

Subject Index to Volume 20

- Abstracts, European Society for Pediatric Research, 1034
- Acetate, metabolism, perirenal adipose tissue, fetal and neonatal calf, 542
- Acetylcholine, gallbladder contractility and, development, guinea pig, 214
- N-Acetyl-neuraminic acid, distribution and metabolic fate, infantile sialic acid storage disease, 773
- Acetylsalicylic acid, fatty acid hydroxylation and, rat liver, 1221
- Acidemia
 isovaleric
 isovaleryl-CoA dehydrogenase activity, tritium release assay, 59
 prenatal diagnosis, 222
 metabolic, effect on cardiac output and regional blood flow, newborn lamb, 756
 propionic, pancytopenia in, hematologic evaluation, neonate, 783
- Acidosis
 effect on intestinal blood flow and oxygen uptake, newborn piglet, 929
 hypercapnic, effect on renal function, newborn rabbit, 798
 lactic, pyruvate carboxylase deficiency, infant, 274
 metabolic, jejunal phosphate and glucose transport affected by, weanling rat, 763
- Aciduria, dicarboxylic, Zellweger syndrome and neonatal adrenoleukodystrophy, 62
- Acyl-CoA dehydrogenase, variant medium chain, biosynthesis, cultured fibroblasts, 843
- Adenosine triphosphatase, calcium-transporting enzyme, isolation in cystic fibrosis, 356
- Adipose, metabolism, fetal and neonatal calf, 542
- Adipose tissue, thymidine kinase activity, 118
- Adolescence, food choices, Lipid Research Clinics prevalence study, 309
- β -Adrenoceptor, function, leukocytes, neonate, 1152
- Adrenoleukodystrophy, neonatal, dicarboxylic aciduria in, 62
- Adult, erythrocyte filterability, compared with neonate, 1269
- Aerosol, radiolabeled, submicronic, pulmonary deposition sites, 1297
- Age
 compensatory renal growth and, rat, 347
 selenium status and, Belgium and The Netherlands, 574
- Age differences
 Cis-platin nephrotoxicity, rat, 9
 plasma glutamate concentrations, 53
- Aging, immunoreactive pancreatic cationic trypsinogen, changes related to, cystic fibrosis and pancreatic insufficiency, 209
- Airway, collapsibility, effect of tracheal smooth muscle tone on, neonate, 492
- Airway pressure, constant positive, assessment of optimal level, hyaline membrane disease, 884
- Alanine, sodium absorption and, viral diarrhea, piglet, 879
- Aldosterone, colonic NaKATPase activity, control, weanling rat, 242
- American Pediatric Society
 presidential address, 1345
 medical ethics and the law, 913
- Amino acid
 branched-chain, metabolism, maple syrup urine disease, 169
 concentration, maternal hypoaminoacidemia and, rat fetus, 1071
 metabolism, insulin effect, fetal hepatocytes, rat, 609
 pools, protein synthesis and, neonate, 140
 sulfur uptake, membrane fluidity and, brush border membrane, rat kidney, 1305
 transport, brush border membrane, nursing animals, rat, 890
- Amniotic fluid
 digoxin and digitoxin-like immunoreactive substances, 28
 isovalerylglycine in, stable isotope dilution analysis, prenatal isovaleric acidemia diagnosis, 222
- Ampicillin, subinhibitory polymyxin B and, *Haemophilus influenzae* type B infection, infant rat, 237
- Antibody, monoclonal, lymphocyte subsets identified by, healthy children, 1147
- Apoprotein, plasma lipoprotein composition, neonates, 324
- Arginine, insulin response, protein-energy malnutrition, 1122
- Arginine vasopressin, urinary, excretion pattern, neonate, 103
- Artery, cerebral, leukotriene effect, newborn pigs, 973
- Arthritis, juvenile, complement activation patterns, 1332
- Asphyxia
 birth, neuroendocrine lung and brainstem injury, 828
 effect on intestinal blood flow and oxygen uptake, newborn piglet, 929
 neonatal, cerebral blood flow and O₂ metabolism after, lamb, 778
 perinatal, plasma β -endorphin in, 577
- Astrocyte cell, synthesis and secretion of nerve growth-stimulating factor, neonatal mouse, 367
- Audiometry, auditory brainstem response, treated congenitally hypothyroid children, 570
- Benzoate, metabolic changes caused by, lysinuric protein intolerance, 1117
- Bile, secretion, control, newborn puppy, 203
- Bilirubin
 conjugate formation, human newborn, 947
 encephalopathy, role of total bilirubin, protein binding, and blood-brain barrier, rat, 789
 unconjugated, auditory brainstem response, infant rhesus monkey, 511
- Birth, catecholamine release, effect of chemical sympathectomy, 1338
- Birth weight, low, medium-chain triglycerides, organic acid excretion, 122
- Blood, contamination, hemagglutination test, fetal red cells, 1082
- Blood-brain barrier, role in bilirubin encephalopathy, rat, 789
- Blood flow
 as hematocrit function, neonatal lamb, 1274
 cerebral
 after asphyxia, newborn lamb, 778
 alterations, prolonged hypocarbia, piglets, 147
 autoregulation impairment, hypoxic newborn lamb, 516
 sympathetic nerve stimulation effects on, newborn piglet, 131
 intestinal, asphyxia, hypoxia, acidosis effect, newborn piglet, 929
 pulmonary, tolazoline and, fetal lamb, 1131
 regional, comparative effects, metabolic acidemia and hypoxemia, neonatal lamb, 756
 regional cerebral, hyperventilation, newborn dog, 1102
- Blood sampling, prenatal, normal fetus, 342
- Body composition, determination, total body electrical conductivity method, neonate, 561
- Body water, effect of extracorporeal membrane oxygenation on, neonatal baboon, 381
- Bone
 decreased mineral, chronic furosemide therapy, newborn rat, 74
 growth and mineral content, very low birth weight infants, 925
- Brain
 blood flow, see Blood flow
 cerebral cortical synaptosomes, nerve growth factor measurement, mouse, 391
 cerebral metabolic intermediates, after intrauterine growth retardation, dog, 662
 function, phenylalanine effects, phenylketonuria patients, 1112
 hypothermic, nuclear magnetic resonance spectroscopy and, rabbit, 867
- Brainstem
 bombesin-like peptide regulation, pulmonary neuroendocrine cells, neonate, 828
 methionine-enkephalin levels, hypoxia influence, rabbit, 655
- Breast feeding
 carnitine levels, serum and breast milk, 806
 lymphocyte proliferation, effects on, infant, 227
 see also Human milk
- Breath amplitude, heart rate variability and, full-term neonates, 301
- Breathing patterns, predictive value, sudden infant death syndrome, 680
- Brush border membrane
 amino acid transport, nursing animals, rat, 890
 fluidity, glucocorticoid-mediated altera-

- tion, small intestine, rat, 79
Saccharomyces boulardii, response to, human and rat, 192
- Cardiac output, comparative effects, metabolic acidemia and hypoxemia, newborn lamb, 756
- Carnitine
 phosphatidylcholine species composition and, fetal rat lung, 1280
 serum and breast milk concentrations, during prolonged breast-feeding, 806
- Carotid body, maturation, effect on laryngeal chemoreflex, neonatal lamb, 724
- Catecholamine
 hypoglycemia response, short stature and, 1097
 metabolic clearance and plasma appearance rates, fetal sheep, 992
 release, chemical sympathectomy effect, 1338
- Cell, endothelial, proliferation, mucocutaneous lymph node syndrome, 943
- Cephalosporins, third generation, cellular uptake and cell-associated activity of, 909
- Cerebral artery, Doppler ultrasound waveforms, controlled hypercapnia, neonate, 218
- Cerebrospinal fluid, biogenic amine metabolites, acute lymphocytic leukemia, 285
- Chemoreflex, laryngeal, effects of carotid body maturation and terbutaline, neonatal lamb, 724
- Chemotaxis, neutrophil, ontogeny, fetal lamb, 265
- Choking, first aid, comments, Howland Award acceptance, 1013
- Cholecystokinin octapeptide, gallbladder contractility and, development, guinea pig, 214
- Choline, uptake, intestine, neonatal and adult rat, 768
- Circulation
 nifedipine effects, newborn lamb, 1
 pulmonary, prostaglandin H₂ effects, perinatal lamb, 565
- Cis-platin, nephrotoxicity, young and adult rats, 9
- Coagulation, neonatal systems compared, lambs, piglets, rabbits, beagle pups, 961
- Coagulopathy, acute polycythemia and, newborn dog, 151
- Colon, NaKATPase activity, control, aldosterone role, weanling rat, 242
- Complement
 activation
 different patterns, juvenile arthritis, 1332
 respiratory fluids, cystic fibrosis, 1258
- Concanavalin A, effect on peripheral blood mononuclear cells, glomerular basement membrane, rat, 321
- Cord blood
 digoxin- and digitoxin-like immunoreactive substances, neonate, 28
 lipid levels, high-density lipoprotein subclass and, 487
 mononuclear cells, interleukin-2 receptor production by, 136
- Corticosteroid, globulin binding to, gestation, diabetic rat, 155
- Corticosterone
 circulating, thyroxine effects, infant rat, 87
 fetal and maternal, corticosteroid binding globulin and, gestation, diabetic rat, 155
- Creatinine clearance, effect of assisted ventilation, low birth weight infants, 447
- Cromolyn sodium, pulmonary vasoconstriction and, neonatal lamb, 834
- Cystic fibrosis
 altered antibody isotope, opsonic deficiency and, 453
 calcium-transporting ATPase enzyme isolation, erythrocyte membrane, 356
 circulating immune complexes, correlation to clinical parameters, 385
 diagnosis, premature infants, 536
 linoleic acid deficiency, correction, 36
 monocyte chemiluminescence in, patients and parents, 619
 neutrophils, formyl-methionyl-leucyl-phenylalanine-induced response, 520
 oxygen consumption and ouabain binding sites, nasal epithelium, 1316
 pancreatic insufficiency and, immunoreactive pancreatic cationic trypsinogen, age-related changes, 209
 phosphatidylethanolamine N-methyltransferase, properties and activity, 1290
 Pseudomonas mucoid strains, antibody, enzyme-linked immunosorbent assay, 1085
 respiratory fluids, complement activation in, 1258
- Cystine, transport, developmental aspects, dog, 593
- Dazmegrel, effects on pulmonary gas exchange, piglet, 481
- Defense mechanism, pulmonary, postnatal maturation, lung, lamb, 496
- Dehydroepiandrosterone sulfate, metabolism, growth retarded fetus, 166
- Dexamethasone, superoxide dismutase turnover and, fetal lung, rat, 895
- Diabetes
 fetal and maternal corticosterone and corticosteroid binding globulin, gestation, rat, 155
 streptozotocin-induced, lung development, fetal rat, 67
- Diaphragm, force output, postnatal changes, piglet, 658
- Diarrhea, sodium absorption, alanine effect, piglet, 879
- Digitoxin, immunoreactive substances similar to, amniotic fluid, cord blood, and serum, neonate, 28
- Digoxin, immunoreactive substances similar to, amniotic fluid, cord blood, and serum, neonate, 28
- Dihydroxyvitamin D₃, see Vitamin D
- Diltiazem, heart function and, neonate, 838
- Diphtheria toxin, IgG and IgG subclass specific antibody responses, DTP immunization, neonates and infants, 735
- Disaccharidase, intestinal, nutritional rehabilitation effect, weanling rat, 793
- Electrical conductivity, total body, body composition determination, neonate, 561
- Electroencephalogram, phenylalanine effects, phenylketonuria patients, 1112
- Electrolyte balance, effect of assisted ventilation, very low birth weight infants, 447
- Embryo, environmental hyperthermia, hemodynamic effects, chick, 1213
- Endocrine pulse, detection, dual-threshold method for, 632
- β -Endorphin, plasma, perinatal asphyxia, 577
- Endotoxin, subinhibitory polymyxin B and ampicillin effects, *Haemophilus influenzae* type B infection, infant rat, 237
- Energy
 expenditure, estimation of, premature infants, 646
 metabolism
 in premature infants, 638
 variations, preterm infants, 422
- Enterotoxin
 heat-stable, *Escherichia coli*, sensitivity, small intestine, immature rat, 555
 inhibition by milk gangliosides, human and cow's milk compared, 416
- Enzyme
 antioxidant
 lung development, streptozotocin-induced diabetes, fetal rat, 67
 metyrapone effect on maturation, rat lung, 672
 gluconeogenic, effects of fasting on, ovine fetus, 676
 postreceptor defect, leprechaunism and, 329
- Enzyme-linked immunosorbent assay, antibody detection, Pseudomonas mucoid strains, cystic fibrosis, 1085
- Epidermal growth factor
 artificial feeding and, suckling rat, 1248
 differential response, neonatal rat, 468
 lung development influenced by, fetal rat, 473
 neonatal hyperthyroidism effect
 mouse saliva, 587
 tissues, urine, and blood, mouse, 628
 thyroxine effect, neonatal mice, 281
 thyroxine-mediated responses, developing sympathetic nervous system involvement, submandibular gland, mouse, 232
- Epinephrine, systemic blood pressure effect, sepsis-induced pulmonary hypertension, piglet, 872
- Epithelium, nasal, oxygen consumption and ouabain binding sites, cystic fibrosis, 1316
- Erratum, 160
- Erythrocyte
 cell flow during hypoxemia, fetal scalp, sheep, 407
 deformability, fetus, preterm, and term neonate, 93
 filterability, neonates and adults, 1269
 insulin binding, preterm newborn infant, 256
 neonatal, aging process, 1091
- Erythropoiesis, infants of diabetic mothers, 161
- Erythropoietin, immunoreactive, temporal response to acute hypoxemia, fetal sheep, 15
- Escherichia coli*, heat-stable enterotoxin, sensitivity, small intestine, immature rat, 555
- Escherichia coli* K1, infection, protection against, neonatal rat, 175
- European Society for Paediatric Gastroenterology and Nutrition, annual meeting abstracts, 689
- European Society for Pediatric Research
 abstracts, 1034
 author index to abstracts, 1065
 lectures, 1017
- Eye, fetal visual evoked potential, visual maturation and, lamb, 351

- Fasting, gluconeogenic enzymes and, ovine fetus, 676
- Fatty acid
dicarboxylic and ω -1 hydroxy, excretion, medium-chain triglyceride ingestion and, low birth weight infant, 122
hydroxylation, acetylsalicylic acid effect, rat liver, 1221
- Feeding
artificial, epidermal growth factor and, suckling rat, 1248
thermogenic effect, premature infants, 638
- Fertility, onset, undernutrition and, rat, 1161
- Fetal alcohol syndrome, zinc status of infants with, 551
- Fetus
acute hypoxemia, immunoreactive erythropoietin, temporal response, sheep, 15
adipose metabolism, calf, 542
amino acid concentrations, maternal hypoaacidemia and, rat, 1071
blood group antigens, maternal blood contamination detection, 1082
catecholamine clearance, sheep, 992
erythrocyte deformability, 93
gluconeogenesis and oxygenation, lamb, 532
gluconeogenic enzyme, fasting effect, sheep, 676
growth retardation
feto-placental steroid metabolism, 166
somatomedin C/insulin-like growth factor I concentrations, rat, 126
isolated hepatocytes, insulin effect, rat, 609
lung development
epidermal growth factor influence, rat, 473
nonhuman primate, male and female, 987
prolactin role, 876
streptozotocin-induced diabetes, rat, 67
thyroid hormone and, rat, 545
lung hypoplasia
morphometry, guinea pig, 955
oligohydramnios-induced, guinea pig, 951
lung surfactant and inositol, gestational age-dependent changes, rat, 24
metabolic requirements, guinea pig, 1156
mother and, corticosterone and corticosteroid binding globulin, gestation, diabetic rat, 155
neutrophil chemotaxis, ontogeny, lamb, 265
normal, prenatal blood sampling, 342
phosphatidylcholine species composition, thyroxine and carnitine effects, rat lung, 1280
prostaglandin concentrations, late gestation, sheep, 83
protein turnover, after maternal starvation, rat, 1252
pulmonary blood flow, tolazoline and, lamb, 1131
red blood cell flow, hypoxemia, scalp, sheep, 407
serum somatomedin C, thymidine, and transferrin, 71
somatomedin-C/insulin-like growth factor I, tissue and plasma concentrations, first half of gestation, 253
superoxide dismutase turnover, dexamethasone effect, rat lung, 895
visual evoked potential, visual maturation and, lamb, 351
- Fibrinogen, clottable, acute polycythemia effects, newborn dog, 151
- Fibroblasts
branched-chain amino acids in, metabolism, maple syrup urine disease, 169
isovaleric acidemia, isovaleryl-CoA dehydrogenase activity, tritium release assay, 59
N-acetyl-neuraminic acid distribution, infantile sialic acid storage disease, 773
- Fluid, respiratory, complement activation in, cystic fibrosis, 1258
- Folic acid, constant rate administration, neural tube defects and, 761
- Food consumption, among white adolescents, Lipid Research Clinics prevalence study, 309
- Formula
lipid differences, compared with breast milk, neonates, 332
triglycerides in, relation to plasma ketone body concentrations, 338
- Freund's adjuvant, glucose transport following, rat kidney, 443
- Furosemide, chronic therapy, growth failure and decreased bone mineral, newborn rat, 74
- Gallbladder, contractility, development, guinea pig, 214
- Ganglioside, composition compared, human and bovine milk, 416
- Gestation
chemical composition, fetal and maternal guinea pig, 1156
fetal and maternal corticosterone and corticosteroid binding globulin, diabetic rat, 155
first half, somatomedin-C/insulin-like growth factor I, tissue and plasma concentrations, fetus, 253
- Gestational age
plasma inositol levels and surfactant composition, changes dependent on, fetal rat, 24
prostaglandin concentrations, maternal and fetal tissues, sheep, 83
protein synthesis and amino acid pools, neonate, 140
- Gliadin, wheat, peptides, adenylate cyclase activation by, atrophic celiac intestinal mucosa, 53
- Globulin, corticosteroid binding, fetal and maternal, gestation, diabetic rat, 155
- Glucocorticoids
fluidity alteration mediated by, brush border membranes, small intestine, rat, 79
prostaglandins vs., small intestine, infant rat, 109
- Gluconeogenesis
hepatic, oxygenation and, fetal lamb, 532
lactate related, small intestinal mucosa, suckling rats, 1321
- Glucose
endogenous production, regulation, glucose role in, newborn, 49
hypertonic feeding, vascular response, mesentery, neonatal piglet, 1136
metabolism, perirenal adipose tissue, fetal and neonatal calf, 542
placental distribution, maternal concentration and, 269
polymer
absorption and oxidation, neonates, 740
hydrolysis, salivary amylase contribution to, premature infant, 186
- transport
alterations after Freund's adjuvant, kidney, rat, 443
metabolic acidosis effect, weanling rat, 763
uterine uptake, near-term guinea pig, 730
- Glutamate, plasma concentrations, age differences, 53
- Glycogenesis, type IB, chemotaxis and neutrophil function in, 438
- Granulomatous disease, chronic, nitroblue tetrazolium test, eosinophils, 378
- Growth and development
biosynthetic somatomedin C and, dwarf mouse, 825
chemical composition determination, fetal and maternal guinea pig, 1156
corticosterone, thyroxine effects, infant rat, 87
gallbladder contractility, guinea pig, 214
immune system development, premature infant, 899
lung, streptozotocin-induced diabetes, fetal rat, 67
myo-inositol uptake, lung cells, perinatal rabbit, 179
sympathetic nervous system, thyroxine-mediated nerve growth factor and epidermal growth factor responses, submandibular gland, mouse, 232
- Growth factor
nerve
neonatal hyperthyroidism effect, mouse saliva, 587
submandibular gland, thyroxine effect, neonatal mouse, 281
 β -nerve, measurement in cerebral cortical synaptosomes, mouse, 391
- Growth failure, decreased bone mineral and, chronic furosemide therapy, newborn rat, 74
- Growth hormone
arginine infusion and, protein-energy malnutrition, 1122
secretion
catch-up growth control and neural control, dissociation of, stunted head-irradiated rat, 261
catecholamines and, short children, 1097
- Growth-promoting activity, serum somatomedin C, transferrin, and, fetus, 71
- Growth retardation
feto-placental steroid metabolism, fetus, 166
intrauterine, cerebral metabolic intermediate response after, dog, 662
uterine artery ligation, somatomedin C/insulin-like growth factor I and, fetal rat, 126
- Growth-stimulating factor, nerve, synthesis and secretion by astrocyte cells, neonatal mouse, 367
- Guanylate cyclase, leprechaunism, postreceptor defect and, 329
- Hearing
auditory brainstem response
treated congenitally hypothyroid children, 570
unconjugated bilirubin infusion, infant rhesus monkey, 511
- Heart
mechanical function, Ca^{2+} channel blocker effect, neonate, 838
Purkinje fibers, autonomic interactions,

- dog, 613
rate, predictive value, sudden infant death syndrome, 680
verapamil, cardiovascular effects, age and, neonatal swine, 428
- Heart rate, variability, respiration patterns and, normal neonate, 301
- Heart ventricle
left, effects of interventricular shunt, dog, 433
septal defect, indices of left ventricular function, dog, 433
- Hemagglutination, detection of maternal blood contamination, fetal red cells, 1082
- Hematocrit, blood flow and oxygen delivery, neonatal lamb, 1274
- Hematopoiesis, *in vitro* studies, pancytopenia in propionic acidemia, neonate, 783
- Hemofiltration, end stage renal disease, vitamin D supplement effects, 5
- Hemorrhage, intracranial, regional cerebral ischemia, potassium and, 478
- Hepatocytes, amino acid and lipid metabolism in, insulin stimulation, fetal rat, 609
- Herpes simplex
immune response, herpes labialis patients, 905
 γ -interferon production and, neonatal mononuclear cells, 398
- Howland Award
acceptance, first aid for choking victims, 1013
presentation, 1986, Richard L. Day, 1009
- Human milk
carnitine levels, prolonged breast feeding, 806
fortified, excretion of immune factors and, very low birth weight infants, 711
ganglioside composition, compared with cow's milk, 416
leukocytes, response to chemoattractant peptides, 373
lipid differences, compared with formula, neonates, 332
- Hyaline membrane disease
constant positive airway pressure, assessment of optimal level, 884
recovery, surfactant quantity and composition during, 1243
- Hydrolysis, glucose polymer, salivary amylase contribution to, premature infant, 186
- Hyperammonemia
congenital, behavioral and neurotransmitter changes, rat model, 1310
waste nitrogen excretion, benzoate and phenylacetate role, 1117
- Hypercapnia, controlled, neonatal cerebral artery Doppler ultrasound waveforms, 218
- Hyperimmunoglobulin E syndrome, intercurrent measles infection, transient remission after, 685
- Hyperinsulinemia, lipase activities, infants of diabetic mothers, 527
- Hypertension
pregnancy-induced, pituitary function, fetus, 876
pulmonary
pediatric cardiology workshop proceedings, 811
sepsis-induced, epinephrine effect, piglet, 872
- Hyperthermia, environmental, hemodynamic effects, chick embryo, 1213
- Hyperthyroidism
growth factor secretion and, saliva, neonatal mice, 587
neonatal, epidermal growth factor levels after, mouse, 628
- Hyperventilation, cerebral blood flow during, newborn dog, 1102
- Hypoaminoacidemia, maternal, amino acid concentrations and, fetal plasma, rat, 1071
- Hypocarbica, prolonged, cerebral blood flow and oxygen consumption changes during, piglet, 147
- Hypoglycemia, catecholamine response to, short stature and, 1097
- Hypothermia, cerebral metabolic studies after, nuclear magnetic resonance spectroscopy and, rabbit, 867
- Hypothyroidism, congenital, auditory brainstem response in, 570
- Hypoxemia
effect on cardiac output and regional blood flow, unanesthetized newborn lamb, 756
immunoreactive erythropoietin, temporal response, fetal sheep, 15
neonatal status epilepticus and, nuclear magnetic resonance study, dog, 581
red blood cell flow, fetal scalp, sheep, 407
- Hypoxia
alveolar, cromolyn sodium and, neonatal lamb, 834
cerebral blood flow autoregulation and, neonatal lamb, 516
chronic, *in utero*, pulmonary vasculature, neonatal guinea pig, 292
effect on intestinal blood flow and oxygen uptake, newborn piglet, 929
methionine-enkephalin levels and, brainstem nuclei, rabbit, 655
nonischemic, mucosal structure and function, dog jejunum, 1143
pulmonary vasoconstriction induced by, attenuation, newborn lamb, 113
d-tubocurarine and pancuronium, cardiovascular effects, newborn lamb, 246
vascular smooth muscle cell growth inhibited by, 966
ventilatory response, prenatal starvation and, neonatal guinea pig, 920
- Immune complex
circulating, correlation to clinical parameters, cystic fibrosis, 385
immunoglobulin rheumatoid factor, in juvenile rheumatoid arthritis patients, 977
- Immune factors, fecal excretion, fortified human milk and, very low birth weight infants, 711
- Immune system, development, premature infants, 899
- Immunoglobulin
Escherichia coli K1 infection, protection against, neonatal rat, 175
maternal intravenous infusion, transplacental passage, mothers to neonates, 933
plasma concentrations, immune system development, premature infants, 899
- Immunoglobulin A, deficiency, with immunoglobulin G subclass deficiency, 937
- Immunoglobulin G
antibody responses, DTP immunization, neonates and infants, 735
subclass antibodies, in cystic fibrosis, 453
subclass deficiency, in immunoglobulin A deficiency, 937
- Immunoreactivity
digoxin- and digitoxin-like substances, amniotic fluid, cord blood, and serum, neonate, 28
erythropoietin, temporal response to acute hypoxemia, fetal sheep, 15
pancreatic cationic trypsinogen, age-related changes, cystic fibrosis and pancreatic insufficiency, 209
- Indomethacin, intestinal ulcer and, neonatal rat, 598
- Infant
see also Neonate
macrosomic, lipase activities, 527
plasma peptide YY levels, 1225
- Infantile sialic acid storage disease, N-acetyl-neuraminic acid, distribution and metabolic fate, human fibroblasts, 773
- Infection
patterns, immune system development, premature infants, 899
respiratory, immunoglobulin G subclass deficiency and, 937
see also specific infection
- Inhalation, aerosol, radiolabeled, submicronic, pulmonary deposition sites, 1297
- Inositol, plasma, gestational age-dependent changes, fetal rat, 24
- Insulin
arginine infusion and, protein-energy malnutrition, 1122
binding, erythrocyte, preterm newborn infant, 256
islet-stimulating activity, obesity and, 720
- Interferon, immune response to herpes simplex and, herpes labialis patients, 905
 γ -Interferon, herpes simplex stimulation and, neonatal mononuclear cells, 398
- Interleukin-2 receptor, see receptor
- Intestinal mucosa
atrophic celiac, adenylate cyclase activation, wheat gliadin-derived peptides, 42
Saccharomyces boulardi, response to, human and rat, 192
- Intestine
acute yersiniosis, clinical, morphological, and biochemical alterations, rabbit, 602
choline uptake by, neonatal and adult rat, 768
repair, chronically undernourished rabbits, 1301
small
brush border membrane, glucocorticoid-mediated alteration of fluidity, rat, 79
Escherichia coli heat-stable enterotoxin and, rat, 555
glucocorticoid and prostaglandin effects, infant rat, 109
- Irradiation, head, growth hormone secretion, rat, 261
- Isovaleryl-CoA dehydrogenase, tritium release assay measuring isovaleric, acidemia fibroblasts, 59
- Isovalerylglycine
stable isotope dilution analysis prenatal diagnosis of isovaleric acidemia diagnosis, 222
- Jejunum, mucosal structure and function,

- nonischemic hypoxia effects, dog, 1143
- Kawasaki disease, acute, endothelial cell proliferation in, 943
- Ketoacid dehydrogenase, branched-chain, activity abnormalities, amino acid metabolism, 169
- Kidney
 amino acid transport, nursing animals, rat, 890
 assisted ventilation and, very low birth weight infants, 447
 compensatory growth, influence of age, rat, 347
 cystine transport, developmental aspects, dog, 593
 end stage disease, hemofiltration-treated, vitamin D supplements and, 5
 glucose transport, Freund's adjuvant and, rat, 443
 hypercapnic acidosis and renal function, newborn rabbit, 798
- β -Lactamase, inducibility, piperacillin susceptibility of *Pseudomonas cepacia*, cystic fibrosis, 1174
- Lactate
 gluconeogenesis and, small intestinal mucosa, suckling rats, 1321
 metabolism, perirenal adipose tissue, fetal and neonatal calf, 542
 uterine uptake, near-term guinea pig, 730
- Lactoferrin, isolation and characterization, monkey, 197
- Lectures, European Society for Pediatric Research, 1017
- Leprechaunism, guanylate cyclase activity, postreceptor defect and, 329
- Leukemia, acute lymphocytic, biogenic amine metabolites, cerebrospinal fluid, 285
- Leukocyte
 β -adrenoceptor function, neonate, 1152
 human milk, response to chemoattractant peptides, 373
 polymorphonuclear
 adherence and chemotaxis, healthy and stressed neonates, 297
 leukotriene B4 biosynthesis, cord blood, infants, children, and adults, 402
- Leukotriene B4, biosynthesis, umbilical cord blood, infants, children, and adults, 402
- Leukotrienes
 cerebral arteries affected by, newborn pig, 973
 role in group B streptococcal sepsis, piglet, 1004
- Linoleic acid, deficiency, correction, cystic fibrosis, 36
- Lipase, hepatic, macrosomic infants, 527
- Lipid
 metabolism, insulin effect, fetal hepatocytes, rat, 609
 plasma lipoprotein composition, neonates, 324
- Lipid peroxidation, vitamin E effects, neonatal rabbit, 505
- Lipoprotein
 high-density, cord blood lipid levels and, 487
 plasma, postheparin activity, hyperinsulinemic infants and large-for-date infants, 527
- Lipoteichoic acid, group B streptococcal, toxicity, rabbit and mouse, 1168
- Liver, fatty acid hydroxylation, acetylsalicylic acid effect, rat, 1221
- Lung
 capacity, transfusion effects, thalassemia major, 20
 circulation, effects of prostaglandin H₂, perinatal lamb, 565
 defense mechanisms, antimicrobial, postnatal maturation, conventional and germ-free lamb, 496
 development
 Clara cell-specific protein and, rat, 802
 nonhuman primate fetus, male and female, 987
 streptozotocin-induced diabetes, fetal rat, 67
 thyroid hormone and, fetal rat, 545
 effect of passive smoking, lamb, 853
 functional residual capacity determination, N₂ washout method, neonate, 668
 hypoplasia
 morphometry, after oligohydramnios, fetal guinea pig, 955
 oligohydramnios-induced, fetal guinea pig, 951
 influence of epidermal growth factor, fetal rat, 473
 microvascular pressure, micropuncture measurement, rabbit, 1107
 myoinositol uptake development, perinatal rabbit, 179
 natural surfactant clearance, effects of dose and species, neonatal rabbit, 1139
 phosphatidylcholine species composition, thyroxine and carnitine effects, fetal rat, 1280
 pulmonary deposition sites, inhaled, radiolabeled, submicronic aerosol, 1297
 pulmonary hypertension
 epinephrine effect, piglet, 872
 pediatric cardiology workshop proceedings, 811
 pulmonary vasoconstriction, cromolyn sodium effect, neonatal lamb, 834
 superoxide dismutase turnover, dexamethasone effect, fetal rat, 895
 surfactant and antioxidant enzyme maturation, metyrapone effect, rat, 672
 surfactant phospholipids, changes in, normal and diabetic pregnancies, rat, 650
 vascular structure, hypoxia effects, neonatal guinea pig, 292
- Luteinizing hormone, pulsatile, release, error estimate definition, 632
- Lymphocyte
 proliferation, breast feeding effects on, infant, 227
 subset identification, monoclonal antibodies, healthy children, 1147
- Macrosomia, neonatal, lipase activities in, 623
- Malnutrition
 pancreatic exocrine function and, 1236
 postnatal, disaccharidase response to nutritional rehabilitation, weanling rat, 793
 protein-energy, insulin response to arginine infusion, 1122
- Maple syrup urine disease, branched-chain amino acid metabolism, fibroblasts, 169
- Maternity
 fetus and
 corticosterone and corticosteroid binding globulin, gestation, diabetic rat, 155
 prostaglandin concentrations, late gestation, sheep, 83
 glucose concentration, placental glucose distribution and, 269
- McCune-Albright syndrome, ovarian function in, clinical and laboratory results, 859
- Measles, hyperimmunoglobulin E syndrome and, transient remission after, 685
- Membrane
 fluidity, sulfur amino acid uptake and, brush border membrane, rat kidney, 1305
 oxygenation, extracorporeal, effect on body water content, neonatal baboon, 381
- Mesentery, hypertonic feeding, microvascular response, neonatal piglet, 1136
- Metabolism, cerebral intermediate response, after intrauterine growth retardation, dog, 662
- Methionine-enkephalin, age-dependent hypoxia influence, brainstem nuclei, rabbit, 655
- Metyrapone, surfactant and antioxidant enzyme maturation and, rat lung, 672
- Micropuncture, vascular pressure measured by, rabbit lung, 1107
- Milk
 cow's, ganglioside composition and enterotoxin-inhibitory activity, compared with human milk, 416
 monkey, lactoferrin isolation and characterization, 197
- Monoamine metabolites, acute lymphocytic leukemia, cerebrospinal fluid, 285
- Monocyte, chemiluminescence in, cystic fibrosis patients and parents, 619
- Mononuclear cell, γ -interferon production, herpes simplex virus stimulated, neonate, 398
- Mononuclear cells, cord blood, interleukin-2 receptor production by, 136
- Monosodium L-glutamate, plasma glutamate concentrations, age differences, 53
- Muco-cutaneous lymph node syndrome, endothelial proliferation in, 943
- Mucosa, jejunal, hypoxia effects, dog, 1143
- Muscle, smooth, tracheal mechanics and, neonate, 1216
- Myelin, tubular, formation, surfactant and phospholipid extract adsorption related to, cow, 97
- Myocardium, dysfunction, experimental septic shock, 1240
- Myoinositol, uptake, perinatal development, lung, rabbit, 179
- NaKATPase, colonic activity, control, aldosterone role, weanling rat, 242
- Naloxone, septic shock and, newborn piglet, 707
- National Heart, Lung, and Blood Institute, pediatric cardiology workshop proceedings, pulmonary hypertension, 811
- Neonate
 acute polycythemia causing coagulopathy, dog, 151
 adipose metabolism, calf, 542
 adrenoleukodystrophy, dicarboxylic aciduria in, 62
 airway collapsibility, effect of tracheal

- smooth muscle tone on, 492
 asphyxia, cerebral blood flow and O₂ metabolism after, lamb, 778
 bile secretion, control, puppy, 203
 bilirubin conjugate formation, 947
 blood flow and oxygen delivery, as hematocrit function, lamb, 1274
 body composition, mother's smoking and, 716
 body composition determination, total body electrical conductivity method, 561
 body water content, extracorporeal membrane oxygenation and, baboon, 381
 breast feeding, lymphocyte proliferation, effects on, 227
 cerebral artery Doppler ultrasound waveforms, controlled hypercapnia and, 218
 cerebral blood flow impairment, hypoxic lamb, 516
 chronic furosemide therapy, growth failure and decreased bone mineral, 74
 circulating corticosterone, age and thyroxine effects, rat, 87
 coagulation systems, comparative study, lambs, piglets, rabbits, beagle pups, 961
 digoxin- and digitoxin-like immunoreactive substances, amniotic fluid, cord blood, and serum, 28
 effects of chronic *in utero* hypoxia, pulmonary vasculature, guinea pig, 292
 endogenous glucose production, regulation, glucose role in, 49
 epidermal growth factor
 differential response, rat, 468
 compared with adult, 1269
 erythrocytes
 aging process, 1091
 filterability, compared with adult, 1269
 erythropoiesis, diabetic mothers, 161
Escherichia coli K1 infection, protection against, rat, 175
 full-term
 breath amplitude modulation of heart rate variability, 301
 erythrocyte deformability, 93
 functional residual capacity measurement, N₂ washout method, 668
 glucocorticoids and prostaglandins, comparative effects, small intestine, rat, 109
 glucose polymer, absorption and oxidation, 740
Haemophilus influenzae type B infection, subinhibitory polymyxin B and ampicillin for, rat, 237
 heart function, calcium antagonist effect, 838
 hypercapnic acidosis, effect on renal function, rabbit, 798
 hyperinsulinemic, plasma lipoprotein and hepatic lipase activities, 527
 hyperthyroid, epidermal growth factor levels after, mouse, 628
 hypertonic feeding, vascular response, mesentery, neonatal piglet, 1136
 hyperventilation, regional cerebral blood flow during, dog, 1102
 hypoxia-induced pulmonary vasoconstriction, attenuation, lamb, 113
 intestinal ulcer, indomethacin and, rat, 598
 large-for-date, plasma lipoprotein and hepatic lipase activities, 527
 laryngeal chemoreflex, effects of carotid body maturation and terbutaline on, lamb, 724
 leukocytes, β -adrenoceptor function, 1152
 lipid differences, breast versus formula, 332
 lipid peroxidation in, vitamin E effects, 505
 lung and brainstem injury, neuroendocrine cells, 828
 macrosomic
 lipase activities, 527
 lipase activities in, 623
 mononuclear cells, γ -interferon production by, 398
 natural surfactant clearance, rabbit lung, 1139
 nerve growth-stimulating factor, synthesis and secretion by astrocyte cells, mouse, 367
 nifedipine, circulatory effects, lamb, 1
 normoxia and hypoxia, *d*-tubocurarine and pancuronium, cardiovascular effects, lamb, 246
 pancytopenia and propionic acidemia, hematologic evaluation, 783
 parenterally fed, surgery effects on nitrogen metabolism, 32
 plasma lipoproteins, apolipoprotein and lipid composition, 324
 plasma peptide YY levels, 1225
 polymorphonuclear leukocyte adherence and chemotaxis, comparison, healthy and stressed, 296
 premature, see also Prematurity
 immunoglobulin, transplacental passage, 933
 serum thyroglobulin levels, 1001
 α -thalassemia in, 1077
 thyroglobulin cord serum levels, 996
 variations in energy metabolism, 422
 prenatal starvation, ventilatory response to hypoxia and, guinea pig, 920
 preterm, variations in energy metabolism, 422
 protein synthesis and amino acid pools, 140
 pulmonary vasculature, hypoxia effects, guinea pig, 292
 pulmonary vasoconstriction, cromolyn sodium and, lamb, 834
 pyruvate carboxylase deficiency, cross-reacting material (negative), 274
 respiratory difficulties, plasma β -endorphin in, 577
 respiratory distress syndrome, cardiopulmonary function measurement, 316
 sepsis, dazmegrel effects, piglet, 481
 smooth muscle contraction, tracheal mechanics and, 1216
 status epilepticus, effects of hypoxemia on, 581
 stressed, polymorphonuclear leukocyte adherence and chemotaxis, 296
 submandibular gland nerve growth factor synthesis, thyroxine-mediated, mouse, 281
 sympathetic nerve stimulation, effects on cerebral blood flow, piglet, 131
 term, erythrocyte deformability, 93
 unconjugated bilirubin infusion, auditory brainstem response, rhesus monkey, 511
 urinary arginine vasopressin, excretion pattern, 103
 verapamil, cardiovascular effects, pig, 428
 very low birth weight
 bone growth with low bone mineral content in, 925
 effect of assisted ventilation in, 447
 effects of human milk feeding, 711
 whole blood filterability, compared with adult, 1269
 Nephrology, pediatric, research grant applications, National Institutes of Health, 1067
 Nephrotoxicity, Cis-platin, young and adult rats, 9
 Nerve
 growth factor, thyroxine-mediated responses, developing nervous system involvement, submandibular gland, mouse, 232
 growth-stimulating factor, synthesis and secretion, neonatal mouse astrocyte cell, 367
 Nervous system, sympathetic, developing, submandibular gland nerve growth factor and epidermal growth factor responses, mouse, 232
 Neural tube defect, arsenate-induced, folic acid administration and, 761
 Neuroblastoma, antigenic analysis, human, 915
 Neuroendocrine cells, brainstem injury and, neonatal lung, 828
 Neurotransmitter, metabolism, acute lymphocytic leukemia, 285
 Neutrophil
 adhesion abnormality, surface membrane proteins and, 361
 chemotaxis, ontogeny, fetal lamb, 265
 cystic fibrosis, formyl-methionyl-leucyl-phenylalanine-induced response, 520
 nitroblue tetrazolium staining, screening, chronic granulomatous disease, 378
 peptide receptor activation in, tosylamino-phenylethyl-chloromethylketone effect, 848
 type IB glycogenesis, 438
 Newborn, see Neonate
 Nifedipine, circulatory effects, newborn lamb, 1
 Nitroblue tetrazolium, eosinophil staining, screening, chronic granulomatous disease, 378
 Nitrogen, metabolism, surgery effects, parenterally fed neonates, 32
 Normoxia, *d*-tubocurarine and pancuronium, cardiovascular effects, newborn lamb, 246
 Nuclear magnetic resonance, neonatal status epilepticus, effect of hypoxemia on, dog, 581
 Nutrition
 disaccharidase response to feeding patterns, weanling rat, 793
 food choices among white adolescents, Lipid Research Clinics prevalence study, 309
 medium-chain triglycerides, organic acid excretion and, low birth weight infant, 122
 parenteral, surgery effects on nitrogen metabolism, 32
 N₂ Washout method, functional residual capacity measurement, neonate and small children, 668
 Obesity, serum insulinotropic activity, compared with nonobese infants and children, 720
 Oligohydramnios
 lung hypoplasia and
 influence of timing and gestational duration, fetal guinea pig, 951
 morphometry, fetal guinea pig, 955

- Ouabain, binding sites, nasal epithelium, cystic fibrosis, 1316
- Oxygen
arterial, saturation, transfusion effects, thalassemia major, 20
cerebral metabolic rate, hyperventilation, newborn dog, 1102
consumption
alterations, prolonged hypocarbia, piglet, 147
nasal epithelium, cystic fibrosis, 1316
delivery, as hematocrit function, neonatal lamb, 1274
high, lung development, streptozotocin-induced diabetes, fetal rat, 67
metabolism, after asphyxia, newborn lamb, 778
uptake, asphyxia, hypoxia, acidosis effect, newborn piglet, 929
uterine uptake, near-term guinea pig, 730
- Oxygenation, hepatic gluconeogenesis and, fetal lamb, 532
- Paco₂, pH and, hypoxia-induced pulmonary vasoconstriction and, newborn lamb, 113
- Pancreas
exocrine function, malnutrition and reserpine treatment effects, 1236
insufficiency, immunoreactive pancreatic cationic trypsinogen, age-related changes, cystic fibrosis, 209
- Pancuronium, cardiovascular effects, normoxia and hypoxia, newborn lamb, 246
- Pancytopenia, propionic acidemia and, hematologic evaluation, neonate, 783
- Peptide
atrial natriuretic, plasma levels, healthy children and cardiac disease, 1328
chemoattractant, human milk leukocyte response, 373
chemotactic receptor activation, tosylaminophenylethyl-chloromethylketone effect, human neutrophils, 849
wheat gliadin-derived, adenylate cyclase activation by, atrophic celiac intestinal mucosa, 42
- Peptide YY, plasma levels, neonates and infants, 1225
- Perinate, myoinositol uptake development, lung, rabbit, 179
- Peroxisome, phytol feeding and, mouse, 411
- pH, arterial, hypoxia-induced pulmonary vasoconstriction attenuated by, newborn lamb, 113
- Phenylacetate, metabolic changes caused by, lysinuric protein intolerance, 1117
- Phenylalanine
effects on brain function, phenylketonuria patients, 1112
neutrophil response, cystic fibrosis, 520
- Phenylketonuria, brain function, phenylalanine effects, 1112
- Phosphate, transport, metabolic acidosis effect, weanling rat, 763
- Phosphatidylcholine
species composition, thyroxine and carnitine effects, fetal rat lung, 1280
surfactant clearance, neonatal rabbit lung, 1139
- Phosphatidylethanolamine N-methyltransferase
granulocyte, properties and activity, cystic fibrosis, 1290
lymphocyte, properties and activity, cystic fibrosis, 1290
- Phosphatidylglycerol, synthesis, surfactant, perinatal rabbit, 179
- Phosphatidylinositol
gestational age-dependent changes, fetal rat, 224
synthesis, surfactant, perinatal rabbit, 179
- Phospholipid
composition, sulfur amino acid uptake and, brush border membrane, rat kidney, 1305
extracts, adsorption, tubular myelin formation and, cow, 97
lung effluent, surfactant substitution effect, respiratory distress syndrome, 1228
surfactant, changes, fetal lung, normal and diabetic pregnancies, rat, 650
- Phytol, peroxisome proliferation and, mouse, 411
- Placenta, glucose distribution, maternal glucose concentration and, 269
- Plasma
ketone bodies, triglycerides and, infant formula, 338
lipoprotein, apolipoprotein and lipid composition, neonates, 324
- Polycythemia, acute, coagulopathy and, newborn dog, 151
- Polymyxin B, ampicillin and, *Haemophilus influenzae* type B infection, infant rat, 237
- Potassium
regional cerebral ischemia, intracranial hemorrhage, 478
total body, mother's smoking and, neonate, 716
- Preeclampsia, newborn prolactin in, relation to fetal adrenal activity, 876
- Pregnancy
diabetic
erythropoiesis in infants, 161
fetal corticosterone, rat, 155
surfactant phospholipids, fetal rat lung, 650
immunoglobulin, intravenous infusion, transplacental passage, preterm neonate, 933
- Prematurity
cystic fibrosis diagnosis, 536
energy expenditure, estimation, 646
energy metabolism, thermogenic effect of feeding and, 638
erythrocyte deformability, 93
erythrocyte insulin binding, newborn infant, 256
evolution of primitive reflexes, 1284
glucose polymer hydrolysis, salivary amylase contribution to, infant, 186
immune system development, plasma immunoglobulin concentrations and, 899
 α -thalassemia in, 1077
- Pressure, transdiaphragmatic, postnatal changes, piglet, 658
- Primates, nonhuman, fetal lung development, male and female, 987
- Prolactin, fetal lung maturation and, normotensive and hypertensive mothers, 876
- Prostaglandin
concentrations, maternal and fetal tissues, late gestation, sheep, 83
glucocorticoids vs., small intestine, infant rat, 109
- Prostaglandin H₂, effects on pulmonary circulation, perinatal lamb, 565
- Prostaglandin synthetase, inhibition, group B streptococcal shock, rabbit, 864
- Protein
Clara cell-specific, quantitative assay, rat lung, 802
hydrophobic, surfactant activity, 460
pulmonary surfactant-associated, immunologic identification, 744
surface membrane, neutrophil adhesion abnormality and, 361
synthesis, amino acid pools and, neonate, 140
turnover, after maternal starvation, fetal rat tissue, 1252
- Pseudomonas aeruginosa*, mucoid strains, antibody, cystic fibrosis patients, 1085
- Pseudomonas cepacia*, piperacillin susceptibility, β -lactamase inducibility and, cystic fibrosis, 1174
- Puberty
precocious, ovarian function, 859
undernutrition and, rat, 1161
- Purkinje fibers, autonomic interactions, dog, 613
- Pyruvate carboxylase, deficiency, cross-reacting material (negative), infant, 274
- Rebreathing, cardiopulmonary function measurement, respiratory distress syndrome, ventilated neonates, 316
- Receptor
insulin, erythrocyte, premature newborn infant, 256
interleukin-2, cord blood mononuclear cells, 136
- Red blood cell, see Erythrocyte
- Reflex, primitive, evolution, premature infant, 1284
- Research, pediatric nephrology, grant applications, National Institutes of Health, 1067
- Reserpine, chronic treatment, pancreatic exocrine function and, 1236
- Respiration
dynamics, rapid rate mechanical ventilation, paralyzed rabbit, 750
heart rate variability and, normal full-term neonates, 301
- Respiratory distress syndrome
cardiopulmonary function measured, ventilated neonates, 316
lung effluent phospholipids, surfactant substitution effect, 1228
- Rheumatoid factor, immune complexes, in juvenile rheumatoid arthritis patients, 977
- Richard L. Day
Howland award acceptance, 1013
Howland award presentation, 1009
- Saccharomyces boulardi*, small bowel response to, human and rat, 192
- Salivary amylase, glucose polymer hydrolysis, contribution to, premature infant, 186
- Selenium, status as function of age, Belgium and The Netherlands, 574
- Sepsis
dazmegrel effects, piglet, 481
group B streptococcal, leukotriene role, piglet, 1004
- Septic shock, naloxone effect, newborn piglet, 707
- Serum
digoxin and digitoxin-like immunoreactive substances, neonate, 28

- Escherichia coli* K1 infection, protection against, neonatal rat, 175
- insulinotropic activity, obese and non-obese infants and children, 720
- lipids, breast versus formula, 332
- Shock
- group B streptococcal, prostaglandin synthetase inhibition in, rabbit, 864
 - septic, experimental, myocardial dysfunction comparison, 1240
- Short stature, catecholamine response to hypoglycemia, 1097
- Shunt, interventricular, effects on indices of left ventricular function, dog, 433
- Smoking
- maternal, total body potassium and, neonate, 716
 - passive, effect on lung, lamb, 853
- Smooth muscle cell, vascular, hypoxia effect on growth, 966
- Society for Pediatric Research, presidential address, 1348
- Sodium, absorption, alanine and, piglet jejunum, 879
- Somatomedin C
- biosynthetic, growth effects, dwarf mouse, 825
 - serum, thymidine, transferrin, and, fetus, 71
- Somatomedin-C/insulin-like growth factor I
- tissue and plasma concentrations, first half of gestation, fetus, 253
 - tissue and serum concentrations, growth retardation and, fetal rat, 126
- Spectroscopy, nuclear magnetic resonance, cerebral metabolic studies by, rabbit, 867
- Spermatogenesis, undernutrition and, rat, 1161
- Staining, nitroblue tetrazolium, screening, chronic granulomatous disease, 378
- Starvation
- maternal, protein turnover after, fetal rat tissue, 1252
 - prenatal, ventilatory response to hypoxia and, neonatal guinea pig, 920
- Status epilepticus, neonatal, effect of hypoxemia on, dog, 581
- Steroids, feto-placental metabolism, growth retarded fetus, 166
- Streptococcus
- group B
 - colonization prevention, rabbit and mouse, 1168
 - sepsis, hemodynamics, piglet, 1004
- Submandibular gland, nerve growth factor, thyroxine-mediated, developing sympathetic nervous system involvement, mouse, 232
- Sudden infant death syndrome, heart rate and breathing patterns, predictive value, 680
- Sulfate, effect of concanavalin A on uptake, glomerular basement membrane, rat, 321
- Superoxide dismutase, dexamethasone and, fetal lung, rat, 895
- Surfactant
- activity, hydrophobic protein and, 460
 - adsorption, tubular myelin formation, cow, 97
 - clearance rate, neonatal rabbit lung, 1139
 - composition
 - during hyaline membrane disease recovery, 1243
 - gestational age-dependent changes, fetal rat, 24
 - maturation, metyrapone effect on, rat lung, 672
 - phosphatidylglycerol and phosphatidylinositol synthesis, perinatal rabbit, 179
 - protein, hydrophobic, immunologic identification, 744
 - substitution, phospholipid lung effluent and, respiratory distress syndrome, 1228
- Surgery, nitrogen metabolism, effects on, parenterally fed neonates, 32
- Sympathetic nervous system
- see also Nervous system, sympathetic stimulation
 - effect on cerebral blood flow, newborn piglet, 131
- Synaptosome, cerebral cortical, nerve growth factor measurement, mouse, 391
- Terbutaline, effect on laryngeal chemoreflex, neonatal lamb, 724
- Testicle, postnatal activity, salivary testosterone measurement and, 1324
- Testosterone, salivary measurement, postnatal testicular activity and, 1324
- Tetanus toxoid, IgG and IgG subclass specific antibody responses, DTP immunization, neonates and infants, 735
- α -Thalassemia, premature neonate, 1077
- Thalassemia major, transfusion, pulmonary effects, 20
- Thymidine, serum somatomedin C, transferrin, and, fetus, 71
- Thymidine kinase, adipose tissue, 118
- Thyroglobulin
- cord serum levels, preterm infants, 996
 - serum levels, preterm infants, 1001
- Thyroid hormone, fetal lung maturation, rat, 545
- Thyrotropin-releasing hormone, pituitary-thyroid axis response, mother, fetus, neonate, 982
- Thyroxine
- corticosterone development and, infant rat, 87
 - effect on submandibular gland nerve growth factor and epidermal growth factor, neonatal mice, 281
 - nerve growth factor and epidermal growth factor responses mediated by, developing sympathetic nervous system involvement, submandibular gland, mouse, 232
 - phosphatidylcholine species composition and, fetal rat lung, 1280
- Tidal volume, measurement, high-frequency jet ventilation, rabbit, 45
- Tolazoline, local infusion, pulmonary blood flow adaptation, fetal lamb, 1131
- Tosylaminophenylethyl-chloromethylketone, chemotactic peptide receptor activation and, human neutrophils, 848
- Trachea
- smooth muscle, role of contraction, neonate, 1216
 - smooth muscle tone, effect on airway collapsibility, neonate, 492
- Transferrin, serum somatomedin C, thymidine, and, fetus, 71
- Transfusion, pulmonary effects, thalassemia major, 20
- Triglycerides
- medium-chain
 - organic acid excretion and, low birth weight infant, 122
 - plasma ketone bodies and, infant formula, 338
- Trypsinogen, immunoreactive pancreatic cationic, age-related changes, cystic fibrosis and pancreatic insufficiency, 209
- d*-Tubocurarine, cardiovascular effects, normoxia and hypoxia, newborn lamb, 246
- Ulcer, intestinal, indomethacin and, neonatal rat, 598
- Ultrasonography, Doppler, cerebral artery waveforms, controlled hypercapnia and, neonate, 218
- Umbilical cord, polymorphonuclear leukocytes, leukotriene B4 biosynthesis in, infants, children, and adults, 402
- Undernutrition
- chronic, intestinal repair, rabbit, 1301
 - fertility onset, spermatogenesis, and pubertal development related to, rat, 1161
- Urease, behavioral and neurotransmitter changes caused by, congenital hyperammonemia, rat model, 1310
- Urine
- arginine vasopressin, excretion pattern, neonate, 103
 - isovalerylglycine in, stable isotope dilution analysis, prenatal isovaleric acidemia diagnosis, 222
- Uterine artery, ligation, growth retardation, somatomedin C/insulin-like growth factor I and, fetal rat, 126
- Uterus, oxygen, glucose, and lactate movement, near-term guinea pig, 730
- Vasoconstriction
- pulmonary
 - cromolyn sodium and, neonatal lamb, 834
 - hypoxia-induced, attenuation, newborn lamb, 113
- Ventilation
- assisted, renal function and, premature infants, 447
 - high-frequency jet, tidal volume measurement during, rabbit, 45
 - mechanical, rapid rate, respiration dynamics during, paralyzed rabbit, 750
 - newborn guinea pig, 920
- Verapamil
- age-dependent cardiovascular effects, neonatal swine, 428
 - heart function and, neonate, 838
- Vitamin D, 1,25-dihydroxyvitamin D₃, mineral balance and, hemofiltration-treated end stage renal disease, 5
- Vitamin E, lipid peroxidation and, neonatal rabbit, 505
- Whole blood, filterability, neonates and adults, 1269
- Yersiniosis, intestinal response, rabbit, 602
- Zellweger syndrome, neonatal adrenoleukodystrophy and, dicarboxylic aciduria in, 62
- Zinc, fetal alcohol syndrome infants, 551