"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN S.YE.

MAYSKIY, I.N., professor, redaktor; LEPESHINSKAYA, O.B., redaktor; SEVERIN, S.Ye., redaktor; IMSHENETSKIY, A.A., redaktor; GLUSHCHENKO, I.Ye., professor, redaktor; KHRUSHCHEV, G.K., professor, redaktor; STUDITSKIY, A.N., professor, redaktor; VORONTSOVA, M.A., professor, redaktor; VYAZOV, O.Ye., kandidat meditsinskikh nauk, redaktor; ZHUKOVSKIY, M.A., kandidat meditsinskikh nauk, redaktor; OBYSOV, N.A., redaktor

[New data on the problem of the development of cellular and non-cellular forms of living] Novye dannye po probleme razvitiia kletochnykh i nekletochnykh form zhivogo veshchestva; trudy. Moskva, Gos. izd-vo med. lit-ry, 1954. 274 p. (MLRA 7:8)

1. Deystvitel'nyy chlen AMN SSSR (for Lepeshinskaya, Severin)
2. Chlen-korrespondent AN SSSR (for Imshenetskiy)
(Cells)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

BAKULEV, A.N., redaktor; GAYEVSKAYA, M.S., redaktor; GORIZONTOV, P.D., redaktor; GULYAYEV, A.V., redaktor; DOBRODEYEV, A.V., redaktor; MIL'CHENKO, I.T., redaktor; NEGOVSKIY, V.A., redaktor; NYROVA, P.F., redaktor; PETROV, B.A., redaktor; SARKISOV, S.A., redaktor; SEVERIN, S.Ye., redaktor; SHIKUNOVA, L.G., redaktor; NEYMAN, I.M., redaktor; BOBROVA, Ye.N., tekhnicheskiy redaktor

[Transactions of the conference dedicated to problems of pathological physiology and therapy of the terminal states in the clinic and in first aid practice; December 10-12, 1952] Trudy Konferentsii posviashchennoi probleme patofiziologii i terapii terminal'nykh sostoianii v klinike i praktike neotlozhnoi pomoshchi, 10-12 Dekabria 1952 g. Moskva, Gos. izd-vo meditsinskoi lit-ry, 1954. 329 p. (MLRA 8:3)

1. Konferentsiya posvyashchennaya probleme patofiziologii i terapii terminal'nykh sostoyanii v klinike i praktike neotlozhnoi pomoshchi, Moscow, 1952.

(Physiology, Pathological) (Death, Apparent)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S.Ye. (Moskva)

Distribution, conversion in the organism, and biological siginificance of carnosine and anserine. Usp.biol.khim. 2:355-377 '54. (MIRA 12:12)

(CARNOSINE, metabolism)
(ANSERINE, metabolism)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S.E.

USSR.

Vladimir Aleksandrovich Engel'gardt, A. I. Oparin, N. M. Cisakyan, A. A. Kursanov, and S. E. Severin, Izvest. Akad. Nauk S.S.S.R., Ser. Biol. 1954, No. 6, 125-3.
—Brief biography of the biochemist on 60th birthday.
G. M. Kosolapoff

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S. Ye.

"The Application of Radioactive Phosphorus in Investigating the Processes of Phosphorylation," a paper presented at the Atoms for Peace Conference, Geneva, Switzerland, 1955

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S.Ye.

[Nitrogen muscle extracts and their role in muscle metabolism: reports and papers of the Third International Congress of Biochemistry, Brussels, 1-6 August, 1955] Azotistye ekstraktivnye veshchestva myshts i ikh rol' v mushechnom obmene; soobshcheniia i doklady na III Mezhdunarodnom biokhimicheskom kongresse, Briussel', 1-6 avgusta 1955 g. Moskva, Izd-vo Akad. nauk SSSR, 1955. 21 p. [Parallel texts in Russian and French]. (MIRA 11:6)

(MUSCLES)
(NITROGEN--ASSIMILATION AND EXCRETION)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

Nitrogenous substances extracted from muscles and their role in muscle metabolism. S. E. Severin (Univ. Moscow). *Congr. intern. biochim., Résumés communs., 3e Congr., Brussels* 1955, 86(in Russian and French).—Mainly a discussion. The effects of carnosine (I) or anserine (II) on intact or triturated voluntary muscle are described (cf. *C.A.* 48, 1011*e*). II has an important role in the respirative phosphorylation of muscle but I is less active (cf. *C.A.* 48, 5899*b*). I and II occur in the voluntary muscle of all vertebrates except some fishes. The main physiol. role of I and II is to promote the formation of energy-rich P compds.

W. C. Tobie

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S.Ye.

I.M. Sechenov's works on blood gases and their significance at present; 50th anniversary of the death of Ivan Mikhailovich Sechenov. Biokhimiia 20 no.6:641-644 N-D '55. (MLRA 9:3)

(BIOGRAPHIES,
Sechenov, Ivan M.)
(BLOOD,
gases, research of I.M.Sechenov)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S.

KOVRIGINA, M.; NESMEYANOV, A.; BAKULEV, I.; KOCHERGIN, I.; OPARIN, A.; ANICHKOV, N.; NESTEROV, A.; KROTKOV, F.; CHERNOGOVSKIY, V.; TIMAKOV, V.; SEVERIN, S.; HUDNEY, G.; SERGIYEV, P.; DOVYDOVSKIY, I.; OHEKHOVICH, V.; TALYZIN, F.; STRUKOV, A.; MIGUNOV, B.; SKVORTSOV, M.

A.I. Abrikosov; obituary. Vest. AN SSSR 25 no.5:65-66 My '55. (Abrikosov, Aleksei Ivanovich, 1875-1955) (MLRA 8:7)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S.E.

Extractable nitrogenous substances of muscle tissues in the process of ontogenesis. P. L. Vul'fson and S. E. Severin (Moscow State Univ.). *Ukrain. Biokhim. Zhur.* 27, 295-98(1955)(in Russian).—Two groups of gestating sows were used. The controls were fed a standard diet. The exptl. group was given an addnl. 30% of balanced proteins and five times the vitamin A ration. At intervals embryos were removed from their mothers and qual. and quant. detns. made of the extractives of the skeletal muscles. In the early stages of the embryonic development the glutamic acid is high. It soon begins to diminish and in young pigs (one month old) it constitutes only a minor part of the N extractives of the muscles. The aspartic acid content is lower than that of glutamic acid, and it, too, diminishes as the embryo develops. The glycine content of muscle increases in the early stages up to one-month-old pigs. The content of alanine is high and remains so throughout the period of the embryo development. β-Alanine is high at first, but disappears in pigs one month old. At this stage the appearance of carnosine becomes manifest. By means of the diazo reagent it was shown that some carnosine is present in embryos 65 days old; in embryos 90 days old its content increases and in the skeletal muscles of piglets one month old carnosine is present to the extent of 500 mg. % on the basis of dry wt. No histidine was found. The general trend of analytical results was the same in the controls as in the richly fed animals, but the level of the data values was higher in the latter. B. S. I.

MD

1

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

Severin, S. E.

Prevention of the action of poisons on the oxidative metabolism of muscle tissue by means of anserine. S. E. Severin, N. P. Meshkova, and N. I. Razumovskii (M. V. Lomonosov State Univ., Moscow). *Doklady Akad. Nauk S.S.S.R.* 103, 871-4(1955); cf. *C.A.* 48, 4079*c*, 5899*b*.—Expts. with pigeon breast muscle specimens in the presence of CN ions showed that addn. of anserine raises the amt. of bound P in the tissue which is proportional to the amt. of residual respiration. Carnosine does not stimulate phosphorylation in these conditions. In expts. with NaN_3 it was shown that anserine almost completely prevents the toxic action of azide on respiratory phosphorylation; either carnosine or histidine added to the azide system increases O consumption and increases the formation of labile P. In the presence of dinitrophenol anserine increases only that part of phosphorylation which is not blocked by the nitrophenol.

G. M. Kosolapoff

2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

BAKULEV, A.N., glavnyy redaktor; ANICHKOV, N.N., redaktor; BOLDYREV, T.Ye., redaktor; BRUSILOVSKIY, L.Ya., redaktor; BYKOV, K.M., redaktor; VASILENKO, V.Kh., redaktor; VINOGRADOV, N.A., redaktor; GRASHCHENKOV, N.I., redaktor; DAVYDOVSKIY, I.V., redaktor; ZDRODOVSKIY, P.F., redaktor; KAVETSKIY, R.Ye., redaktor; KOCHERGIN, I.G., redaktor; KROTKOV, F.G., redaktor; KUPRIYANOV, P.A., redaktor; LEBEDINSKIY, A.V., redaktor; MALINOVSKIY, M.S., redaktor; MAN'KOVSKIY, B.N., redaktor; NESTEROV, A.I., redaktor; ORBELI, L.A. , redaktor; PAVLOVSKIY, Ye.N., redaktor; SEVERIN, S.Ye., redaktor; SKRYABIN, K.I., redaktor; SMIRNOV, Ye.I., redaktor; TIMAKOV, V.D., redaktor; TUR, A.F., redaktor; SHABANOV, A.N., redaktor

[Great Medical Encyclopedia] Bol'shaia meditsinskaia entsiklopediia. Glav.red. A.N.Bakulev. Chleny red.kollegii N.N.Anichkov i dr. Izd. 2-oe. Moskva, Gos. izd-vo med. lit-ry. Vol. 1. A - Angiofibroma. 1956. 1216 columns. --- [Phonograph record and three-dimensional color spectacles] Grammofonnaia plastinka i ochki-svetofil'try.

(MEDICINE--DICTIONARIES)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

BELITSER, V.A.; KOTEL'NIKOVA, A.V.; LYUBIMOVA, M.N.; SEVERIN, S.Ye.; STEPANENKO, B.N.; ENGEL'GARDT, V.A.

Second International Conference on Lipids and the Third International Biochemical Congress. Vop.med.khim. 2 no.1:73-79 Ja-F '56. (MLRA 9:9)
(GHENT--LIPIDS--CONGRESSES)
(BRUSSELS--BIOCHEMISTRY--CONGRESSES)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S.Ye., prof.; KARANDAYEV, S.Ye.

Work of the administration of the Department of Medical Biology of the Academy of Medicine in 1955. Vest.AMN SSSR 11 no.5: 76-80 '56. (MIRA 12:10)

1. Akademik-sekretar' Byuro Otdeleniya mediko-biologicheskikh nauk AMN SSSR (for Severin). 2. Uchenyy sekretar' Byuro Otdeleniya mediko-biologicheskikh nauk AMN SSSR (for Karandayav).
(MEDICAL RESEARCH)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

BAKULEV, A.N., glavnyy red.; ANICHKOV, N.N., red.; BOLDYREV, T.Ye., red.; BRUSILOVSKIY, L.Ya., red.; BYKOV, K.M., red.; VASILENKO, V.Kh., red.; VINOGRADOV, N.A., red.; GRASHCHENKOV, N.I., red.; DAVYDOVSKIY, I.V., red.; ZDRODOVSKIY, P.F., red.; KAVETSKIY, R.Ye., red.; KOCHERGIN, I.G., red.; KROTKOV, F.G., red.; KUPRIANOV, P.A., red.; LEBEDINSKIY, A.V., red.; MALINOVSKIY, M.S., red.; MAN'KOVSKIY, B.N., red.; NESTEROV, A.I., red.; ORBELI, L.A., red.; PAVLOVSKIY, Ye.N., red.; SEVERIN, S.Ye., red.; SKRYABIN, K.I., red.; SMIRNOV, Ye.I., red.; TIMAKOV, V.D., red.; TUR, A.F., red.; SHABANOV, A.N., red.

[The Great Medical Encyclopedia] Bol'shaia meditsinskaia entsiklopediia. Glav.red. A.N.Bakulev. Chleny red.kollegii N.N.Anichkov i dr. Moskva, Gos.izd-vo med.lit-ry. Vol.3. B - Bogolepova. Izd.2-oe. 1957. 1176 columns. (MIRA 11:1)
(MEDICINE--DICTIONARIES)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

USSR / Human and Animal Physiology. Heart. T

Abs Jour : Ref Zhur - Biol., No 15, 1958, No. 70140

Author : Milovidova, M. K.; Severin, S. Ye.
Inst : Academy of Sciences USSR
Title : The Influence of the Dipeptides - Carnosine and Anserine - on Oxidative Phosphorylation in the Myocardial Tissues

Orig Pub : In the collection, Probl. fiziol. tsentr. nervn. sistemy, Moscow-Leningrad, AN SSSR, 1957, 365-373

Abstract : No abstract given

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S.Ye.

Second symposium on problems in the structure and function of erythrocytes. Vop.med.khim. 3 no.2:153-154 Mr-Ap '57. (MLRA 10:7)
(ERYTHROCYTES)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S.Ye.; MARDAHSEV, S.R.; BUCHKOV, S.M.; DEBOV, S.S.

International Congress on Clinical Chemistry. Vop.med.khim. 3 no.5: 397-400 S-O '57. (MIRA 10:12)
(CHEMISTRY, MEDICAL AND PHARMACEUTICAL)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S. Ye.

AUTHOR: Severin, S. Ye., Corresponding member of AN USSR 30-10-8/26

TITLE: Some Results and Tasks of Soviet Biochemistry (Nekotoryye itogi i zadachi sovetskoy biokhimii).

PERIODICAL: Vestnik AN SSSR, 1957, October, Nr 10, pp. 66-70 (USSR)

ABSTRACT: The 3 most important institutes in the field of biochemistry are the following:
1) The Biochemical Institute imeni A. N. Bakh AS USSR;
2) The Institute of Medical and Biological Chemistry, Academy of Medical Sciences USSR
3) The Ukrainian Biochemical Institute, AS Ukrainian SSR (Kiyev)
In addition a number of biochemical laboratories was established recently at many institutes AS USSR, at many research laboratories and at the universities.
The following important research results are worth mentioning:
a) Nitrogen change- conversion of amino acids.- Separation of the ferments causing aminozation.
b) Determination of the influence of vitamin B6.
c) Determination of the structure and the fermentative

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conditions under which various complex carbohydrates split up.

d) Synthesis and decomposition of oligo-saccharides.
e) Determination of the albumin nature of the ferments.
f) Investigation on the composition of the muscular system and on the fermentative conversions taking place in this system.
g) Biosynthesis of "carnozine".
h) Investigation on the complicated albumina occuring in the nucleons proteides.
i) Determination of the composition of blood and from that the determination of optimum blood conservation.
k) Investigation of the biochemistry of the nervous system, especially of the brain.

Criticism is invited in spite of the many successes achieved. It should be pointed out that no attention at all is paid to a great number of problems. Moreover it is stated that the manufacture of laboratory instruments, glas-appliances (flasks and retorts) and chemical initial substances leaves much to be desired and that it does not by far meet the high requirements.

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN S.E.

EXCERPTA MEDICA Sec.2 Vol.11/3 Physio-biochem. Mar 58

1126. OXIDATIVE PHOSPHORYLATION IN MUSCLE TISSUE AFTER DENERVATION OR DE-EFFERENTATION AND IN THYROTOXICOSIS (Russian text) - Severin S.E. Dept. of Animal Biochem., State Univ., Moscow - BIOKHIMIIA 1957, 22/1-2 (259-265) Graphs 5

The changes in muscle metabolism observed under the above condition are not connected with the uncoupling of oxidative phosphorylation. The metabolism of muscle tissue in each investigated case had characteristic peculiarities due to a changed correlation of rates of the different enzyme reactions. An increase of ATPase activity was found in the de-efferentated muscle. In thyrotoxicosis an increased formation of fructose diphosphate was observed, which was due to the lowering of creatine kinase activity.

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

EXCERPTA MEDICA Sec 2 Vol.2/6 Physiology June 58

2629. SYMPOSIUM ON THE PROBLEMS OF THE STRUCTURE AND FUNCTION OF ERYTHROCYTES (Russian text) - Severin S. E. - VESTN. AKAD. NAUK SSSR 1957, 27/5 (80-82)

Report of the proceedings of this symposium (Berlin 24-26. 1. 1957). It was concerned specially with erythrocytogenesis, the metabolism and haemolysis of erythrocytes and their morphology and ultrastructure. The problems worked out in the principal scientific institutes of Berlin-Buch are described. Gaertner - Cracow

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

AUTHOR SLOZHENIKINA, L.V., SEVERIN S.Ya., Corresponding [redacted]
Member of the Academy 20-2-44/67

TITLE The Effect of Deafferentation and Deefferentation of a Muscle Upon the Level of Carnosine and Anserine Contained.
(Vlieyaniye defferentatsii i deeferentsatsii myshts na soderzhaniye v nikh dipeptodov kornosina i anserina -Russian)

PERIODICAL Doklady Akademii Nauk SSSR, 1957, Vol 113, Nr 2, pp 399-402 (U.S.S.R.)
Reviewed 7/1957 Received 6/1957

ABSTRACT The investigations carried out by the authors before have shown that after the elimination of motoric fibres ofthe nervus ischiadicus an interruption of the carbonhydrate-phosphorus conversion is observed. Considering the influence of the dipeptides ascertained before: carnosine and anserine on the mentioned conversion and of the oxidation conversion, quantity fluctuations of these dipeptides in the muscles could be assumed on the on the occasion of denervation. In this relation the content of these substances in deafferentiated and deefferentiated muscles was investigated. It remained to be determined, which of the eliminated fibres of the nervus ischiadicus effect the quantity modifications of carnosine and anserine in the denerved muscles. For the experiments grown up cats even used; the rear roots of the spinal marrow of these cats were disjoined and the ganglia L_5 to S_2 (sometimes L_4) = deafferentiation, were removed. Unilateral disjunction of the front roots from L_5 to S_2 (sometimes L_4) caused the deefferentiation. For the investigation the calf-foot-muscles of the operated limbs were used, the

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The Effect of Deafferentation and Deeferentation of a Muscle Upon the Level of Carnosine and Anserine Contained.

20-2-44/67

muscles symmetrical to these served as a means of control.The carnosine and anserine content was ascertained in the 3-chlorine-acetric-acid extraction by means of the distribution chromatographic method on paper.The deafferentiation of the muscles leads to a slight (18%) decrease of the carnosine content.Anserine content is apparently dependent on still smaller fluctuations.In the case of a deefferentiation, the carnosine content decreases about a fortnight after the operation until it disappears entirely after 36 days. In spite of this no histidene is found in muscles.Opposing results are found for the anserine content on the occasion of deefferentiation.After a fortnight it increases and remains increased until the 6oth day. From the contrast of the results of the authors with the data from publications it becomes obvious that the fluctuations of carnosine and anserine content after a muscle-denervation depend practically only on the elimination of motoric fibres. Thsu the disjunction of the rear roots of the spinal marrow together with the removal of the spinal marrow ganglia in the case of cats leads to an unessential decrease of the carnosine content; anserine content practically remains unchanged.The disjunction of the front roots ofthe spinal marrow causes a decrease and later even thedisappearance of carnosine content.Anserine content increases andremains increased until the 6oth day after the operation.

Card 2/3

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S. Ye.

"Mechanism of Carnosine and Anserine Effect on Glycolitic and Oxidative Phosphorylation."

Severin, Sergey - Moscow State Univ., Chair of Animal Biochem.

paper presented at the 4th Intl. Congress of Biochemistry, Vienna, 1-6 Sep 58.

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SEVERIN, S.E.

BAKULEV, A.N., akad., glavnyy red.; ANICHKOV, N.N., red.; BOLDYREV, T. Ye., red.; BRUSILOVSKIY, L.Ya., prof., red.; BYKOV, K.M., red.; VASILENKO, V.Kh., red.; GRASHCHENKOV, N.I., prof., red.; DAVYDOVSKIY, I.V., red.; ZDRODOVSKIY, P.F., red.; KAVETSKIY, R.Ye., red.; KOCHERGIN, I.G., red.; KROTKOV, F.G., red.; KUPRIYANOV, P.A., red.; LEBEDINSKIY, A.V., red.; MALINOVSKIY, M.S., red.; MAN'KOVSKIY, B.N., red.; NESTEROV, A.I., red.; ORBELI, L.A., red.; PAVLOVSKIY, Ye.N., red.; SEVERIN, S.E., red.; SKRYABIN, K.I., red.; SMIRNOV, Ye.I., red.; TIMAKOV, V.D., prof., red.; TUR, A.F., red.; SHABANOV, A.N., prof., red.

[Great Medical Encyclopedia] Bol'shaia meditsinskaia entsiklopedia. Izd. 2. Moskva, Gos. nauchnoe izd-vo "Bol'shaia sovetskaia entsiklopediia." Vol. 7. [Gynatresia -burning. 1958. 1120 columns] Ginatreziia-gorenie. [Phonograph record to accompany the article "Golos"(voice of laryngectomees)] Grammofonnaia plastinka k stat'e "Golos"(golos liaringektomirovannykh bol'nykh), [Three-dimensional viewer] Ochki-svetofil'try. (MIRA 11:12)

(MEDICINE--DICTIONARIES)

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BAKULEV, A.N., glavnyy red.; ANICHKOV, N.N., red.; BOLDYREV, T.Ye., red.; BRUSILOVSKIY, L.Ya., red.; BYKOV, K.M., red.; VASILENKO, V.Kh., red.; GRASHCHENKOV, N.I., red.; DAVYDOVSKIY, I.V., red.; ZDRODOVSKIY, P.F., red.; KAVETSKIY, P.Ye., red.; KOCHERGIN, N.G., red.; KROTKOV, F.G., red.; KUPRIYANOV, P.A., red.; LEBEDINSKIY, A.V., red.; MALINOVSKIY, M.S., red.; MAN'KOVSKIY, B.N., red.; NESTEROV, A.N., red.; ORBELI, L.A., red. PAVLOVSKIY, Ye.N., red.; SEVERIN, S.Ye., red.; SKRYABIN, K.I., red.; SMIRNOV, Ye.I., red.; TIMAKOV, V.D., red.; TUR, A.F., red.; SHABANOV, A.N., red.; GRISHINA, L.A., tekhn. red.

[Great Medical Encyclopedia] Glav. red. A.N. Bakulev. Chleny red. kollegii N.N. Anichkov i dr. Moskva, Gos. izd-vo med. lit-ry. Vol.6. Vul'va - Ginantrop. Izd.2. 1958. 1184 columns. (MIRA 11:9)
(Medicine—Dictionaries)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

BAKULEV, A.N., glav. red.; ANICHKOV, N.N., red.; BOLDYREV, T.Ye., red.; BRUSILOVSKIY, L.Ya., red.; BYKOV, K.M., red.; VASILENKO, V.Kh., red.; VINOGRADOV, N.A., red.; GRASHCHENKOV, N.I., red.; DAVYDOVSKIY, I.V., red.; ZDRODOVSKIY, P.F., red.; KAVETSKIY, P.Ye., red.; KOCHERGIN, I.G., red.; KROTKOV, F.G., red.; KUPRIYANOV, P.A., red.; LEBEDINSKIY, A.V., red.; MALINOVSKIY, M.S., red.; MAN'KOVSKIY, B.N., red.; NESTEROV, A.I., red.; ORBELI, L.A., red.; PAVLOVSKIY, Ye.N., red.; SEVERIN, S.Ye., red.; SKRYABIN, K.I., red.; SMIRNOV, Ye.I., red.; TIMAKOV, V.D., red.; TUR, A.F., red.; SHABANOV, A.N., red.; KALINICHEV, V.A., tekhn. red.

[Great medical encyclopaedia] Bol'shaia meditsinskaia entsiklopediia. ___[Phonograph record to accompany the article on "Congenital heart disease"] Grammofonnaia plastinka soderzhit zapis' zvukovykh iavlenii k stat'e "Vrozhdennye poroki serdtsa." Glav. red. A.N.Bakulev. Chleny red. kollegii N.N. Anichkov i dr. Izd.2. Moskva, Gos. izd-vo med. lit-ry. Vol.5. Vezikula - Vulkanizatsiia. 1958. 1248 columns.
(MEDICINE--DICTIONARIES) (MIRA 11:7)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN S.

OREKHOVICH, V.N.; BYCHKOV, S.M.; DEBOV, S.S.; MARDASHEV, S.R.; SEVERIN, S.Ye.

Second International Congress on Clinical Chemistry. Vest.AMN SSSR 13 no.2:62-74 '58. (MIRA 11:3)
(CHEMISTRY, MEDICAL AND PHARMACEUTICAL)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

4123. EFFECTS OF THE DIPEPTIDES ANSERINE AND CARNOSINE ON OXIDATIVE PHOSPHORYLATION IN ISOLATED MITOCHONDRIA OF THE PECTORAL MUSCLE OF THE PIGEON (Russian text) - Severin S.E. and Yu Hu-Yu. Fac. of Biol., Moscow State Univ. - BIOKHIMIYA 1958, 23/6 (862-868) Graphs 2 Tables 5

α-Ketoglutaric acid was used as substrate and yeast hexokinase and glucose as the phosphate-accepting system. Addition of anserine to the suspension of freshly isolated mitochondria did not affect the oxygen uptake or the binding of mineral phosphate. Exposure of mitochondria to room temperature (aging) for 20, 40 and 60 min. resulted in a drastic reduction of the P/O coefficient and in swelling of the mitochondria. Addition of anserine and carnosine to the salt solution in which aging of the mitochondria took place greatly inhibited the aging effect, that is to say maintained phosphate demineralization at a high level and hence prevented the reduction of the P/O coefficient. The maintenance of phosphorylation in mitochondria at a high level does not depend on the buffering capacity of the dipeptides, nor can it be attributed to a lesser rise of ATPase activity in aged mitochondria in the presence of anserine. Histidine and β-alanine do not exhibit any such effect as the dipeptides in question.

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SEVERIN, S.Ye.; VEY-MIN' [Wei-Min]

Conversion of β-alanine in vivo and in the isolated liver. Biul. eksp. biol. i med. 46 no.11:51-55 N '58. (MIRA 12:1)

1. Is kafedry biokhimii zhivotnykh Moskovskogo gosudarstvennogo universiteta (zav. - deystvitel'nyy chlen AMN SSSR S. Ye. Severin).
(ALANINE, metab.
β-alanine, conversion in vivo & in isolated liver (Rus))

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SOV/20-120-2-40/63

AUTHORS: Severin, S. Ye., Corresponding Member, Academy of Sciences, USSR, U Vey-min'

TITLE: Conversions of β-Alanine in the Renal Tissue of Rats (Prevrashcheniya β-alanina v pochechnoy tkani krys)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 120, Nr 2, pp.364-367 (USSR)

ABSTRACT: The enzymatic decomposition of β-alanine had several times been investigated. Part of the authors came to the conclusion that this substance in the renal tissue is not subject to deamination (Refs 2, 3). But others (Refs 4 - 8) proved that the addition of β-alanine to sections or to pulp of renal periderm of rats and rabbits leads to an excessive ammonia formation and oxygen absorption. A survey of publications is given (Refs 5 - 13). The formation mechanism of ammonia at the expense of the added β-alanine, however, remained undetermined. The present paper is devoted to this problem. The method is described. In the first series of experiments ammonia and amino acids were determined. The authors and others (Refs 5 - 8) proved that the excessive ammonia at the ex-

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pense of β-alanine is only produced after 4o minutes of incubation. Under anaerobic conditions no ammonia forms, not even within 4 hours of incubation. But by means of the method of chromatography it was possible to observe an excessive formation of β-alanine and of glutamic acid after 2o minutes of incubation in an O_2- or N_2-atmosphere. At the same time β-alanine disappears (Table 1, Figure 1). The excessive formation of α-amino acids and of ammonia at the expense of β-alanine can be explained in different manners: 1) β-alanine is in the renal tissue subject to an oxidative deamination; then α-amino-acids form at the expense of the liberated ammonia due to amination and subsequent hyperamination. 2) α--amino-acids, which are then deaminated under the formation of ammonia, are directly formed of β-alanine by hyperamination. 3) Both processes take place simultaneously. In order to determine which of these 3 courses is actually taken, the authors made experiments with the inhibition of aminopherases. Hydroxylamine ($1o^{-3}$M) completely inhibited the formation of ammonia at the expense of β-alanine. On this occasion almost no amino acids formed (Figures 2, A and V). The hyperamination process of β-alanine and the formation of excessive ammonia

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SOV/ 2o-12o-2-4o/63

Conversions of β-Alanine in the Renal Tissue of Rats

were also suppressed. The experimental results speak in favor of the second hypothesis. An additional confirmation of this hypothesis was obtained with the renal pulp of rats poisoned by ING. From the above-mentioned results follows that the first stage of β-alanine transformation in the renal pulp of rats is the process of its hyperamination with preformed or added α-ketonic acids. The formation of ammonia is the result of a subsequent deamination of the α-amino-acids accumulating on this occasion. There are 3 figures, 1 table, and 19 references, 8 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: January 2o, 1958

1. Alanines—Decomposition 2. Chromatographic analysis —Applications 3. Tissues(Biology)—Biochemistry 4. Kidneys —Biochemistry

Card 3/3

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SOV/ 20-120-6-42/59

AUTHORS: Severin, S. Ye., Corresponding Member, Academy of Sciences, USSR; Wu, Wei-min

TITLE: The Mechanism of Transformation of β-Alanine in the Renal Tissue of Rats (Mekhanizm prevrashcheniya β-alanina v pochechnoy tkani krys)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 120, Nr 6, pp. 1314-1317 (USSR)

ABSTRACT: It was found in an earlier work (Ref 1) that the formation of NH_2 in the mentioned tissue takes place from added β-alanine by its reamination with a following deamination of the formed α-amino acids. In the present paper the mechanism of this process is discussed. A paste from the renal cork layer was used for the experiment. 300 mg of it were introduced into 1,7 ml of a phosphate-salt-mixture without calcium ions (Ref 2). The test sample contained 20 μ mols β-alanine. The rats were prepared for the experiment by being poisoned with isonicotyl hydrazide (INH) (Ref 3). In the course of an incubation period of 4 hours in an oxygen atmosphere no ex-

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SOV/ 20-120-6-42/59

The Mechanism of Transformation of β-Alanine in the Renal Tissue of Rats

cess amount of ammonia was formed at the expense of β-alanine. In the control samples 9 mols of excess ammonia were accumulated within the same period (Ref 1). In the control an excess amount of α-alanine and of glutamic acid was found, which had formed at the expense of the added β-alanine. In the test sample only an excess of α-alanine was found (Figs 1, 2). These facts indicate that during the incubation β-alanine transfers its amino-group to the pyruvate contained in the tissue. The α-alanine that forms reacts under the participation of the glutamic pyruvate transamination with the α-ketoglutaric acid under formation of glutamic acid; the latter is deaminated in an γ-O_2-atmosphere. If INH is introduced into the rats the reamination process between α-alanine and α-ketoglutaric acid in the renal tissue is suppressed. Due to this fact no excess glutamic acid forms at the cost of the added β-alanine and thus, no excess ammonia is accumulated. In order to confirm this allegation experimentally the authors carried out 4 test series: I) Reamination between β-alanine and pyruvate as well as between β-alanine and ketoglutaric acid. Table 1 shows that the expected results were obtained. II) Checking of the activity of the glutamic-

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SOV/ 2o-12o-6-42/59

The Mechanism of Transformation of β-Alanine in the Renal Tissue of Rats

-pyruvate-transamination. The test results proved to be in favor of the suggested hypothesis. III) Oxydative deamination of the glutamic acid. IV) Influence of INH on the cleavage of the β-alanine in vitro. The results are given on Tables 3 and 4. On the basis of the results obtained a cleavage mechanism of β-alanine in the renal tissue of rats is suggested (the scheme is given). There are 2 figures, 4 tables, and 5 references, 4 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvenny universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: March 13, 1958

1. Alanines--Chemical reactions 2. Hydrazines--Chemical reactions 3. Hydrazines--Physiological effects 4. Tissues (Biology)--Chemical properties 5. Kidneys--Physiology

Card 3/3

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

AUTHORS: Severin, S. Ye., Corresponding Member, Academy of Sciences, USSR, Nagradova, N. K.

SOV/20-121-3-34/47

TITLE: Characteristic Features in the Action of Dehydrase of Phosphoglycerin Aldehyde (Ob osobennostyakh deystviya degidrazy fosfoglitserinovogo al'degida)

PERIODICAL: Doklady Akademii nauk SSSR, Vol. 121, Nr 3, pp. 519 - 522 (USSR)

ABSTRACT: Among all factors determining the velocity of the enzymic reaction those effects which influence the suppression or the activation of the ferment are most important. We know from publications that not only substances of non-physiological nature (poisons, various synthetical compounds) but also natural transformation products may act as inhibitors. The effect of those natural products may be used to regulate the velocity of biochemical processes. The authors noticed that the activity of the dehydrase PGA depends to a great extent on the type of buffer used in connection with the reaction of the glycolytic oxide reduction. The glycine buffer had the most favorable effect on the ferment. In the veronal- and phosphate buffer the dehydrase

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was suppressed. This suppression could be eliminated by the addition of amino acids and dipeptides. The reaction in the bicarbonate buffer which contained different amounts of phosphate enabled the authors to find out that the bicarbonate buffer suppresses the dehydrase PGA. This problem is treated in detail in the paper. The authors used a bicarbonate phosphate buffer without special activators; they did use, however, redistilled water. Table 1 A shows that the reaction depends on the concentration of inorganic phosphate. The impression is gained that higher phosphate concentrations bind the active dehydrase centers and thus prevent the reaction. An addition of histidine leads to the release of any reactive groups. Thus there is an increase of the enzymic activity and subsequently the amount of organic phosphorus, necessary for the reaction. The activating effect of the amino acid does not completely eliminate the inhibiting effect of phosphorus. Its importance may lie in the protection of dehydrase against the action of other inhibitors. As can be seen from figure 1, a part of this action apparently consists of interaction between phosphate, histidine and the active dehydrase centers. Various amino acids have different protecting

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effects. Furthermore, the nature of the mentioned inhibition was determined. Figure 3 shows that competitive reactions between the reaction substrate and the phosphate exist. The higher the substrate concentration the stronger the inhibition. Apparently phosphoglycerin aldehyde competes with phosphate for the possession of some active centers in the protein. The activating affect of the amino acids may be due to the protection of those centers against phosphate and to the guarantee of a more rapid interaction between ferment and substrate. Figure 4 reveals that the effect of the amino acids decreases with increasing concentration of phosphoglycerin aldehyde. There are 4 figures and 15 references, 1 of which is Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im.M.V.Lomonosova (Moscow State University imeni M.V.Lomonosov)

SUBMITTED: January 22, 1958

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S.Ye.; VUL'FSON, P.L.

Nitrogenous extractives in fish muscles. Biokhimiia 24 no.6: 1002-1009 N-D '59. (MIRA 13:5)

1. Chair of Animal Biochemistry, the State University, Moscow.
(NITROGEN)
(FISH)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S.Ye. (Moskva)

Synthesis and utilization of high-energy phosphorus compounds in the muscle tissue under normal conditions and in certain pathological states. Usp.sovr.biol. 48 no.2:123-135 S-O '59. (MIRA 13:3)
(MUSCLES metab.)
(PHOSPHATES metab.)

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

17(3) SOV/20-128-3-54/58

AUTHORS: Severin, S. Ye., Corresponding Member AS USSR, Skulachev, V. P., Kiselev, L. L.

TITLE: Regulation of Phosphorylating and Nonphosphorylating Oxidation by Hexokinase

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 128, Nr 3, pp 628-631 (USSR)

ABSTRACT: Two types of biological oxidation reactions as mentioned in the title are distinguished (Refs 1-4). This phenomenon - generally called phenomenon of two oxidation ways in the respiratory chain - enforces the revision of several experiments, particularly the application of hexokinase and glucose - a system accepting the powerful phosphate (~P) which is formed in phosphorylating oxidation. The present paper investigates the effect of hexokinase and glucose on the interrelation of the two oxidation ways mentioned in the title. The paper is divided into 2 sections: (1) Change-over to phosphorylating oxidation. The oxidation and phosphorylation of mitochondria in the liver of pigeon were

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measured according to the method of reference 5. The dependence of oxidation and phosphorylation on the quantity of hexokinase in the reaction mixture is shown in figure 1. Hence it appears that hexokinase stimulates both processes. This respiratory stimulation (first proved by V. A. Engel'gardt and V. A. Belitser) disappears completely if the phosphorus and the adenyl system are excluded from the incubation mixture. Figure 2 shows the dynamics of ΔP and ΔO at the change in the hexokinase quantity from 0 to 0.2 units, i.e. the initiation of phosphorylating oxidation as a complement to the nonphosphorylating one. (2) Change - over to nonphosphorylating oxidation. The results compiled in table 1 show that a preincubation with hexokinase and glucose without oxidation substratum makes possible the determination of the ability of a hexokinase excess of initiating nonphosphorylating oxidation. Table 2 shows the interrelation of phosphorylating and nonphosphorylating oxidation in dependence on the activity of the system accepting $\sim$P. The results obtained lead to the conclusion that the acceptor system hexokinase-glucose cannot be regarded as a

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Regulation of Phosphorylating and Nonphosphorylating Oxidation by Hexokinase SOV/20-128-3-54/58

"passive trap of macroerga" (powerful compounds). On the other hand, it is a regulator for the ratio of the two oxidation types mentioned. According to the concentration, it exerts 2 opposite kinds of effect on the coupling degree of oxidation and phosphorylation. The "switching" capacity of hexokinase, appearing under certain conditions, might play a part in the regulation of glycolysis and oxidative phosphorylation by this ferment in vivo (according to V. S. Il'in and co-worker, Refs 9, 10). There are 3 figures, 2 tables, and 10 references, 5 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: June 23, 1959

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APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

PARNAS, Yakov [Yakub-Karl] Oskarovich, akademik [deceased]; DZBANOVSKAYA, A.Ye. [translator]; ROZENGARD, V.I. [translator]; TOLKACHEVSKAYA, N.F. [translator]; STEPANENKO, B.N., otv.red.; BRAUNSHTEYN, A.Ye., red.; KOTEL'NIKOVA, A.V., red.; SEVERIN, S.Ye., red.; ENGEL'GARDT, V.A., red.; KOLPAKOVA, Ye.A., red.izd-va; POLENOVA, T.P., tekhn.red.

[Selected works] Izbrannye trudy. Moskva, Izd-vo Akad.nauk SSSR, 1960. 491 p. (MIRA 13:8)

(BIOCHEMISTRY)

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

S/020/60/131/06/62/071
B011/B005

AUTHORS: Severin, S. Ye., Corresponding Member AS USSR, Skulachev, V. P., Maslov, S. P., Benediktov, I. I., Shestakov, V. G.

TITLE: A Thermoregulatory Separation Between Respiration and Phosphorylation

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 131, No. 6, pp. 1447 - 1450

TEXT: There are 2 ways of oxidation in the respiratory system: a) a phosphorylating way, and b) a way independent of phosphorylation. The functional role of the way which is not connected with the formation of energy-rich phosphates has not yet been clarified. In their paper, the authors studied the oxidative mechanism of the maintenance of a constant body temperature of a warm-blooded animal (pigeon) under a short action of cold. The oxidative phosphorylation was measured on mitochondria of the musculus pectoralis and the liver by the methods of Ref. 9 (with the cooperation of L. L. Kiseleva). The intensity of oxidation in vivo was determined by the oxygen consumption of the pigeon (for methods see Ref. 18). The feathers of the test pigeons were removed and kept for 10-180 min in a cooling chamber at -15°. If the pigeon was kept for a while at about 15° before the

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A Thermoregulatory Separation Between Respiration and Phosphorylation

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B011/B005

test, a progressive hypothermia of the body occurred after 10-20 min already. Pigeons coming from an unheated room in winter endured - even without feathers - the cooling for many hours maintaining their body temperature at 40°. With pigeons kept in the warm, this ability could be developed artificially. This was possible by cooling a pigeon down to +30-35°, then interrupting the further cooling. A pigeon treated in this way kept its temperature of 40° for several hours in the cooling chamber after 1-2 days. Fig. 1 shows a typical experiment. The investigation of such pigeons showed a rapid stimulation of oxygen consumption in cooling. The coefficient P/O (ratio between phosphorylating and nonphosphorylating oxidation), measured on mitochondria of pigeons cooled once more (Table 1), showed that the first cooling of about 15-25 min led to hypothermia, whereas in the second cooling of 2.5 hours (2 days after the first one) the pigeon remained at about 40°. Table 1 shows that oxidation in the muscle is directed in such a manner that it takes place in the nonphosphorylating way: P/O is reduced to 10/57. This investigation was carried out by Yan Fu-yuy in the authors' laboratory. Table 2 shows that oxidation was nearly fully separated from phosphorylation in a cold-trained pigeon which was cooled once more. In a pigeon cooled for the first time, the coupling of oxidation to phosphorylation is widely maintained while the body temperature decreases. Such birds die of

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

A Thermoregulatory Separation Between Respiration and Phosphorylation

S/020/60/131/06/62/071
B011/B005

hypothermia in the cooling chamber within 20-40 min. Trained pigeons stand it for several hours. The mentioned passing over simplifies considerably the respiratory function in the maintenance of body temperature. The separation of one type of oxidation from the other one forms, besides the increased O_2 consumption, a mechanism of urgent mobilization of heat. The rapidity of this separation indicates a perfect mechanism of thermoregulatory passing over of the oxidation ways within the muscles. The P/O ratio is supposed to be determined by the interaction of 2 opposite systems: a coupling and a separating system. The problem is being further investigated. There are 2 figures, 2 tables, and 18 references, 8 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: January 23, 1960

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

PARNAS, Yakov Oskarovich, akademik [deceased]; DZBANOVSKAYA, A.Ye. [translator]; ROZENGARD, V.I. [translator]; TOLKACHEVSKAYA, N.F. [translator]; STEPANENKO, B.N., otv.red.; BRAUNSHTEYN, A.Ye., red.; KOTEL'NIKOVA, A.V., red.; SEVERIN, S.Ye., red.; ENGEL'GARDT, V.A., red.; KOLPAKOVA, Ye.A., red.izd-va; POLYNOVA, T.P., tekhn.red.

[Collected works] Izbrannye trudy. Moskva, Izd-vo Akad.nauk SSSR, 1960. 491 p. (MIRA 13:7)
(NITROGEN--ANALYSIS) (NAPHTHOQUINONE) (BIOCHEMISTRY)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S.Ye.; YAN FU-YUY [Yang Fu-Yü]

Oxidative phosphorylation in thyrotoxicosis. Biokhimiia 25 no.5: 855-864 S-O '60. (MIRA 14:1)

1. Chair of Animal Biochemistry, State University, Moscow.
(HYPERTHROIDISM) (PHOSPHORYLATION)
(OXIDATION, PHYSIOLOGICAL)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S.Ye.; SKULACHEV, V.P.; KISELEV, L.L.; MASLOV, S.P.

Phosphorylating and nonphosphorylating oxidation in growing muscles. Dokl. AN SSSR 134 no.6:1468-1471 O '60. (MIRA 13:10)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova. Chlen-korrespondent AN SSSR (for Severin).
(OXIDATION, PHYSIOLOGICAL) (PHOSPHORYLATION)
(MUSCLE)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S.YE., VULFSON, P. L., MESHKOVA, N. P., SHESTAKOV, S. V. (USSR).

Effect of Carnosine and Anserine Dipeptides on the Metabolism of Skeletal Muscle.

report presented at the 5th Int'l.
Biochemistry Congress, Moscow, 10-16 Aug. 1961

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, Sergey Yevgen'yevich; VINETSKIY, Yu.P., nauchnyy red.; ~~SHUSTOVA, I.B., red.;~~ RAKITIN, I.T., tekhn. red.

[Biochemical principles of life] Biokhimicheskie osnovy zhizni. Moskva, Izd-vo "Znanie," 1961. 45 p. (Narodnyi universitet kul'tury. Estestvennonauchnyi fakul'tet, no.27) (MIRA 15:3)

1. Chlen-korrespondent Akademii nauk SSSR (for Severin)
(Life--Origin) (Biochemistry)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S.Yo.

Energy metabolism of the heart and its disorders in coronary insufficiency. Kardiologiia 1 no.2:3-13 Mr-Ap '61. (MIRA 15:1)

1. Deystvitel'nyy chlen AMN SSSR.
(CORONARY HEART DISEASE)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S.Ye., prof.

Transformation of energy in the body. Zdorov'e 7 no. 2:9-11 F '61. (MIRA 14:2)

1. Chlen-korrespondent AN SSSR.
(METABOLISM) (ADENOSINETRIPHOSPHORIC ACID)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

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SEVERIN, S.Ye.; TSEYTLIN, L.A.

Anaerobic conversion of carbohydrates in myocardial tissues under normal conditions and in experimental myocarditis. Vop. med. khim. 7 no.2:201-208 Mr-Ap '61. (MIRA 14:6)

1. Institute of Pharmacology and Chemotherapy, Academy of Medical Sciences of the U.S.S.R., Moscow.
(HEART—MUSCLE) (CARBOHYDRATE METABOLISM)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S.Ye.; ZUBOVSKAYA, A.M.

Aldolase activity of the cardiac mitochondria in rabbits.
Vop. med. khim. 7 no.4:443-444 Jl-Ag '61. (MIRA 15:3)

1. Institute of Pharmacology of the U.S.S.R. Academy of Medical Sciences.
(HEART) (ALDOLASE) (MITOCHONDRIA)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

VYALYKH, M.F.; SEVERIN, S.Ye.

Labile phosphorus compounds in the cardiac muscle of a rabbit affected with aortic stenosis. Dokl. AN SSSR 136 no.2:483-486 '61. (MIRA 14:1)

1. Institut farmakologii i khimioterapii Akademii meditsinskikh nauk SSSR. 2. Chlen-korrespondent AN SSSR (for Severin).
(HEART--MUSCLE) (GREATINEPHOSPHORIC ACID)
(AORTA--DISEASES)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S.Ye.; SHESTAKOV, S.V.

Properties of pyruvic dehydrogenase from skeletal muscles. Dokl. AN SSSR 140 no.6:1452-1455 O '61. (MIRA 14:11)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
2. Chlen-korrespondent AN SSSR (for Severin).
(Pyruvic dehydrogenase)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S. YE.

10

SEVERIN, Sergey Yevgen'yevich, Institute of Pharmacology and Chemotherapy, Academy of Medical Sciences, Moscow; VUL'FSON, N. S. (possibly P.L. VUL'FSON, Chair, Animal Biochemistry, Moscow State University (1959 position)]- "The importance of karnosis in neurotrophic relations" Session I

SHAMARINA, N. N., Physiological Laboratory, Academy of Sciences USSR, Moscow - "Effect of tetanic stimulation on different muscle fibers" II-2-b

Probably N.M!

STUDITSKIY, Aleksandr Nikolayevich, ZHENEVSKAYA, R. P., and RUMYANTSEVA, O.N., all of the Institute of Animal Morphology imeni A. N. Severtsov, Academy of Sciences USSR, Moscow - "Neurotrophic influence in recovery of structure and function of regenerating muscle" I

TELEPNEVA, V. I., Chair, Animal Biochemistry, Moscow State University, Moscow - "Changes in muscle following denervation" Session II-2-a

YAKOVLEV, N. N., KRASNOVA, A. F., and CHAGOVETS, N.R., all of the Leningrad Scientific Research Institute, Institute of Physical Culture, Leningrad - "Adaptation of energy metabolism in muscle" Session II-2-b

report to be submitted for the Symposium on the Effects of Use and Disuse on Neuromuscular Functions (IUPS), Prague-Liblice, Czech, 18-24 Sep 1962.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SKULACHEV, Vladimir Petrovich; SEVERIN, S.Ye., prof., otv. red.; LIVANOVA, N.B., red. izd-va; GUSEVA, A.P., tekhn. red.

[Relationship between oxidation and phosphorylation in the respiratory chain] Sootnoshenie okisleniia i fosforilirovaniia v dykhatel'noi tsepi. Moskva, Izd-vo Akad. nauk SSSR, 1962. 155 p. (MIRA 15:7)

1.Chlen-korrespondent Akademii nauk SSSR (for Severin).
(Respiration) (Oxidation) (Phosphorylation)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

STEPANENKO, B.N., otv. red.; SEVERIN, S.Ye., red.; DEREVITSKAYA, V.A., red.; ROZENFEL'D, Ye.L., red.; KUZNETSOV, A.A., red.; PARNES, Ya.A., red.izd-va; MAKAGONOVA, I.N., tekhn. red.

[Carbohydrates and carbohydrate metabolism]Uglevody i uglevodnyi obmen; materialy. Moskva, Izd-vo Akad. nauk SSSR, 1962. 335 p. (MIRA 16:1)

1. Vsesoyuznaya konferentsiya po probleme "Khimiya i obmen uglevodov."2d, Moscow, 1961. 2. Institut biokhimii im. A.N. Bakha Akademii nauk SSSR (for Stepanenko). 3. Institut biologicheskoy i meditsinskoy khimii Akademii meditsinskikh nauk SSSR (for Rozenfel'd).

(CARBOHYDRATE METABOLISM)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S.Ye.; TSEVELIN, L.A.

Characteristics of glycolytic oxidation-reduction in myocardial extracts. Vop. med. khim. 8 no.6:611-616 N-D '62. (MIRA 17:5)

1. Institut farmakologii i khimioterapii AMN SSSR, Moskva.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S.Ye.

Role of the processes of anaerobic and oxidative phosphorylation in the protictive functions of the body. Vest.AMN SSSR 17 no.5:93-101 '62. (MIRA 15:10)

(IMMUNITY) (PHSOPHORYLATION)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S.Ye.; LYU SHU-SEN' [Liu Shu-sen]

Biosynthesis of acetylcholine in the nervous and muscle tissue of insects. Biokhimiia 27 no.6:1085-1091 N-D '62. (MIRA 17:5)

1. Kafedra biokhimii zhivotnykh gosudarstvennogo universiteta imeni Lomonosova, Moskva.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S. Ye.; SKULACHEV, V. P.; SIVKOVA, V. G.; MASLOV, S. P.

Separation of oxidation and phosphorylation at the cessation of the hypothermal state. Dokl. AN SSSR 147 no.6:1489-1492 D '62. (MIRA 16:1)

1. Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova.
2. Chlen-korrespondent AN SSSR (for Severin).

(Phosphorylation) (Oxidation) (Hypothermia)

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S.Ye.; VUL'FSON, P.L.; TRANDAFILOVA, L.L.

Carnosine content in different parts of frog muscles. Dokl.AN SSSR 145 no.1:215-217 Jl '62. (MIRA 15:7)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
2. Chlen-korrespondent AN SSSR (for Severin).
(CARNOSINE) (MUSCLE)

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B144/B186

AUTHORS: Severin, S. Ye., Corresponding Member AS USSR, Skulachev, V. P., Sivkova, V. G., Maslov, S. P.

TITLE: Separation of oxidation and phosphorylation in the warming-up period after hypothermia

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 147, no. 6, 1962, 1489 - 1492

TEXT: Oxidation and phosphorylation were studied in the mitochondria of the pectoralis muscle of doves. The doves were cooled for 1.5 hr to -17°C, then left at room temperature to warm up to 38°C, and killed. The methods of separating mitochondria and measuring the oxidation and phosphorylation were described earlier (Sootnosheniye okisleniya i fosforilirovaniya v dykhatel'noy tsepi (Interrelations of oxidation and phosphorylation in the respiratory chain), Izd. AN SSSR, 1962; Biokhimiya, 25, 1058 (1960)). The tests showed that exclusion of phosphorylation does not affect the oxidation rate of succinic acid, but reduces markedly that of maleic acid owing to the loss in DNP in the mitochondria. The reduction in optical density from 6.9 to 5.2 and of the oxidation rate ratio between maleic and succinic acids from 0.88 to 0.21 indicate the structural change occurring

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MASLOV, S.P. Prinimali uchastiye: MALKOVA, M.G.; KOSAREVA, Ye.A.; SISAKYAN, N.M., akademik, glav. red.; BAYEV, A.A., zam. glav. red.; SEVERIN, S.Ye., red.toma; VETROVA, I.B., red. izd-va; GUSEVA, A.P., tekhn. red.

[Intracellular respiration: phosphorylating and nonphosphorylating oxidation reactions; symposium V]Vnutrikletochnoe dykhanie: fosforiliruiushchie i nefosforiliruiushchie reaktsii okisleniia; simpozium V. Moskva, Izd-vo Akad. nauk SSSR, 1962. 439 p. (Its Trudy) (MIRA 16:3)

1. International Congress of Biochemistry. 5th, Moscow, 1961.
2. Chlen-korrespondent Akademii nauk SSSR (for Severin).

(CELL METABOLISM) (PHOSPHORYLATION)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S.Ye.; TSEYTLIN, L.A.; DRUZHININA, T.N.

Enzymatic breakdown of diphosphopyridine nucleotide in the homogenates of cardiac and skeletal musculature. Biokhimiia 28 no.1:145-151 Ja-F '63. (MIRA 16:4)

1. Laboratory of Biochemistry, Institute of Pharmacology and Chemotherapy, Academy of Medical Sciences, Moscow.
(CODEHYDROGENASE) (MUSCLE)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S. Ye.

"Problems of the Biological Activity of Natural Imidazole Compounds."

report to be presented at the 6th Intl. Cong on Biochemistry, New York City, 26 Jul-1 Aug 1964.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S.Ye.; LYU SHU-SEN' [Liu Shu-sên]

Biosynthesis of acetylcholine. Usp.biol.khim. 5:151-170 '63.
(MIRA 17:3)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S.Ye.; BOCHARNIKOVA, I.M.; VUL'FSON, P.L.; GRIGOROVICH, Yu.A.; SOLOV'YEVA, G.A.

Biological role of carnosine. Biokhimiia 28 no.3:510-516 My-Je '63. (MIRA 17:2)

1. Chair of Animal Biochemistry, State University, Moscow.

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S.Ye.

Symposium on the Molecular Physiology of the Cell in Berlin.
Vest. AN SSSR 33 no.11:97-99 N '63. (MIRA 17:1)

1. Chlen-korrespondent AN SSSR.

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S.Ye.

Biochemical Conference in the German Democratic Republic.
Vest. AN SSSR 34 no. 2:82-83 F '64. (MIRA 17:5)

1. Chlen-korrespondent AN SSSR.

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S.Ye.; KONDRASHOVA, M.N.; NIKOLAYEVA, L.V.

ADP-like effect of k-strophanthin on sarcosome respiration. Vop. med. Khim. 9 no. 3:319-321 My-Je '63. (MIRA 17:9)

1. Institut farmakologii i khimioterapii AMN SSSR i kafedra biokhimii zhivotnykh Moskovskogo gosudarstvennogo universiteta imeni Lomonosova.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SISAKYAN, Norayr Martirosovich, akademik; SEVERIN, Sergey Yevgen'yevich; PARIN, Vasiliy Vasil'yevich; EL'PINER, Isaak Yefimovich, doktor biol. nauk; KUZIN, Aleksandr Mikhaylovich; ISAYEV, I.B.; SOROKO, Ya.I., red.

[Biology and its allies] Biologiia i ee soiuzniki; sbornik. Moskva, Izd-vo "Znanie," 1964. 77 p. (Novoe v zhizni, nauke, tekhnike. VIII Seriia: Biologiia i meditsina, nos.17-18) (MIRA 17:10)

1. Deystvitel'nyy chlen AMN SSSR (for Severin, Parin). 2. Chlen-korrespondent AN SSSR (for Kuzin).

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BUZNIKOV, G.A.; VERZHBINSKAYA, N.A.; MANOYLOV, S.Ye.; NEYFAKH, S.A.; POGIAZOV, B.F ; SEVERIN, S.Ye.

International symposium on molecular cellular physiology in Berlin and the annual meeting of biochemists in Jena. Vop. med. khim. 10 no.1:95-103 Ja-F '64.

(MIRA 17:12)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S.Ye.; TSEYTLIN, L.A.

Enzymatic degradation of diphosphopyridine nucleotide (DPN) in heart muscle homogenates in experimental myocarditis. Vop.med.khim. 10 no.3:300-305 My-Je '64. (MIRA 18:2)

1. Laboratoriya biokhimii Instituta farmakologii i khimioterapii AMN SSSR, Moskva.

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S.Ye.; GLEMZHA, A.A.

Effect of imidazole derivatives on pyruvic dehydrogenase in the muscle tissue. Biokhimiia 29 no.6:1170-1176 N-D '64. (MIRA 18:12)

1. Kafedra biokhimii zhivotnykh biologo-pochvennogo fakul'teta Gosudarstvennogo universiteta imeni M.V.Lomonosova, Moskva. Submitted June 24, 1964.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S.Ye. (Moskva)

Problem of the biological activity of natural compounds of imidazole. Usp. sovr. biol. 59 no.2:165-186 Mr-Ap '65. (MIRA 18:4)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S.Ye.; TSEYTLIN, L.A.; TELEPNEVA, V.I.

Enzymic synthesis of the nucleotide adenosine diphosphatide from nicotinamide mononucleotide and adenosine triphosphatide in isolated nuclei of the heart, skeletal muscles and liver of rabbits. Dokl. AN SSSR 160 no.4:953-955 F '65.

(MIRA 18:2)

1. Moskovskiy gosudarstvennyy universitet i Nauchno-issledovatel'skiy institut farmakologii i khimioterapii AMN SSSR. 2. Chlen-korrespondent AN SSSR (for Severin).

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SEVERIN, S.Ye.

Energy supply needed for physiological functions. Vest. AN SSSR 35 no.7:42-58 Jl '65. (MIRA 18:8)

1. Chlen-korrespondent AN SSSR.

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S.Ye.; POPOVA, I.A.

Imidazole, adenylic acid, coenzyme A, and their acetyl derivatives involved in the synthesis and biosynthesis of acetylcholine. Biokhimiia 30 no.5:970-979 S-O '65. (MIRA 18:10)

1. Kafedra biokhimii zhivotnykh biologo-pochvennogo fakul'teta Gosudarstvennogo universiteta imeni M.V.Lomonosova, Moskva.

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SEVERIN, S.Ye.; TELEPNEVA, V.I.; ZAYTSEVA, N.N.; SHARKOVA, Ye.V.

Particular features of oxidative phosphorylation in denervated skeletal muscles. Ukr.biokhim.zhur. 37 no.5:787-797 '65. (MIRA 18:10)

1. Kafedra biokhimii zhivotnykh Moskovskogo gosudarstvennogo universiteta.

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SEVERIN, S.Ye.; SOLOV'YEVA, G.A.

Role of imidazole and its natural compounds in the functional activity of muscles. Biul.eksp.biol. i med. 59 no.5:54-58 '65. (MIRA 18:11)

1. Kafedra biokhimii zhivotnykh (nauchnyy rukovoditel' - prof. S.Ye.Severin) Gosudarstvennogo universiteta imeni M.V. Lomonosova, Moskva. Submitted August 13, 1964.

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, S.Ye.; VUL'FSON, P.L.; SKOLYSHEVA, L.K.

Effect of imidazole and acetylimidazole on the properties of phosphorylase b. Dokl. AN SSSR 166 no.1:238-241 Ja '66. (MIRA 19:1)

1. Moskovskiy gosudarstvennyy universitet. 2. Chlen-korrespondent AN SSSR (for Severin). Submitted July 23, 1965.

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ACC NR: AP6004852 SOURCE CODE: UR/0218/65/030/005/0970/0979

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AUTHORS: Severin, S. Ye.; Popova, I. A.

ORG: Moscow State University im. M. V. Lomonosov, Department of Biology and Soil Science, Chair of Animal Biochemistry (Kafedra biokhimii zhivotnykh biologo-pochvennogo fakul'teta Gosudarstvennogo universiteta)

TITLE: Participation of imidazol, adenilic acid, CoA, and their acetyl derivatives in the synthesis and biosynthesis of acetylcholine 22

SOURCE: Biokhimiya, v. 30, no. 5, 1965, 970-979

TOPIC TAGS: biosynthesis, chemical synthesis, reaction mechanism, enzyme

ABSTRACT: Acetylimidazol (I), acetyladenilic acid (II), and acetyl CoA (III) were synthesized, and their properties were investigated, especially with respect to their possible participation in processes of enzymatic and non-enzymatic acetylation of choline (IV). The transfer of the acetyl group to IV occurs most readily with I, and is accelerated in the presence of CoA. The latter reaction probably occurs according to the following scheme:

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ACC NR: AP6004852

processes. The mechanism of the participation of I in the formation of acetylcholine is discussed. The authors express their gratitude to Professor M. M. Botvinik for practical guidance and help in the chemical synthesis. Orig. art. has: 7 tables, 3 figures, and 3 equations.

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Card 3/3

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SHORM, F., prof. (Chekhoslovatskaya Sotsialisticheskaya Respublika).
SEVERIN, S.Ye.

"Three whales" of biochemistry. Nauka i zhizn' 28 no.11:33-40 N '61. (MIRA 14:12)

(BIOCHEMISTRY)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, V., ing. agr.; BALASESCU, M., ing. agr.

Seeking for new unused resources. St si Teh Buc 14 no. 8: 20-21,27 Ag '62.

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, V. A., Z. V. YEFROL'YEVA, I. S. BUYANOVSKAYA

"Contribution to the Question of the Nature of the Bacteriophage," Zhurnal mikrobiol. i immunol., IX, (Supplement, pages 82-84), 1932

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548220003-6

SEVERIN, V.A.

1ST AND 2ND ORDERS — PROCESSES AND PROPERTIES INDEX — 3RD AND 4TH ORDERS

COMMON ELEMENTS — COMMON VARIABLES INDEX

5 **Resynthesis of adenosinetriphosphoric acid during oxidation of α-ketonic and amino acids in nuclear erythrocytes.** V. A. Severin. *Biokhimiya* 2, 60-9(1937).—It had previously been found that pyrotartaric acid increases the respiration of nuclear erythrocytes by about 30-40%, with a corresponding increase in the abs. amt. of adenosinetriphosphoric acid (*I*). To det. whether pyrotartaric acid is specific, several amino and α-ketonic acids were tested. Some amino acids (alanine, glutamic acid) 6 and α-ketonic acids (α-ketobutyric acid, α-ketoglutaric acid) increase the respiration of bird erythrocytes. A simultaneous decrease in the decompn. of I is observed, which points to an increase in the resynthesis of I.

H. Cohen

Biochem. Section, Inst, Moscow

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

MATERIALS INDEX — 3RD AND 4TH GROUPS — 2ND LETTER — AUTHOR INDEX — 1ST AND 2ND LETTER

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SEVERIN V.A.

BC

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Oxidative metabolism of *B. coli* in presence of amino-acids. V. A. Severin (Biochimia, 1944, 9, 229—238).—Of the amino-acids examined alanine caused the largest increase in O_2 consumption. O_2 consumption in presence of aspartic acid is catalytically increased by alanine or pyruvic acid, which is probably due to transamination and subsequent oxidative breakdown of the alanine formed. H. G. R.

DEPT. OF BIOCHEM. OF MICROBES VIEM, MOSCOW

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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Name: SEVERIN, Varvara Andreyevna

Dissertation: Oxidation exchange and the participation in it of certain animoacids and B. coli, B.staphylococcus aureus, penicillium chrysigenum Q=176

Degree: Doc Biol Sci

Affiliation: All-Union Sci Res Inst of Antibiotics of the Min of Health USSR

Defense Date, Place: 28 Jun 56, Council of Inst of Biochemistry imeni Bakh, Acad Sci USSR

Certification Date: 23 Mar 57

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Severin, V A.

ANTIBIOTICS

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"Synthetic Medium for the Culture of Streptomyces Globisporus Streptomycini of the Strain LS-1", by V.A. Severin, and S.V. Gorskaya, All-Union Scientific Research Institute of Antibiotics, Antibiotiki, No 2, March-April 1957, pp 26-32

Streptomyces globisporus streptomycini, which produces Streptomycin, is capable of growing, developing, and producing an antibiotic in nutrient media of various compositions; however, the most effective media have proved to be those containing corn extract and soya flour.

For intricate biochemical analysis, however, the authors found the synthetic seeding medium to be the most convenient. Consequently, a medium was developed consisting of : ammonium sulfate 0.4%; glucose 2-2.5%; lactic acid 0.6%; sodium bicarbonate 1% (or anhydrous 0.35%); sodium chloride 0.2%; mono-potassium phosphate 0.05%; ferrous sulfate ($FeSO_4 \cdot 7H_2O$) - 0.005%; manganese sulfate ($MnSO_4 \cdot 7H_2O$) - 0.005%; magnesium sulfate ($MgSO_4 \cdot 7H_2O$) - 0.01%; and zinc sulfate ($ZnSO_4 \cdot 7H_2O$) - 0.001%.

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SEVERIN, V.A.; MALOVA, S.N.; GRACHEVA, I.V.

Processes of the conversion of mannosidostreptomycin into streptomycin A. Report no.1 [with summary in English]. Mikrobiologiia 26 no.5:580-585 S-O '57. (MIRA 10:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov, Moskva.

(STREPTOMYCIN, related compounds,
mannosidostreptomycin conversion to streptomycin A (Rus))

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SEVERIN, V.A.; GRACHEVA, I.V.

Conversion of mannosidostreptomycin to streptomycin A. Report No.2 [with summary in English]. Mikrobiologiia 27 no.1:27-31 Ja-F '58. (MIRA 11:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov, Moskva.

(STREPTOMYCIN, rel. cpds.
mannosidostreptomycin, transformation into streptomycin A
II (Rus)

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BRINBERG, S.L.; SURIKOVA, Ye.I.; SEVERIN, V.A.; GRABOVSKAYA, O.Z.
GRINYUK, T.I.

Comparative physiological study of strains of Actinomyces streptomycini in connection with the biosynthesis of streptomycin. Trudy Inst. mikrobiol. no. 6:212-224 '59. (MIRA 13:10)
(ACTINOMYCES STREPTOMYCINI)

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SEVERIN, V.A.; GORSKAYA, S.V.

Method for working with the cultivated mycelium of a streptomycin-producing organism. Antibiotiki, 4 no.2:5-9 Mr-Ap '59. (MIRA 12:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.
(STREPTOMYCES, culture
cultivation of streptomycin producing strain (Rus))

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