## CONTENTS

VOL. 64, No. 1  
JANUARY 1983

### Guidance for Authors

---

### Editorial Review

**The role of pituitary gonadotrophin-releasing hormone receptors in the physiological regulation of gonadotrophin secretion.**  
R. N. CLAYTON  
1–6

### Controversies in Medicine

**Luxuskonsumption, diet-induced thermogenesis and brown fat: a critical review.**  
G. R. HERVEY and G. TOBIN  
7–18

**Luxuskonsumption, diet-induced thermogenesis and brown fat: the case in favour.**  
N. J. ROTHWELL and M. J. STOCK  
19–23

### The pulmonary haemodynamic effects of almitrine infusion in men with chronic hypercapnia.**  
W. L. DULL, J. M. POLU and P. SADOUL  
25–31

### Myocardial exchanges of glutamate, alanine and citrate in controls and patients with coronary artery disease.**  
A. R. THOMASSEN, T. T. NIelsen, J. P. BAGGER and P. HENNINGSEN  
33–40

### Glucose turnover and indices of recycling in thyrotoxicosis and primary thyroid failure.**  
41–47

### Cholinergic manifestations of the acute autonomic reaction to hypoglycaemia in man.**  
R. J. M. COWL, B. M. FRIER, N. MCD. DAVIDSON, W. M. HOPKINS and E. B. FRENCH  
49–53

### Pain and fatigue after concentric and eccentric muscle contractions.**  
D. J. NEWHAM, K. R. MILLS, B. M. QUIGLEY and R. H. T. EDWARDS  
55–62

### Release of a 6-oxoprostaglandin E₁-like substance from human platelets.**  
F. J. LOFTS and P. K. MOORE  
63–68

### Factors influencing the regional deposition of inhaled particles in man.**  
M. J. CHAMBERLAIN, W. K. C. MORGAN and S. VINITSKI  
69–78

### Effects of myeloid leukaemic blast cell extract on sodium transport in human erythrocytes.**  
M. A. MIR  
79–83

### Sex differences of hepatic conjugation of bilirubin determine its maximal biliary excretion in non-anaesthetized male and female rats.**  
M. MURACA, JAN DE GROOTE and J. FEVERY  
85–90

### The influence of different types of ω3 polyunsaturated fatty acids on blood lipids and platelet function in healthy volunteers.**  
T. A. B. SANDERS and F. ROSHANAI  
91–99

### Whole-body protein turnover before and after resection of colorectal tumours.**  
R. E. GLASS, E. B. FERN and P. J. GARLICK  
101–108

### SHORT COMMUNICATIONS

**Changes in liver glycogen and glycolytic intermediates during abdominal surgery in man.**  
G. M. HALL, CELINE TRAYNOR and J. L. PATERSON  
109–111

**Relationship between primary biliary cirrhosis and chronic graft versus host disease: investigation of histocompatibility (HLA) antigenic determinants in biliary tract antigens.**  
I. G. MCFARLANE, B. M. MCFARLANE, A. J. HAINES, A. L. W. F. EDDLESTON and R. WILLIAMS  
113–116

### CORRESPONDENCE SECTION

**Oedema in cor pulmonale.**  
P. D'A. SEMPLE, W. S. WATSON and G. H. BEASTALL  
117–118
Contents

VOL. 64, No. 2
FEBRUARY 1983


Cerebral blood flow and cerebral metabolism in normal and intrauterine growth retarded neonatal piglets. P. A. FLECKNELL, R. WOOTTON and MURIEL JOHN 161–165
Erythrocyte sodium and potassium in patients with hypokalaemia, M. CUMBERBATCH and D. B. MORGAN 167–176
Effect of hypokalaemia on the ouabain-sensitive sodium transport and the ouabain-binding capacity in human erythrocytes. E. J. RUBYTHON and D. B. MORGAN 177–182
Clearance and non-invasive determination of the hepatic extraction of indocyanine green in baboons and man. S. L. GRAINGER, P. W. N. KEELING, I. M. H. BROWN, J. H. MARIGOLD and R. P. H. THOMPSON 207–212
Nocturnal hypoxaemia in chronic obstructive pulmonary disease. J. R. STRADLING and D. J. LANE 213–222
The interaction of cigarette smoke solution with α1-antitrypsin: effect on inhibitory capacity, electrophoretic mobility and immunological measurement. R. A. STOCKLEY and S. C. AFFORD 223–230

Short Communications

Effect of nicotinic acid on acylglycerol metabolism in human adipose tissue. P. ARNER and J. ØSTMAN 235–237

Correspondence Section

A dissenting view of the significance of 3-methylhistidine excretion in cirrhotic patients. M. J. RENNIE, D. J. MILLWARD, D. HALLIDAY and K. LUNDHOLM 243–246

Medical Research Society (Meeting 6 and 7 January 1983)

Communications 1p–74p

247–252

Editorial Review: Digitalis intoxication. J. K. ARONSON

253–258

Baroreflex function after therapy withdrawal in patients with essential hypertension. R. CARRETTA, B. FABRIS, G. BELLINI, LAURA TONUTTI, GABRIELLA BATILANA, ANNA BIANCHETTI and LUCIANO CAMPANACCI

259–263

Platelet α2-adrenergic receptors in treated and untreated essential hypertension. H. J. MOTULSKY, D. T. O’CONNOR and P. A. INSEL

265–272

The epidemiology of plasma renin. T. W. MEADE, J. D. IMESON, D. GORDON and W. S. PEART

273–280

The role of cardiopulmonary sympathetic afferents in blood volume homeostasis in the non-human primate. K. G. CORNISH and J. P. GILMORE

281–287

The reliability of the carbon dioxide-rebreathing, indirect Fick method of cardiac output determination in patients with pulmonary disease. R. I. STEWART and C. M. LEWIS

289–293

Effects of dietary sodium on circadian rhythm and physiological responses of 18-hydroxycorticosterone. J. R. SOWERS, V. I. MARTIN and F. W. J. BECK

295–301

The effect of experimental rat tumours on progesterone binding in the host liver. G. FEUER and J. A. KELLEN

303–306

Binding of testosterone and oestradiol to sex hormone binding globulin, human serum albumin and other plasma proteins: evidence for non-specific binding of oestradiol to sex hormone binding globulin. M. J. IQBAL, MAUREEN DALTON and R. S. SAWERS

307–314

Growth hormone-induced changes in myofibrillar protein breakdown in hypopituitary children. F. J. BALLARD, J. L. BURGOYNE, T. M. TOMAS and J. L. PENFOLD

315–320


321–331


333–340

Mucosal enzyme activities, with special reference to enzymes implicated in bicarbonate secretion, in the duodenum of rats with cysteamine-induced ulcers. D. STIEL, D. J. MURRAY and T. J. PETERS

341–347


349–354

SHORT COMMUNICATION

Elevated arterial cyclic AMP levels during the onset of renal hypertension in rats. R. E. CHATELAIN

355–358

The importance of the renin-angiotensin system in the development and maintenance of hypertension in the two-kidney one-clip hypertensive rat. J. J. MORTON and ELISABETH C. H. WALLACE

359–370

Post-adrenalectomy hypotension in rats; absence of baroreflex resetting or effect of naloxone. S. M. GARDINER and T. BENNETT

371–376

The cardiovascular and renal responses to short-term isolation in Brattleboro rats. S. M. GARDINER and T. BENNETT

377–382
The effect of insulin on the rise in blood pressure and plasma aldosterone after angiotensin II in normal man. H. VIERHAPPER, W. WALDHÄUSL and P. NOWOTNY 383–386

The presence in normal plasma, serum and platelets of factors that stimulate the production of prostacyclin (PGI₂) by cultured endothelial cells. J. M. SEID, P. B. B. JONES and R. G. G. RUSSELL 387–394


A Signal Detection Theory analysis of the effect of chest cage restriction upon the detection of inspiratory resistive loads. P. G. NARBED, D. MARCER, J. B. L. HOWELL and E. SPENCER 417–421


Changes in the number and activity of sodium pumps in erythrocytes from patients with hyperthyroidism. E. J. RUBYTHON, M. CUMBERBATCH and D. B. MORGAN 441–447

SHORT COMMUNICATIONS

Effect of pH, viscosity and ionic-strength changes on ciliary beating frequency of human bronchial explants. C. K. LUK and M. J. DULFANO 449–451

α₁-Antitrypsin and reactive systemic amyloidosis. C. P. J. MAURY, A.-M. TEPPO, B. FRÖSETH and O. WEGELIUS 453–454

VOL. 64, No. 5 MAY 1983

The effect of phenylephrine upon arterial pressure, carotid sinus radius and baroreflex sensitivity in the conscious greyhound. R. C. PEVERER, D. H. BERGEL, J. L. ROBINSON and P. SLEIGHT 455–461


Dose-dependent effects of meclofenamate on peripheral vasculature of conscious rabbits. R. A. BANKS, L. J. BEILIN and J. SOLTYS 471–474

A comparison of the bronchodilator and vasopressor effects of exercise levels of adrenaline in man. J. B. WARREN and N. DALTON 475–479

Reversible acid activation of amniotic fluid inactive renin. R. C. FRANKS, F. BODOLA, R. D. RENTHAL and R. H. HAYASHI 481–486

Role of impaired inspiratory muscle function in limiting the ventilatory response to carbon dioxide in chronic airflow obstruction. H. R. GRIBBIN, I. T. GARDNER, G. J. HEINZ III, G. J. GIBSON and N. B. PRIDE 487–495

Development of the respiratory compensation to progressive metabolic alkalosis resulting from potassium depletion in conscious rats. P. GIRARD, M. BRUN-PASCAUD and J.-J. POCIDALO 497–504

An improved method for the determination of potassium in leucocytes. H. SCHLEBUSCH, M. SORGER, S. A. HÖCK and F. KRÜCK 505–510

Insulin-induced glucose utilization influences triglyceride metabolism. J. BAZELMANS, P. J. NESTEL and C. NOLAN 511–516
Contents

Effects of ingested steak and infused leucine on forelimb metabolism in man and the fate of the carbon skeletons and amino groups of branched-chain amino acids. M. ELIA and G. LIVESEY

A study of zinc metabolism in alcoholic cirrhosis. P. R. MILLS, G. S. FELL, R. G. BESENT, L. M. NELSON and R. I. RUSSELL

Vertebral bone loss: an unheeded side effect of therapeutic bed rest. B. KRØLNER and B. TOFT

Physical exercise as prophylaxis against involutional vertebral bone loss: a controlled trial. B. KRØLNER, B. TOFT, S. PORS NIELSEN and E. TØNDEVOLD

SHORT COMMUNICATIONS

Aminophylline and fatigue of adductor pollicis in man. C. M. WILES, J. MOXHAM, D. NEWHAM and R. H. T. EDWARDS

Ferroxidase and ascorbate oxidase activities of caeruloplasmin in synovial fluid from rheumatoid patients. D. R. BLAKE, A. BLANN, P. A. BACON, M. FARR, J. M. C. GUTTERIDGE and B. HALLIWELL

Intravenous ethanol can provide bronchodilatation in asthma. J. G. AYRES and T. J. H. CLARK

VOL. 64, No. 6 JUNE 1983


Response to repeated frusemide administration on low chloride and low sodium intake in the rat. T. KHAN, A. M. KAUFMAN and F. L. MAC-MOUNE

Lactic acidosis and the cardiovascular system in the dog. A. I. ARIEFF, E. W. GERTZ, R. PARK, W. LEACH and VIRGINIA C. LAZAROWITZ


Do elderly patients with an excessive fall in blood pressure on standing have evidence of autonomic failure? B. J. ROBINSON, R. H. JOHNSON, D. G. LAMBIE and KAREN T. PALMER

Haemodynamic responses to static and dynamic handgrip before and after autonomic blockade. S. F. LEWIS, W. F. TAYLOR, B. C. BASTIAN, R. M. GRAHAM, W. A. PETTINGER and C. G. BLOMQVIST

Influence of muscle wasting on oral glucose tolerance testing. R. T. MOXLEY, R. C. GRIFFS, G. B. FORBES, D. GOLDBLATT and KATHERINE DONOHOE

The effects of human milk and low-protein formulae on the rates of total body protein turnover and urinary 3-methylhistidine excretion of preterm infants. P. B. PENCHARZ, L. FARRI and A. PAPAGEORGIOU

Central and peripheral nerve conduction in thyroid dysfunction: the influence of l-thyroxine therapy compared with warming upon the conduction abnormalities of primary hypothyroidism. R. J. ABBOTT, B. P. O'MALLEY, D. B. BARNETT, L. TIMSON and F. D. ROSENTHAL

Impairment of cyclic AMP response to bovine parathyroid hormone in patients on chronic lithium therapy with diminished renal urine-concentrating ability. D. G. WALLER, J. D. M. ALBANO, J. G. B. MILLAR and A. POLAK

The use of 4-aminobenzoic acid as a marker to validate the completeness of 24 h urine collections in man. SHEILA BINGHAM and J. H. CUMMINGS
Platelet function and lipoprotein levels after plasma exchange in patients with familial hypercholesterolaemia. G. Brook, G. Winterstein and M. Aviram 637–642


Formation of hydroxyl radicals from hydrogen peroxide and iron salts by superoxide- and ascorbate-dependent mechanisms: relevance to the pathology of rheumatoid disease. D. A. Rowley and B. Halliwell 649–653

A radioimmunoassay for α- and β-gliadins. P. J. Ciclitira and E. S. Lennox 655–659

Correspondence Section

Assessment of vascular responses to postural change. A. C. Dornhorst 661–662