

**PUBLISHED BY**  
**THE MEDICAL RESEARCH SOCIETY AND THE BIOCHEMICAL SOCIETY**

**© The Medical Research Society and the Biochemical Society 1982**  
**ISSN 0143-5221**

**Printed in Great Britain by Spottiswoode Ballantyne Ltd.**  
**Colchester and London**

# Volume 63

## AUTHOR INDEX

- ALLAN, R.N. 373-380  
 ALLEN, A. 187-195  
 ALON, U. 59-64  
 ANDREWS, P.L.R. 169-173  
 ATKINS, G.L. 405-414  
 BALLARD, F.J. 421-427  
 BARER, G.R. 497-503  
 BARNES, J.L.C. 461-472  
 BARNES, N.D. 461-472  
 BARNES, P. 401-404  
 BARNETT, D.B. 97-105  
 BARTHOLOMEW, T.C. 65-73  
 BARTTER, F.C. 397-400  
 BAYLEY, S. 33-42  
 BECK, D. 447-453  
 BECKAGE, M. 393-396  
 BENNETT, E.D. 361-366  
 BENNETT, T. 301-310  
 BERANT, M. 59-64  
 BERETTA-PICCOLI, C. 257-270, 325-328  
 BETTER, O.S. 59-64  
 BIANCHETTI, M.G. 325-328  
 BILLING, B.H. 65-73  
 BING, R.F. 121-125  
 BISHOP, H. 373-380  
 BLAIR, J.A. 373-380  
 BLANCHET, L. 29-32  
 BODDY, K. 257-270  
 BOEHRINGER, K. 325-328  
 BOER, P. 47-51  
 BÖNNER, G. 349-354, 447-453  
 BRASH, H.M. 17-22  
 BRON, A.J. 211-216  
 BROWN, J.J. 257-270  
 BROWN, W.B. 271-274  
 BROYER, M. 539-548  
 BRUNNER, H.R. 333-338  
 BRUNO, M. 381-385  
 BULL, H.J. 197-203  
 BURDON, J.G.W. 11-15  
 BURGOYNE, J.L. 421-427  
 BYLUND-FELLENUS, A.-C. 293-299  
 CALVERLEY, P.M.A. 17-22  
 CAMPBELL, E.J.M. 11-15  
 CAMPBELL, I.W. 17-22  
 CAPACI, M.T. 455-460  
 CATANZARO, O.L. 217-218  
 CICCARELLI, M. 285-292  
 CLARKE, B.F. 17-22  
 CLARKSON, E.M. 415-420  
 CLIFTON-BLIGH, P. 367-372  
 COLTART, D.J. 197-203  
 CONN, M.L. 127-135  
 CORNET, F. 145-152  
 COULL, A. 573-576  
 COUNSILMAN, A.C. 429-435  
 COURNOT-WITMER, G. 539-548  
 CROSS, S.M.C. 429-435  
 CUMMING, A.M.M. 257-270  
 CUNDY, T. 145-152  
 CURRY, S.H. 75-80  
 DAHLENBURG, G.W. 421-427  
 DAVIE, M.W.J. 461-472  
 DAVIES, D.L. 257-270  
 DAVIS, M. 75-80  
 DEEG, M. 447-453  
 DE JONG, P.E. 53-58  
 DE JONG-VAN DEN BERG, L.T.W. 53-58  
 DE WARDENER, H.E. 415-420  
 DE ZEEUW, D. 53-58  
 DOBBS, R.J. 33-42  
 DOBOZY, A. 421-427  
 DONKER, A.J.M. 53-58  
 DORHOUT MEES, E.J. 47-51  
 DORNAN, T.L. 211-216  
 DOUGLAS, N.J. 137-143  
 DULFANO, M.J. 393-396  
 EAST, B.W. 257-270  
 EDMUNDS, A.T. 107-113  
 EDWARDS, R.H.T. 161-167, 519-523  
 EMBERSON, C. 461-472  
 EMMERSON, B.T. 429-435  
 ENDEMAN, H.J. 47-51  
 EPSTEIN, M. 555-563, 565-571  
 ESLER, M. 321-323  
 EVANS, S. 437-440  
 EWING, D.J. 17-22  
 FARIS, I.B. 115-119  
 FAVRE, H. 317-319  
 FITZGERALD, A. 421-427  
 FLENLEY, D.C. 17-22  
 FRASER, D.R. 311-316  
 FRASER, R. 257-270  
 FRUTTERO, B. 381-385  
 FUJIMOTO, S. 251-255  
 FUKUCHI, S. 331-332  
 GALE, E.A.M. 301-310  
 GANTEN, D. 349-354  
 GARDNER, M.L.G. 405-414  
 GARNER, A. 187-195  
 GATTA, A. 387-392  
 GIBBS, G.P. 175-185  
 GILL, G.W. 497-503  
 GILMORE, I.T. 197-203  
 GODFREY, S. 107-113  
 GORDON, R.B. 429-435  
 GOTOH, M. 331-332  
 GOURJON, M. 317-319  
 GREEN, J.H. 301-310  
 GREEN, J.R. 153-160  
 GRIFFIN, G.E. 1-10  
 GROSS, F. 349-354, 447-453  
 GULAK, P.V. 43-45  
 GÜLLNER, H.G. 397-400  
 HABIB, R. 539-548  
 HAIGH, J.W. 437-440  
 HALLIDAY, D. 485-496, 519-523  
 HANDA, M. 275-279  
 HANSKY, J. 321-323  
 HANSON, M.A. 505-511  
 HASHMONAI, M. 59-64  
 HAYES, P.A. 127-135  
 HEADING, R.C. 231-235  
 HESP, R. 153-160  
 HEYNEN, G. 145-152  
 HIGGS, C.M.B. 513-517  
 HILLON, P. 29-32  
 HODGES, J.R. 339-347  
 HOWELL, S. 161-167  
 HUGHES, M. 219-221  
 HUGHES, R.D. 237-242  
 HULLIN, R.P. 549-554  
 HULME, P. 153-160  
 HURWITZ, M.L. 573-576  
 IDSTRÖM, J.-P. 293-299  
 ITO, K. 251-255

- JAMIESON, G.G. 115-119  
 JARVIS, A. 573-576  
 JOHNSTON, D.G. 437-440  
 JONES, A.W. 441-445  
 JONES, D.A. 161-167  
 JONES, N.L. 87-92
- KAJI, H. 251-255  
 KANG, E.S. 455-460  
 KANIS, J.A. 145-152  
 KAWABE, H. 275-279  
 KEELING, P.W.N. 223-224  
 KERSS, S. 187-195  
 KILLIAN, K.J. 11-15  
 KITIS, G. 373-380  
 KLEINKNECHT, C. 539-548  
 KLIMIUK, P.S. 577-580  
 KONDO, K. 275-279  
 KORONES, D.N. 455-460  
 KURASAKI, M. 251-255
- LAKER, M.F. 437-440  
 LAOUARI, D. 539-548  
 LASZLO, G. 513-517  
 LAWSON, A.M. 65-73  
 LAWSON, D.E.M. 461-472  
 LAYCOCK, J.F. 525-532,  
 533-538  
 LEBREC, D. 29-32  
 LEE, V.Y. 219-221  
 LEVER, A.F. 257-270  
 LIFSCHITZ, M. 555-563, 565-  
 571  
 LINARI, F. 381-385  
 LINK, L. 325-328  
 LITVINOV, I.S. 43-45  
 LUCAS, M.L. 373-380  
 LUDBROOK, J. 115-119  
 LUK, C.K. 393-396  
 LUND, P. 225-230
- MACDONALD, I.A. 301-310  
 MACLENNAN, A.H. 421-427  
 MACNEE, W. 137-143  
 MAGGIORE, Q. 285-292  
 MANSELL, M.A. 223-224  
 MARANGELLA, M. 381-385  
 MARIGOLD, J.H. 197-203  
 MARIN-GREZ, M. 349-354,  
 447-453  
 MATTHEWS, D.E. 519-523  
 MAWER, E.B. 577-580  
 MCAREAVEY, D. 271-274  
 MCCONNELL, J.B. 75-80  
 MCCULLOCH, A.J. 437-440  
 MCGRATH, B.P. 321-323  
 MCNICOL, G.P. 205-209
- MELAMED, J.R. 573-576  
 MERKEL, C. 387-392  
 MILANI, L. 387-392  
 MILLWARD, D.J. 519-523  
 MIZUNO, K. 331-332  
 MOHAMMED, F.H. 497-503  
 MORDECHOVITZ, D. 59-64  
 MORGAN, D.B. 549-554  
 MORRIS, B.J. 367-372  
 MORRISON, J.B. 127-135  
 MORTON, J.J. 325-328  
 MOUNIER, F. 539-548  
 MULLINS, R. 211-216
- NAHORSKI, S.R. 97-105  
 NICHOLSON, W.E. 397-400  
 NYE, P.C.G. 505-511
- OBIKA, L.F.O. 93-96  
 OEI, H.Y. 47-51  
 ORDE-PECKAR, C. 211-216  
 ORLOV, S.N. 43-45, 281-284  
 ORTH, D.N. 397-400
- PACK, R.J. 23-28  
 PADFIELD, P.L. 257-270  
 PASTERNAK, C.A. 1-10  
 PATERSON, A. 145-152  
 PATON, R.C. 205-209  
 PELL, J. 23-28  
 PENNEY, M.D. 549-554  
 PETERS, D.K. 175-185  
 PHIPPS, R.J. 23-28  
 POON, P.Y.W. 211-216  
 POSEN, S. 367-372  
 POSTNOV, Y.V. 43-45, 281-  
 284  
 POSTON, L. 237-242, 243-  
 249  
 PRENEN, J.A.C. 47-51  
 PRIDE, N.B. 401-404  
 PUSSELL, B. 175-185
- RAMACHANDRAN, M. 555-  
 563  
 RAPPAPORT, K. 555-563,  
 565-571  
 RAWLINS, M.D. 81-85  
 RECORD, C.O. 81-85  
 REEVE, J. 153-160, 175-185,  
 329-330  
 RENNIE, M.J. 485-496, 519-  
 523  
 RICHARDSON, P.S. 23-28  
 RICHARDSON, R.B. 513-517  
 ROBERTS, G.E. 461-472
- ROBERTSON, J.I.S. 257-270,  
 271-274  
 ROBINSON, B.F. 33-42  
 ROBINSON, B.G. 367-372  
 ROSENDORFF, C. 573-576  
 ROUSSOS, C. 161-167  
 RUOL, A. 387-392  
 RUSSELL, R.G.G. 145-152  
 RUSE, W. 223-224
- SACKNER, M.A. 473-483  
 SAITO, K. 251-255  
 SAITO, T. 251-255  
 SANDHU, J.S. 311-316  
 SANDLE, G.I. 81-85  
 SARGENT, A. 373-380  
 SARUTA, T. 275-279  
 SCHAECHTELIN, G. 349-354  
 SCHERSTEN, T. 293-299  
 SCHNEIDER, A.W. 473-483  
 SCHNEIDER, E.G. 93-96  
 SCHNEIDER, R.E. 373-380  
 SCHOUTEN, H. 53-58  
 SEALE, J.P. 219-221  
 SEEBER, A.M. 217-218  
 SEMPLE, P.F. 257-270  
 SETCHELL, K.D.R. 65-73  
 SEWELL, R.B. 237-242, 243-  
 249  
 SHIRLEY, D.G. 525-532,  
 533-538  
 SKINNER, J. 525-532  
 SPECK, G. 349-354  
 SPOOR, S.M. 47-51  
 SRINIVASAN, D.P. 549-554  
 STATIUS VAN EPS, L.W. 53-  
 58  
 STEPHENS, W.P. 577-580  
 STERN, A.I. 321-323  
 STRADLING, J.R. 401-404  
 SUDLOW, M.F. 137-143  
 SUGGETT, A.J. 497-503  
 SUMMERFIELD, J.A. 65-73  
 SUTTON, J.R. 87-92  
 SUZUKI, H. 275-279  
 SWALES, J.D. 121-125  
 SWART, S. 121-125
- TAYLOR, J.L. 577-580  
 TAYLOR, T.V. 169-173  
 TEKADE, N. 455-460  
 TEMPLE, D.M. 219-221  
 THOMAS, T.H. 549-554  
 THOMPSON, R.P.H. 197-203,  
 223-224  
 THURSTON, H. 121-125  
 TIGHE, D. 361-366

- TINDALL, H. 205–209  
TOBIN, M.J. 473–483  
TOEWS, C.J. 87–92  
TOMAS, F.M. 421–427  
TOOLEY, M. 107–113  
TORRANCE, R.W. 505–511  
TURINI, G.A. 333–338  
TURNER, R.C. 211–216
- VILA, S.B. 217–218
- WALFORD, S. 301–310  
WALKER, P.M. 293–299
- WALTER, S.J. 525–532, 533–538  
WARD, A. 81–85  
WARD, G.R. 87–92  
WARRINGTON, S. 577–580  
WEGG, W. 361–366  
WEIDMANN, P. 257–270, 325–328  
WELBY, J. 437–440  
WILKINSON, S.P. 243–249  
WILLIAMS, E.D. 257–270  
WILLIAMS, I.P. 23–28
- WILLIAMS, R. 75–80, 237–242, 243–249  
WILSON, M.G. 397–400  
WOLMAN, S.L. 519–523  
WONG, P.C. 355–360  
WOOTEN, O. 393–396  
WRAITH, P.K. 17–22  
WRIGHT, N. 23–28  
WRIGHT, R. 339–347
- ZIMMERMAN, B.G. 355–360  
ZOCALI, C. 285–292

# Volume 63

## SUBJECT INDEX

First and last page numbers of papers to which entries refer are given.  
Page numbers marked with an asterisk refer to Editorial Reviews.

- Absorption, intestinal  
  [<sup>3</sup>H]cellobiotol 311–316  
  folic acid 373–380  
  [<sup>14</sup>C]mannitol 311–316  
  oxalate 381–385  
  propranolol 81–85, 373–380  
  rate constants 373–380
- N*-Acetylcysteine, gastric mucus 187–195
- Activation analysis 257–270
- Adenosine di- and tri-phosphate, muscle 87–92
- Adenosine triphosphate, natriuresis 415–420\*
- Adenylate cyclase 97–105\*
- Adrenaline, biosynthesis in hypertension 573–576
- Adrenergic resistance, airway responses 513–517
- $\alpha$ -Adrenoceptor  
  bronchial secretion 23–28  
  function and regulation 97–105\*
- $\beta$ -Adrenoceptor  
  agonists 137–143  
  bronchial secretion 23–28  
  function and regulation 97–105\*
- Airways  
  resistance 137–143, 513–517  
  salbutamol 513–517  
  secretion 23–28
- Aldosterone  
  angiotensin II 325–328  
  congestive heart failure 333–338\*
- Amniocentesis, protein breakdown 421–427
- Angiotensin II  
  aldosterone 325–328  
  intraventricular injection 275–279
- Angiotensin-converting enzyme 331–332
- Anticonvulsant drugs, skin vitamin D 461–472
- Antidiuresis, hydrochlorothiazide 525–532, 533–538
- Antiplatelet therapy 205–209
- Argine vasopressin, water deprivation 549–554
- Arterioles  
  primary hypertension 33–42  
  sodium nitroprusside 33–42  
  veramil 33–42
- Asian immigrants, serum 25-hydroxyvitamin D 577–580
- Aspirin, platelet survival 205–209
- Asthma, ciliostasis 393–396
- Autonomic dysfunction 285–292, 321–323
- Baroreflex, exercise 115–119
- Benoxaprofen, lung slow-reacting substances 219–221
- Bile acids  
  hepatic extraction 197–203  
  serum and skin interstitial fluid 65–73  
  sulphates 65–73
- Blood flow  
  hepatic 29–32  
  rat hindlimb 293–299  
  renal 355–360
- Blood pressure  
  exercise 115–119  
  sodium and dopamine response 93–96
- Bone formation 153–160
- Breath, ethanol concentration 441–445
- Breathing  
  hypoxic drive 17–22  
  loaded 1–9\*  
  pattern, cigarette smoking 473–483
- Bromocriptine, vasopressin 367–372
- Bronchi, secretion 23–28
- Bronchodilatation 137–143
- Calcitonin secretion rate 145–152
- Calcium  
  absorption 329–330  
  bone formation 153–160  
  erythrocyte membrane 281–284  
  hyperoxaluria 381–385  
  low phosphorus diet 539–548  
  metabolism 325–328
- Calcium stone disease, hyperoxaluria 381–385
- Captopril  
  congestive heart failure 333–338\*  
  renal renin 355–360
- Carbon dioxide, cerebral vascular nociceptors 505–511
- Cardiac output, transthoracic impedance cardiography 107–113
- Cardiorespiratory arrest 17–22
- Catecholamines, thermoregulation 301–310
- Carotid sinus reflex 115–119
- [<sup>3</sup>H]Cellobiotol, intestinal absorption 311–316
- Cell surface and disease 1–9\*
- Cerebral arteries, nociceptors 505–511
- Chemosensitivity 17–22
- Chenodeoxycholic acid, hepatic extraction 197–203

- Cholaemia, renal function and haemodynamics 59–64
- Cholecalciferol, skin synthesis 461–472
- Cholestasis 65–73
- Cigarette smoking, breathing pattern 473–483
- Cilia inhibition 393–396
- Cirrhosis, liver  
   decompensated 555–563  
   diazepam 75–80  
   proteinuria 387–392
- Clearance, oxalate 47–51
- Coeliac disease  
   absorption 373–380  
   propranolol absorption 81–85
- Coenzyme A esters, liver 455–460
- Cold immersion 127–135
- Compartmental analysis 175–185
- Complement 175–185
- Conduction velocity, vagus nerve 169–173
- Congestive heart failure 333–338\*
- Converting enzyme inhibitors 355–360
- Corticotropin, pain 397–400
- Cortisol, pain 397–400
- Creatine, exercise 87–92
- Creatinine  
   myofibrillar protein breakdown 421–427  
   urinary excretion 421–427
- Crush fracture osteoporosis 153–160
- Cystinuria, zinc 223–224
- Deoxycorticosterone acetate, erythrocyte membrane 43–45
- Diabetes insipidus, electrolyte balance 525–532, 533–538
- Diabetes mellitus  
   blood viscosity 211–216  
   cardiorespiratory arrest 17–22  
   hydrochlorothiazide 525–532, 533–538  
   platelet survival 205–209
- Dialysis, serum 237–242
- Diazepam, chronic liver disease 75–80
- 16,16-Dimethylprostaglandin E<sub>2</sub>, gastric mucus 187–195
- Dipyridamole, platelet survival 205–209
- Disaccharide, intestinal absorption 311–316
- Diuretics  
   hypertension 121–125  
   renal kallikrein–kinin system 447–453
- Dopamine  
   blockade 361–366  
   sodium and pressor effect 93–96
- Drug absorption 373–380
- Dysmyelinating diseases 1–9\*
- Electrolyte balance, diabetes insipidus 525–532, 533–538
- $\beta$ -Endorphin/ $\beta$ -lipotropin, pain 397–400
- Enteropathy, experimental 311–316
- Erythrocyte  
   calcium-binding in hypertension 281–284  
   membrane 43–45, 281–284  
   superoxide dismutase 251–255
- Erythrocyte membrane  
   spontaneous hypertension 43–45  
   structure 281–284
- Essential hypertension, electrolytes 257–270
- Ethanol, exhaled 441–445
- Exercise  
   aerobic and anaerobic 87–92  
   cardiac output 107–113, 115–119  
   muscle blood flow 293–299
- Expiration, ethanol concentrations 441–445
- Extracellular fluid  
   diabetes insipidus 525–532  
   thiazide diuretics 121–125
- Fasting, muscle protein synthesis 519–523
- Fatigue, muscle 161–167
- Fatty acid emulsion, prostaglandin synthesis 565–571
- Feeding  
   gastric mucus 187–195  
   muscle protein synthesis 519–523
- Fibrinogen, diabetes mellitus 211–216
- Fick method, indirect 107–113
- Fluorescent probe, erythrocyte membrane structure 43–45
- Folic acid, intestinal absorption 373–380
- Forearm resistance vessels, primary hypertension 33–42
- Frusemide, renal kallikrein–kinin system 447–453
- Fulminant hepatic failure 237–242
- Gas chromatography–mass spectrometry, bile acid profiles 65–73
- Gastric emptying 231–235
- Gastric mucus 187–195
- Gastrocnemius muscle, blood flow 293–299
- Glucose  
   kinetics 437–440  
   metabolism 437–440  
   turnover 437–440
- [6,6-<sup>2</sup>H]Glucose turnover 437–440
- Glycaemia, control 211–216
- Glycogen, muscle 87–92
- Glycoproteins, bronchial secretion 23–28
- Goldblatt hypertension  
   adrenaline enzyme inhibitor 573–576  
   exchangeable sodium 271–274
- Gout, lymphocyte purine synthesis 429–435
- Gut, immune responses 339–347\*
- Haematocrit *see* Packed cell volume
- Haemodialysis 237–242, 285–292

- Haemodynamics, cholaemia 59–64  
 Haemoglobin, glycosylated 211–216  
 Headache, vascular nociceptors 505–511  
 Heart rate  
   exercise 115–119  
   haemodialysis 285–292  
 Heat storage 127–135  
 Heat transfer, respiratory 127–135  
 Hormones, congestive heart failure 333–338\*  
 Hydrochlorothiazide, diabetes insipidus 525–532, 533–538  
 Hydroxycholecalciferol, Asian immigrants 577–580  
 Hypercholesterolaemia 1–9\*  
 Hyperplasia 1–9\*  
 Hypertension  
   diuretics 121–125  
   electrolytes 257–270  
   erythrocyte membrane 43–45  
   low-renin 257–270  
   phentolamine 33–42  
   phenylethanolamine *N*-methyltransferase 573–576  
   vascular smooth muscle 33–42  
 Hypertension, experimental  
   Goldblatt two kidney, one clip 271–274  
   portal 29–32  
   renal 349–354  
 Hypoglycaemia, insulin 301–310, 321–323  
 Hypotension  
   cholaemia 59–64  
   postural 321–323  
 Hypothermia 127–135  
 Hypothyroidism, myofibrillar protein breakdown 421–427  
 Hypoventilation, lung gas exchange 497–503  
 Hypoxia, transient 17–22  
 Hypoxic pulmonary vasoconstriction 497–503  
  
 Immune responses, gut and liver 339–347\*  
 Immunoglobulin A, synthesis and transport 339–347\*  
 Impedance cardiography 107–113  
 Inhalation rewarming 127–135  
 Indomethacin, water excretion in sickle cell anaemia 53–58  
 Inspiratory loads 11–15  
 Inspired air, alcohol exhalation 441–445  
 Insulin, hypoglycaemia 301–310, 321–323  
 Intermittent claudication 293–299  
 Intestinal transport 405–414\*  
 Intraventricular angiotensin II 275–279  
 Iodide, renal clearance 175–185  
 Ipratropium 137–143  
 Iproveratril, vascular smooth muscle in hypertension 33–42  
  
 Isotope analysis 485–496\*  
 Ischaemic pain 397–400  
  
 Jaundice, renal function and haemodynamics 59–64  
 Jejunum  
   propranolol absorption 81–85  
   surface pH 373–380  
 Juxtaglomerular apparatus 121–125  
  
 Kallikrein, renal excretion 217–218  
 Kallikrein–kinin system, renal hypertension 349–354  
 Kidney  
   blood flow 355–360  
   cholaemia 59–64  
   frusemide 447–453  
   hydrochlorothiazide 533–538  
   kallikrein 217–218, 349–354  
   [<sup>14</sup>C]oxalate clearance 47–51  
   phosphorus, dietary 539–548  
   prostaglandin E 555–563  
   renal nerves 275–279  
   renin 349–354  
   resistance 549–554  
   sodium 555–563  
   thiazides 533–538  
   water excretion 53–58  
 Kidney disease, nephrosis 317–319  
 Kinetic analysis of transport processes 405–414\*  
 Kininogen 447–453  
 Krebs, Sir Hans 225–230  
  
 Lactate, muscle 87–92  
 Leucocyte  
   adrenoceptors 97–105\*  
   sodium transport 237–242, 243–249  
 $\gamma$ -Lipotropin, pain 397–400  
 Linoleic acid, prostaglandin production 565–571  
 Lipoxigenase inhibitor 219–221  
 Lithium treatment, water deprivation 549–554  
 Liver  
   bile acid extraction 197–203  
   blood flow 29–32  
   cholaemia 59–64  
   coenzyme A esters 455–460  
   immune responses 339–347\*  
   renal function 387–392  
 Liver disease  
   cirrhosis 75–80, 387–392  
   cirrhosis, decompensated 555–563  
   fulminant hepatic failure 237–242  
   Reye's syndrome 455–460  
 Lower-body positive pressure, natriuresis 361–366

- Lung  
  hypoxic vasoconstriction 497–503  
  slow-reacting substances 219–221  
  volumes 107–113  
Lymphocytes, prime synthesis in gout 429–435
- [<sup>14</sup>C]Mannitol, intestinal absorption 311–316
- Mass spectrometry  
  bile acid profiles 65–73  
  glucose kinetics 437–440  
  stable isotopes 485–496\*
- Membrane  
  cell 1–9\*  
  erythrocyte 43–45, 281–284
- Meningeal blood vessels, carbon dioxide 505–511
- Metabolic clearance rate 145–152
- 3-Methylhistidine, urinary excretion 421–427
- Methylxanthines, muscle fatigue 161–167
- Metoprolol, body temperature 301–310
- Mineralocorticoid escape 243–249
- Mucus  
  bronchial secretion 23–28  
  gastric gel 187–195
- Muscle, skeletal  
  exercise 293–299  
  low-frequency fatigue 161–167  
  protein synthesis, stable isotope techniques 519–523  
  pyruvate dehydrogenase 87–92
- Natriuresis  
  frusemide 447–453  
  hormone 243–249, 317–319, 415–420\*  
  lower-body positive pressure 361–366
- Natriuretic factor 243–249, 317–319, 415–420\*
- Neoplasia 1–9\*
- Nephrotic syndrome 317–319
- Nerve conduction velocities 169–173
- Nifedipine, angiotensin II 325–328
- Nitroprusside, vascular smooth muscle in hypertension 33–42
- Noradrenaline, conversion in hypertension 573–576
- Nutrition, uraemia 539–548
- Osteomalacia 577–580
- Osteoporosis 153–160
- Oxalate  
  intestinal hyperabsorption 381–385  
  renal clearance 47–51
- 6-Oxoprostaglandin F<sub>1α</sub>, linoleic acid 565–571
- Packed cell volume, diabetes mellitus 211–216
- Paget's disease 145–152
- Pain, ischaemic, opioid peptides 397–400
- Pancreatic polypeptide 321–323
- Pepsin, gastric mucus 187–195
- pH, jejunal surface 373–380
- Phentolamine, primary hypertension 33–42
- Phenyl diguanide, respiration 505–511
- Phosphocreatine, muscle 87–92
- Phosphorus, low intake and uraemia 539–548
- Plasma membrane 1–9\*
- Plasma protein turnover 175–185
- Plasma renin activity  
  congestive heart failure 333–338\*  
  diuretics in hypertension 121–125  
  renal hypertension 349–354
- Platelet survival, diabetes mellitus 205–209
- Polydipsia, water deprivation 549–554
- Polypeptide, pancreatic 321–323
- Polyuria, water deprivation 549–554
- Portal hypertension 29–32
- Potassium, total body 257–270
- Prematurity, myofibrillar protein breakdown 421–427
- Pro-opiocortin, pain 397–400
- Propranolol  
  body temperature 301–310  
  hepatic blood flow 29–32  
  intestinal absorption 81–85, 373–380  
  withdrawal syndrome 97–105\*
- Prostaglandin E  
  decompensated cirrhosis 555–563  
  linoleic acid 565–571
- Prostaglandin, renal 53–58
- Protein  
  breakdown in newborn infants 421–427  
  plasma turnover 175–185  
  synthesis, muscle 519–523
- Proteinuria, liver cirrhosis 387–392
- Pruritus, bild acids 65–73
- Psychomotor tests, liver cirrhosis 75–80
- Psychophysics, respiration 11–15
- Pulmonary disease, ciliostasis by sputum 393–396
- Purine synthesis, lymphocytes, in gout 429–435
- Pyruvate dehydrogenase, muscle 87–92
- Rate constants, absorption 373–380
- Reaction time, respiratory loads 11–15
- Renal concentrating capacity, sickle cell anaemia 53–58
- Renal diluting capacity, sickle cell anaemia 53–58
- Renal nerves, angiotensin II 275–279
- Renal plasma flow, frusemide 447–453
- Renal prostaglandin E 555–563
- Renin  
  congestive heart failure 333–338\*  
  renal 349–354
- Renin-angiotensin system 355–360



- Respiration, cerebral vascular nociceptors 505–511
- Respiratory centre, smoking breathing pattern 473–483
- Respiratory inductive plethysmography 473–483
- Retinopathy, diabetes mellitus 205–209, 211–216
- Reye's syndrome, liver coenzyme A content 455–460
- Rickets, Asian immigrants 577–580
- Salbutamol  
 airway calibre, normal subjects 137–143  
 airway responsiveness 513–517
- Saralasin, congestive heart failure 333–338\*
- Shivering 127–135
- Sickle cell anaemia, water excretion 53–58
- Skeletal muscle *see* Muscle, skeletal
- Skin, vitamin D synthesis 461–472
- Slow-reacting substances, lung 219–221
- Smooth muscle, vascular 33–42
- Sodium  
 balance, diabetes insipidus 525–532, 533–538  
 captopril 355–360  
 dopamine 93–96  
 exchangeable 257–270, 271–274  
 excretion 317–319  
 lower-body positive pressure 361–366  
 total body 257–270  
 transport, leucocyte 237–242, 243–249
- Soleus muscle, blood flow 293–299
- Specific enzyme activity, superoxide dismutase 251–255
- Sputum, ciliostasis 393–396
- Stable isotopes 437–440, 485–496\*, 519–523
- Stomach  
 gastric emptying 231–235  
 mucus gel layer 187–195
- Stress, opioid peptides 397–400
- Strontium (<sup>85</sup>Sr), bone formation 153–160
- Superoxide dismutase, erythrocyte 251–255
- Teprotide, congestive heart failure 333–338\*
- Thermogenesis 127–135
- Thermoregulation, hypoglycaemia 301–310
- Thiazide diuretics 121–125
- Tracer kinetics, plasma protein turnover 175–185
- Tracer methodology 437–440, 485–496,\* 519–523
- Transport, intestinal 405–414\*
- Ultraviolet irradiation, skin vitamin D 461–472
- Uraemia  
 autonomic lesion 285–292  
 low phosphorus diet 539–548
- Urate, lymphocytes, gout 429–435
- Urinary calculi 381–385
- Ursodeoxycholic acid, hepatic extraction 197–203
- Vagotomy 169–173
- Vagus nerve, conduction velocities 169–173
- Vascular nociceptors 505–511
- Vascular resistance 115–119
- Vasopressin  
 angiotensin II 275–279  
 bromocriptine 367–372
- Ventilation, diabetic autonomic neuropathy 17–22
- Ventilation/perfusion ( $\dot{V}/\dot{Q}$ ) ratios 497–503
- Viruses, cell surface 1–9\*
- Viscosity, blood, diabetes mellitus 211–216
- Vitamin D  
 deficiency, Asian immigrants 577–580  
 skin 461–472
- Vitamin D<sub>3</sub>, calcium absorption 329–330
- Volume homeostasis 555–563
- Water  
 balance, diabetes insipidus 525–532, 533–538  
 deprivation, lithium-treated patients 549–554  
 excretion, sickle cell anaemia 53–58  
 vapour, expired air ethanol 441–445
- Zinc, cystinuria 223–224

## CORRECTION

### Volume 62

page 532, Table 3, the value under 'Non-haem Fe' for patient no. 14 should read 0.096