. J. B. ELDER, G. GILLESPIE, E. H. G. CAMPBELL, I. E. GILLESPIE, G. P. CREAN and A. W. KAY	193
The effect of sub-threshold doses of pentagastrin on the acid response to insulin in duodenal ulcer subjects before and after truncal vagotomy. J. B. ELDER, G. GILLESPIE, I. E. GILLESPIE, G. P. CREAN, A. W. KAY and E. H. G. CAMPBELL	201
Arterial angiotensin II and venous immunoreactive material before and during angiotensin infusion in man. W. OELKERS, G. DÜSTERDIECK and J. J. MORTON	209
Sodium turnover in irradiation hypertension. A. E. ERMEL	219
Factors affecting the absorption of vitamin B ₁₂ . J. F. ADAMS, D. J. CLOW, SHEILA K. ROSS, K. BODDY, PRISCILLA KING and MAUREEN A. MAHAFFY	233
The effects of chronic hypokalaemia, hyponatraemia, and acid-base alterations on erythrocyte sodium transport. M. L. LEVIN, F. C. RECTOR, JR and D. W. SELDIN	251
Relationship between dietary carbohydrates and fats in their influence on serum lipid concentrations. I. MACDONALD	265
Characterization of the natriuresis caused in normal man by immersion in water. M. EPSTEIN, D. C. DUNCAN and L. M. FISHMAN	275
Cortisol and aldosterone excretion and plasma cortisol concentrations in normal and obese female subjects. MARGARET E. HANKIN, HELEN M. THEILE and A. W. STEINBECK	289
SHORT COMMUNICATION	
Amounts of faecal porphyrin-peptide conjugates in the porphyrias. M. R. MOORE, G. G. THOMPSON and A. GOLDBERG	299
CORRESPONDENCE SECTION	
Measurement of mixed venous PCO ₂ . M. E. WISE, J. G. DEFARES, S. GODFREY and ELIANA WOLF	303
VOL. 43, No. 3	
SEPTEMBER 1972	
Ethics in human experimentation	309
Relation of the extracellular [bicarbonate]/[chloride] ratio to erythrocyte sodium content: a possible new control system. M. A. NEEDLE, W. SHAPIRO, V. VISWANATHAN and M. SEMAR	311
Flow dependence of the intrapulmonary distribution of inspired boluses of ¹³³ Xe in smokers and non-smokers. R. R. MARTIN, N. R. ANTHONISEN and M. ZUTTER	319
Uric acid in advanced renal failure. G. M. DANOVITCH, J. WEINBERGER and G. M. BERLYNE	331

Studies of the mechanism of the Jarisch–Herxheimer reaction in louse-borne relapsing fever: evidence for the presence of circulating <i>Borellia</i> endotoxin. A. D. M. BRYCESON, K. E. COOPER, D. A. WARRELL, P. L. PERINE and E. H. O. PARRY	343
The transient nature of angiotensin-induced natriuresis in the rabbit. J. K. HEALY and A. J. ELLIOTT	355
The effects of low-protein diet and uraemia upon urea-cycle enzymes and transaminases in rats. C. L. BROWN, B. J. HOUGHTON, R. L. SOUHAMI and P. RICHARDS	371
Inositol phosphates and phytic acid as inhibitors of biological calcification in the rat. C.J. VAN DEN BERG, L. F. HILL and S. W. STANBURY	377
Effects of chronic beta-adrenergic blockade on systemic and renal haemodynamic responses to hyperosmotic saline in hypertensive patients. X. H. KRAUSS, M. A. D. H. SCHALEKAMP, G. KOLSTERS, G. A. ZAAL and W. H. BIRKENHÄGER	385
The fate of [¹⁴ C]carbonoxolone in patients with gastric ulcer. D. V. PARKE, T. C. HUNT and P. IVESON	393
Influence of cortical plasma transit-time on <i>p</i> -aminohippurate extraction during induced renal vasodilatation in anaesthetized dogs. M. T. VELASQUEZ, A. V. NOTARGIACOMO and J. N. COHN	401
The distribution and storage of vitamin D and its metabolites in human tissues. E. BARBARA MAWER, JOAN BACKHOUSE, CARLENE A. HOLMAN, G. A. LUMB and S. W. STANBURY	413
The relation between the concentration of calcium salts in the urine and renal stone composition in patients with calcium-containing renal stones. R. W. MARSHALL, M. COCHRAN, W. G. ROBERTSON, A. HODGKINSON and B. E. C. NORDIN	433
Comparison of intestinal absorption rates of glycine and glycyglycine in man and the effect of glucose in the perfusing fluid. G. C. COOK	443
Effect of catecholamines and other vasoactive substances on superficial hand veins in man. J. G. COLLIER, C. NACHEV and B. F. ROBINSON	455
A comparison of the fat-free mass of young adults estimated by anthropometry, body density and total body potassium content. J. WOMERSLEY, K. BODDY, PRISCILLA C. KING and J. V. G. A. DURIN	469
SHORT COMMUNICATION	
Improved atraumatic method for estimation of cerebral transit-time in man. I. M. S. WILKINSON, J. GODDARD, H. J. TESTA and B. PULLEN	477
MEDICAL RESEARCH SOCIETY (Meeting held on 7 July 1972)	
Demonstrations	7P
Symposium: Absorption	9P
Communications	10P
VOL. 43, No. 4	OCTOBER 1972
Relationship between the adrenergic nervous system and renin during adaptation to upright posture: a possible role for 3,4-dihydroxyphenethylamine (dopamine). J. L. CUCHE, O. KUCHEL, A. BARBEAU, R. BOUCHER and J. GENEST	481
Volatile phenols in serum of uraemic patients. B. WENGLER and K. HELLSTRÖM	493

Calcium oxalate crystalluria and inhibitors of crystallization in recurrent renal stone-formers. W. G. ROBERTSON and M. PEACOCK	499
The absorption of orally administered [$^{12}\alpha\text{-}^3\text{H}$]digoxin in man. B. BEERMANN, K. HELLSTRÖM and A. ROSÉN	507
The effect of aluminium hydroxide on calcium, phosphorus and aluminium balances, the serum parathyroid hormone concentration and the aluminium content of bone in patients with chronic renal failure. E. M. CLARKSON, V. A. LUCK, W. V. HYNSON, R. R. BAILEY, J. B. EASTWOOD, J. S. WOODHEAD, V. R. CLEMENTS, J. L. H. O'RIORDAN and H. E. DE WARDENER	519
An organ culture study of the effect of drugs on the secretory activity of the human bronchial submucosal gland. JENNIFER STURGESS and LYNNE REID	533
Capillary diffusion capacity for ^{131}I in muscles of patients with chronic renal insufficiency. K. ROZTOČIL, I. PŘEROVSKÝ and P. NOVÁK	545
The CO_2 titration curve of mixed venous blood. C. T. KAPPAGODA, J. B. STOKER, H. M. SNOW and R. J. LINDEN	553
Renal excretion of bicarbonate and hydrogen ions: effects of mannitol diuresis in normal man. P. A. POOLE-WILSON, J. PATRICK, G. A. MACGREGOR and N. F. JONES	561
Effect of renal beta- and alpha-adrenergic stimulation on proximal sodium reabsorption in dogs. L. M. BLENDIS, R. B. AULD, E. A. ALEXANDER and N. G. LEVINSKY	569
SHORT COMMUNICATION	
Faecal sodium/potassium ratio and aldosteronism in experimental hypertension in the rat. J. D. SWALES, H. THURSTON, F.P. QUEIROZ and J. D. TANGE	577

VOL. 43, No. 5

NOVEMBER 1972

Inspiratory flow rate and ventilation distribution in normal subjects and in patients with simple chronic bronchitis. J. M. B. HUGHES, B. J. B. GRANT, R. E. GREENE, L. D. ILIFF and J. MILIC-EMILI	583
The role of pancreatic glucagon in the pathogenesis of acute pancreatitis. J. L. DAY, M. KNIGHT and J. R. CONDON	597
Turnover studies of copper in homozygotes and heterozygotes for Wilson's disease and controls: isotope tracer studies with ^{67}Cu . G. T. STRICKLAND, W. M. BECKNER, MEI-LING LEU and S. O'REILLY	605
Absorption of copper in homozygotes and heterozygotes for Wilson's disease and controls: isotope tracer studies with ^{67}Cu and ^{64}Cu . G. T. STRICKLAND, W. M. BECKER and MEI-LING LEU	617
Changes in total body calcium content in primary hyperparathyroidism. D. J. HOSKING, M. J. CHAMBERLAIN and J. H. FREMLIN	627
Late hypoalbuminaemia and albumin metabolism in paraplegic and tetraplegic patients. P. RANLØV, N. ROSSING, M. SCHWARTZ, B. ESKESEN and G. RASMUSSEN	639
Baroreflex sensitivity in patients on long-term haemodialysis. T. G. PICKERING, B. GRIBBIN and D. O. OLIVER	645
Intestinal dipeptide transport in normal and cystinuric subjects. M. D. HELLIER, C. D. HOLDSWORTH, D. PERRETT and C. THIRUMALAI	659

Leucocyte potassium in uraemia: comparisons with erythrocyte potassium and total exchangeable potassium. J. PATRICK, N. F. JONES, BERENICE BRADFORD and JUDITH GAUNT	669
The effect of caloric intake on nitrogen balance in chronic renal failure. B. E. B. HYNE, EDNA FOWELL and H. A. LEE	679
A new method for measuring static compliance in infants and young children. A. D. MILNER, D. HULL, D. J. HATCH and J. J. COGSWELL	689
Peritoneal dialysis for the support of respiratory insufficiency in rabbits. A. V. BERAN and W. F. TAYLOR	695
SHORT COMMUNICATIONS	
Isolation and characterization of a serum antibactericidal factor. P. W. TAYLOR	705
Effect of vasopressin on the reabsorption of phenacetin and its metabolites from the tubular fluid in man. M. A. BARRACLOUGH	709
The effect of parathyroid hormone on the uptake and release of calcium by bone in tissue culture. W. G. ROBERTSON, M. PEACOCK, D. ATKINS and L. A. WEBSTER	715
CORRESPONDENCE SECTION	
Absorption abnormalities in coeliac disease. D. L. WINGATE and R. I. RUSSELL	719
VOL. 43, No. 6	
DECEMBER 1972	
Normal urine concentrating ability in magnesium depletion. S. M. SUH and J. SELLORS	723
Intestinal structure and function after small bowel by-pass in the rat. M. H. GLEESON, J. CULLEN and R. H. DOWLING	731
Biochemical changes in intestinal mucosa after experimental small bowel by-pass in the rat. M. H. GLEESON, R. H. DOWLING and T. J. PETERS	743
Lung function in provoked asthma: responses to inhaled urea, methacholine and isoprenaline. J. F. CADE and M. C. F. PAIN	759
Sodium conservation in chronic renal failure: studies using oral diazoxide. J. D. SWALES H. THURSTON and J. E. F. POHL	771
The relationship between the magnesium concentration in the dialysis fluid used and in the plasma and erythrocytes of patients with chronic renal failure being treated by regular haemodialysis. CH. HEIERLI and A. V. L. HILL	779
Quantitative histology of bone: the use of a computer program and results in normal subjects. R. GARRICK, P. DOMAN and S. POSEN	789
Composition of pteroylpolyglutamates (conjugated folates) in guinea-pig liver and their formation from folic acid. R. CORROCHER, B. K. BHUYAN and A. V. HOFFBRAND	799
Subcellular localization of folate and effect of methotrexate on the incorporation of radioactive folic acid into guinea-pig liver folate. R. CORROCHER and A. V. HOFFBRAND	815
Uptake of dipeptides containing basic and acidic amino acids by rat small intestine <i>in vitro</i> . D. BURSTON, JILL M. ADDISON and D. M. MATTHEWS	823
Pressor response to angiotensin I and angiotensin II: the site of conversion of angiotensin I. E. C. OSBORN, G. TILDESLEY and P. T. PICKENS	839

The action of L-dopa on baroreflexes in Parkinsonism. J. L. REID, D. B. CALNE, C. F. GEORGE and S. D. VAKIL	851
Ventilatory response to exercise and to CO ₂ rebreathing in normal subjects. A. S. REBUCK, N. L. JONES and E. J. M. CAMPBELL	861
Humoral immune responses in the tropical-splenomegaly syndrome in New Guinea. G. G. CRANE, MERRILL J. ROWLEY, M. F. WARBURTON and I. R. MACKAY	869
Bronchial sympathetic activity in chronic bronchitis. T. W. ASTIN	881
A study of water and electrolyte transport by the excluded human colon. R. L. BOWN, G. E. SLADEN, B. ROUSSEAU, J. A. GIBSON, M. L. CLARK and A. M. DAWSON	891
SHORT COMMUNICATIONS	
Somatomedin (sulphation factor)-like activity of homocystine. JENNIFER M. DEHNEL and M. J. O. FRANCIS	903
Evidence for active transport of the dipeptide glycylsarcosine by hamster jejunum <i>in vitro</i> . JILL M. ADDISON, D. BURSTON and D. M. MATTHEWS	907
MEDICAL RESEARCH SOCIETY (Meeting held on 27 October 1972)	
Demonstrations	15P
Communications	15P