

SUBJECT INDEX

- Adipose tissue fatty acids, diet, 317
- Aging
- nutrition, 19
 - mitochondrial theory, 20
 - mitochondrial bioenergetics, 21
 - oxidative stress, 22
- Anaerobic threshold, heart rate, 327
- Antioxidant
- estradiol effect, 225
 - melatonin, 53
- Apoproteins A1 and B, fatty acid supplementation, 349
- Aquaporins, water channels, 59
- Arginyl aminopeptidase, brain, light effect, 249
- Asymmetry, retinal aminopeptidase, 249
- Blood
- apoproteins, n-3 fatty acids, 349
 - lipids
 - dietary oils, 199
 - n-3 fatty acid supplementation, 349
- Brain, arginyl aminopeptidase, 249
- oxidative stress melatonin, 301
- BrdU, testicular cells proliferation, 289
- Breast cancer, dexamethasone, 355
- c-fos, expression, lithium chloride, 361
- Cadmium, pituitary secretion, 265
- Cardiovascular system regulation,
- arterial reflexes, 23
 - brain angiotensins, 27
 - brainstem, cerebellum centers, 28
 - endothelium, hypertension, 37
 - galamine, 25
 - nucleus tractus solitarii, 24
 - pontine areas, 26
- Cells
- MCF-7 cell line, HLA class I expression, 355
- cancer breast, dexamethasone, 355
- hepatocytes, estrogens, 225
- Cerebellum, motor learning, 49
- Cerebral cortex, PET, fMRI, 7
- Circadian rhythms, training schedule, 239
- Cholesterol, fatty acid supplementation, 349
- Coconut oil, plasma lipids, 199
- Collecting duct, salt reabsorption regulation, 8
- Colon
- dithiothreitol, electrophysiology, 385
 - Isc, hypoxia, 367
- Cortistatin, cortical activity, 39
- Creatine, physical performance, 343
- Culture medium, oocytes, EIA, 271
- Darkness, brain aminopeptidase activity, 249
- Dexamethasone, MHC, breast cancer, 355
- Diabetic rats, gonadectomy, 211
- Diamidino yellow, 500
- Dietary oils
- lipids, apoproteins, 349
 - plasma lipids, 199
- Dithiothreitol, colon electrophysiological properties, 385
- Effort test, swimmers, 327
- EIA, 17 β -estradiol, progesterone, 271
- Endothelin, renal function, 36, 37
- Energy restriction, adipose fatty acids, 317
- Enzyme immunoassay, LH, 205
- Epithelial polarity, oxygen availability 367
- Epithelial transport
- aquaporins, 59
 - ion exchangers, 57
 - nucleoside transporters, 58
 - Na/H exchangers, 60
- 17 β -Estradiol,
- antioxidant effect, 225

- EIA, oocyte culture medium, 271
 Exchangers, $\text{Na}^+ \text{-H}^+$
 NaCl proximal tubule absorption, 57
 isoforms, regulation, 60
 Exercise, fish hematologic response, 217
 blood volume regulation, 61
 creatine supplementation, 343
 glucose, glycogen control, 64
 metabolic, hormonal changes, 62
 role of potassium, 63
 Exocrine pancreas, potassium efflux, 231
 Feeding behavior, lithium chloride, 361
 FSH, cadmium effect, 265
 testicular proliferation, 289
 fMRI, PET, cerebral cortex, 7
 Genetic obesity, energy restriction, 317
 GH, cadmium effect, 265
 Glucose tolerance, gonadectomy, 211
 Gonadectomy, ess diabetic rats, 211
 Gonadoreline, LH secretion, 205
 hCG, testicular proliferation, 289
 Heart rate, anaerobic threshold, 327
 Hematological responses, trout exercise, 217
 Hepatocyte, rat, estrogens effect, 225
 Histamine, pancreas potassium efflux, 231
 HIV-disease, quantitative PCR, 307
 Hormones
 17β -estradiol
 EIA, 271
 rat hepatocytes, 225
 FSH,
 cadmium effect, 265
 testicular proliferation, 289
 GH
 cadmium effect, 265
 secretion, neural control, 42
 hCG, testicular proliferation, 289
 LH
 cadmium effect, 265
 gonadoreline, naloxone, 205
 melatonin, oxidative stress, 301
 progesterone, EIA, 291
 prolactin, cadmium effect, 265
 sex steroids, IGF-1, brain, 41
 thyroid, brain gene expression, 40
 TSH, cadmium effect, 265
 Hypothalamus, lithium chloride, 361
 Hypoxia, colon electrophysiological properties, 367
 Intestinal perfusion, technical precisions, 281
 Intestinal sacs, hypoxia, 367
 Learning, associative pancreatic β -cell, 52
 Legumes, muscle protein synthesis, 385
 LH,
 cadmium effect, 205
 gonadoreline, naloxone, 205
 Light, brain aminopeptidase activity, 249
 Lipid peroxidation, estradiol effect, 225
 Lithium chloride, c-fos brain expression, 361
 Mathematical modelling
 integrative physiology, 45
 physiological control systems, 44
 renal autoregulation, 43
 renal blood flow, 47
 thermoregulatory system, 46
 Melatonin
 antioxidant, 53
 cell neuroprotector, 54
 NO, central neurons system, 56
 nuclear signalling, 55
 oxidative stress, 301
 Memory
 associative, brain loci, 50
 imaging, PKC, 51
 Metabolism, trout exercise, 217
 MHC, dexamethasone, MCF-7 cells, 355
 Mucus gel layer, colon, DTT, 385
 Muscle protein synthesis, pea diets, 383
 Naloxone, LH secretion, 205
 Obesity, fatty acid profiles, 317
 Olive oil
 adipose fatty acids, 317
 plasma lipids, 199
 Oocyte, culture medium, EIA, 271
 Ovulation induction, gonadoreline, naloxone, 205
 Oxidative stress
 melatonin, 301
 aging, 22
 Paraventricular nucleus, c-fos expression, 361
 PCR, quantitative, HIV-1, 307
 PET, fMRI, cerebral cortex, 7
 Physical performance
 creatine supplementation, 343
 training schedule, 239
 Physiological breakthroughs, electronic techniques, 9
 Plasma lipids, dietary oils, 199
 Potassium efflux, exocrine pancreas, 231
 Progesterone, EIA, oocyte culture medium, 271
 Prolactin, cadmium effect, 265
 Protein synthesis, pea diets, 383
 Proliferation, somatic testicular cells, 289
 PUFA n-3, Apo, lipids, serum, 349

- Quantitative PCR, HIV-1 infection, 307
- recFSH, testicular proliferation, 289
- Renal function, endothelin
 glomeruli, 36
 hypertension, 37
 NO
 hemodynamics, excretion, 35
 PG's, natriuresis, 33
 pressure natriuresis, 34
- Respiratory integration
 carotid body cells, 16
 rhythm generation, 13
 sleep, 17
 supramedullary centers, 15
 upper airway reflexes, 14
- Rhythm
 circadian, 239
 respiratory, 13
- Rose hip oil, plasma lipids, 199
- Sex steroids, IGF-1, brain, 41
- Short-circuit current
 colon dithiothreitol, 385
 hypoxia, 367
- Sleep, ventilatory control, 17
- Spleen contraction, trout exercise, 217
- Stress, trout hematological responses, 217
- Sunflower oil, plasma lipids, 199
- Swimming
 anaerobic threshold, 327
 performance, training schedule, 239
- Temperature control
 brain neurotransmitters, 29
 fever, cytokines role, 32
 hyperthermic, endotoxemia, 30
 hypothalamic thermosensitivity, 31
- Testis, gonadotrophins treatment, 289
- Thyroid hormones, brain gene expression, 40
- Training schedule, physical performance, 239
- Transporters, nucleoside, liver cells, 58
- Triglycerides, fatty acid supplementation, 349
- Trout, hematological responses, 217
- TSH, cadmium effect, 265
- Ussing chamber
 dithiothreitol, 385
 rat distal colon, 367
- Volume flux measurements, intestine, 281

