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USSR Space Life Sciences Digest

Index to Issues 1–4

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Index to Issues 1–4

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NOTE FROM THE EDITORS

The document herein is intended as an appendix to issues 1 through 4 of the USSR Space Life Sciences Digest. It is arranged in three sections. In Section 1, abstracts from the first four issues are grouped according to subject; please note the four-letter codes in the upper right hand corner of the pages. Section 2 lists the categories according to which Digest entries are grouped and cites additional entries relevant to that category by four-letter code and entry number in Section 1. Please refer to Section 1 for titles and other pertinent information. Key words are indexed in Section 3. Where only codes are listed, with no specific entry numbers, all or most of the abstracts in that area are considered relevant to the key word.

USSR

SPACE LIFE SCIENCES DIGEST

INDEX

ISSUES 1 THROUGH 4

USSR SPACE LIFE SCIENCES DIGEST INDEX

TABLE OF CONTENTS

SECTION 1

USSR SPACE LIFE SCIENCES DIGEST

AREAS OF INTEREST

ISSUES 1 THROUGH 4

ADAP	Adaptation
BIOR	Biological Rhythms
BIOS	Biospherics
BODF	Body Fluids
BOTA	Botany
CDRS	Cardiovascular and Respiratory Systems
CYBM	Cybernetics/Biomedical Data Processing
DEVE	Development
ENDO	Endocrinology
EXOB	Exobiology
GAST	Gastrointestinal System
GENE	Genetics
GRAV	Gravitational Biology
GPDY	Group Dynamics
HAEN	Habitability/Environment Effects
HEAL	Health and Medical Treatment
HEMA	Hematology
HIST	Histology
HUPF	Human Performance
IMMU	Immunology
LFSP	Life Support Systems
MAMC	Man-Machine Systems
MATH	Mathematical Modeling
META	Metabolism
MICR	Microbiology
MPHC	Morphology and Cytology
MUSC	Musculoskeletal System
NEUR	Neurophysiology
NUTR	Nutrition
PERC	Perception
PERS	Personnel Selection
PSYC	Psychology
RADI	Radiobiology
REPR	Reproductive System
SPBI	Space Biology
SPPH	Space Physiology

ISSUE 2

1. P52(8/85) Bobrov LL. Effect of the adaptation facilitator bemityl on seasonal and diurnal fluctuation in the physical work capacity of people stationed in the Antarctic. Informativnyy Byulleten' Sovetskoy Antarkticheskoy ekspeditsii. 105: 59-64; 1984.

Adaptation, Drugs
Humans, Antarctic Regions
Performance, Physical Work Capacity

2. M15(8/85) Soroko SI. Neyrofiziologicheskiye mekhanizmy individual'noye adaptatsii cheloveka v antarktide [Neurophysiological mechanisms of individual adaptation to the antarctic in humans]. Leningrad: Nauka; 1984.

Key words: Adaptation, Antarctic conditions, Neurophysiology, Biofeedback, Psychology, Performance

ISSUE 4

3. P145(12/85) Kolenda YuV, Vovchuk SV, Levitskiy AR. Effect of kallikrein on the development of the general adaptive syndrome. Patologicheskaya Fiziologiya i Eksperimental'naya Terapiya. 1985(4):52-54.

Adaptation, General, Stress
Rats
Countermeasures, Kallikrein; Immobilization

BIOLOGICAL RHYTHMS

ISSUE 4

1. M49(12/85) Alyakrinskii BS, Stepanova SI; [Volume editor: O.G. Gazenko]. Po zakony ritma [Following rhythm's law]. Moscow: Nauka; 1985.

Key Words: Biorhythms: Human Performance, Job Performance, Cosmonauts, Cosmonaut Schedules

BIOSPHERICS

ISSUE 2

1. M25(8/85) Afanas'yev YuA, editor. Izucheniye prirodnykh resursov i okruzhayushchey sredy kosmicheskimi sredstvami [The study of natural resources and the environment from space]. Leningrad: Gidrometeoizdat, 1984.

Key Words: Biospherics, Natural Resources, Environment, Remote Sensing, Satellite Data

2. M26(8/85) Tishchenko AP, Viktorov SV (Kozlov NP, editor). Priroda zemli uz kosmosa [Earth's natural resources from space]. Leningrad: Gidrometeoizdat, 1984.

Key Words: Biospherics, Remote Sensing Data, Vegetation Oceanography, Earth Resources

ISSUE 3

3. M30(10/85) Kaznacheyev VP, editor in chief. Prognoz antropoekologicheskoy situatsii s pomoshch'yu kosmicheskikh sredstv: Materialy Pervogo Vsesoyuznogo soveshchaniya po kosmicheskoy antropoekologii [Predicting anthropoecological situations using data obtained in space: Proceedings of the First All-Union Conference on Space Anthropoecology], Novosibirsk, 1982. Leningrad: Nauka; 1982.

Key Words: Biospherics, Remote Sensing Data, Ecology, Human Impact, Natural Resources, Public Health, Desertification, Epidemiology, Salyut-6

4. M31(10/85) Kaznacheyev VP, editor-in-chief. Kosmicheskiye issledovaniya antropoekologicheskoy situatsii Sibiri i Dal'nego Vostoka: Materialy Pervogo Vsesoyuznogo soveshchaniya po kosmicheskoy antropoekologii [Use of data obtained in space to study anthopoecological conditions in Siberia and the Far East: Proceedings of the First All-Union Conference on Space Anthropoecology], Novosibirsk, 1982. Leningrad: Nauka; 1982.

Key Words: Biospheris, Remote Sensing Data, Ecology Human Impact, Natural Resources, Public Health, Epidemiology, Salyut-6

ISSUE 4

5. P147(12/85) Vinogradov BV. Aerospace methods in ecological prediction. Priroda. 1985(7): 13-23.

Biospherics
Review Article
Ecological Prediction

6. M52(12/85) Krasnogorskaya NV, Fokin AV, Laskorin BN, editors. Electromagnitnyye polya v biosfere. Tom I: Electromagnitnyye polya v atmosfere zemli i ikh biologicheskoye znacheniye [Electromagnetic fields in the biosphere. Volume I: Electromagnetic fields in the atmosphere of Earth and their biological significance]. Moscow: Nauka; 1984.

Key Words: Biospherics, Electromagnetic Fields, Solar Activity, Anthropogenic Effects; Cardiovascular System, Modeling

7. M53(12/85) Krasnogorskaya NV, Fokin AV, Kaznacheyev VD, editors. Electromagnitnyye polya v biosfere. Tom II: Biologicheskoye deystviye electromagnitnykh poley [Electromagnetic fields in the biosphere. Volume II: The biological effects of electromagnetic fields] Moscow: Nauka; 1984.

Key Words: Biospherics, Electromagnetic Fields, Adaptation, Metabolism, Enzymology, Biorhythms, Modeling, Health and Medical Treatment

BODY FLUIDS

ISSUE 2

1. P67(8/85)* Grigor'yev AI, Dorokhova BP, Semenov VYu, Morukov BV, Baychorov EO, Skukina IS, Afonin BV. Fluid-electrolyte metabolism and renal function in cosmonauts after an 185-day space flight. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(3): 21-27; 1985.

Body Fluids, Mineral Metabolism; Also Endocrinology
Humans, Cosmonauts
Space Flight, Salyut-6

2. M19(8/85) Natochin YuV. Problemy evolyutsionnoy fiziologii vodno-solevogo obmena [Problems in the evolutionary physiology of fluid-electrolyte exchange]. Paper read at the IVth Lecture dedicated to L.A. Orbeli, 29 October 1982. Leningrad: Nauka; 1984.

Key Words: Body Fluids, Fluid Electrolyte Exchange

ISSUE 3

3. P122(10/85)* Yunusov MA, Orlov VN, Vinokhodova TV. The effect of "dry" immersion on indicators of fluid-electrolyte exchange and levels of aldosterone and hydrocortisone in the blood plasma of individuals with varying levels of total body water. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina, 19(4):42-45; 1985.

Body Fluids, Fluid-electrolyte Exchange, Aldosterone
Humans, Edema
Hypokinesia, Immersion

4. P132(10/85)* Simonov LG, Rosenblyum LA, Bogdanova NN. Information derivable from echo-signals produced by pulsed ultrasound scanning of the brain (simulation study). Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(4):83-85; 1985.

Body Fluids, Intracranial Fluid Shifts
Model, Analogue
Ultrasound Scanning

5. P133(10/85)* Krotov BP, Bazunova YeG, Kulayev BS. Exploration of the potential for using dual frequency impedance plethysmography for determining the ratio between total and extracellular fluids in the body. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(4):86-89; 1985.

Body Fluids, Total and Extracellular Fluids
Rats
Impedance Plethysmography, Dual Frequency

6. P91(10/85) Semenov VYu, Aleksandrova YeA. Changes in fluid-electrolyte exchange early in an immersion period at different times of day. Fiziologiya Cheloveka. 11(3): 499-503; 1985.

Body Fluids, Fluid-electrolyte Balance
Humans
Immersion, Biological Rhythms

7. P92(10/85)Monin YuG, Goncharevskaya OA, Izmaylova NP, Mlodik YeYa. The effect of various low-calorie diets on fluid-electrolyte homeostasis. Fiziologiya Cheloveka. 11(3): 511-521; 1985.

Body Fluids, Fluid-electrolyte Balance
Humans, Males
Nutrition, Diets, Low Calorie

8. M28(10/85) Lebedev AA. Diuretiki i krovoobrashcheniye [Diuretics and circulation]. Moscow: Meditsina; 1984. [208 pages; 14 tables; 21 illustrations; 217 references; 77 in English]

Key Words: Body Fluids, Fluid-Electrolyte Exchange, Diuretics, Cardiovascular Systems, Circulation Disorders, Endocrinology, Renin-Aldosterone, Catecholamine

9. BR4(10/85) Leybson L. Review of: Natochin YuV. Problemy evolutsionnoy fiziologii vodno-solenogo obmena. [Problems in the evolutionary physiology of fluid-electrolyte exchange]. Leningrad: Nauka; 1984; 34 p. In: Zhurnal Evolyutsionnoy Biokhimii i Fiziologii. XXI(2): 210-212. See BODF2 (M19).

Key Words: Body Fluids, Fluid Electrolyte Exchange

ISSUE 4

10. P156(12/85)* Noskov VB, Kozyrevskaya GI, Morukov BV, Artamasova YeM, Rustam'yan LA. Body position during hypokinesia and its effects on fluid-electrolyte exchange. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(5): 31-34.

Body Fluids, Fluid-electrolyte Exhange
Humans, Males
Hypokinesia, Horizontal, Head-down Tilt

BOTANY

ISSUE 1

1. P24(6/85)* Safonkin AF. The effect of substrate moisture content on growth and leaf structure of corn. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 1985; 19(2): 94-96.

Botany
Higher Plants, Corn
Moisture

ISSUE 2

2. P80(8/85)* Maksimova YeN. The effect of heavy charged particles (HZE) of galactic cosmic radiation on seeds. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(3):71-74; 1985.

Botany, Cell Mutations; Also Radiobiology
Lettuce, Seeds
Radiation, HZE

3. P63(8/85) Vikhrov AI, Kovalev YeYe, Maksimova YeN, Nevzgodina LV, Potapov YuV. Cytogenic changes in cells of lettuce seedlings during irradiation with a beam of accelerated carbon nuclei. Radiobiologiya. XXV(1): 24-28; 1985.

Botany, Cells; Also Radiobiology
Lettuce, Seeds
Radiation, Heavy Nuclei

4. M16(8/85) Sytnik KM, Kordyum YeL, Nedukha YeM, Sidorenko PG, Fomicheva VM. Rastitel'naya kletka pri izmenenii geofizicheskikh faktorov [The plant cell under altered geophysical conditions]. Kiev: Naukova Dumka; 1984.

Key Words: Botany, Lower and Higher Plants, Cytology, Space flight Factors, Weightlessness, Vibration, Magnetic Fields, Clinostasis, Space Flight Simulation

ISSUE 4

5. P178(12/85) Laurinavichyus RS, Yaroshus AV, Radzyavichus G. A methodology for setting up experiments on the significance of gravity in plant growth and development processes. In Dubinin NP, editor, Biologicheskiye issledovaniye na orbital'nykh stantsiyakh "Salyut" [Biological investigations on "Salyut" orbital stations]. Moscow: Nauka; 1984; pp. 15-20. (See SPPH #1 -- M5)

Botany, Growth and Development
Experimental Methods and Equipment
Space Flight, Salyut

6. P179(12/85) Merkis AI, Laurinavichyus RS, Shvyazhdene DV. Spatial orientation and growth of plants under weightlessness and in an artifical gravity field. In Dubinin NP, editor, Biologicheskiye issledovaniye na orbital'nykh stantsiyakh "Salyut" [Biological investigations on "Salyut" orbital stations]. Moscow: Nauka; 1984; pp. 72-81. See SPPH1 (M5).

Botany, Orientation and Growth
Lettuce and Cress
Space Flight, Salyut; Weightlessness; Artificial Gravity

7. P181(12/85) Laurinavichyus RS, Yaroshyus AV, Marchyukaytis A, Shvyagzhdene DV, Mashinskiy AL. Metabolism of pea plants grown under space flight conditions. In Dubinin NP, editor, Biologicheskiye issledovaniye na orbital'nykh stantsiyakh "Salyut" [Biological investigations on "Salyut" orbital stations]. Moscow: Nauka; 1984; pp. 96-81. See SPPH1 (M5).

Botany, Metabolism
Pea
Space Flight, Salyut

CARDIOVASCULAR AND RESPIRATORY SYSTEMS

ISSUE 1

1. P6(6/85)* Dartsmeliya VA, Belkaniya GS. Typology of hemodynamic state of healthy individuals during tilt tests. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(2): 26-32; 1985.

Cardiovascular and Respiratory Systems, Hemodynamics
Humans, Typology
Orthostatic Tolerance, Tilt Tests

2. P8(6/85)* Kabesheva TA, Kopanev SV, Panferova NYe, Zavadovskiy AF. Mechanisms underlying vascular adaptation to head-down tilt, Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 1985.

Cardiovascular System, Peripheral Circulation
Humans, Men
Head-down Tilt and Hypokinesia, Adaptation Training

3. P9(6/85)* Sokolov VI. Cerebral hemodynamics and ventricular function during head-down tilt of -15^{o}, Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(2): 39-42; 1985.

Cardiovascular and Respiratory System, Cerebral Hemodynamics and Ventricular Function
Humans, Men, Typology
Head-down Tilt

4. P10(6/85)* Genin AM, Baranov VM, Shabel'nikov VG, Acyamolova NM, Kotov AN, Volkov MYu, Yurova KS, Poleshchuk AT. The influence of short-term hypokinesia with head-down tilt on the dynamics of cardiorespiratory indices during an incremental exercise test, Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(2): 43-46; 1985.

Cardiovascular and Respiratory Systems, Physical Work Capacity
Humans, Males
Hypokinesia, Head-down Tilt, Physical Exercise

5. P25(6/85) Meyerson FZ, Katkova LS, Malyshev VV. Comparison of the effects of preliminary adaptation to moderate exercise and of short-term stress on disruption of cardiac contractile functions in response to long-term stress. Kardiologiya. XXV(2): 74-77; 1985.

Cardiovascular and Respiratory Systems, Myocardium
Rats
Stress, Exercise

6. P26(6/85) Nepomnyashchikh LM, Kolesnikova LV, Nepomnyashchikh GI. Myocardial tissue organization in rats under hypokinesia (a stereological investigation). Arkhiv Anatomii, Gistologii i Embriologii. 88(1): 57-62; 1985.

Cardiovascular and Respiratory Systems, Myocardium; Also Morphology and Cytology
Rats
Immobilization

7. P29(6/85) Palets BL, Popov AA, Tikhonov MA, Arkhangel'skiy DYu. Hemodynamics under gravitational loading (mathematical model). Fiziologiya Cheloveka. 11(2): 185-191; 1985.

Cardiovascular and Respiratory Systems, Hemodynamics
Mathematical Models
High-Gravity Environments; Head-down Tilt

8. P49(6/85) Desova AA, Korotkiy VF, Belova II, and Zhuravel' AA. Identification of additional features in the peripheral pulse signal providing information about the functional state of a human operator. Fiziologiya Cheloveka. 11(2): 192-200; 1985.

Cardiovascular and Respiratory Systems, Pulse; Also Health and Medical Treatment, Diagnosis
Humans, Operators
Mental Complexity, Stress

ISSUE 2

9. P55(8/85) Karabayeva AK, Milovanov AP. Morphometric changes in the pulmonary bronchial tree of of rats in response to high altitude and post-adaptation. Zdravokhraneniye Kirgizii. 1985(2): 25-26.

Cardiovascular and Respiratory Systems, Lungs; Also Morphology and Cytology
Rats
High Altitude, Adaptation

10. P56(8/85) Moldotashev IK, Tilis YuA, Tenenbaum, AM. Non-invasive evaluation of the mitral regurgitation volume and pumping function of the left ventricle of the heart. Zdravokhraneniye Kirgizii. 1985(2): 27-29.

Cardiovascular and Respiratory Systems, Mitral Regurgitation; Also Health and Medical Treatment
Humans, Patients
Health and Medicine, Diagnosis, Non-invasive

11. P68(8/85)* Kotovskaya AR, Dimitrov DG, Luk'yanyuk VYu, Vil'Vil'yams IF, Golovkina OL, Andreyeva VG, Artamonova NP, Kuz'min MP (Bulgaria, USSR). Tolerance of healthy and arteriosclerotic middle-aged subjects to $+G_z$ and $+G_x$ acceleration. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(3): 27-31; 1985.

Cardiovascular and Respiratory Systems, Tolerance
Humans, Patients, Arteriosclerosis
Acceleration, Centrifugal

12. P70(8/85)* Vol'vach SI, Kovalenko YeA, Ponomarev SI, Gabyshev VK, Nikiforov VI, Kulev AP, Arkhipov VV. Oxygen supply and regional circulation in the gingival mucosa in response to lower body negative pressure. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(3): 33-37; 1985.

Cardiovascular and Respiratory Systems, Peripheral Circulation
Humans, Males
Lower Body Negative Pressure

13. P71(8/85)* Fomin IO, Orlov VN, Radzevich AE, Leksin GS. The effect of immersion in water on central hemodynamic parameters in individuals over 45. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 1985; 19(3):37-40.

Cardiovascular and Respiratory Systems, Blood Pressure
Humans, Patients, Arterial Hypertension, Middle-aged
Water Immersion

14. P78(8/85)* Bednenko VS, Polyakov VN, Dvornikov MV, Stepanov VK, Kozlov AN. The effect of acute hypoxia on coronary and systemic circulation. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(3):64-68; 1985.

Cardiovascular and Respiratory Systems, Coronary Circulation
Humans
Hypoxia

15. P85(8/85)* Kazakova PT, Yurenev AP, Kulayev BS, Nazin AN, Shevchenko YuV. Results of echocardiographic examinations of Macaca mulatta at rest. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 1985; 19(3): 81-84.

Cardiovascular and Respiratory Systems, Echocardiography; Also Health and Medicine
Primates, Macaca mulatta
Validation

16. M18(8/85) Breslav IS. Patterny dykhaniye: Fiziologiya, ekstremal'nyye coctoyaniya, patologiya [Patterns of respiration: Physiology, extreme conditions, pathology]. Leningrad: Nauka; 1984.

Key Words: Cardiovascular and Respiratory Systems, Stress, Sleep - Wakefulness, Hypoxia, Hypobaria

ISSUE 3

17. P131(10/85)* Bryantsev LA, Mikhenko AYe. Evaluation of human physical work capacity under hyperbaric conditions. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina, 19(4):11-19; 1985.

Cardiovascular and Respiratory Systems, Physical Work Capacity
Humans, Divers
Hyperbaria

18. P119(10/85)* Vol'vach SI, Kovalenko YeA, Voronin LI, Ulyatovskiy NV, Gabyshev VK, Nikiforov VI, Arkhipov VV. Oxygen balance and regional circulation in the gingival mucosa during exposure to positive $+G_z$ acceleration in the head-pelvis direction. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(4): 31-35; 1985.

Cardiovascular and Respiratory Systems, Impedance Plethysmography, Polarography
Humans, Males
Acceleration Stress, Countermeasures

19. P134(10/85)* Sokolova IV, Khrashcheva LA. Automated measurement of cardiac output by means of impedance plethysmography of the trunk. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(4):89-90; 1985.

Cardiovascular and Respiratory System, Cardiac Output, Impedance Plethysmography
Humans
Biomedical Data Processing and Cybernetics, Automated Program;

20. P126(10/85)* Katkov AYu, Vyazova YeP, Chabdarova RN, Krikun IS, Kudryashova ZhM. Tolerance to sudden onset hypoxic hypoxia in humans. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(4): 57-60; 1985.

Cardiovascular and Respiratory Systems
Humans, Typology
Hypoxia, Rapid Onset

21. P97(10/85) Bunyatyan AM, Mar'yan KL, Kargina-Terent'yeva. Changes in cardiovascular functions and adrenergic cardiac innervation in response to immobilization stress. Fiziologicheskiy Zhurnal SSSR imeni I.M. Sechenova. LXXI(5):581-586; 1985.

Cardiovascular and Respiratory Systems, Innervation; Also Endocrinology, Adrenal Gland
Rats, Typology
Immobilization Stress

22. P94(10/85) Vinogradov AV, Sycheva Im, Rylova AK. Clinical value of using scintigraphy with ^{99}Tm-pyrophosphate in conjunction with a bicycle ergometric exercise test. Kardiologiya. XXV(5): 9-14; 1985.

Cardiovascular and Respiratory Systems, Myocardium; Also Health and Medical Treatment
Humans, Patients, Heart Disease
Scintigraphy

23. P93(10/85) Meyerson FZ, Dolgikh VT, Smolentseva VN, Batrachenko YeR. Prevention of metabolic disorders and impairment of heart muscle functioning in response to immobilization by means of preliminary adaptation to short periods of stress. Voprosy Meditsinskoy Khimii. 31(3): 41-45: 1985.

Cardiovascular and Respiratory Systems, Myocardia; Also Adaptation
Rats
Stress, Immobilization; Pre-adaptation

24. M33(10/85) Lipovetskiy BM. Functsional'naya otsenka koronarnogo krovotoka u cheloveka (Methody fiziologicheskikh issledovaniy) [Functional evaluation of coronary circulation in humans (Methods for physiological studies)]. Leningrad: Nauka; 1985.

Key Words: Cardiovascular and Respiratory Systems, Coronary Circulation, Health and Medical Treatment, Diagnosis, Ischemia, Physical Stress Tests, Provocative Test

ISSUE 4

25. P158(12/85)* Orlov VN, Fomin IO, Radzevich AE, Leskin GS. The effect of breathing pressurized air during immersion in water on hemodynamics in patients with borderline arterial hypertension. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(5): 39-41.

Cardiovascular and Respiratory Systems, Hemodynamics
Humans, Patients, Hypertension
Hyperkinesia, Immersion; Pressure Breathing

26. P159(12/85)* Krasnykh IG, Gaydamakin NA, Petrukhin VG. Functional [determined using X-rays] and pathological morphological changes in the hearts of dogs undergoing six months of hypokinesia. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(5): 41-45.

Cardiovascular and Respiratory Systems, Heart, Atrophy; Also Histology and Morphology, Cardiac
Dogs
Hypokinesia, Immobilization

27. P162(12/85)* Kokova NA. Hemodynamic parameters of individuals varying in tolerance to $+G_z$ (head-foot) acceleration. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(5): 56-60.

Cardiovascular and Respiratory Systems, Hemodynamics; Also Musculoskeletal System, Conditioning
Humans, Typology
Acceleration Stress

28. P164(12/85)* Lapayev EV, Bednenko VS. The cumulative effect of Coriolis acceleration on cardiac hemodynamics. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(5): 64-67.

Cardiovascular and Respiratory Systems, Hemodynamics, Cardiac
Humans
Acceleration, Coriolis

29. P166(12/85)* Gorozhanin VS. Individual differences in regulation and level of maximum oxygen uptake. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(5): 72-77.

Cardiovascular and Respiratory Systems, Maximum Oxygen Uptake
Humans, Males; Typology
Neurological and Hormonal Systems

30. M39(12/85) Amosov NM, Bendet YaA. Fizicheskaya aktivnost' i serdtse. [Physical activity and the heart]. Second edition, revised and augmented. Kiev: Zdorov'ya; 1984.

Key Words: Cardiovascular and Respiratory Systems, Cardiovascular Conditioning, Physical Exercise; Human Performance, Work Capacity

31. BR5(12/85) Zhironkin AG. Review of: Breslav IS. Patterny dykhaniye: Fiziologiya ekstremal'nyye sostoyaniye, patologiya [Patterns of respiration: Physiology of extreme conditions, pathology]. Leningrad: Nauka; 1984. In: Fiziologicheskiy Zhurnal SSSR imeni I.M. Sechenova. LXXI(8): 1036-1039; 1984. See CARD16 (M18).

Key words: Cardiovascular and Respiratory Systems, Respiration, Extreme Conditions, Hyperbaria, Stress, Exertion, Hyperthermia

CYBERNETICS AND BIOMEDICAL DATA PROCESSING

ISSUE 1

1. M8(6/85) Aleksandrov VV, Shneyderov VS. Obrabotka mediko-biologicheskikh dannykh na EVM [Processing of biomedical data on the computer]. Leningrad: Meditsina; 1984.

Key Words: Cybernetics and Biomedical Data Processing, Biomedical Statistics, Medical Diagnosis

ISSUE 2

2. P84(8/85)* Nidekker IG, Nechayev AP, Brodetskaya YeYe, Zarovnyy AV, Ryzhov BN, Stepanov VA, Odinokov GI. Development of an interactive system for data processing in human factors engineering experiments. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(3): 78-81; 1985.

Biomedical Data Processing, Human Factors Engineering
System Description
Man-Machine Systems

DEVELOPMENT

ISSUE 4

1. P176 (12/85). Kokorin AI, Pigareva MD, Pal'mbakh LR, Afanes'yev GD, Mashinskiy AL. Embryological development of the domestic quail under conditions of weightlessness. In Dubinin NP, editor, Biologicheskiye issledovaniye na orbital'nykh stantsiyakh "Salyut" [Biological investigations on "Salyut" orbital stations]. Moscow: Nauka; 1984; pp. 139-141. See SPBI1 (M5).

Development, Embryology
Birds, Quail
Space Flight, "Salyut-6," Weightlessness

2. M43(12/85)* Kusen' SI, Stoyka RS. Molekulyarnyye mekhanizmy v deystvii polipeptidnykh faktorov rosta [Molecular mechanisms in the operation of polypeptide growth factors]. Moscow: Science; 1985.

Key Words: Development, Embryogenesis, Polypeptide Growth Factors; Cytology, Cell Proliferation

ENDOCRINOLOGY

ISSUE 1

1. P14(6/85)* Tigranyan RA, Kalita NF, Makho L, Kvetnyanski R. (USSR, Czechoslovakia). Hormone content of blood plasma in rats after flight in the "Cosmos-1129" biosatellite. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(2): 60-61; 1985.

Endocrinology, Stress; Also Hematology
Rats
Space Flight, Cosmos-1129 Biosatellite; Immobilization

2. P21(6/85)* Shirinyan EA, Avakyan OM. Regulation of physical activity in head-down tilt by means of the sympathoadrenal and pituitary-adrenocortical systems. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 1985; 19(2): 87-89.

Endocrinology; Endurance
Rats
Head-down Tilt, Tail Suspension; Hypothermia

3. P39(6/85) Goncharov NP, Katsia GB, Shexova, AN. Circadian rhythms of corticosteroids in female hamadryas baboons after long-term hypokinesia. Problemy Endokrinologii. XXXI(1): 70-73; 1985.

Endocrinology, Circadian Rhythms; Also Reproductive Systems
Primates, Baboons, Females
Hypokinesia

ISSUE 3

4. P95(10/85) Belyayev NG. Endocrine regulation of calcium homeostasis in a recovery period. Teoriya i Praktika Fizicheskoy Kul'tury. 1984(4): 18-19.

Endocrinology, Thyroid, Parathyroid, Calcium
Humans, Athletes
Physical Exercise

5. P106(10/85) Ivanova TM, Kvetanskiy R, Bedova TI, Oprshalova Z, Dobrakovova M. [USSR, Czechoslovakia] Catecholamine content in brain nuclei of August rats subjected to immobilization stress. Fizioloicheskiy Zhurnal SSSR imeni I.M. Sechenova. LXXI(7): 823-828; 1985.

Endocrinology, Catecholamines; Neurophysiology;
Cardiovascular and Respiratory System, Blood Pressure
Rats, Individual Differences, Typology
Stress, Immobilization

6. P96(10/85) Makoyeva LD, Belinskaya TF, Li YeD, Margaryan AG, Sabayev VV. The effect of beta-adrenegic blockers and trental on plasma renin and aldosterone concentration in normal subjects during hypokinesia with head-down tilt. Kardiologiya. XXV(6):40-42; 1985.

Endocrinology, Aldosterone, Renin
Humans, Males
Hypokinesia, Head-down Tilt; Drugs, Beta-blockers

ISSUE 4

7. P144(12/85) Shvalev VN, Kargina-Terent'yeva RA, Mar'yan KL, Pavlovich YeR. Changes in the medulla of the adrenal glands in rats subjected to immobilization stress. Arkhiv Anatomii, Gistologii i Embriologii. 89(8): 97-103; 1985.

Endocrinology, Adrenal Histology
Rats
Immobilization Stress

8. P146(12/85) Morenkova SA. Insulin-receptor interaction with plasma membranes of hepatic and muscle cells in rats with generalized infections. Patologicheskaya Fiziologiya i Eksperimental'naya Terapiya. 1985(4): 43-46.

Endocrinology, Insulin, Insulin-Receptor Interaction
Rats
Disease, Infections, Countermeasures, Indomethacin

EXOBIOLOGY

ISSUE 3

1. P99(10/85) Lozina-Lozinskiy LK. Where did life originate -- in the ocean or on land? Zhurnal Evolutsionnoy Biokhimii i Fiziologii. XXI(3):303-307; 1985.

Exobiology, Abiogenesis
Review Article
Anabiosis, Dry Land

2. BR3(10/85) Korochkin LA. Review of: Kordyum VA, Evolutsia i Biosfera. Kiev: Naukova Dumka; 1982. In: Zhurnal Evolutsionnoy Biokhimii i Fiziologii. XXI(3): 319-321; 1985.

Key Words: Exobiology, Molecular Evolution, Population Genetics, Silent DNA, Exogenous Influences, Genome, Biosphere

ISSUE 4

3. P175(12/85) Mednikov VM. The monophyletic origin of life (the organic world) and the evolution of ecosystems. Zhurnal Obshchey Biologii. XLVI (4): 462-470; 1985.

Exobiology, Evolution of Ecosystem
Theoretical Paper
Origin of Life

4. P177(12/85) Khenokh MA, Kuznetsova YeA, Tsupkina NV, Mashinskiy AL, Konyshin NI, Nechitaylo GS, Semenov YuP. Abiogenic synthesis of biological precursors during exposure to space flight factors. In Dubinin NP, editor, Biologicheskiye issledovaniye na orbital'nykh stantsiyakh "Salyut" [Biological investigations on "Salyut" orbital stations]. Moscow: Nauka; 1984; pp. 21-25. See SPPH1 (M5).

Exobiology, Abiogenic Synthesis
Biological Precursors, Nucleosides
Space Flight, "Salyut-6," Cosmic Radiation, Long-term Exposure

5. M55(12/85) Rubenchik LI. Poisk mikro-organizmov v kosmose [Search for microorganisms in space (Second Edition; revised and augmented)]. Kiev: Naukova Dumka; 1983*. [111 pages]

Key Words: Exobiology, Microbiology, Space Flight Factors

GASTROINTESTINAL SYSTEM

ISSUE 1

1. P7(6/85)* Zhiznevskaya OV, Medkova IL. Investigation of the bile acid spectra in humans subjected to a 120 day period of hypokinesia with head-down tilt. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(2): 33-35; 1985.

Gastrointestinal System, Liver
Humans, Males
Hypokinesia, Bedrest and Head-down Tilt

ISSUE 2

2. P72(8/85)* Medkova IL, Nikolayeva NM, Zhiznevskaya OV. Lipid hydrolysis in humans during hypokinesia with head-down tilt. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(3):40-44; 1985.

Gastrointestinal System, Lipid Hydrolysis, Liver Function
Humans, Males
Hypokinesia, Head-down Tilt

GENETICS

ISSUE 1

1. P30(6/85) Bobkova NN. Investigation of the effect of hypokinesia and acceleration on human chromosomes. Fiziologiya Cheloveka. 11(2): 300-301; 1985.

Genetics, Chromosomes
Humans, Patients
Hypokinesia, Acceleration

GRAVITATIONAL BIOLOGY

ISSUE 3

1. P125(10/85)* Kotovskaya AR, Krasnov IB, Shipov AA. Major results of experiments with long-term centrifugation of rats as applied to the problem of artificial gravity. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(4): 53-57.

Gravitational Biology, Physiological Indicators, Musculoskeletal System, Neurophysiology, Endocrinology, Enzymology
Rats
Artificial Gravity, Centrifugation, Long-term

GROUP DYNAMICS

ISSUE 1

1. M2(6/85) Krylov VYu, Morozov YuI. Kiberneticheskiye modeli i psikhologiya, [Cybernetic models and psychology]. Moscow: Nauka; 1984.

Key Words: Group Dynamics, Occupational, Artificial Intelligence, Psychology, Computer Systems, Simulation

ISSUE 2

2. M22(8/85) Nemov RS. Sotsial'no-psikhologicheskiy analiz effektivnoy deyatel'nosti kollektiva [Social psychological analysis of effective collective activity]. Moscow: Pedagogika; 1984.

Key Words: Group Dynamics, Group Performance

3. M24(8/85) Shchelgachev RV (editor). Sovershenstvovaniye organizatsii truda i otdykha plavsostava (Sb. nauch. tr.) [Enhancing the organization of work and rest for ships' crews: Collection of scientific papers]. Leningrad: Transport; 1984.

Key Words: Group Dynamics, Crew Performance, Psychology, Work Capacity, Work-rest Cycles, Environmental Factors, Noise and Vibration, Personnel Selection

HABITABILITY AND ENVIRONMENT EFFECTS

ISSUE 1

1. P15(6/85)* Zaloguyev SN, Viktorov AN, Shilov VM, Gorshkov VP, Zarubina MM, Shinkareva MM, Norkina TYu. Results of microbiological investigations performed during the flight of the "Salyut-6" orbital station. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(2): 64-69; 1985.

Habitability and Environment Effects, Hygiene
Microbiology, Plants
Space Flight, Salyut-6

2. P16(6/85)* Viktorov AN, Novikova ND. Characteristics of the formation of microflora on construction materials used in hermetically sealed living quarters. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(2): 66-69; 1985.

Habitability and Environment Effects
Microbiology, Plants
Spacecraft Cabins, Hermetic Seals

3. P18(6/85)* Kondratyuk VA. Experimental determination of acceptable concentrations of sodium and calcium in reclaimed drinking water. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 1985; 19(2): 69-74.

Habitability and Environment Effects, Potable Water; Also Life Support Systems
Rats
Life Support Systems, Water Reclamation; Minerals

4. P19(6/85)* Galaktionova GV, Mastryukova VM, Strizhovskiy AD. Sensitivity of mammalian tissues to the prolonged effects of constant high-voltage magnetic fields. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(2): 78-81; 1985.

Habitability and Environment Effects; Also Morphology and Cytology
Mice
Radiobiology, Magnetic Fields

5. P31(6/85) Bushov YuV, Yershov AF, Os'minin FB, Pisanko AP, Nibush VA. The effect of moderate hypoxia on the work capacity of a human operator as a function of individual differences. Fiziologiya Cheloveka. 11(2): 258-261; 1985.

Radiobiology, Habitability and Environment Effects, Hypoxia; Also Cardiovascular and Respiratory Systems
Humans, Typology, Operators
Human Performance

6. P45(6/85) Il'nitskaya AV, Kalina OV. Evaluation of the combined effects of noise and ozone. Gigiyena Truda i Professional'nyye Zabolevaniya. 1985(3): 19-22.

Habitability and Environment Effects, Noise and Ozone
Rats
Medical Effects

ISSUE 2

7. P81(8/85)* Sedov AV, Akimov VI. Metering out the dosage of volatile compounds in hypobaric experiments. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(3):74-75; 1985.

Habitability and Environment Effects, Gas Composition
Apparatus Description
Volatile Substances

ISSUE 4

8. P171(12/85)* Mishchenko VF, Zubov VA, Yeremenko YuG. Synthetic biocidal paintings composed of high molecular metalloorganic compounds. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(5): 89-92; 1985.

Habitability and Environment Effects, Paints, Metalloorganic compounds; Life Support Systems, CELSS
Fungi
Fungicidal Properties

9. P148(12/85) Vlasov VA, Vasil'yev GA. Predicting the toxicity of burning polymers. Gigiyena i Sanitariya. 1985(8): 18-21.

Habitability and Environment Effects, Outgas, Toxicity
Mathematical Modeling
Polymers, Burning

HEALTH AND MEDICAL TREATMENT

ISSUE 1

1. P28(6/85) Agadzhanyan NA, Krasnikov NP. Evaluation of the functional state of athletes breathing atmospheres with altered gas compositions. Teoriya i Praktika Fizicheskoy Kul'tury. 1985(3): 19-20.

Health and Medical Treatment, Fitness
Humans, Athletes
Atmosphere, Gas Mixtures

2. P32(6/85) Lushchitskiy MA, Myasnikov AP, Shumskiy YuP. The effect of severe trauma on decompression sickness. Voenno-meditsinskiy Zhurnal. 1985(1): 35-37.

Health and Medical Treatment, Decompression Sickness
Cats
Injuries

3. P47(6/85) Kislyakov YuYa, Kopyl'tsov AV. Formation of gas bubbles in biological tissues during decompression (mathematical modeling). Biofizika 30(2): 337-340; 1985.

Health and Medical Treatment, Decompression Sickness
Tissues
Mathematical Models

4. P46(6/85) Lozinskiy VS. Trends in the work of the flight surgeon. Voyenno-meditsinskiy Zhurnal. 1985(3): 47-48.

Health and Medical Treatment, Medical Trends
Flight Crew
Flight Surgeon

ISSUE 2

5. P61(8/85) Kokhanov VP, Nikitin YeA. The effect of electro-acupuncture on the work capacity of ship crew members on long-term cruises. Voyenno-meditsinskiy Zhurnal. 1984(4): 69-70.

Health and Medical Treatment, Electroacupuncture
Humans, Crew, Ship
Work Capacity, Productivity

6. P83(8/85)* Zal'tsman GG, Kuchuk GA, Rovnyy. Identifying individual differences in susceptibility to hyperbaric oxygen. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(3):76-77; 1985.

Health and Medical Treatment, Oxygen Toxicity; Also Habitability and Environment Effects
Humans, Individual Differences
Hyperoxia

ISSUE 3

7. P136(10/85)* Naydina VP, Avetisyants BL, Dubinin DM. Gas chromatographic analysis of free fatty acids of skin lipids. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(4): 93-94; 1985.

Health and Medical Treatment, Skin Lipids
Humans, Males
Gas Chromatography

ISSUE 4

8. P169(12/85)* Vlasov VV. [Effectiveness] of drugs and surfactants in preventing decompression sickness in rats. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(5): 86-87.

Health and Medical Treatment, Decompression Sickness
Rats
Drugs, Surfactants

9. P173(12/85)* Simonov LG, Drobakhin GA, Uoffe YuS, Safarov YuS, Talalayev YeG. A small piezo transducer with an elastic coating for continuous study of biological subjects. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsinsa. 19(5): 81-82.

Health and Medical Treatment, Ultrasound
Equipment Development
Transducer, Piezo; Adhesive

HEMATOLOGY

ISSUE 1

1. P35(6/85) Mishchenko VP, Yeremina YeL, Sorokina SI, Gritsay NN, Goncharenko LL, Loban' GA, and Gubka PI. The effect of therapeutic running on lipid peroxidation, blood coagulation, and the antiaggregation properties of vessel walls. Voprosy Meditsinskoy Khimii. XXXI(1): 99-101; 1985.

Hematology, Coagulation; Also Metabolism, Lipids
Humans
Physical Exercise, Fitness

ISSUE 2

2. P50(8/85) Deribas VI, Ostan'kovich AA, Pogozhev IB, Sitnikov AP, Fedorova OP. Statistical analysis of the leukocyte ratios used to assess adaptive reactions. Izvestiya Sibirskogo Otdeleniya Akademii Nauk SSSR. 6(1): 121-128; 1985.

Hematology, Leukocytes; Also Adaptation
Humans
Statistical Processing, Confidence Intervals

3. P54(8/85) Volzhskaya AM, Troshikhin GV, Shumilova TYe. Oxygen transport capacity of the blood and erythropoiesis in rats after prolonged exposure to nitrogen-oxygen gas mixture under high pressure. Fiziologicheskiy Zhurnal SSSR (imeni I.M. Sechenov). 71(3): 320-324; 1985.

Hematology; Also Habitability and Environment Effects
Rats
Hyperbaric Chambers, Gas Mixture

4. P69(8/85)* Khapilov NV, Panchenko VS, Kotov NN, Asyamolov, BF. The effect of hypokinesia and $+G_z$ acceleration on the transport function of the blood. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(3): 31-33; 1985.

Hematology
Humans, Males
Hypokinesia, Accleration

5. P90(8/85) Dudarev VP. Compensation and adaptation mechanisms of the blood system in response to hematic hypoxia. Fiziologicheskiy Zhurnal (Akademiya Nauk Ukrainskoy SSR). 31(1):21-27; 1985.

Hematology, Adaptation
Rats
Hematic Hypoxia

ISSUE 4

6. P153(12/85)* Ushakov AS, Ivanova SM, Ataullakhanov FI, Pichugin AV, Dubinskaya YeI, Brantova SS, Labetskaya OI, Naydina VP, Zezerov AYe. Human erythrocyte metabolism during long-term space flight. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(5): 19-23.

Hematology, Erythrocyte Metabolism
Humans, Cosmonauts
Space Flight, Long-term, Salyut-7

7. P157(12/85)* Kirichenko LL, Smirnov VV, Yevdokimova AG. Microcirculation and cellular hemostasis in men with borderline arterial hypertension exposed to "dry" immersion in thermally neutral water. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(5): 35-38.

Hematology, Hemostasis Cellular
Humans, Male, Patients, Hypertension
Immersion

8. P150(12/85) Raimzhanov AR. Characteristics of erythropoeisis in permanent inhabitants of high altitude regions. Zdravookhraneniye Kirgizii. 1985(4): 30-35.

Hematology, Erythropoeisis; Also Adaptation, Long-term
Humans
High Altitudes

9. M51(12/85) Moiseyeva OI. Fiziologicheskiye mekhanizmy regulyatsii erythropoiesis [Physiological mechanisms for regulating erythropoeisis]. Leningrad: Nauka; 1985.

Key Words: Hematology, Erythropoiesis, Hypoxia

HISTOLOGY

ISSUE 4

1. P172(12/85)* Furduy FI, Khaydarliu SKh, Mamalyga LM. Combined effects of stressors on the structure of spinal reflex arcs. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(5): 92-95.

Histology, Spinal cord, RNA, proteins; Also Neurophysiology
Rats
Hypokinesia, Immobilization stress, hypoxia

HUMAN PERFORMANCE

ISSUE 4

1. M38(12/85) Medvedev VI, editor. Fiziologicheskiye printsipy razrabotki rezhimov truda i otdykha [Physiological principles underlying scheduling of work and rest periods]. Leningrad: Nauka; 1984.

Key Words: Human Performance, Work Schedules, Rest Periods

IMMUNOLOGY

ISSUE 1

1. P27(6/85) Petrov VR, Cheredeyev AN, Koval'chuk LV. Principles of immunology research. Sovetskaya Meditsina. 1985(3): 66-69.

Immunology; Also Health and Medical Treatment
Humans
Research Principles

ISSUE 2

2. P79(8/85)* Novikov VS, Bortnovskii VN. The effect of dibasolum on the general immunity of humans in a hermetically sealed cabin. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(3): 68-70; 1985.

Immunology; Also Habitability and Environment Effects
Humans, Males
Isolation, Hypokinesia, Performance; Drugs

ISSUE 3

3. P101(10/85) Voytko NYe, Yatsishina TA, Vysotskiy, Konovalova LS. Cellular and humoral immunity in volunteers consuming diets differing in protein content. Voprosy Pitaniya. 1985(3): 28-33.

Immunology, Cellular and Humoral
Humans
Nutrition, Protein

4. P102(10/85) Surkina ID, Orlova ZS, Borodin YuV, Sharova TL, Bogdanov NG, Smirnova AN, Pyatnitskaya IN, Larina TI. Immune competence and vitamin level of highly trained athletes. Teoriya i Praktika Fizicheskoy Kul'tury. 1985(4): 37-39.

Immunology
Humans, Athletes
Nutrition, Vitamins

5. P103(10/85) Arlashchenko NI, Adamchik ZhF, Shtemberg AS, Klemparskaya NN, Dobronravova NN, Chukhrov AD. The effect of immunoglobulin on the work capacity of irradiated animals. Seriya Biologicheskaya. 1985(3): 404-411.

Immunology, Immunoglobulins; Radiobiology, Radioprotection
Mice, Rats
Work Capacity; Autoflora; Higher Nervous Activity

LIFE SUPPORT SYSTEMS

ISSUE 1

1. P17(6/85)* Kondrat'yeva YeM. The composition and growth dynamics of bacteria associated with algae in human biological LSS. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(2)69-74; 1985.

Life Support Systems
Microbiology, Bacteria; Algae
Waste Utilization

2. P23(6/85)* Golubeva YeG, Gur'yeva TS, Tikhobayeva OI. Chemical composition of the biomass of Musca domestica L. larvae and pupae which develop in organic wastes in biological human life support systems. Kosmicheskaya Biologiyai Aviakosmicheskaya Meditsina. 19(2): 91-93; 1985.

Life Support Systems, Closed Ecological Systems
Insects, Flies
Chemical Composition

3. M4(6/85) Serebryakov VN. Osnovy proyektirovaniya sistem zhizneobecpecheniye ekipazha kosmicheskikh letatel'nykh apparatov [Principles for designing life support systems for crews of space flight vehicles]. Moscow: Mashinostroyeniye; 1983.

Key Words: Life Support Systems, Closed Ecological Systems, Environmental Factors, Air Purification, Recovery, Recycling, Reliability, Spacecrew Supplies, Temperature Control

ISSUE 2

4. M12(8/85) Abramov IP, Severin GI, Stolitskiy AYu, Sharipov PKh. Skafandry i sistemy dlya raboty v otkrytom kosmose [Space suits and systems for work in outer space]. Moscow: Mashinostroyeniye; 1984.

Key Words: Life Support Systems, Portable Life Support Systems, Habitability and Environmental Effects, Man Machine Systems, Space Flight, Voskhod-2, Gemini, Soyuz-5, Apollo, Skylab, Salyut, Shuttle

ISSUE 3

5. P129(10/85)* Yunusova LS, Drugova NA. A study of the microflora of the chufa plant -- a proposed component of biological life support systems. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina, 19(4):65-68; 1985.

Life Support Systems, CELSS
Botany, Higher Plants, Chufa; Microbiology, Microflora
Cultivation Conditions

6. P128(10/85)* Bergter F, Harz D, Muller PJ, Mund K, Gunther U, Hesse T, Hartmann R, Wanke G, Tairbekov MG, Parfenov GP, Pakhomov AI (GDR, USSR). Determining the growth coefficient of the biomass of Bacillus Subtilis under weightlessness. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(4):63-65.

Life Support Systems, Biomass Growth
Microbiology, Bacteria, Bacillus Subtillus
Spaceflight, Salyut-6, Weightlessness

7. P130(10/85)* Antonyan AA, Levinskikh MA, Sukhova NI. Study of the growth, development and metabolism of the Closteriopsis acicularis under conditions of limited nitrogen from the standpoint of biological life support systems. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina, 19(4):69-73; 1985.

Life Support Systems, CELSS
Microbiology, Algae, Closteriopsis acicularis
Nitrogen Deficit

8. P137(10/85)* Levinskikh MA, Livanskaya OG. Study of the mineral requirements of a new strain of algae proposed for biological life support systems. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(4): 95-96; 1985.

Life Support System, CELSS
Microbiology, Algae, Closteriopsis
Mineral Requirements

9. P104(10/85) Fishteyn GN, Kovrov BG. Microecosystems and a case study of their use for studying the life of protozoa in a community of microscopic organisms. Zhurnal Obshchey Biologii. XLVI(3): 336-344; 1985.

Life Support Systems, Microecosystems
Microbiology, Algae, Chlorella; Bacteria; Protozoa, Tetrahymena
Light, Peptone

MAN-MACHINE SYSTEMS

ISSUE 1

1. M3(6/85) Popov YeP, Yushchenko AS. Roboty i chelovek [Robots and the human] (In series: Nauka i tecknicheskiy progress [Science and technological progress], editor, Makarov IM) Moscow: Nauka; 1984.

Key Words: Man-Machine Systems, Robotics, Human Factors, Performance

MATHEMATICAL MODELING

ISSUE 4

1. M34(12/85) Gel'fand IM, scientific editor. Voprosy kibernetiki: Zadachi meditsinskoy diagnostiki i prognozirovaniya s tochki zreniya matematika [Issues in cybernetics: The problems of medical diagnosis and prognosis from the mathematician's point of view]. Moscow: Scientific Committee on the Interdisciplinary Problem of] Cybernetics, USSR Academy of Sciences; 1985.

Key Words: Health and Medical Treatment, Diagnosis, Prognosis, Cardiovascular Disease; Mathematical Modeling, Computer Modeling

2. M41(12/85) Baydosov VA, Fefelova VA. Matematicheskoye modelirovaniye protsessov v meditsinskikh i biologicheskikh sistemakh: [Sb. statey] [Mathematical modeling of processes in medical and biological systems: [Coll. of papers]. Sverdlovsk: 1982.

Key Words: Mathematical Modeling, Biological and Physiological Systems; Health and Medical Treatment, Cardiovascular Systems, Thyroid, Cell Development

METABOLISM

ISSUE 1

1. P11(6/85)* Ushakov AS, Vlasova TF, Miroshnikova YeB, Panferova NYe, Murugova TP. Investigation of certain aspects of amino acid metabolism in humans subjected to the combined effects of short-term head-down tilt and ultraviolet irradiation. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(2): 46-49; 1985.

Metabolism, Amino Acids; Also Habitability and Environment Effects
Humans
Head-down Tilt and Ultraviolet Radiation

2. P36(6/85) Temur'yants NA, Yevstaf'yeva YeV, Makeyev VB. Adaptation of lipid metabolism in rats with restricted mobility as a result of exposure to a variable infra-low frequency magnetic field. Biofizika. 1985: 30(2): 313-316.

Metabolism, Lipid
Rats
Magnetic Field and Immobilization

ISSUE 2

3. P86(8/85)* Makho L, Tigranyan RA, Shkottova N, Palkovich M (Czechoslovakia, USSR). The process of lipogenesis in the liver of rats after flight in the "Cosmos-1129" Biosatellite. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(3): 84-85; 1985.

Metabolism, Liver, Lipogenesis
Rats
Space Flight, Cosmos-1129

ISSUE 3

4. P118(10/85)* Libkind VI, Vlasov VD. The effect of physical activity on lipid metabolism in pilots. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(4): 29-31; 1985.

Metabolism, Lipids
Humans, Pilots
Physical Work Capacity

5. P120(10/85)* Vlasova TF, Miroshnikova YeB, Ushakov AS. An investigation of certain aspects of amino acid metabolism in humans exposed to 120 days of hypokinesia with head-down tilt. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(4): 35-38; 1985.

Metabolism, Amino Acids
Humans
Hypokinesia, Head-down Tilt

6. P123(10/85)* Shidovskaya TYe. Lipid peroxidation rate in tissues of rats subjected to hypokinesia. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina, 19(4):42-45; 1985.

Metabolism, Lipid Peroxidation
Rats
Hypokinesia, Immobilization Stress

7. P127(10/85)* Davydova NA, Senkevich YuA, Belakovskiy MS, Samratova SV. Study of catecholamine metabolism under high altitude conditions. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(4): 60-63; 1985.

Metabolism, Catecholamines
Humans, Athletes, Mountain Climbers
Adaptation, High Altitude; Training

ISSUE 4

8. P170(12/85)* Vlasova TF, Miroshnikova YeB, Belakovskiy MS, Kochetkova AN, Sergeyev IN. The effect of 24,25-dihydroxycholecalciferol on amino acid metabolism in rats subjected to hypokinesia. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsinsa. 19(5): 88-89.

Metabolism, Amino Acid
Rats
Hypokinesia, Vitamins, 24,25-dihydroxycholecalciferol

9. P143(12/85) Bol'shakova TD, Meshcheryakova SA, Tyabenkova VF, Romanova NI, Levin YaI, Dallakyan IG. The effect of 24 hours of sleep deprivation on metabolism of biogenic amines. Fiziologiya Cheloveka. 11(4): 652-656. M.

Metabolism, Biogenic Amines; Biological Rhythms
Humans, Males
Sleep, Deprivation, Short-term

MICROBIOLOGY

ISSUE 3

1. M27(10/85) Bayev AA, editor. Biotekhnologiya [Biotechnology]. Moscow: Nauka; 1984. [309 pages]

Key Words: Microbiology; Biotechnology, Biochemistry, Genetic Engineering, Cellular Engineering

ISSUE 4

2. P182(12/85)Vaulina EN, Ankeyeva ID, Slashcheva NK. Viability and mutability of Chlorella cells. [In Dubinin NP, editor, Biologicheskiye issledovaniye na orbital'nykh stantsiyakh "Salyut. Biological investigations on "Salyut" orbital stations]. Moscow: Nauka; 1984; pp. 43-45. See SPBI1 (M5).

Microbiology, Viability, Mutability; Also Cytology
Chlorella
Space Flight, Salyut-Soyuz, Soyuz-22

MORPHOLOGY AND CYTOLOGY

ISSUE 1

1. P13(6/85)* Kaplanskiy AS, Savina YeA, Kazakova PB, Khoroshilova-Maslova IP, Kharin GM, Yakovleva VI, Plakhuta-Plakutina GI, Durnova GN, Il'ina-Kakuyeva YeI, Alekseyev YeI, Pankova AS, Shvets VN, Burkovskaya TYe. Head-down tilt in monkeys: A morphological investigation. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(2): 53-60; 1985.

Morphology and Cytology
Primates, Rhesus Monkeys
Hypokinesia, Head-down Tilt

2. P20(6/85)* Yakovleva VI, Belkaniya GS. Morphological manifestations of hemodynamic shifts in the lungs of monkeys during hypokinesia with head-down tilt. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina 19(2): 85-87; 1985.

Morphology and Cytology, Lungs; Also Cardiovascular and Respiratory
Primates, Rhesus Monkeys
Hypokinesia, Head-down Tilt

ISSUE 2

3. P74(8/85)* Lychakov DV, Lavrova YeA. Investigation of the vestibular structure and the concentration of ions in the body of spurred frog tadpoles exposed to weightlessness. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(3): 48-52; 1985.

Morphology and Cytology, Otolith Organs, Ontogeny; Also Neurophysiology
Frogs
Space Flight, Salyut-6, Weightlessness

4. P180(12/85) Sushkov FB, Mal'ts V, Kopp F, Pitra K, Rokov A, Rudneva SV, Stolley P, Tolkendorf Ye, Fender Kh, Yunge G. Experiment in culture of mammalian cells on the "Salyut-6" -- Soyuz-31" space complex. In Dubinin NP, editor. Biologicheskiye issledovaniye na orbital'nykh stantsiyakh "Salyut". See SB #1 -- M5.

Morphology and Cytology, Cytogenetic Parameters
Mammalian Cells, Hamsters
Space flight, Salyut-6

MUSCULOSKELETAL SYSTEM

ISSUE 1

1. M9(6/85) Prokhonchukov AA, Zhizhina NA, Tigranyan RA. Gomeostas kostnoy tkani v norme i pre ekstemal'nom vosdeystvii [Homeostasis of bone tissue under normal and extreme conditions]. (In series, Problemy kosmicheskoy biologii [Problems in space biology]; vol. 49; editor, Gorizontov PD.) Moscow: Nauka; 1984.

Key Words: Bone Physiology, Space flight, Cosmos biosatellites and Salyut-1 orbital stations, Weightlessness, Radiobiology

2. P34(6/85) Kasatkina LF. Density of muscle fibers in motor units in different stages of denervation-reinnervation in humans, Patologicheskaya Fiziologiya i Eksperimental'naya Terapiya. 1985(1): 42-46.

Musculoskeletal System; Also Neurophysiology
Humans, Patients
Diseases

ISSUE 2

3. P58(8/85) Osipenko AV. The effect of antimacrophage cytotoxic serum on blood composition and regeneration of bone tissue in distraction osteosynthesis. Patologicheskaya Fiziologiya i Eksperimental'naya Terapiya. 1985(2): 68-71.

Musculoskeletal System, Bone Regeneration; Also Hematology, Monocytes
Dogs
Injuries

4. P76(8/85)* Il'ina-Kakuyeva YeI, Novikov VYe. Skeletal muscles of rats in simulated weightlessness: A morphological investigation. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(3):56-59; 1985.

Musculoskeletal System, Leg Muscles
Rats
Tail Suspension

5. P77(8/85)* Talipov MS, Bogoyavlenskaya ON. The effect of short-term exposure to heat on tissue respiration of the skeletal muscles and internal organs of chickens during hypokinesia. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(3): 60-63; 1985.

Musculoskeletal System, Muscles, Tissue Respiration
Chickens
Hypokinesia and Heat

6. BR2(8/85) Petrovich YA, Sumarokov DD. Review of: Prokhonchukov AA, Zhizhina NA, Tigranyan RA. Gomeostaz kostnoy tkani v norme i pri ekstremal'nom vozdeystvii [Homeostasis of bone tissue under normal and extreme conditions]. Moscow: Nauka, 1984. In: Patologicheskaya Fiziologiya i Eksperimental'naya Terapiya. 1985(3):89-90.

Musculoskeletal System, Bone Physiology
Space Flight, Cosmos and Salyut-1
Weightlessness
Radiobiology

ISSUE 3

7. P121(10/85)* Grigor'yeva LS, Kozlovskaya IB. The effect of 7 days of immersion hypokinesia on fine motor control [literally: precise movements]. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(4): 38-41; 1985.

Musculoskeletal System, Motor Control
Humans, Males
Hypokinesia, Immersion

8. P124(10/85)* Shvets VN, Burkovskaya TYe, Vnukova ZYe, Kabitskaya OYe. The effect of 24, 25-dihydroxyvitamin D_3 on osteoprogenitor cells in immobilized rats. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(4): 48-53; 1985.

Musculoskeletal System, Osteoporosis
Rats
Immobilization; Nutrition, Vitamin D

9. P98(10/85) Chaykovskiy VS, Ivanova YeI, Posozkin VA. Content and utilization of testosterone in the cardiac and skeletal muscles of male rats after physical exercise. Problemy Endokrinologii. XXXI(3): 78-82; 1985.

Musculoskeletal System, Cardiac and Skeletal Muscles; Also
    Endocrinology, Testosterone
Rats, Males
Physical Exercise

10. P100(10/85) Smolyar VI. Effect of amino acid deficiency on growth and formation of bone tissue. Voprosy Pitaniya. 1985(3): 38-42.

Musculoskeletal System, Bone Growth
Children, Rats
Nutrition, Amino Acids

11. M32(10/85) Rakhimov YA, editor in chief. Struktura skeletnykh myshts i vysokogornaya gipoksiya [The structure of the skeletal muscles and high-altitude hypoxia]. Novosibirsk: Nauka; 1985. [85+ pages]

Key Words: Musculoskeletal System; Skeletal Muscles; Hypoxia, High Altitude; Morphology and Cytology

ISSUE 4

12. P154(12/85)* Zatsiorskiy VM, Sirota MG, Prilutskii BI, Raytsin LM, Seluyanov VN, Chugunova LG. Biomechanical description of body and movements of humans subjected to a 120-day period of hypokinesia with head-down tilt. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(5): 23-27.

Musculoskeletal System, Muscle Atrophy, Walking
Humans, Males
Hypokinesia, Head-down tilt

13. P161(12/85)* Oganov VS, Skuratova SA, Shirvinskaya MA. Contractile properties of the myofibrils of rats under long-term exposure to +2 G_x. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(5): 53-56.

Musculoskeletal System, Myofibrils, Contractility
Rats
Artificial Gravity, Centrifugation

14. P163(12/85)* Tikunov BA, Kayfadzhyan MA, Oganesyan SS. Change in the physicochemical properties of contractile and regulatory protein of different types of muscle during and after acceleration stress. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(5): 60-64.

Musculoskeletal Muscles, Actomyosin
Rats
Acceleration

15. P160(12/85)* Shipov AA, Shvets VN, Tabakova LA, Kabitskaya OYe. Changes in the physical condition, vestibular function and skeletal system of rats undergoing long-term rotation. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(5): 46-52.

Neurophysiology, Vestibular Nystagmus; Musculoskeletal System, Bone Growth
Rats
Artificial Gravity, Centrifugation

NEUROPHYSIOLOGY

ISSUE 1

1. P1(6/85)* Yegorov AD, Yuganov YeM. Labyrinthine and extralabyrinthine mechanisms underlying the development of motion sickness during weightlessness. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 1985; 19(2): 4-9.

Neurophysiology, Motion Sickness
Humans, Cosmonauts
Weightlessness, Adaptation

2. P41(6/85) Popugayev AI. Potential for directed development of the vestibular function. Teoriya i Praktika Fizicheskoy Kultury. 1985(1); 22-23.

Neurophysiology, Motion sickness, Vestibular Nystagmus
Human, Children, Typology
Adaptation, Training

3. P37(6/85) Bragin YeO. Neurochemical mechanisms regulating the sensitivity to pain. Uspekhi Fiziologicheskikh Nauk. 16(1): 21-42; 1985.

Neurophysiology, Brain
Rats
Pain Sensitivity

4. M10(6/85) Levashov MM. Nistagmometriya v otsenke sostoyaniya vestibulyarnoy funktsiy [The use of nystagmometry to evaluate the vestibular function]. (In series, Problemy kosmicheskoy biologii [Problems in space biology]; volume 50; editor, AM Ugoleva.) Moscow: Nauka; 1984.

Key Words: Neurophsyiology, Nystagmus, Motion Sickness, Vestibular Function

ISSUE 2

5. P51(8/85) Bazarov VG, Lutsenko VI. Vestibulospinal reactions and excitability threshholds of the cupular apparatus in chronic cochleovestibular insufficiency. Zhurnal Ushnykh, Nosovykh i Gorlovykh Bolezney. 1985(1): 17-21.

Neurophysiology, Motion Sickness, Vestibular Tests, Nystagmus
Humans, Patients
Cochleovestibular Pathology

6. P59(8/85) Shaposhnikov YeA. Prevention of neuro-psychological changes in hypokinesia. Zhurnal Nevropatologii i Psikhiatrii imeni S.S. Korsakova. 85(2): 215-219; 1985.

Neurophysiology, Hypokinesia Effects; Also Psychology, Hypokinesia Effects
Humans
Physical Exercise; Electrostimulation; Psychotherapy

7. P62(8/85) Shaposhnikov YeA, Khondkarian OA. Changes in the nervous system following prolonged hypokinesia (a clinical/experimental investigation). Zhurnal Nevropatologii i Psikhatrii imeni S.S. Korsakova. 84(12): 1761-1766; 1984.

Neurophysiology
Humans, Males
Hypokinesia, Countermeasures

8. P73(8/85)* Krylov YuV, Vorob'yev OA, Zaritskiy VV. The dissociation of vestibular-autonomic and vestibular-sensory reactions. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(3): 44-48; 1985.

Neurophysiology, Vestibular System
Humans, Patients, Deaf
Caloric Irrigation

9. P75(8/85)* Popov VK, Ivanova RS (Bulgaria). The pairing principle and kinematic asymmetry of the otolithic system. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(3):53-55; 1985.

Neurophysiology, Otolith Organs
Humans
Rotation; Mathematical Modelling

10. M21(8/85) Arshavskiy YuI, Gel'fand IM, Orlovskiy GN. Mozzhechok i upravleniye ritmicheskimi dvizheniyami [The cerebellum and control of rhythmic movements]. Moscow: Nauka; 1984.

Key Words: Neurophysiology, Cerebellum, Motor Control, Rhythmic Motion

11. BR1(8/85) Shipov AA. Review of: Levashev, MM. Nystagmometry in evaluation of the status of the vestibular function. Series: Problems in Space Biology, Vol. 50, editor V.A. Kislyakov. Leningrad: Nauka; 1984. In: Kosmicheskaya Biologiya i Avaiakosmicheskaya Meditsina. 19(3): 87-89; 1985. See NEUR4 (M10).

Key Words: Neurophysiology, Nystagmus, Vestibular Function, Motion Sickness

ISSUE 3

12. P109(10/85) Sten'ko YuM, Varenikov II, Skrupskiy VA. Using electric sleep to prevent cumulative fatigue in sailors on long-term cruises. Gigiyena Truda i Professional'nyye Zabolevaniye. 1985(5): 42-44.

Neurophysiology, Fatigue
Humans, Sailors
Sleep, Electric Sleep; Noise

13. P110(10/85) Kabalova LA, Soldatkina SA, Zaytseva YeP. The state of the central and peripheral nervous systems during exposure to transport noise of varying intensity. Gigiyena i Sanitariya. 1985(6): 22-24.

Neurophysiology, Sensorimotor Cortex; Also Psychology, Experimental Neurosis, Learning
Rats
Noise

ISSUE 4

14. P160(12/85)* Shipov AA, Shvets VN, Tabakova LA, Kabitskaya OYe. Changes in the physical condition, vestibular function and skeletal system of rats undergoing long-term rotation. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(5): 46-52.

Neurophysiology, Vestibular Nystagmus; Musculoskeletal System, Bone Growth
Rats
Artificial Gravity, Centrifugation

15. P155(12/85)* Davydov NA, Galkina YeYu, Ushakov AS. Functional activity of the serotonin and histaminergic systems in humans subjected to long-term hypokinesia. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(5): 27-30.

Neurophysiology, Histamines
Humans, Males
Hypokinesia, Head-down Tilt, Prolonged

16. P165(12/85)* Stolbkov YuK. Dependence of nystagmus on the function of the utricule. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(5): 68-72.

Neurophysiology, Nystagmus, Cervical; Utricular Nerves
Birds, Doves
Acceleration, Angular

17. P167(12/85)* Levashov MM. Role of vestibular recruitment and directional predominance in nystagmus in diagnostic examinations. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(5): 78-81.

Nystagmus, Directional Predominance
Review/Theoretical Article, Patients
Diagnosis

18. P168(12/85)* Marks E, Zuzhevich V, Dvoretski Ye, Mazhenski M (Poland). Age-related changes in the EEGs of pilots, Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(5): 85-86.

Neurophysiology, EEG
Humans, Pilots
Aging

19. P142(12/85) Ivanov AL, Snitko VM. Use of acupuncture in the prevention and cure of motion sickness. Voyenno-meditsinskiy zhurnal. 1985(8): 56-57.

Neurophysiology, Motion Sickness
Human, Sailors
Health and Medical Treatment, Countermeasures, Acupuncture

20. P141(12/85) Lapayev EV, Vorob'yev OA. Identification of vestibular asymmetry in the flight medical examination. Voyenno-meditsinskiy zhurnal. 1985(8): 53-56.

Neurophysiology, Vestibular Nystagmus
Humans, Pilots
Asymmetry

21. M45(12/85) Nasonkin OS, Pashkovskiy EV. Neyrofiziologiya shoka [The neurophysiology of shock]. Leningrad: Meditsina; 1984.

Key Words: Neurophysiology, Cerebral Hemodynamics, Metabolism; Health and Medical Treatment, Shock

NUTRITION

1. P174(12/85)* Popov IG. Hygienic aspects of the daily diet of flight crews. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(5): 4-19.

Nutrition, Daily Diets
Flight Crews
Review Article

PERCEPTION

ISSUE 1

1. P5(6/85)* Solodovnik FA, Chapayev AB. The influence of position of the human body and its restraint on magnitude of spatial illusions during weightlessness. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(2): 23-26; 1985.

Perception, Spatial Illusion
Humans
Weightlessness, Body Position, Immobilization

2. P21(6/85)* Ayzikov GS, Klyushnikova ON. The influence of experimentally induced motion sickness on postrotation nystagmus and counter-rotation illusion. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(2): 89-91; 1985.

Perception, Illusion; Also Neurophysiology, Nystagmus
Humans, Males
Motion Sickness; Drugs

3. P44(6/85) Gurfinkel' VS, Debreva YeYe, Levik YuS. On the relationship between perception of the parts of the body and movement. Fiziologiya Cheloveka. 1985; 11(1): 7-11.

Perception, Orientation
Humans
Motion

ISSUE 3

4. P115(10/85)* Lapa VV, Bukalov YeYe, Lemeshchenko NA. An investigation of the factors determining geocentric techniques used by pilots for orientation. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(4): 19-23; 1985.

Perception, Orientation
Humans, Pilots
Visual Displays, Perspective

ISSUE 4

5. M35(12/85) Travnikova NP. Effektivnost' vizual'nogo poicka [Effectiveness of visual search]. Moscow: Mashinostroyeniye; 1985.

Key words: Perception, Visual Search, Optical Instruments, Human Performance, Personnel Selection

PERSONNEL SELECTION

ISSUE 1

1. P4(6/85)* Yevdokimov, V.I. Use of projective tests as a rapid technique for predicting self-discipline of pilot trainees. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(2): 20-23; 1985.

Personnel Selection, Self-discipline; Also Psychology
Humans, Pilots
Psychological Tests

2. P42(6/85) Lapin YeA. Spatial representations and job performance in air traffic controllers. Vestnik Moskovskogo Universiteta: Seriya: 14 Psikhologiya. 1985(1): 68-70.

Personnel Selection, Operator Performance; Also Perception
Humans, Air Traffic Controller
Space Perception

3. M1(6/85) Bodrov VA, Malkin VB, Pokrovskiy BL, Shpachenko DI. Psikhologicheskiy otbor letchikov i kosmonavtov [Psychological selection of pilots and cosmonauts]. (In series, Problemy kosmicheskoy biologii [Problems in space biology]; vol. 48; editor, Lomov BF.) Moscow: Nauka, 1984.

Key Words: Personnel Selection, Cosmonauts, Psychological Tests, Pilot and Cosmonaut Performance, Electroencephalography, Mathematical Models

ISSUE 4

4. P152(12/85) Bodrov VA, Fedoruk AG. Functional asymmetry of paired organs in members of flight crews. Voyenno-meditsinskiy Zhurnal. 1985(7): 50-52.

Personnel Selection, Physiological
Humans, Flight Crews
Functional Asymmetry

PSYCHOLOGY

ISSUE 1

1. P2(6/85)* Litsov AN, Shevchenko VF. Psychophysiological characteristics of the organization and scheduling of daily activity cycles of crews on long-term space flights. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(2): 12-16; 1985.

Psychology, Circadian Rhythms; Also Neurophysiology; Also Human Performance
Humans, Cosmonauts
Activity cycles, Work and Rest; Also Space Flight, Salyut-6 and -7

2. P3(6/85)* Myasnikov VI, Ryzhov BN, Sal'nitskiy VP. Zone of functional comfort for an operator in control of a moving object. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(2): 17-19; 1986.

Psychology, Stress; Also Neurophysiology; Also Human Performance
Humans, Operators
Task Complexity, Performance

3. P43(6/85) Aladzhalova NA, Kvasovets SV. Spontaneous mood changes under conditions of monotony and decasecond rhythms in brain potentials. Problemy Psikhofiziki. 6(2): 105-113; 1985.

Psychology, Mood; Also Neurophysiology
Humans, Adults
Monotony, Electroencephalography

4. P40(6/85) Bokovikov AK, Krylova NV, Kurashvili VA. Problems in aerospace psychology: Papers presented at the XIVth Gagarin lectures. Psikhologicheskiy Zhurnal. 6(1): 151-152; 1985.

Psychology, Aerospace
Humans, Cosmonauts, Pilots
Conferences

5. P48(6/85) Kulikovskiy VV. Influence of performance of demanding mental tasks demands on sleep. Fiziologiya Cheloveka. 11(2): 247-250; 1985.

Psychology, Sleep, Electroencephalogy; Also Neurophysiology
Humans, Adults
Human Performance, Mental Tasks

ISSUE 2

6. P87(8/85)* Yevdokimov VI. Means used by pilots and cadets to resolve frustrating situations. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(3): 86-87; 1985.

Psychology; Human Performance
Humans, Pilots and Cadets
Psychological Tests

7. P60(8/85) Ponomarenko VA. The psychological evaluation of flight performance. Voyenno-meditsinskiy zhurnal. 1985(4): 67-69.

Psychology; Human Performance, Evaluation; Health and Medical Treatment, Flight Surgeon
Humans, Pilots
Trends

8. M11(8/85) Leonova AB. Psikhodiagnostika funktsional'nykh sostoyaniy chelovek [Psychological diagnosis of human functional states]. Moscow: Izd. Mosk. Univ.; 1984.

Key Words: Psychology, Functional Studies, Human Performance, Circadian Rhythms

ISSUE 3

9. P117(10/85)* Bodrov VA, Kupriyanov AA, Fedoruk AG, Kharin VV. Use of pilot training simulators to detect functional capabilities of pilots. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(4): 26-29; 1985.

Psychology, Stress
Pilots; Patients, Functional Disorders
Personnel Selection, Training Simulator Performance

10. P116(10/85)* Tereplyak Ya, Matseychik (Poland). Resistance of psychomotor performance to anticipatory stress in pilots with varying anxiety levels. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(4): 24-26; 1985.

Psychology, Human Performance, Psychomotor
Humans, Pilots
Stress, Anxiety Level

11. P112(10/85) Gambashidze GM, Tkhorevskiy VI, Yampol'skaya YeG. Human functional status during monotonous activity accompanied by various levels of physical strain. Gigiyena Truda i Professional'nyye Zabolevaniya. 1985(6): 5-9.

Psychology, Functional Status
Human Performance, Humans, Workers, Sex Differences
Physical Exertion; Monotony

12. P113(10/85) Rakov GK, Fadeyev YuA. Using galvanic skin response to estimate emotional stress during job performance. Fiziologiya Cheloveka. 11(3): 463-469; 1985.

Psychology, Stress, Emotional; Human Performance
Humans, Workers
GSR

RADIOBIOLOGY

ISSUE 1

1. M7(6/85) Miroshnichenko LI, Petrov VM. Dinamika radiatsionykh usloviy v kosmos [The dynamics of the radiation enivronment in space]. Moscow: Energoatomizdat; 1985.

Key Words: Radiobiology, Radiation

ISSUE 2

2. P57(8/85) Moldotashev B, Daniyarov SB. Quantitative changes in Myelokaryocytes and Picture Produced by Myelography in Response to the Combined Influence of High Altitude and Ionizing Radiation. Izvestiya Akademii Nauk Kirgizskoy SSR. 1985(1): 32-36.

Radiobiology; Also Hematology, Bone Marrow
Rats and Dogs
Adaptation, High Altitude

3. P66(8/85)* Davydov BI. Electromagnetic radiation of radio wave frequency (microwaves): Principles, standardization criteria and threshold doses. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(3): 8-21; 1985.

Radiobiology, Microwaves
Humans
Dosage, Risk

4. P64(8/85) Turdyyev AA, Bogdanova-Berezobskaya IG, Dvornikova LI. Criteria for evaluating the radiation tolerance of Testudo horsfieldi. Radiobiologiya. XXV(1): 92-95; 1985.

Radiobiology, Radiation Tolerance
Tortoises
Mortality Rate; Stochastic Processes

5. P65(8/85) Shlumukova IF, Serkiz YaI, Chebotarev YeYe, Pavlenko IO, Shlapatskaya VV, Svirgun VP. The effect of seasonal and diurnal rhythms on the time course of radiation injury. Radiobiologiya. XXV(1): 139; 1985.

Radiobiology, Radiation Tolerance
Rats
Biological Rhythms; Mortality Rate

6. P88(8/85) Grodzinskiy DM, Fialkova YeYu, Gudkov IN. Radioprotective effect of ethylene on gamma-irradiated plants. Radiobiologiya. XXV(2): 212-215; 1985.

Radiobiology, Mitosis; Also Botany
Botany, Pea, Root Meristem
Radioprotective Agent, Ethylene

7. P89(8/85) Kuna P. (Czechoslovakia). Acute toxicity and radioprotective effect of gammophos injected intramuscularly in mice. Radiobiologiya. XXV(1): 59-62; 1985.

Radiobiology, Antiradiation Drugs, Gammaphos
Mice
Toxicity, Radioprotective Efficacy

8. M17(8/85) Akoyev IG, Yurov SS. Voprosy biologicheskogo deystviya i dozimetrii tyazhelykh zaryazhennykh chastits i adronov vysokikh energii [Issues related to the biological effects and dosimetry of HZE and high energy hadrons]. Proceedings of: All-Union Scientific Conference with Participation of Socialist Countries, Pushchino; 1984.

Key Words: Radiobiology, Hadrons, HZE, Dosimetry, Cytology, Mammals, Plants, Perception, Visual sensation, Space flight, Salyut-6

9. M23(8/85) Eydus LKh, Korystov YuN. Kislorod v radiobiologii [Oxygen in radiobiology]. Moscow: Energoatomizdat; 1984.

Key Words: Radiobiology, Oxygen Effect, Cytology

ISSUE 3

10. P114(10/85) Kalacheva VYa, Arente GV, Pavlovskaya TYe. Energy-independent binding of Ca^{2+} ions by mitochrondria of pea seedlings and the negative effect of X-rays on this process. Radiobiologiya. XXV(3): 348-35; 1985.

Radiobiology, X-rays
Botany, Peas, Mitochondria
Calcium Binding

11. P140(10/85) Chernov IP. The moderating influence of hypokinesia on interphase destruction of thymus and peripheral blood lymphocytes in irradiated rats [Abstract only]. Radiobiologiya. XXV(3): 429; 1985.

Radiobiology, Lymphocytes
Rats
Hypokinesia

ISSUE 4

12. P183(12/85) Fedorenko BS, Karpovskiy AL, Ryzhov NI, Krasavin YeA. Study of radiation damage in the brain tissue of rats. In Dubinin NP, editor, Biologicheskiye issledovaniye na orbital'nykh stantsiyakh "Salyut" [Biological investigations on "Salyut" orbital stations]. Moscow: Nauka; 1984; pp. 152-158. See SPBI1 (M5).

Radiobiology, Brain Tissue; Also Neurophysiology, Histology
Rats
Space Flight, Kosmos; HZE

13. P184(12/85) Nevsgodina LV. Study of the effect of galactic HZE's on air-dried seeds of Lactuca sativa. In Dubinin NP, editor, Biologicheskiye issledovaniye na orbital'nykh stantsiyakh "Salyut" [Biological investigations on "Salyut" orbital stations]. Moscow: Nauka; 1984; pp. 158-162. See SPBI1 (M5).

Radiobiology
Botany, Lettuce, Seeds
Space Flight, Salyut-6, Kosmos; HZE

14. P149(12/85) Kyshtobayev ShK, Razumovskiy YuK, Turganbayev ZhT. Changes in oxidation-reduction (redox) and hydrolytic enzymes of rat pituitary glands in response to irradiation at low mountain elevations. Zdravokhraneniye Kirgizii. 1985(4): 20-22.

Radiobiology, Irradiation
Rats
Enzymology, Pituitary, Redox

15. M36(12/85) Miroshnichenko LI, Petrov VM. Dinamika radiatsionnykh uslovii v kosmose [The dynamics of radiation conditions in space]. Moscow: Energoatomizdat; 1985.

Key Words: Radiobiology, Galactic and Solar Radiation

16. M37[(12/85) Vorob'yev YeI, Stepanov RP. Ioniziruyushchiye isluchenіya i krovenosnyye sosudy [Ionizing radiation and blood vessels]. Moscow: Energoatomizdat; 1985.

Key Words: Radiobiology; Cardiovascular and Respiratory Systems, Vascular Damage

17. M46(12/85) Grigorov NL. Elektrony vysokoy energii v okrestnosti zemli [High energy electrons in the environment of Earth]. Moscow: Nauka: 1985.

Key Words: Radiobiology, Cosmic Rays, Corpuscular Radiation, Near-earth Space

18. M54(12/85) Vorob'yev YeI, Kovalov YeYe. Radiatsionnaya bezopasnost' ekipazhey letatel'nykh apparatov [Radiation safety of flight vehicle crews]. Moscow: Energoatomizdat; 1983.

Key Words: Radiobiology, Radiation Safety, Space Crews

REPRODUCTIVE SYSTEM

ISSUE 1

1. P12(6/85) Serova LV, Denisova LA, Apanasenko ZI, Bryantseva LA, Chel'naya NA. General description of an experiment on rat ontogenesis on the "Cosmos-1514" biosatellite. Kosmicheskaya Biologiya i Aviakosmicheskaya Meditsina. 19(2): 49-53; 1985.

Reproductive System, Pregnancy, Ontogeny
Rats, Mothers, Neonates
Space Flight, Cosmos-1514 Biosatellite

SPACE BIOLOGY

ISSUE 1

1. M5(6/85) Dubinin NP (editor). Biologicheskiye issledovaniye na orbital'nykh stantsiyakh "Salyut" [Biological investigations on the Salyut orbital stations]. Moscow: Nauka; 1984.

Key Words: Space Biology, Space Flight, Salyut, Genetics, Embryology, Botany, Higher Plants, Lower Plants, Zoology, Insects, Vertebrates, Radiobiology

SPACE PHYSIOLOGY

ISSUE 3

1. M29(10/85) Gasanov GG, editor in chief. XIV S'yezd vsesoyuznogo fiziologicheskogo obshchestva imeni I.P. Pavlov [(Proceedings of) the] XIVth Conference of the I.P. Pavlov All-Union Physiological Society]; 1983; Baku. Leningrad: Nauka; 1983. 2 vol.

Key Words: Cybernetics, Psychology, Health and Medical Treatment, Cardiovascular and Respiratory Systems, Genetics, Neurophysiology, Human Performance, Musculoskeletal System, Mathematical Monitoring, Adaptation, Nutrition, Endocrinology, Metabolism, Biological Rhythms

SECTION 2

USSR SPACE LIFE SCIENCES DIGEST

TOPIC/CATEGORY CROSS REFERENCE INDEX

HEALTH AND MEDICAL TREATMENT (HEAL)

BIOS: 7; CDRS: 8, 10, 15, 22, 24; HAEN: 6; META: 3; IMMU: 1; MATH: 1, 2; NEUR: 12, 18, 21; NUTR: 1; PSYC: 7; SPPH: 1

HEMATOLOGY (HEMA)

ENDO: 1; MPHC: 2; MUSC: 3; NEUR: 21; RADI: 2

HISTOLOGY (HIST)

CDRS: 6, 26; RADI: 12

HUMAN PERFORMANCE (HUPF)

ADAP: 1; BIOR: 1; CDRS: 8, 17, 30; GPDY: 2, 3; HAEN: 5; HEAL: 5; MAMC: 1; META: 4; PERC: 5; PERS: 1, 2; PSYC: 1, 2, 5, 6, 7, 8, 10, 11, 12; SPPH: 1

LIFE SUPPORT SYSTEMS (LFSP)

HAEN: 3, 8; HEAL: 3

MAN/MACHINE SYSTEMS (MAMC)

CYBM: 2; LFSP: 4

MATH MODELING (MATH)

CDRS: 7; HAEN: 9; HEAL: 3; NEUR: 9; SPPH: 1

METABOLISM (META)

BIOS: 7; HEMA: 1, 6; NEUR: 21; SPPH: 1

MICROBIOLOGY (MICR)

EXOB: 5; HAEN: 1, 2; LFSP: 1, 5, 7, 8, 9

MORPHOLOGY AND CYTOLOGY (MPHC)

BOTA: 2, 3, 4; CDRS: 6, 9, 26; DEVE: 2; ENDO: 8; HAEN: 4; IMMU: 3; MICR: 2; MUSC: 4, 11; RADI: 8, 9

MUSCULOSKELETAL SYSTEM (MUSC)

CDRS: 27; GRAV: 1; SPPH: 1

NEUROPHYSIOLOGY (NEUR)

ADAP: 2; CDRS: 29; ENDO: 5; GRAV: 1; HIST: 1; MPHC: 3; MUSC: 2, 7, 15; PERC: 2; PSYC: 1, 2, 3, 5; RADI: 12; SPPH: 1

NUTRITION (NUTR)

BODF: 7; IMMU: 3, 4; META: 8; MUSC: 8, 10; SPPH: 1

PERCEPTION (PERC)

PERS: 2; RADI: 8

PERSONNEL SELECTION (PERS)

GPDY: 3; PERC: 5; PSYC: 9

PSYCHOLOGY (PSYC)

ADAP: 2; GPDY: 2, 3, 3; NEUR: 6, 13; PERS: 1, 3

RADIOBIOLOGY (RADI)

BOTA: 2, 3; HAEN: 4; IMMU: 5; MUSC: 1, 6; SPBI: 1

REPRODUCTIVE SYSTEM (REPR)

ENDO: 3

SECTION 3

USSR SPACE LIFE SCIENCES DIGEST

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16. Abstract

This document is an index to issues 1-4 of the USSR Space Life Sciences Digest. It is arranged in three sections. In section 1, abstracts from the first four issues are grouped according to subject; please note the four-letter codes in the upper right hand corner of the pages. Section 2 lists the categories according to which Digest entries are grouped and cites additional entries relevant to that category by four-letter code and entry number in section 1. Refer to section 1 for titles and other pertinent information. Key words are indexed in section 3.

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