

CONTENTS

Vol. 72, No. 1

January 1987

EDITORIAL REVIEW

Intracellular calcium: friend or foe?

A. K. CAMPBELL 1-10

Effect of albumin on taurocholate uptake kinetics in rat liver

R. ALDINI, A. RODA, A. M. MORSELLI-LABATE, P. SIMONI, E. RODA and
L. BARBARA 11-17

Exaggerated responsiveness of immunoreactive atrial natriuretic peptide to saline infusion in chronic renal failure

R. G. WALKER, C. P. SWAINSON, T. G. YANDLE, M. G. NICHOLLS and
E. A. ESPINER 19-24

Plasma atrial natriuretic peptide: its relationship to changes in sodium intake, plasma renin activity and aldosterone in man

G. A. SAGNELLA, N. D. MARKANDU, A. C. SHORE, M. L. FORSLING and
G. A. MACGREGOR 25-30

Atrial natriuretic peptide inhibits the effect of endogenous angiotensin II on plasma aldosterone in conscious sodium-depleted rats

L. CHARTIER and E. L. SCHIFFRIN 31-35

The role of RT1 antigen differences in semi-allogeneic rat pregnancy

D. A. POWER, C. CUNNINGHAM and G. R. D. CATTO 37-45

Studies *in vivo* and *in vitro* of terbutaline-induced β -adrenoceptor desensitization in healthy subjects

A. MARTINSSON, K. LARSSON and P. HJEMDAHL 47-54

Autonomic mechanisms in the heart rate response to coughing

C. CARDONE, F. BELLAVERE, M. FERRI and D. FEDELE 55-60

Renal ammoniogenesis following glutamine loading in intact dogs during acute metabolic acid-base perturbations

J. AREAS, S. BALIAN, D. SLEMMER, M. BELLEDONNE and H. G. PREUSS 61-69

Enhancement of specific [3 H]ouabain binding and ouabain sensitive 86 rubidium influx in intact human lymphocytes by a dialysable factor in human and fetal calf serum

V. M. S. OH, E. A. TAYLOR, J. L. DING, N. A. BOON, J. K. ARONSON and
D. G. GRAHAME-SMITH 71-79

The potential use of lithium as a marker for the assessment of the sources of dietary salt: cooking studies and physiological experiments in men

C. P. SANCHEZ-CASTILLO, J. SEIDELL and W. P. T. JAMES 81-86

A test of the validity of the lithium-marker technique for monitoring dietary sources of salt in man

C. P. SANCHEZ-CASTILLO, W. J. BRANCH and W. P. T. JAMES 87-94

An assessment of the sources of dietary salt in a British population

C. P. SANCHEZ-CASTILLO, S. WARRENDER, T. P. WHITEHEAD and W. P. T. JAMES 95-102

δ -Aminolaevulinic acid in plasma, cerebrospinal fluid, saliva and erythrocytes: studies in normal, uraemic and porphyric subjects

A. GORCHEIN and R. WEBBER 103-112

Effect of acute ethanol administration on the baroreceptor reflex control of heart rate in normotensive human volunteers

A.-R. A. ABDEL-RAHMAN, R. H. MERRILL and W. R. WOOLSE 113-122

Decreased distensibility of resistance vessels of the skin in type 1 (insulin-dependent) diabetic patients with microangiopathy

J. KASTRUP, T. NØRGAARD, H.-H. PARVING and N. A. LASSEN 123-130

SHORT COMMUNICATIONS

Effects of acute hypermagnesaemia on intracellular calcium concentration and adrenergic activity

T. LENZ, H. HALLER, M. LÜDERSDORF, H. M. THIEDE, A. KRIBBEN, K. JENDROSKA,
A. DISTLER and T. PHILIPP 131-134

Adrenergic control of plasma magnesium in man

K. F. WHYTE, G. J. ADDIS, R. WHITESMITH and J. L. REID 135-138

- The effect of sodium taurocholate on proximal tubular reabsorption in the rat kidney
 O. S. BETTER, V. GUCKIAN, G. GIEBISCH and R. GREEN 139-141
- Effects of changes in dietary sodium intake on aortic sodium pump activity in the rat
 R. BRADLAUGH, R. F. BING, J. D. SWALES and H. THURSTON 143-146

CORRESPONDENCE

- Haemodynamic effects of vasopressin in man
 W. L. BLOK, G. SCHREIJ and P. W. DE LEEUW 147
- Angiotensin converting enzyme activity and hypoxia
 J. S. MILLEDGE and D. M. CATLEY 149

Vol. 72, No. 2

February 1987

EDITORIAL REVIEW

- The proteinase-antiproteinase theory of emphysema: time for a reappraisal?
 H. M. MORRISON 151-158
-
- Plasma atrial natriuretic peptide concentrations during exercise in sodium replete and deplete normal man
 A. M. RICHARDS, G. TONOLO, J. G. F. CLELAND, G. D. MCINTYRE, B. J. LECKIE, H. J. DARGIE, S. G. BALL and J. I. S. ROBERTSON 159-164
- Relationship between the renin-aldosterone system and atrial natriuretic polypeptide in rats
 Y. HIRATA, M. ISHII, T. SUGIMOTO, H. MATSUOKA, T. ISHIMITSU, K. ATARASHI, T. SUGIMOTO, A. MIYATA, K. KANGAWA and H. MATSUO 165-170
- Ion flux and Na⁺,K⁺-ATPase activity of erythrocytes and leucocytes in thyroid disease
 F. A. KHAN and D. N. BARON 171-179
- Dissociation between circulating concentrations of immunoreactive growth hormone releasing factor and growth hormone in normal human subjects
 A. M. SOPWITH, E. S. PENNY, N. LYTRAS, G. M. BESSER and L. H. REES 181-185
- Effect of partial ornithine carbamoyltransferase deficiency on urea synthesis and related biochemical events
 J. D. S. KAY, V. G. OBERHOLZER, J. W. T. SEAKINS and M. HJELM 187-193
- Vasoactive intestinal peptide: a direct renal natriuretic substance
 K. A. DUGGAN and G. J. MACDONALD 195-200
- Effect of dietary sodium chloride and posture on plasma immunoreactive atrial natriuretic peptide concentrations in man
 L. R. SOLOMON, J. C. ATHERTON, H. BOBINSKI and R. GREEN 201-208
- Duodenal and ileal lipid suppresses postprandial blood glucose, and insulin responses in man: possible implications for the dietary management of diabetes mellitus
 I. MCL. WELCH, C. BRUCE, S. E. HILL and N. W. READ 209-216
- Delayed postprandial plasma bile acid response in coeliac patients with slow mouth-caecum transit
 R. C. SPILLER, P. F. FROST, J. S. STEWART, S. R. BLOOM and D. B. A. SILK 217-223
- Measurement of fingertip blood flow using thermal clearance reflects anastomotic rather than nutrient blood flow
 J. S. CORCORAN, C. W. I. OWENS and J. S. YUDKIN 225-232
- Intrathyroidal autonomic nerves can directly influence hormone release from rat thyroid follicles: a study *in vitro* employing electrical field stimulation and intracellular microelectrodes
 S. T. GREEN 233-238
- The role of the autonomic nervous system in the resting tachycardia of human hyperthyroidism
 B. C. MACIEL, L. GALLO, JR, J. A. MARIN NETO, L. M. Z. MACIEL, M. L. D. ALVES, G. M. F. PACCOLA and N. IAZIGI 239-244
- The effect of a synthetic polypeptide on the renal handling of protein in man
 R. BEETHAM, A. DAWNAY and W. CATTELL 245-249

SHORT COMMUNICATIONS

- Effects of ethanol ingestion on blood pressure reactivity
G. EISENHOFER, D. G. LAMBIE and R. H. JOHNSON 251-254
- Oral absorption of the somatostatin analogue SMS 201-995: theoretical and practical implications
H. S. FUESSL, J. DOMIN and S. R. BLOOM 255-257

CORRESPONDENCE SECTION

- Diet-induced thermogenesis
P. I. MANSELL, I. A. MACDONALD and I. W. FELLOWS 259-261

Vol. 72, No. 3

March 1987

EDITORIAL REVIEW

- Halothane hepatitis: a model of immune mediated drug hepatotoxicity
J. NEUBERGER and J. G. KENNA 263-270
-
- Cardiac and renal hyperplasia in newborn spontaneously hypertensive rats
J. KUNES, S. C. PANG, M. CANTIN, J. GENEST and P. HAMET 271-275
- Aldosterone responsiveness to metoclopramide in hyperprolactinaemia
B. P. O'MALLEY, D. MERCEY, E. CLARKE, M. MAGUIRE, J. JACKSON and F. D. ROSENTHAL 277-282
- Hypoxic pulmonary vasoconstriction persists in the human transplanted lung
E. D. ROBIN, J. THEODORE, C. M. BURKE, S. N. OESTERLE, M. B. FOWLER, S. W. JAMIESON, J. C. BALDWIN, A. J. MORRIS, S. A. HUNT, A. VANKESSEL, E. B. STINSON and N. E. SHUMWAY 283-287
- Fractional dextran and protein clearances in glomerulonephritis and in diabetic nephropathy
I. ALA-HOUHALA and A. PASTERNAK 289-296
- The relationship between intestinal crypt cell production and intestinal water absorption measured *in vitro* in the rat
R. A. GOODLAD, J. A. PLUMB and N. A. WRIGHT 297-304
- Atrial natriuretic peptide: evidence of action as a natriuretic hormone at physiological plasma concentrations in man
J. V. ANDERSON, J. DONCKIER, N. N. PAYNE, J. BEACHAM, J. D. H. SLATER and S. R. BLOOM 305-312
- Effects of a high K^+ /low Na^+ diet on blood pressure in young spontaneously hypertensive rats
A. L. SUGDEN, J. A. STRAW and B. L. BEAN 313-319
- Na^+ , K^+ and water balance in young spontaneously hypertensive rats: relationship to blood pressure after high K^+ treatment
A. L. SUGDEN, B. L. BEAN and J. A. STRAW 321-327
- Extrarenal synthesis of 1,25-dihydroxyvitamin D: sensitivity to glucocorticoid treatment
S. ADAMI, G. GRAZIANI, D. TARTAROTTI, R. CAPPELLI, S. CASATI, A. CANTALUPPI, V. BRAGA and V. LO CASCIO 329-334
- Circulatory response to postural change in healthy male subjects in relation to age
J. H. A. DAMBRINK and W. WIELING 335-341
- A randomized controlled trial of the effect of dietary fibre on blood pressure
B. M. MARGETTS, L. J. BEILIN, R. VANDONGEN and B. K. ARMSTRONG 343-350
- The effect of prostaglandin E_1 upon the pressor and hormonal response to exogenous angiotensin II in human pregnancy
F. BROUGHTON PIPKIN, R. MORRISON and P. M. S. O'BRIEN 351-357
- The effect of muscle paralysis on the radial growth of collagen fibrils in developing tendon
J. E. SCOTT, M. HAIGH, G.-E. NEO and S. GIBSON 359-363
- Reduced brain Na^+ , K^+ -ATPase activity in rats with galactosamine-induced hepatic failure: relationship to encephalopathy and cerebral oedema
R. J. EDE, C. D. GOVE, R. D. HUGHES, W. MARSHALL and R. WILLIAMS 365-371

- Lung lavage fluid from patients with α_1 -proteinase inhibitor deficiency or chronic obstructive bronchitis: anti-elastase function and cell profile
H. M. MORRISON, J. A. KRAMPS, D. BURNETT and R. A. STOCKLEY 373-381

SHORT COMMUNICATION

- Effect of dietary linoleate content on the metabolic response of rats to *Escherichia coli* endotoxin
J. M. WAN and R. F. GRIMBLE 383-385
- Lack of angiotensin I accumulation after converting enzyme blockade by enalapril or lisinopril in man
J. NUSSBERGER, D. B. BRUNNER, B. WAEBER, J. BIOLLAZ and H. R. BRUNNER 387-389

Vol. 72, No. 4

April 1987

EDITORIAL REVIEWS

- Arterial haemodynamics of hypertension
N. WESTERHOF and R. M. HUISMAN 391-398
- The special proteins of bone tissue
J. T. TRIFFITT 399-408
-
- Glucose absorption from maltotriose and glucose oligomers in the human jejunum
B. J. M. JONES, B. E. HIGGINS and D. B. A. SILK 409-414
- The effect of iron and folate therapy on maximal exercise performance in female marathon runners with iron and folate deficiency
M. MATTER, T. STITTFALL, J. GRAVES, K. MYBURGH, B. ADAMS, P. JACOBS and T. D. NOAKES 415-422
- Assessment of beat to beat changes in cardiac output during the Valsalva manoeuvre using electrical bioimpedance cardiography
S. A. SMITH, M. M. SALIH and W. A. LITTLER 423-428
- Interaction between renal prostaglandins and angiotensin II in controlling glomerular filtration in the dog
M. E. OLSEN, J. E. HALL, J.-P. MONTANI and J. E. CORNELL 429-436
- A modified single breath method for estimation of cardiac output in humans at rest and during exercise
Y. M. H. AL-SHAMMA, R. HAINSWORTH and N. P. SILVERTON 437-441
- Coffee consumption and blood pressure: an Italian study
M. PERITI, A. SALVAGGIO, G. QUAGLIA and L. DI MARZIO 443-447
- Amiloride inhibits the rise of urinary kallikrein excretion induced by frusemide administration in the rat
L. F. O. OBIKA and M. MARIN-GREZ 449-454
- Effect of thyroparathyroidectomy on the activities of thymidylate synthetase and thymidine kinase during liver regeneration after partial hepatectomy
R. NAKATA, I. TSUKAMOTO, M. MIYOSHI and S. KOJO 455-461
- The ulcerogenic and protective action of rice and rice fractions in experimental peptic ulceration
A. P. JAYARAJ, F. I. TOVEY, C. G. CLARK, K. R. REES, J. S. WHITE and M. R. LEWIN 463-466
- Plasmin: a possible physiological modulator of the human platelet adenylate cyclase system
S. ADNOT, N. FERRY, J. HANOUNE and M.-L. LACOMBE 467-473
- AMP deaminase deficiency: study of the human skeletal muscle purine metabolism during ischaemic isometric exercise
S. P. T. SINKELER, R. A. BINKHORST, E. M. G. JOOSTEN, R. A. WEVERS, M. M. COERWINKEL and T. L. OEI 475-482
- Resting and stimulated cytosolic free calcium levels in neutrophils from patients with Bartter's syndrome
F. DI VIRGILIO, L. CALÒ, S. CANTARO, S. FAVARO, A. PICCOLI and A. BORSATTI 483-488

- Effects of increasing glucose intake on nitrogen balance and energy expenditure in malnourished adult patients receiving parenteral nutrition
T. CHIKENJI, D. H. ELWYN, K. M. GIL, E. DANFORTH JR, J. ASKANAZI and J. M. KINNEY 489-501
- Decrease in human quadriceps muscle protein turnover consequent upon leg immobilization
J. N. A. GIBSON, D. HALLIDAY, W. L. MORRISON, P. J. STOWARD, G. A. HORNSBY, P. W. WATT, G. MURDOCH and M. J. RENNIE 503-509

SHORT COMMUNICATIONS

- Effects of variation of the tri-iodothyronine/reverse tri-iodothyronine ratio *in vivo* on the metabolic characteristics of subsequently isolated hepatocytes
A. AL-SAAD, D. SPRAGUE, M. SUGDEN, A. GOODE and S. ORR 511-513
- Trace elements during the development of hypertension in the spontaneously hypertensive rat
A. BERTHELOT, C. LUTHRINGER and A. EXINGER 515-518

Vol. 72, No. 5

May 1987

EDITORIAL REVIEW

- Special features, pathogenesis and aetiology of glomerular diseases in the tropics
J. L. NGU and T. J. YOUMBISSI 519-524
-
- Lack of effect of atrial natriuretic peptide on vasopressin release
K. OGAWA, L. F. ARNOLDA, E. A. WOODCOCK, M. HIWATARI and C. I. JOHNSTON 525-530
- Changes in the plasma levels of atrial natriuretic peptides during mineralocorticoid escape in man
F. P. CAPPUCIO, N. D. MARKANDU, M. G. BUCKLEY, G. A. SAGNELLA, A. C. SHORE and G. A. MACGREGOR 531-539
- Is there neural control over electrolyte reabsorption in the human salivary gland?
S. L. LEVIN and L. I. KHAIKINA 541-548
- β -Adrenoceptor blockade and plasma lipoproteins. Comparison of the effects of propranolol and pindolol on plasma lipoproteins including high-density lipoprotein subfractions
R. J. NORTHCOTE and D. BALLANTYNE 549-556
- Loss of spontaneous variability of fingertip anastomotic blood flow in diabetic autonomic neuropathy
J. S. CORCORAN and J. S. YUDKIN 557-562
- High resolution proton nuclear magnetic resonance studies of human cerebrospinal fluid
J. D. BELL, J. C. C. BROWN, P. J. SADLER, A. F. MACLEOD, P. H. SØNKSEN, R. D. HUGHES and R. WILLIAMS 563-570
- Influence of age on deterioration of the remnant kidney in uninephrectomized rats
S. OKUDA, K. MOTOMURA, T. SANAI, H. TSURUDA, Y. OH, K. ONOYAMA and M. FUJISHIMA 571-576
- The relationship between the plasma potassium concentration and renal potassium excretion in the adrenalectomized rat
M. L. WEST, H. SONNENBERG, A. VERESS and M. L. HALPERIN 577-583
- Bronchial effects of leukotriene D₄ inhalation in normal human lung
H. BISGAARD and S. GROTH 585-592
- Gliadin binding to rat and human enterocytes
J. COLYER, P. J. KUMAR, N. M. WALDRON, M. L. CLARK and M. J. G. FARTHING 593-598
- Haemodynamic consequences of experimental papillary necrosis in the rat
G. I. RUSSELL, R. F. BING, H. THURSTON and J. D. SWALES 599-604
- The effect of sodium intake on rabbit renal prostaglandin E₂ and thromboxane A₂: dissociation from the renin-angiotensin system
A. A. ATTALLAH 605-609
- Exercise-induced changes in renal function and their relation to plasma noradrenaline in insulin-dependent diabetic children and adolescents
B.-L. JOHANSSON, U. BERG, A.-B. BOHLIN, A.-K. LEFVERT and U. FREYSCHUSS 611-620

- The effects of neonatal hypothyroidism on brain catecholamine turnover in adult rats: assessment by a steady-state method
P. E. HARRIS, B. M. LEWIS, C. DIEGUEZ, R. HALL and M. F. SCANLON 621-627
- Cigarette smoke-induced 'chronic bronchitis': a study *in situ* of laryngo-tracheal hypersecretion in the rat
D. F. ROGERS, N. C. TURNER, C. MARRIOTT and P. K. JEFFERY 629-637
- Influence of cardiopulmonary receptors on the bradycardic responses to carotid baroreceptor stimulation in man
G. PARATI, G. GRASSI, P. CORUZZI, L. MUSIARI, A. RAVOGLI, A. NOVARINI and G. MANCIA 639-645

Vol. 72, No. 6

June 1987

EDITORIAL REVIEW

- Endogenous sodium pump inhibitors: a role in essential hypertension?
L. POSTON 647-655
-
- Effects of verapamil and converting enzyme inhibition on bilateral renal function of two-kidney, one-clip hypertensive rats
D. W. PLOTH, K. KLEEMAN, L. MORRILL, R. RADEMACHER and C. A. JACKSON 657-667
- The iron content of finger-nails in iron deficient patients
M. DJALDETTI, P. FISHMAN and J. HART 669-672
- Increased collagen synthesis and cross-link formation in the skin of rats exposed to vinyl chloride monomer
K. R. KNIGHT and R. GIBBONS 673-678
- The effects of four β -adrenoceptor antagonists during modest exercise on plasma ammonia and heart rate
P. E. HALL, S. R. SMITH and M. J. KENDALL 679-682
- Time course of changes in hepatic metabolism in response to sepsis in the rat: impairment of gluconeogenesis and ketogenesis *in vitro*
P. R. L. DE VASCONCELOS, M. G. W. KETTLEWELL and D. H. WILLIAMSON 683-691
- Arterial oxygen saturation and breathlessness in patients with chronic obstructive airways disease
R. LANE, A. COCKCROFT, L. ADAMS and A. GUZ 693-698
- Multiple forms of immunoreactive renin in human adrenocortical tumour tissue from patients with primary aldosteronism
K. MIZUNO, M. OJIMA, S. HASHIMOTO, M. TANI, S. NIIMURA, N. KUNII, R. YABE, H. WATARI, T. INAGAMI and S. FUKUCHI 699-704
- Absorption of 5-fluorouracil and related pyrimidines in rat small intestine
J. R. BRONK, N. LISTER and S. LYNCH 705-716
- Influence of cyclo-oxygenase inhibition and of leukotriene receptor blockade on pulmonary vascular pressure/cardiac index relationships in hyperoxic and in hypoxic dogs
M. LEEMAN, R. NAEIJE, P. LEJEUNE and C. MÉLOT 717-724
- Corticosteroid binding globulin in normotensive and hypertensive human pregnancy
J. M. POTTER, U. W. MUELLER, P. E. HICKMAN and C. A. MICHAEL 725-735
- Circadian variation of thyrotrophin, determined by ultrasensitive immunoradiometric assay, and the effect of low dose nocturnal dopamine infusion
D. J. KERR, V. K. SINGH, M. G. MCCONWAY, G. H. BEASTALL, J. M. C. CONNELL, W. D. ALEXANDER and D. L. DAVIES 737-741
- The effect of insulin-induced hypoglycaemia on gastrointestinal motility in man
I. W. FELLOWS, D. F. EVANS, T. BENNETT, I. A. MACDONALD, A. G. CLARK and S. R. BLOOM 743-748
- Renal and cardiovascular effects of caffeine: a dose-response study
A. P. PASSMORE, G. B. KONDOWE and G. D. JOHNSTON 749-756