

REVISTA ESPAÑOLA DE FISIOLÓGIA

Volume 35, 1979

CONTENTS

Num. 1

MONTILLA, P., M. C. BELLIDO, R. MUÑOZ and M. L. DORADO. — Effect of the Bilateral Amygdaloid Complex Lesion on the Hypothalamic L-Leucin-aminopeptidase Activity in the Male Adult Rat	1
RODRÍGUEZ-PORTILLO, M., F. TRUJILLO-RODRÍGUEZ, A. AZNAR-REIG, C. PIAZZA and J. RODRÍGUEZ-VELASCO. — Direct Method for Osmotic Pressure Measurement.	5
AZNAR-M., A., M. DÍAZ-G., E. HERRERA-JUSTINIANO and A. AZNAR-R. — The Effect of the Follicle-stimulating Hormone on Testosterone Liberation Induced by LH in the Isolated Leydig Cell	9
ALEMANY, M. — Amino Acids and Lactate Efflux From <i>in vitro</i> Incubated Soleus Muscles of Suckling Rats.	13
PRIETO, S., A. PÉREZ-GUTIÉRREZ and J. TAMARIT. — Standardization and Clinical Application of a Radioimmunoassay for Human Calcitonin.	21
BARRIENTOS, A., L. RUILOPE, D. JARILLO, J. ALCÁZAR, V. MILLET and J. L. RODICIO. — Alterations Induced by Large Doses of Furosemide in Chronic Renal Insufficiency	29
GONZÁLEZ, M. ^a P., S. CAÑADAS and A. SANTOS-RUIZ. — Enzymatic Disappearance of Hydroxylamine in the Presence of GABA	37
VÁZQUEZ-BAANANTE, I. and M. ROSELL-PÉREZ. — Kinetics of the D and I Glycogen Synthetase Forms and Their Interconversion in the Sea Scallop <i>Pecten maximus</i>	41
CANELA, E. and J. BOZAL. — Comparative Study of Chicken Liver Xanthine Dehydrogenase and Bovine Liver Xanthine Oxidase. Dehydrogenase Activity of Xanthine Oxidase	51
MARCÓ, J. and J. JIMÉNEZ-VARGAS. — Modification of the Ovarian Cycle, Ovulation and Reproduction in Rat by Administration of p-Chlorophenylalanine in the pre and post Ovulation Period	63
MARCÓ, J. and J. JIMÉNEZ-VARGAS. — Suppression by Copulation of the Inhibitory Effect of p-Chlorophenylalanine on Rat Ovulation.	75
SILVA, M. and J. GRAS. — Conditions for Greater Survival of Neonatally Thymectomized Swiss Mice	85
VILLALOBO, A., R. PICORELL and J. CÁRDENAS. — NADH and NADHP-Viologen Reductases From <i>Acinetobacter calcoaceticus</i>	89
PONZ, F., A. ILUNDAIN and M. LLUCH. — Method for Successive Absorptions	

With Intestinal Perfusion <i>in vivo</i>	97
BERJÓN, A., R. JORDANA and F. PONZ. — Bioelectric Behaviour of Intestinal Wall in the Earthworm <i>Scherotheca sp.</i>	105
GARG, V. K. — Studies on the Competitive Intestinal Absorption of Amino Acids, and Sugars in Two Teleost Fishes	111
BOOK REVIEWS	115

Num. 2

FRASQUET, I., J. VIÑA Jr., M. FRASQUET, T. ALVAREZ DE LAVIADA, A. FERRIOL and V. ANTÓN. — Effect of Alloxan in Pancreatectomized Rats	129
SÁNCHEZ-CRIADO, J. E. — Oxidative Metabolism of Main and Accessory Olfactory Bulbs, Lymbic System and Hypothalamus during the Estral Cycle of the Rat	133
SÁNCHEZ-CRIADO, J. E. — Blockade of the Pheromonal Effects in Rat by Central Deafferentation of the Accessory Olfactory System	137
RECIO, F., B. L. KNIGHT, C. OSORIO and N. B. MYANT. — The Effect of Human Placental Lactogen Upon the Metabolism of Rat and Human Adipose Tissue	145
GARCÍA-OLIVARES, E., F. GARRIDO, F. GUTIÉRREZ and C. OSORIO. — Strain-Specific Antigens Detected on Murine Tumour Cells by Means o Rabbit Heteroantisera	153
BAJO, R., A. ALONSO and J. PEÑA. — Growth and Differentiation of Normal and Vaccinia Virus Infected Bone Marrow Stem Cells	159
MONTILLA, P., M. C. MUÑOZ and J. L. PALACIOS. — Effect of Intracerebroventricular Injection of 6-Hydroxydopamine and 5,6-Dihydroxytryptamine on the Phasic Secretion of Luteinizing Hormone	163
GUILLAMÓN, A., J. A. GRAY and P. L. BROADHURST. — Single Alternation with Water Reward: Effects of Sodium Amobarbital on Two Strains of Rats Selectively Bred for High and Low Emotionality	169
MARTÍNEZ DE VICTORIA, E. and M. A. LÓPEZ. — Sympathetic Control on Salivary Secretion by the Parotid Gland in Rabbit. I. Effects on the Unstimulated Gland.	175
MARTÍNEZ DE VICTORIA, E. and M. A. LÓPEZ. — Sympathetic Control on Salivary Secretion by the Parotid Gland in Rabbit. II. Effects on the Gland Submitted to a Weak Parasympathetic Stimulation	181
AGUILAR, E., C. FERNÁNDEZ-GALAZ, A. TEJERO and M. D. VATICÓN. — Effect on the Administration of LH-RH on LH and Prolactin Plasma Levels in Adult Female Rats Ovariectomized and Maintained in Constant Light	187
LÓPEZ-ZABALZA, M. J., N. LÓPEZ-MORATALLA, A. J. IRIARTE and E. SANTIAGO. — Molecular Species of Phosphatidylcholine and Phosphatidylethanolamine in Subcellular Membranes from Rat Liver	193
SANTIAGO, E., N. LÓPEZ-MORATALLA, M. J. LÓPEZ-ZABALZA, A. J. IRIARTE and J. HUAMÁN. — Effect of Uncouplers and Inhibitors of Oxidative Phosphorylation on the Reduced and Oxidized Forms of Mitochondrial ATPase.	201
GARCÍA-CÁNOVAS, F., F. GARCÍA-CARMONA, J. D. GALINDO, E. PEDREÑO and J. A. LOZANO. — Hydroxylating Activity of Frog Epidermis Tyrosinase.	209

AROLA, L., E. HERRERA and M. ALEMANY. — A Method for the Estimation of Striated Muscle Mass in Small Laboratory Animals	215
ARMJO, J. A., A. MEDIAYILLA and J. FLÓREZ. — Inhibition of the Activity of the Respiratory and Vasomotor Centers by Centrally Administered 5-Hydroxytryptamine in Cats	219
CASADO, F., A. CORTÉS and J. BOZAL. — Kinetic Mechanism of Chicken Liver Mitochondrial Malatedehydrogenase	229
ORTIZ, M., M. LLUCH and F. PONZ. — Effect of the pH on Intestinal Absorption of Sugars <i>in vivo</i>	239
BARBER, A., R. JORDANA and F. PONZ. — Competitive Kinetics of Sugar Active Transport in Snail Intestine	243
<i>Letters to the Editors</i>	
PUCHE, E., A. MUNDO, M. ^a G. MORILLAS and J. BOLAÑOS. — Effect of Noradrenaline on ⁴⁵ Ca Kinetics in Rat Isolated Auricle	249
GONZÁLEZ-BARÓN, S., M. MOLINA, F. GARCÍA-MATILLA and A. BOGAS. — Influences of Hypoglossus and Glossopharyngeus Nerves on the Larynx Resistance	251
BOOK REVIEWS	255

Num 3

MARTÍ-BONMATÍ, E., S. F. ALIÑO, E. MORCILLO and J. ESPLUGUES. — Modification by Histamine H ₂ -Receptor Blockade of Acid Secretion Stimulate by Histamine, Pentagastrin and Methacholine in the Isolated Whole Mouse Stomach	261
ORTS, A., J. L. MARTÍ, J. CASTEJÓN, I. BALTAR and J. ESPLUGUES. — Effects of Carbenicillin and Phosphomycin on ADP Induced Platelet Aggregation.	265
ORTS, A., J. L. MARTÍ, J. MARCO, I. BALTAR and J. CASTEJÓN. — Effects of Adrenergic Blockers on Platelet Aggregation	269
GÓMEZ-JARABO, G., M. DE LA HIGUERA, F. J. MATAIX, G. VARELA and M. ILLERA. — The Age as a Factor on the Nutritive Utilisation of Protein by Rainbow Trout	273
MURILLO, M. L., M. S. CAMPOS, F. J. MATAIX and A. MURILLO. — Protein Nutritive Utilisation in Goats whit and without Exclusion of Rumen and Reticulum	279
TEJERO, A., M. D. VATICÓN, C. FERNÁNDEZ-GALAZ and E. AGUILAR. — LH and Prolactin Secretion under Constant Light in Estrogen Treated Rats.	285
GONZÁLEZ-BARÓN, S., M. MOLINA, F. GARCÍA-MATILLA and A. BOGAS. — Vagal Control of Larynx Resistance to the Air Flow	291
ALONSO, A., R. BAJO and J. PEÑA. — Effect of Bleeding on Irradiation-Induced Erythropoiesis in the Spleen of AKR Mice	307
PINTO, B. and F. J. RUIZ-MARCELLÁN. — Different Types of Hypercalciuria in Patients with Renal Lithiasis and Evidence of the Calcium Renal Waste	311
MORENO, A., F. RABADÁN and A. HIDALGO. — Effect of Mexiletine on Glucose and Oxygen Uptake in Rat Brain, Liver and Myocardial Tissue <i>in vitro</i>	317

CASTELLARNAU, C. DE, M. MORETÓ and J. BOLUFER. — Effect of Ethanol on Glucose and Tyrosine Transport in the Rat Small Intestine	321
CASTELLARNAU, C. DE and M. MORETÓ. — Oxyphenisatin Derivatives and Intestinal Glucose and Tyrosine Absorption	327
BORDES, R., F. VIVES, J. SANCHO, C. OSORIO and J. A. GÓMEZ-CAPILLA. — Insulin Effects on Glucose Utilization by Human Lymphocytes	331
VALDIVIA, M. M., J. E. CAMPILLO, M. CASTILLO, E. RODRÍGUEZ and J. OSORIO. — Effect of Octanoic Acid on the Insulin Secretion in Response to Glucose <i>in vitro</i>	337
HORTELANO, P., M. ^a J. FAUS, P. MORATA and F. SÁNCHEZ-MEDINA. — Evolution of Liver and Kidney Gluconeogenesis during Acute Liver Intoxication by Carbon Tetrachloride	341
CORNELLÁ, M., J. CODINA and E. HERRERA. — Effect of Fasting on Circulating Glucose, Ketone Bodies and Insulin Levels in the Stuckling Rat	347
MARÍN, J. and M. SALAICES. — Vasoconstriction of the Isolated Communicating Cerebral Artery Induced by Field Electrical Stimulation.	353
ILUNDAIN, A., M. LLUCH and F. PONZ. — Kinetics of Intestinal Sugar Transport, <i>in vivo</i>	359
ORTIZ, M., M. LLUCH and F. PONZ. — Influence of Luminal Na ⁺ on the Intestinal Absorption of Sugars <i>in vivo</i>	367
BOOK REVIEWS	375

Num. 4

NAVARRO, M. ^a P. and A. MURILLO. — The Nutritive Utilization of Phosphorus in Dietary Calcium Deprivation.	383
DÍAZ-DÍAZ, M. E., J. C. DÍAZ-CHICO and B. N. DÍAZ-CHICO. — Effect of LH-RH, Gonadotrophins or Sex Hormone Treatment on RNA and DNA Concentration in Hypothalamus, Pituitary, Ovary and Uterus in the Immature Female Rat	389
GURTUBAY, J. I. G., J. MARTÍNEZ, A. GUTIÉRREZ-ARRAND and F. M. GOÑI. — Assay of Mitochondrial Membrane-Bound Enzyme Activities in the Presence of Triton X-100	395
FUENTE-BURGUILLO, P. DE LA and G. NICOLÁS. — Respiratory Activity during Germination of Seeds of <i>Cicer arietinum</i> L. II. Effect of some Metabolic Inhibitors and Mitochondrial Activities.	401
ACUÑA, C., A. CANEDO and R. DOMÍNGUEZ. — Study of the Action of the Nucleus Accumbens Septi Electrical Stimulation upon the Unitary Activity of the Amygdaloid Complex of Waking Cats	409
MACARULLA, J. M., C. ABAD, M. LACORT and B. OCHOA. — Effects of T ₃ , T ₄ and Methylthiouracile Short-Term Treatments on Plasma and Liver Lipid Levels in Rats	421
RENGEL, C., C. RODRÍGUEZ-FARNÁNDEZ and J. M. MACARULLA. — Effect of the Thyroid Hormone Triiodothyronine on Fatty Acid Chain Elongation of Mitochondrial Phospholipids	427
ALBA, F., C. GARCÍA DEL RÍO, D. ACUÑA, A. SOLER, L. GARCÍA and T. QUE-SADA. — Effect of Sodium and Osmolarity on Renin Secretion	433
BARÓ, J., A. CORTÉS and J. BOZAL, — Molecular Forms of Chicken Liver	

Cytoplasmic Malate Dehydrogenase.	437
SANTACANA, M. P. and J. ORTEGA. — Effect of the Septal Lesion on the Non-Learned Responses of the Rat	447
CODINA, J. and E. HERRERA. — Effect of Fasting on Urinary Excretion of Water and Nitrogen in the Rat.	457
CARMANIU, S. and E. HERRERA. — Conversion of (U- ¹⁴ C)-Glycerol, (2- ³ H)- Glycerol and (1- ¹⁴ C)-Palmitate into Circulating Lipoproteins in the Rat.	461
HIERRO, J. H., R. SOLANA, F. REQUENA and J. PEÑA. — Effect of Exogenous Serotonin on Intra gastric pH and its Influence on Serum Gastrin Levels in Rats.	467
GANDARIAS, J. M., C. ABAD, M. LACORT and B. OCHOA. — Effect of Progesterone on Rat Plasma and Liver Lipid Levels	471
VIVES-REGO, J., J. JOFRE, J. IMPERIAL, J. RIPOLL and R. PARÉS. — The Effect of 2-Oxoglutarate and Biotin in the Release of Amino Acids by <i>Citrobacter intermedium</i> C3	475
<i>Letters to the Editors</i>	
PALACIÁN, E. — Solubilization of Membrane-Bound Transpeptidase from <i>Streptomyces</i> Strain K-11 with 2,3-Dimethylmaleic Anhydride	481
BOOK REVIEWS.	485

REVISTA ESPAÑOLA DE FISIOLÓGIA

Volumen 35, 1979

INDICE

Núm. 1

MONTILLA, P., M. C. BELLIDO, R. MUÑOZ y M. L. DORADO. — Influencia de la lesión del complejo amigdalino cerebral sobre la actividad L-leucina-minopeptidasa hipotalámica de la rata macho adulta	1
RODRÍGUEZ-PORTILLO, M., F. TRUJILLO-RODRÍGUEZ, A. AZNAR-REIG, C. PIAZZA y J. RODRÍGUEZ-VELASCO. — Técnica de medición directa de la presión oncótica	5
AZNAR-M., A., M. DÍAZ-G., E. HERRERA-JUSTINIANO y A. AZNAR-R. — Efecto de la hormona foliculo estimulante sobre la liberación de testosterona inducida por LH en la célula de Leydig aislada.	9
ALEMANY, M. — Amino Acids and Lactate Efflux From <i>in vitro</i> Incubated Soleus Muscles of Suckling Rats.	13
PRIETO, S., A. PÉREZ-GUTIÉRREZ and J. TAMARIT. — Standardization and Clinical Application of a Radioimmunoassay for Human Calcitonin.	21
BARRIENTOS, A., L. RUILOPE, D. JARILLO, J. ALCÁZAR, V. MILLET and J. L. RODICIO. — Alterations Induced by Large Doses of Furosemide in Chronic Renal Insufficiency	29
GONZÁLEZ, M. ^a P., S. CAÑADAS and A. SANTOS-RUIZ. — Enzymatic Disappearance of Hydroxylamine in the Presence of GABA	37
VÁZQUEZ-BAANANTE, I. and M. ROSELL-PÉREZ. — Kinetics of the D and I Glycogen Synthetase Forms and Their Interconversion in the Sea Scallop <i>Pecten maximus</i>	41
CANELA, E. y J. BOZAL. — Estudio comparativo de la xantindeshidrogenasa de hígado de pollo y de la xantinoxidasa de hígado de buey. Actividad deshidrogenásica de la xantinoxidasa	51
MARCÓ, J. y J. JIMÉNEZ-VARGAS. — Modificación del ciclo ovárico, ovulación y reproducción en la rata por p-clorofenilalanina en periodos cercanos a la ovulación	63
MARCÓ, J. y J. JIMÉNEZ-VARGAS. — Supresión por copulación del efecto inhibidor de la p-clorofenilalanina sobre la ovulación en la rata	75
SILVA, M. y J. GRAS. — Estudio de las condiciones que permiten aumentar la supervivencia del ratón suizo timectomizado neonatalmente	85
VILLALOBO, A., R. PICORELL and J. CÁRDENAS. — NADH and NADHP-Viologen Reductases From <i>Acinetobacter calcoaceticus</i>	89
PONZ, F., A. ILUNDAIN and M. LLUCH. — Method for Successive Absorptions With Intestinal Perfusion <i>in vivo</i>	97

BERJÓN, A., R. JORDANA y F. PONZ. — Comportamiento bioeléctrico de la pared intestinal de la lombriz de tierra <i>Scherotheca sp.</i>	105
GARG, V. K. — Studies on the Competitive Intestinal Absorption of Amino Acids, and Sugars in Two Teleost Fishes	111
CRÍTICA DE LIBROS	115

Núm. 2

FRASQUET, I., J. VIÑA (Jr.), M. FRASQUET, T. ALVAREZ DE LAVIADA, A. FERRIOL y V. ANTÓN. — Contribución al estudio de la aloxana en ratas pancreoprivas	129
SÁNCHEZ-CRIADO, J. E. — Metabolismo oxidativo del bulbo olfatorio principal y accesorio, sistema límbico e hipotálamo durante el ciclo estral de la rata	133
SÁNCHEZ-CRIADO, J. E. — Bloqueo de los efectos feromonales en la rata por deafferentación central del sistema olfatorio accesorio	137
RECIO, F., B. L. KNIGHT, C. OSORIO and N. B. MYANT. — The Effect of Human Placental Lactogen Upon the Metabolism of Rat and Human Adipose Tissue	143
GARCÍA-OLIVARES, E., F. GARRIDO, F. GUTIÉRREZ y C. OSORIO. — Estudio de antígenos característicos de cepa en células tumorales murinas mediante heteroantisueros producidos en conejo	153
BAJO, R., A. ALONSO and J. PEÑA. — Growth and Differentiation of Normal and Vaccinia Virus Infected Bone Marrow Stem Cells	159
MONTILLA, P., M. C. MUÑOZ y J. L. PALACIOS. — Efecto de la inyección intraventricular cerebral de 6-hidroxidopamina y 5-6-dihidroxitriptamina sobre la secreción fásica de hormona luteinizante	163
GUILLAMÓN, A., J. A. GRAY and P. L. BROADHURST. — Single Alternation with Water Reward: Effects of Sodium Amobarbital on Two Strains of Rats Selectively Bred for High and Low Emotionality	169
MARTÍNEZ DE VICTORIA, E. y M. A. LÓPEZ. — Influencias simpáticas sobre la secreción de saliva por la parótida del conejo. I. Efectos sobre la glándula en reposo	175
MARTÍNEZ DE VICTORIA, E. y M. A. LÓPEZ. — Influencias simpáticas sobre la secreción de saliva por la parótida del conejo. II. Efectos sobre la glándula sometida a estimulación parasimpática débil	181
AGUILAR, E., C. FERNÁNDEZ-GALAZ, A. TEJERO y M. D. VATICÓN. — Efecto de la administración de LH-RH sobre niveles plasmáticos de LH y prolactina en ratas hembras adultas ovariectomizadas y mantenidas en iluminación constante	187
LÓPEZ-ZABALZA, M. J., N. LÓPEZ-MORATALLA, A. J. IRIARTE and E. SANTIAGO. — Molecular Species of Phosphatidylcholine and Phosphatidylethanolamine in Subcellular Membranes from Rat Liver	193
SANTIAGO, E., N. LÓPEZ-MORATALLA, M. J. LÓPEZ-ZABALZA, A. J. IRIARTE and J. HUAMÁN. — Effect of Uncouplers and Inhibitors of Oxidative Phosphorylation on the Reduced and Oxidized Forms of Mitochondrial ATPase.	201
GARCÍA-CÁNOVAS, F., F. GARCÍA-CARMONA, J. D. GALINDO, E. PEDREÑO and	

J. A. LOZANO. — Hydroxylating Activity of Frog Epidermis Tyrosinase.	209
AROJA, L., E. HERRERA and M. ALEMANY. — A Method for the Estimation of Striated Muscle Mass in Small Laboratory Animals	215
ARMIJO, J. A., A. MEDIAVILLA and J. FLÓREZ. — Inhibition of the Activity of the Respiratory and Vasomotor Centers by Centrally Administered 5-Hydroxytryptamine in Cats	219
CASADO, F., A. CORTÉS y J. BOZAL. — Mecanismo cinético de la malato-deshidrogenasa mitocondrial de hígado de pollo	229
ORTIZ, M., M. LLUCH and F. PONZ. — Effect of the pH on Intestinal Absorption of Sugars <i>in vivo</i>	239
BARBER, A., R. JORDANA and F. PONZ. — Competitive Kinetics of Sugar Active Transport in Snail Intestine	243
<i>Cartas al Editor</i>	
PUCHE, E., A. MUNDO, M. G. ^a MORILLAS y J. BOLAÑOS. — Acción de la noradrenalina sobre la cinética del Ca ⁴⁵ en aurícula aislada de rata . . .	249
GONZÁLEZ-BARÓN, S., M. MOLINA, F. GARCÍA-MATILLA and A. BOGAS. — Influences of Hypoglossus and Glossopharyngeus Nerves on the Larynx Resistance	251
CRÍTICA DE LIBROS	255

Núm. 3

MARTÍ-BONMATÍ, E., S. F. ALIÑO, E. MORCILLO and J. ESPLUGUES. — Modification by Histamine H ₂ -Receptor Blockade of Acid Secretion Stimulate by Histamine, Pentagastrin and Methacholine in the Isolated Whole Mouse Stomach	261
ORTS, A., J. L. MARTÍ, J. CASTEJÓN, I. BALTAR and J. ESPLUGUES. — Effects of Carbenicillin and Phosphomycin on ADP Induced Platelet Aggregation.	265
ORTS, A., J. L. MARTÍ, J. MARCO, I. BALTAR and J. CASTEJÓN. — Effects of Adrenergic Blockers on Platelet Aggregation	269
GÓMEZ-JARABO, G., M. DE LA HIGUERA, F. J. MATAIX, G. VARELA y M. ILLERA. — La edad como factor determinante de la utilización nutritiva de la proteína por la trucha	273
MURILLO, M. L., M. S. CAMPOS, F. J. MATAIX y A. MURILLO. — Aprovechamiento nutritivo de la proteína en cabras con y sin exclusión de la región retículo ruminal	279
TEJERO, A., M. D. VATICÓN, C. FERNÁNDEZ-GALAZ y E. AGUILAR. — Secreción de LH y prolactina en ratas tratadas con estrógenos y sometidas a luz constante	285
GONZÁLEZ-BARÓN, S., M. MOLINA, F. GARCÍA-MATILLA y A. BOGAS. — Control vagal de la resistencia de la laringe.	291
ALONSO, A., R. BAJO and J. PEÑA. — Effect of Bleeding on Irradiation-Induced Erythropoiesis in the Spleen of AKR Mice	307
PINTO, B. and F. J. RUIZ-MARCELLÁN. — Different Types of Hypercalciuria in Patients with Renal Lithiasis and Evidence of the Calcium Renal Waste	311
MORENO, A., F. RABADÁN y A. HIDALGO. — Efectos de la mexiletina sobre el consumo de oxígeno y glucosa en cerebro, hígado y miocardio de rata	

<i>in vitro</i>	317
CASTELLARNAU, C. DE, M. MORETÓ and J. BOLUFER. — Effect of Ethanol on Glucose and Tyrosine Transport in the Rat Small Intestine	321
CASTELLARNAU, C. DE and M. MORETÓ. — Oxyphenisatin Derivatives and Intestinal Glucose and Tyrosine Absorption	327
BORDES, R., F. VIVES, J. SANCHO, C. OSORIO and J. A. GÓMEZ-CAPILLA. — Insulin Effects on Glucose Utilization by Human Lymphocytes	331
VALDIVIA, M. M., J. E. CAMPILLO, E. RODRÍGUEZ y J. OSORIO. — Efecto del ácido octanoico en la secreción de insulina en respuesta a la glucosa <i>in vitro</i>	337
HORTELANO, P., M. ^a J. FAUS, P. MORATA y F. SÁNCHEZ-MEDINA. — Evolución de la gluconeogénesis hepática y renal durante la intoxicación aguda del hígado por tetracloruro de carbono	341
CORNELLÁ, M., J. CODINA and E. HERRERA. — Effect of Fasting on Circulating Glucose, Ketone Bodies and Insulin Levels in the Suckling Rat	347
MARÍN, J. and M. SALAICES. — Vasoconstriction of the Isolated Communicating Cerebral Artery Induced by Field Electrical Stimulation.	353
ILUNDAIN, A., M. LLUCH and F. PONZ. — Kinetics of Intestinal Sugar Transport, <i>in vivo</i>	359
ORTIZ, M., M. LLUCH and F. PONZ. — Influence of Luminal Na ⁺ on the Intestinal Absorption of Sugars <i>in vivo</i>	367
CRÍTICA DE LIBROS	375

Núm. 4

NAVARRO, M. ^a P. y A. MURILLO. — Utilización nutritiva del fósforo en ausencia de calcio en la dieta.	383
DÍAZ-DÍAZ, M. E., J. C. DÍAZ-CHICO and B. N. DÍAZ-CHICO. — Effect of LH-RH, Gonadotrophins or Sex Hormone Treatment on RNA and DNA Concentration in Hypothalamus, Pituitary, Ovary and Uterus in the Immature Female Rat	389
GURTUBAY, J. I. G., J. MARTÍNEZ, A. GUTIÉRREZ-ARRAND and F. M. GOÑI. — Assay of Mitochondrial Membrane-Bound Enzyme Activities in the Presence of Triton X-100	395
FUENTE-BURGUILLO, P. DE LA and G. NICOLÁS. — Respiratory Activity during Germination of Seeds of <i>Cicer arietinum</i> L. II. Effect of some Metabolic Inhibitors and Mitochondrial Activities.	401
ACUÑA, C., A. CANEDO and R. DOMÍNGUEZ. — Study of the Action of the Nucleus Accumbens Septi Electrical Stimulation upon the Unitary Activity of the Amygdaloid Complex of Waking Cats	409
MACARULLA, J. M., C. ABAD, M. LACORT y B. OCHOA. — Efectos de la administración a corto plazo de T ₃ , T ₄ y metiltiouracilo sobre los niveles de lípidos en hígado y plasma de rata	421
RENGEL, C., C. RODRÍGUEZ-FERNÁNDEZ y J. M. MACARULLA. — Efecto de la hormona tiroidea triiodotironina sobre la elongación de los ácidos grasos de fosfolípidos mitocondriales	427
ALBA, F., C. GARCÍA DEL RÍO, D. ACUÑA, A. SOLER, I. GARCÍA and T. QUESADA. — Effect of Sodium and Osmolarity on Renin Secretion	433

BARÓ, J., A. CORTÉS y J. BOZAL. — Formas moleculares de la malato deshidrogenasa citoplasmática de hígado de pollo	437
SANTACANA, M. P. and J. ORTEGA. — Effect of the Septal Lesion on the Non-Learned Responses of the Rat	447
CODINA, J. and E. HERRERA. — Effect of Fasting on Urinary Excretion of Water and Nitrogen in the Rat.	457
CARMANU, S. and E. HERRERA. — Conversion of (U- ¹⁴ C)-Glycerol, (2- ³ H)-Glycerol and (1- ¹⁴ C)-Palmitate into Circulating Lipoproteins in the Rat.	461
HIERRO, J. H., R. SOLANA, F. REQUENA and J. PEÑA. — Effect of Exogenous Serotonin on Intragastric pH and its Influence on Serum Gastrin Levels in Rats.	467
GANDARIAS, J. M., C. ABAD, M. LACORT y B. OCHOA. — Efecto de la progesterona sobre niveles de lípidos en hígado y plasma de rata	471
VIVES-REGO, J., J. JOFRE, J. IMPERIAL, J. RIPOLL and R. PARÉS. — The Effect of 2-Oxoglutarate and Biotin in the Release of Amino Acids by <i>Citrobacter intermedium</i> C3	475
<i>Carta al Editor</i>	
PALACIÁN, E. — Solubilization of Membrane-Bound Transpeptidase from <i>Streptomyces</i> Strain K-11 with 2,3-Dimethylmaleic Anhydride	481
CRÍTICA DE LIBROS.	485

REVISTA ESPAÑOLA
DE
FISIOLOGIA

Depósito legal: B. 118 - 1958

CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS
DEPARTAMENTO DE INVESTIGACIONES FISIOLÓGICAS DE PAMPLONA

REVISTA ESPAÑOLA
DE
FISIOLOGIA

VOLUMEN 35
1979

REFIAS 35 1-502 (1979)
Rev. esp. Fisiol.

Pamplona (España)

REVISTA ESPAÑOLA DE FISIOLOGIA

Editada por

CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS

(Departamento de Investigaciones Fisiológicas. Pamplona)

Dirección

J. JIMÉNEZ-VARGAS

F. PONZ

Consejo de Redacción

J. BALASCH	E. HERRERA	J. PEÑA
C. BELMONTE	M. ILLERA	A. PIE
J. BOZAL	R. JORDANA	J. PLANAS
J. A. CABEZAS	J. LARRALDE	J. M. RECIO
F. CALVET	A. LÓPEZ-BORRASCA	F. REINOSO
J. CARRERAS	M. LOSADA	J. L. RODRÍGUEZ-CANDELA
J. M. ^a DE CORRAL SALETA	J. A. LOZANO	M. RUIZ-AMIL
R. DOMÍNGUEZ	S. LLUCH	E. SANTIAGO
A. FERNÁNDEZ DE MOLINA	J. M. ^a MACARULLA	A. SANTOS-RUIZ
M. ^a P. FERNÁNDEZ-OTERO	A. MARTÍN-MUNICIO	G. SIERRA
J. FLÓREZ	F. J. MATAIX	A. SOLS
A. FRAILE	F. MAYOR	J. TAMARIT
G. DE LA FUENTE	D. MIR	A. TORRALBA
A. GALLEGO	G. MORREALE	G. VARELA
J. M. ^a GANDARIAS	A. NÚÑEZ	S. VIDAL-SIVILLA
E. GARCÍA-PEREGRÍN	C. OSORIO	J. VIÑA
L. M. GONZALO	R. PARÉS	

Secretario

M. LLUCH

Dirección postal: Revista Española de Fisiología, Apartado, 273. Pamplona (España).

La *Revista Española de Fisiología* publica trabajos originales de investigación, no publicados en otras Revistas, sobre temas de *Fisiología* humana, normal y patológica, *Fisiología* animal y comparada y *Bioquímica*.

La Sección de Crítica de libros informa sobre los libros españoles o extranjeros de *Fisiología* y *Bioquímica* o materias relacionadas que sean enviados a la Redacción de la Revista.

Aparecen cuatro números al año, que integran un volumen.

Precio de suscripción anual: España, 3.500 ptas. Extranjero, 4.000 ptas.

SCIENTIA

International Review of Scientific Synthesis - Founded in 1907

Scientific Editorial Board: Piero Caldirola · Ludovico Geymonat · Giuseppe Montalenti

Editor: N. Bonetti.

SCIENTIA has never abandoned its programme of rigorous scientific synthesis; it aims at going beyond rather than refuting disciplinary specialization.

The motivations behind this approach can be explained today on the one hand through the formation of new areas of scientific research, and on the other through the lively evolution of those social frameworks which are at one and the same time both cause and effect of such research.

Scientia takes on the task it has itself with the help of contributions from scientists and philosophers from all parts of the world.

Publication: 3 volumes of approx. 400 pages each. Articles are published in the language in which they were written and in the integral English and Italian versions.

Annual subscription: Italy Lit. 22,000 - Europe Lit. 27,000 - Non-European countries \$44.00

Specimen copy: Italy Lit. 5,000 - Europe Lit. 5,500 - Non-European countries \$ 7.50

SCIENTIA - Via Guastalla 9 - 20122 Milano (Italy) - Telephone (02) 780.669

“LABORATORIO”

Análisis clínicos - Bacteriología - Inmunología - Parasitología
Hematología - Anatomía patológica - Química clínica

REVISTA MENSUAL

FUNDADORES:

Dr. Justo Covaleta Ortega

Dr. Eduardo Suárez Peregrín

Director: G. PIEDROLA ANGULO

Redacción y Administración: Pl. Campos, 5. Ap. Correos, 193. Granada

Precio de suscripción anual: España: 1100 pesetas

Extranjero: 20 \$ o equivalencia

REVISTA DE MEDICINA DE LA UNIVERSIDAD DE NAVARRA

La Revista de Medicina de la Universidad de Navarra publica artículos originales de investigación experimental y clínica, comunicaciones clínicas, revisiones de temas clínicos a la luz de diversos servicios y departamentos facultativos. Incluye, además, en sus páginas las siguientes secciones: Aula cultural, Medicina y persona, Noticias de la Familia y Crítica de libros.

Aparece trimestralmente. Los cuatro números de cada volumen anual comprenden aproximadamente unas 400 páginas.

Precio de suscripción anual, 700 pesetas.

Redacción: Apartado 273, Pamplona (España).

Administración: EUNSA, Pl. de los Sauces, 1 y 2. Barañain (Pamplona).

TERMINADO DE IMPRIMIR EN 10 DE DICIEMBRE 1979
EN LOS TALLERES DE GRÁFICAS CONDAL
CLOT, 102 Y 104 - BARCELONA-26

CONTENTS

NAVARRO, M. ^a P. and A. MURILLO. — The Nutritive Utilization of Phosphorus in Dietary Calcium Deprivation.	383
DÍAZ-DÍAZ, M. E., J. C. DÍAZ-CHICO and B. N. DÍAZ-CHICO. — Effect of LH-RH, Gonadotrophins or Sex Hormone Treatment on RNA and DNA Concentration in Hypothalamus, Pituitary, Ovary and Uterus in the Immature Female Rat	389
GURTUBAY, J. I. G., J. MARTÍNEZ, A. GUTIÉRREZ-ARRAND and F. M. GOÑI. — Assay of Mitochondrial Membrane-Bound Enzyme Activities in the Presence of Triton X-100	395
FUENTE-BURGUILLO, P. DE LA and G. NICOLÁS. — Respiratory Activity during Germination of Seeds of <i>Cicer arietinum</i> L. II. Effect of some Metabolic Inhibitors and Mitochondrial Activities.	401
ACUÑA, C., A. CANEDO and R. DOMÍNGUEZ. — Study of the Action of the Nucleus Accumbens Septi Electrical Stimulation upon the Unitary Activity of the Amygdaloid Complex of Waking Cats	409
MACARULLA, J. M., C. ABAD, M. LACORT and B. OCHOA. — Effects of T ₃ , T ₄ and Methylthiouracile Short-Term Treatments on Plasma and Liver Lipid Levels in Rats	421
RENGEL, C., C. RODRÍGUEZ-FARNÁNDEZ and J. M. MACARULLA. — Effect of the Thyroid Hormone Triiodothyronine on Fatty Acid Chain Elongation of Mitochondrial Phospholipids	427
ALBA, F., C. GARCÍA DEL RÍO, D. ACUÑA, A. SOLER, L. GARCÍA and T. QUESADA. — Effect of Sodium and Osmolarity on Renin Secretion	433
BARÓ, J., A. CORTÉS and J. BOZAL. — Molecular Forms of Chicken Liver Cytoplasmic Malate Dehydrogenase.	437
SANTACANA, M. P. and J. ORTEGA. — Effect of the Septal Lesion on the Non-Learned Responses of the Rat	447
CODINA, J. and E. HERRERA. — Effect of Fasting on Urinary Excretion of Water and Nitrogen in the Rat.	457
CARMANU, S. and E. HERRERA. — Conversion of (U- ¹⁴ C)-Glycerol, (2- ³ H)-Glycerol and (1- ¹⁴ C)-Palmitate into Circulating Lipoproteins in the Rat.	461
HIERRO, J. H., R. SOLANA, F. REQUENA and J. PEÑA. — Effect of Exogenous Serotonin on Intragastric pH and its Influence on Serum Gastrin Levels in Rats.	467
GANDARIAS, J. M., C. ABAD, M. LACORT and B. OCHOA. — Effect of Progesterone on Rat Plasma and Liver Lipid Levels	471
VIVES-REGO, J., J. JOFRE, J. IMPERIAL, J. RIPOLL and R. PARÉS. — The Effect of 2-Oxoglutarate and Biotin in the Release of Amino Acids by <i>Citrobacter intermedius</i> C3	475
<i>Letters to the Editors</i>	
PALACIÁN, E. — Solubilization of Membrane-Bound Transpeptidase from <i>Streptomyces</i> Strain K-11 with 2,3-Dimethylmaleic Anhydride	481
BOOK REVIEWS.	485

INDICE

NAVARRO, M. ^a P. y A. MURILLO. — Utilización nutritiva del fósforo en ausencia de calcio en la dieta.	383
DÍAZ-DÍAZ, M. E., J. C. DÍAZ-CHICO and B. N. DÍAZ-CHICO. — Effect of LH-RH, Gonadotrophins or Sex Hormone Treatment on RNA and DNA Concentration in Hypothalamus, Pituitary, Ovary and Uterus in the Immature Female Rat	389
GURTUBAY, J. I. G., J. MARTÍNEZ, A. GUTIÉRREZ-ARRAND and F. M. GOÑI. — Assay of Mitochondrial Membrane-Bound Enzyme Activities in the Presence of Triton X-100	395
FUENTE-BURGUILLO, P. DE LA and G. NICOLÁS. — Respiratory Activity during Germination of Seeds of <i>Cicer arietinum</i> L. II. Effect of some Metabolic Inhibitors and Mitochondrial Activities.	401
ACUÑA, C., A. CANEDO and R. DOMÍNGUEZ. — Study of the Action of the Nucleus Accumbens Septi Electrical Stimulation upon the Unitary Activity of the Amygdaloid Complex of Waking Cats	409
MACARULLA, J. M., C. ABAD, M. LACORT y B. OCHOA. — Efectos de la administración a corto plazo de T ₃ , T ₄ y metiltiouracilo sobre los niveles de lípidos en hígado y plasma de rata	421
RENGEL, C., C. RODRÍGUEZ-FERNÁNDEZ y J. M. MACARULLA. — Efecto de la hormona tiroidea triiodotironina sobre la elongación de los ácidos grasos de fosfolípidos mitocondriales	427
ALBA, F., C. GARCÍA DEL RÍO, D. ACUÑA, A. SOLER, L. GARCÍA and T. QUE-SADA. — Effect of Sodium and Osmolarity on Renin Secretion	433
BARÓ, J., A. CORTÉS y J. BOZAL. — Formas moleculares de la malato des-hidrogenasa citoplasmática de hígado de pollo	437
SANTACANA, M. P. and J. ORTEGA. — Effect of the Septal Lesion on the Non-Learned Responses of the Rat	447
CODINA, J. and E. HERRERA. — Effect of Fasting on Urinary Excretion of Water and Nitrogen in the Rat.	457
CARMANU, S. and E. HERRERA. — Conversion of (U- ¹⁴ C)-Glycerol, (2- ³ H)-Glycerol and (1- ¹⁴ C)-Palmitate into Circulating Lipoproteins in the Rat.	461
HIERRO, J. H., R. SOLANA, F. REQUENA and J. PEÑA. — Effect of Exogenous Serotonin on Intragastric pH and its Influence on Serum Gastrin Levels in Rats.	467
GANDARIAS, J. M., C. ABAD, M. LACORT y B. OCHOA. — Efecto de la progesterona sobre niveles de lípidos en hígado y plasma de rata	471
VIVES-REGO, J., J. JOFRE, J. IMPERIAL, J. RIPOLL and R. PARÉS. — The Effect of 2-Oxoglutarate and Biotin in the Release of Amino Acids by <i>Citrobacter intermedius</i> C3	475
<i>Carta al Editor</i>	
PALACIÁN, E. — Solubilization of Membrane-Bound Transpeptidase from <i>Streptomyces</i> Strain K-11 with 2,3-Dimethylmaleic Anhydride	481
CRÍTICA DE LIBROS.	485