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1. ANALYTICAL TECHNIQUES

1.1 General :

Scaccia Scarafoni, G., Carta, S., Tentori, L. and Vivaldi, G. Apparatus for paper electrophoresis with high voltage. *Rend. Ist super. Sanita, Rome*, 1962, 25, 1079-1100.

Coleman, C.H. Automatic pipet for paper chromatography. *J. Assoc. Off. Agric. Chem.*, 1963, 46, 770-771. Defence, Subsistence Testing Lab., Chicago, Ill.

Scaccia Scarafoni, G., Tentori, L. and Vivaldi, G. Apparatus for supplying solutions at different concentrations for chromatography. *Rend. Ist. super. Sanita, Rome*, 1962, 25, 1072-1078.

Gonzalez, G., Cosin, C. and Perez M. E. Contribution to the second international

series for the standardisation of methods of analysis of livestock feeds. *Advances Aliment. Mejora animal*, 1963, 4, 653-662.

Gorbach, G. Microchemistry in the study of food and nutrition. *Nahrung*, 1963, 7, 261-276 (Inst. Biochem. Technol. Tech. Hoschsch, Graz.)

Horning, E. C. and Vanden Heuvel, W. J. A. Gas chromatography. *Annu. Rev. Biochem.*, 1963, 32, 709-754. (Lipid Res. Center, Baylor Univ. Coll. Med., Houston, Tex.)

Karmen, A. Biological implications of gas chromatography. Improved instrumentation and methods increase the utility of gas chromatography to the biologist. *Science*, 1963, 142, 163-172

- (Lab. Tech. Development, Nat. Heart Inst., Bethesda, Md.)
- Altsuler, O. V., Vinogradova, O. M., Roginskij, S. Z. and Cirkov, Ju. N. O. The possibility of chromatographic separation on gas-liquid columns without the use of an inert carrier gas. Dokl. Akad. Nauk SSSR, 1963, 152, 892-895
- Dittrich, S. A new method for quantitative paper chromatography. J. Chromatography, 1963, 12, 47-15. (Fac. Quim., Montevideo).
- Schriesers, H., Thomas, H. and Pohl, F. A simplified elution method for quantitative paper chromatography - Clin. Chim. Acta, 1963, 8, 744-748. (Physiol. chem. Inst., Univ. Bonn.)
- Godfrey, G. Simple elution from paper chromatograms. Lab. Practice, 1963, 12, 919. (Med. Res. Coun., Unit Res. Exp. Pathol. Skin, Med. Sch. Univ. Birmingham).
- Barton, D. N. and Economidis, J. Thin-layer chromatography for amino-acids and sugars. J. Clin. Pathol., 1963, 16, 484-486. (Dept. Chem. Pathol., Royal Free Hosp., London).
- Goulden, J.D.S. Determination of S.N.F. in milk and unsweetened condensed milk from refractive index measurements. J. Dairy Res., 1963, 30, 411-417 (Nat. Inst. Res. Dairying. Shinfield, Reading).
- 1.2 Carbohydrate Constituents :**
- Hay, G. W., Lewis, B. A. and Smith, F. Thin film chromatography, in the study of carbohydrates. J. Chromatography 1963, 11, 479-486. (Dept. Agric. Biochem., Univ. Minnesota, St. Paul)
- Davidson, W. D. and Sackner, M. A. Simplification of the anthrone method for the determination of inulin in clearance studies. J. Lab. Clin. Med., 1953, 62, 351-356. (Dept. Med., Philadelphia Gen. Hosp., Pa).
- Csigas, K. and Walger, J. Simple rapid method of estimating crude fibre in feeding stuffs - Allattenyesztes, 1963, 12, 289-292. Orszag. Mezogazd. Minsegvizsgalo Int., Budapest).
- Van Soest, P. J. Use of detergents in the analysis of fibrous feeds. 1 Preparation of fibre residues of low nitrogen content. 2. A rapid method for the deter- mination of fibre and lignin. J. Assoc. Off. Agric. Chem., 1963, 46, 825-829; 829-835 (Dairy Cattle Res. Branch, Agric. Res. Serv., Agric. Res. Center, Beltsville, Md.)
- Becker, M., Hausberg, H., Harnisch, S. and Clemens, E.-Pectins as components of feedingstuffs. The estimation of pectins in the course of analysis for individual carbohydrates. Arch. Tierernahrung, 1963, 13, 215-227 (Inst. Tierphysiol. Univ. Kiel.)
- Gagliardo, E and Zambotti, V. Separation by gas chromatography of some sugars of biological importance, Boll. Soc. Ital. Biol. sper., 1962, 38, 1791-1793. (Ist. Chim. Biol., Univ. Milan).
- Houtzagers, J.J.R. and Luursema, J. Rapid and simple method of estimating blood sugar. Nederlands Tijdschr. Geneesk., 1963, 107, 2025-2027. (Geneesk. Klin. Rijksuniv. Utrecht).
- Hjelm, M. and De Verdier, C. H. A methodological study of the enzymatic determination of glucose in blood. Scand. J. Clin. Lab. Invest., 1963, 15, 415-428 (Dept. Clin. Chem., Univ. Hosp., Uppsala).
- Bowden, C. H. The estimation of blood galactose using a glucose oxidase-catalase reagent. J. Clin. Pathol., 1963, 16, 470-472 (R.A.F. Inst. Pathol. Trop. Med., Halton, Aylesbury, Bucks).
- Lanzkowsky, P., Klassen, W. H. and Wilson, J. F. Determination of D-xylose in urine by automatic chemical analysis. J. Lab. Clin. Med., 1963, 62, 341-345 (Dept. Pediat. Univ. Utah Coll. Med. Salt Lake. City.)
- 1.3 Nitrogenous constituents**
- Minari, O. and Zilversmit D. B. Use of KCN for stabilization of colour in direct Nesslerization of Kjeldahl digests. Anal. Biochem., 1963, 6, 320-327. (Univ. Tennessee, Dept. Physiol., Memphis).
- Van ES, W. L and Wisse, J. H. Narrow Band-pass ultraviolet filters for continuous determination of protein. Anal. Biochem., 1963, 6, 135-143. (Dept. Phys., Netherlands Cancer Inst., Amsterdam).
- Sammons, H. G. and Whitehead, P. H. A method of quantitative serum protein electrophoresis. Clin. chim. Acta, 1963,

- 88, 673-677. Pathol. Dept. Little Bromwich Gen. Hosp., Birmingham).
- Bocci, V. Starch-Pevikon C-870 gel as a supporting medium in zone electrophoresis J. Chromatography, 1963, 11, 515-523 (Ist Fisiol. Gen., Univ. Seina).
- Radhakrishnamurthy, B., Chapman, K. and Bereson, G. S. A simplified apparatus for vertical gel electrophoresis Biochim. biophys. Acta, 1963, 75, 276-279. (Dept. Med., Louisiana State Univ., Sch. Med., New Orleans).
- Keen, H. and Chlouverakis, C. An immuno assay method for urinary albumin at low concentrations. Lancet, 1963, ii, 913-914 (Dept. Exp. Med., Guy's Hosp., London, S. E. 1.)
- Wrigley, C.W. Multiple column chromatography of wheat gluten proteins. J. Chromatography, 1963, 11, 552-556. (C.S.I.R.O. Wheat Res. Unit, North Ryde, N.S.W.)
- Mutting, D. and Kaiser, E. Quantitative estimation of α -amino N in biological material by the ninhydrin reaction. Hoppe Seyler's Ztschar., 1963, 332, 276-281 (Med. Klin., Univ. Saarland, Homburg/Saar).
- Fisher, L. J., Bunting, S. L. and Rosenberg, L.E. A modified ninhydrin colorimetric method for the determination of plasma alpha-amino nitrogen. Clin. Chem., 1963, 573-581 (Metabol. Serv., Nat. Cancer Inst., Bethesda, Md.).
- Krull, L. H., Wall, J. S. and Dimler, R. J. Dimethyl sulfoxide as solvent for amino nitrogen determination on cereal proteins by the Van Slyke manometric method. Anal. Biochem., 1963, 6, 375-380. (N. utilization Res. Development Div. Agric. Res. Serv., U. S. Dept. Agric. Peoria Ill.).
- Slijapnikov, S. V., Karpejskij, M. Ja. and Litvin, E. F. Use of gas-liquid chromatography for separating some amino acids. Biohimija, 1963, 28, 664-670 (Inst. rad. fiziko-him. biol. Adak. Nauk SSSR, Moscow.)
- Myhill; D. Jackson, D. S. Separation of proline and hydroxyproline using thin-layer chromatography. Anal. Biochem., 1963, 6, 193-198 (Dept. Surg. Univ. Oregon Med. Sch. Portland).
- Bergman, I. and Loxley, R. Two improved simplified methods for the spectrophotometric determination of hydroxyproline. Anal. Chem., 1963, 35, 1961-1965, (Safety in Mines Res. Estab., Minist. Power, Sheffield).
- Rao S. R., Carter, F.L. and Frampton, V. L. Determination of available lysine in oilseed meal proteins, Anal. Chem., 1963, 35, 1927-1930 (S. Reg. Res. Lab. Agric. New Orleans 19, La.).
- Guthrie, R. and Susi A. A simple phenylalanine method for detecting phenylketonuria in large populations of new born infants. Pediatrics, 1963, 32, 338-343, (Dept. Pediat., Sch. Med. State Univ. New York, Buffalo).
- Brieskorn, C. H. and Schelde, J. Estimation of Tryptophan in meat offals and meat products with N-bromosuccinimide. Ztschar. Lebensmittel-Untersuch., Forsch., 1963, 123, 195-200. (Inst. Pharm. Lebensmittelchem., Univ. Warzburg).
- Lerner, S. R. Iodinated amino acid chromatography on polystyrene resins. Arch Biochem. Biophys., 1963, 103, 36-41. (Radioisotope Serv., Veterans Admin. Hosp., Houston, Tex.)
- Holingsworth, D. R., Dillard, M. and Bondy, P. K. Separation of iodoamino acids and related compounds by thin-layer chromatography. J. Lab. Clin. Med. 1963, 62, 346-350 (Dept. Int. Med. Yale Univ. Sch. Med., New Haven, Conn.)
- Mougey, E.H. and Mason, J. W. Separation of some iodoamino acids and iodide by gel filtration. Anal. Biochem., 1963, 6, 223-233. (Dept. Neuroendocrinol., Walter Reed Army Inst., Res., Washington, D. C.)
- Searcy, R. L. and Cox, F. M. A modified technique for ultramicro estimation of Urea nitrogen. Clin. chem. Acta, 1963, 8, 810-812. (Dept. Pathol., California Coll. Med., Los Angeles).
- Logan, J. E. The use of Urograph for the determination of Urea nitrogen concentration in serum and plasma. Canad. Med. Assoc. J., 1963, 89, 341-344. (Lab. Hyg., Dept. Nat. Health Welfare, Ottawa, Ont.).
- Zelck, U. A method for quantitative estimation of allantoin in urine. Bio-

- chem. Ztschr., 1963, 337, 522-530. (Oskar-Kellner-Inst., Tierernahrung, Rostock).
- Ikekawa, N. Gas chromatography of amino acids. I. Analysis of the mixture of methyl-N-trifluoroacetyl derivatives. J. Biochem., Tokyo, 1963, 54, 279-282 (Inst. Physical Chem. Res., Komagome, Bunkyo-ku).
- Makisumi, S., Nicholls, C. H. and Saroff, H. A. The influence of esterifying and acetylating groups on the retention times of amino acid derivatives in gas chromatography. J. Chromatography, 1963, 12, 106-108 (Nat. Inst. Arthritis Metabol. Dis., U.S. Dept. Health, Education, Welfare, Bethesda, Md.)
- Lucas, F., Shaw, J.T.B. and Smith, S. G. Amino acid analysis with fluorodinitrobenzene. Anal. Biochem., 1963, 6, 335-351. (Shirley Inst., Manchester).
- Krampitz, G. and Wieneke, J.-Estimation of amino acids in biological material. 7. An automatic apparatus for routine estimation of amino acids. Stzchr. Tierphysiol. Tierernahrung Futtermitteltk., 1963, 18, 147-166 (Inst. Ant. Haustiere, Univ. Bonn.)
- Braun, L. Quantitative estimation of amino acids by high-voltage electrophoresis Biochem. Ztschr., 1963, 339, 8-12 (Chirurg. Klin., Univ., Munster/Westf.)
- Hotchkiss, R. D. A manometric determination of sulphhydryl groups and its application to proteins in native and denatured states. Biochem. Stzchr., 1963, 338, 848-853 (Chem. Dept., Carlsberg Lab., Copenhagen).
- Staron, T., Allard, C., Chambre, M.M. and Nguyen Dat Xuong. A method for estimating arginine and guanidyl groups in biological material and proteins. C. R. Acad. Sci., 1963, 257, 25552-2554. (Serv. Biochim., Stat. Cent. Pathol. Veg., I. N. R. A., Versailles).
- De Belsunce, D. and Pion, R. Estimation of cystine in foodstuffs Ann. Biol. animale, Biochim. Biophys., 1963, 3, 191-199. (Lab. Etude Metabol., C. N. R. Z. Jouy-en-Josas).
- Bonker, G. J. and Tonge, B. L Separation of cysteine and its oxidation products by paper and thin-layer chromatography. J. Chromatography, 1963, 12, 52-56 (Coll. Technol., Plymouth, Devon).
- Portugal, A.V., Green, R. and Sutherland, T. M. Separation and estimation of the 2,4 dinitrophenyl derivatives of glutamic and aspartic acids. J. Chromatography 1963, 12, 183-188. (Rowett Res. Inst., Bucksburn, Aberdeen).
- Ramdan, M.E.A. and Greenberg D. M. An enzymic micromethod for determination of glutamine and asparagine in blood. Anal. Biochem., 1963, 6, 144-152. (Dept. Biochem., Univ., California Sch. Med., San Francisco).
- Henrioul, F. Estimation of nitrites and nitrates in water and meat. Application of polarography to estimation of nitrates. Rev. Ferment. Indust. alimen., 1963 18, 51-59. (Lab. Bromatol., Inst., Pharm., Univ. Liege).
- Rae, A.C. and Hall, A. N. Determination of nitrate in fermentation media by a modification of the nitron method. J. Sci. Food Agric., 1963, 14, 821-824; (Dept. Biochem., Manchester Coll. Sci. Technol).
- #### 1.4 Lipid Constituents
- Mahadevan, V. Annual review of the literature on fats, oils and detergents, 1.2. J. Amer. Oil Chem. Soc., 1963, 40, 372-394; 472-496 (Univ. Minnesota, Hormel Inst., Austin).
- Winter, E. A new procedure for estimating and studying fats in foods. Ztschr. Lebensmittel-Untersuch. Forsch., 1963, 123, 205-210.
- Rodrigo, D. M. A note on the determination of fat in milk. Trop. Agric., Ceylon, 1962, 118, 41-42 (Dept. Agric., Ceylon)
- De Langen, H. Determination of fat in meat and separable fat by the Gerber test. N.Z. J. Agric. Res., 1963, 6, 452-456 (Ruakura Animal Res. Stat., Dept. Agric., Hamilton).
- Sheppard, A.J. Suitability of lipid extraction procedures for gas-liquid chromatography. J. Amer. Oil Chem. Soc., 1963 40, 545-548. (Div. Nutrit., Food Drug Admin., U. S. Dept. Health Education, Welfare, Washington, D.C.)
- Theriault, C.G. Fractionation of lipids by countercurrent distribution, J. Amer.

- Oil Chem. Soc., 1963, 40, 395-396. (U. S. Army Res. Inst. Environmental Med., Natick, Mass.)
- Rouser, G., Kritchevsky, G., Heller, D. and Liber, E. Lipid composition of beef brain, beef liver, and the sea anemone. Two approaches to quantitative fractionation of complex lipid mixtures J. Amer Oil Chem. Soc., 1963, 40, 425-454 (City of Hope Med. Center, Dept. Biochem., Duarte, Calif.)
- Carroll, K. K. Acid-treated florisil as an adsorbent for column chromatography J. Amer. Oil. Chem. Soc., 1963, 40, 413-419 (Collip Med. Res. Lab., Univ. W. Ontario, London).
- Larrabee, M. G. and Klingman, J. D. A silicic acid microcolumn for continuous gradient elution of lipids, used in studies on sympathetic ganglia of rats. Anal. Biochem., 1963, 6, 111-124. (Thomas C. Jenkins Dept. Biophys., Johns Hopkins Univ., Baltimore, Md.).
- Black, B. C. and Hammond, E. G. The separation of glycerides by liquid-liquid column partition chromatography. J. Amer. Oil Chem. Soc., 1963, 40, 575-579. (Dept. Dairy Food Indust., Iowa State Univ. Sci. Technol. Ames).
- Barrett, C. B. Dallas, M. S. J. and Padley, F. B. The quantitative analysis of triglyceride mixtures by thin layer chromatography on silica impregnated with silver nitrate. J. Amer. Oil Chem. Soc., 1963, 40, 580-584 (Unilever Res. Lab., Welwyn, Herts.)
- Svennerholm, E. and Svennerholm, L. Isolation of blood serum glycolipids Acta chem scand. 1962, 16, 1282-1284. (Dept. Med. Biochem., Univ. Gothenburg).
- Svennerholm, E. and Svennerholm, L. The separation of neutral blood-serum glycolipids by thin-layer chromatography. Biochem. biophys. Acta, 1963, 70, 432-441 (Dept. Med. Biochem., Univ. Gothenburg)
- Wagner, H., Holzl, J., Lissau, A. and Horhammer, L. Paper chromatography of phosphatides. 3. Quantitative estimation by paper chromatography of phosphatides and phosphatidic acids in rat organs. Biochem. Ztschr., 1963, 339, 34-45. Inst. Pharm. Arzneimittel., Univ. Munich.)
- Williams, M.C. and Reiser, R. The chemical and biological assay of essential fatty acids. J. Amer. Oil Chem. Soc., 1963, 40, 237-241, Dept. Biochem. Nutrit. Agric. and Mech. Coll. Texas. College Station).
- Wurster, C. F. (Jr.) Copenhagen, J. H. (Jr.) and Shafer, P. R. Separation of the methyl esters of oleic, linoleic linolenic acids by column chromatography using cation exchange resin containing silver ion. J. Amer. Oil Chem. Soc., 1963, 40, 513-514 (Dept. Biol. Sci., Dartmouth Coll., Hanover, N. H.)
- Ast, H. J. Inadvertent isomerization of polyunsaturated acids during ester preparation. Anal. Chem., 1963, 35, 1539-1540 (Fats and Oils, Food Res. Sect., Armour and Co., Oak Brook, Ill.)
- Buhring, H. The effect of supporting material on the quantitative gas chromatographic analysis of higher fatty acid methyl esters. J. Chromatography, 1963, 11, 452-458. (Physiol. Chem. Inst., Univ. Hamburg).
- Bowyer, D. E., Leat, W. M. F., Howard, A. N. and Gresham, G.A. The determination of the fatty acid composition of serum lipids separated by thin-layer chromatography; and a comparison with column chromatography. Biochim. biophys. Acta, 1963, 70, 423-431. (Dept. Pathol., Univ. Cambridge.)
- Fried, R. and Hoeftmayr, J. (with Buchfink, E. and Eibl, R.) Simplified method of estimating esterified fatty acids in Serum. Klin. Wochenschr., 1963, 41, 727-728. (Wissenschaft. Lab. Firma Dr. Heinz Haury, Munich 23.)
- Muhordov, F.G. Estimation of cholesterol esters in serum by column chromatography. Lab. Delo, 1963, No 11, 14-17 (Sanit. gig. med. inst., Leningrad.)
- Webster, D. The direct estimation of esterified cholesterol with a number of commonly used cholesterol colour reagents. Clin. chim. Acta, 1963, 8, 731-743. (Res. Lab. Dept. Geriat. Med., Sunderland Gen. Hosp.)
- Anisimov, V.E. K. Estimating the extraction ratio of cholesterol. Lab. Delo,

- 1963, No. 11, 17-20 (Med. Inst., Kazan)
- Dick, U. Serum cholesterol values in clinically healthy dogs estimated by the ultra-micromethod. *Berl. Munch. tierarztl. Wochenschr.*, 1963, 76, 350-351. (Klin. Poliklin. Kleine Haustiere, Freie Univ. Berlin.)
- 1.5 Other organic constituents**
- Sandev, S and Chobanov, D. Simplified chromatographic estimation of organic acids in silages. *Arch. Tierernahrung*, 1963, 13, 229-234 (Forschungsinst. Tierzucht Kostinbrod, Sofia.)
- Kuksis, A. and Vishwakarma, P. Simultaneous determination of Krebs cycle acids by gas-liquid chromatography. *Canad. J. Biochem. Physiol.*, 1963, 41, 2353-2362. (Biochem., Queen's Dept. Univ., Kingston Ont.)
- Berry, M.N. Determination of D (-)- β -hydroxybutyric acid in tissue extracts. *Anal. Biochem.*, 1963, 6, 352-358. (Dept. Biochem., Univ. Oxford).
- Dancis, J., Hutzler, J. and Levitz, M. Thin layer chromatography and spectrophotometry of α -ketoacid hydrazones. *Biochim. biophys. Acta*, 1963, 78, 85-90. (Dept. Pediat., New York Univ. Sch. Med., N.Y.)
- Rink, M. and Herrmann, S. Detection of acetoacetic acid and acetone in urine by thin-layer chromatography. *J. Chromatography* 1963, 12, 249 (Pharm. Inst. Univ., Bonn.)
- Bohm, M. and Hense, D. Enzymic estimation of α -ketoglutaric acid in urine and in small samples of blood. *Nutrito et Dieta*, 1963, 5, 92-108. (Max-Planck-Inst. Ernahrungsphysiol., Dortmund.)
- Handschack, W.Q. Quantitative estimation of sorbic acid with the thiobarbituric acid reagent. *Nahrung*, 1963, 7, 155-157.
- Lemieszek-Chodorowska, K. Estimation of sorbic acid in food products. *Roczn. Panstwowego Zakl. Hig.*, 1963, 14, 231-238.
- Milican, R.C. A thiobarbituric acid assay for shikimic acid. *Anal. Biochem.*, 1963, 6, 181-192. (Nat. Inst. Arthritis Metabol. Dis., U.S. Pub. Health Serv., Bethesda, Md.)
- Analytical Methods Committee, Additives in animal feeding stuffs Sub committee. I. Report of the antibiotics Panel. The determination of penicillin, chlortetracycline and oxytetracycline in diet supplements and compound feeding stuffs. 2. Report of the Hormones Panel. The determination of stilboestrol and hexoestrol in compound feeding stuffs. *Analyst*, 1963, 88, 835-850; 925-934.
- 1.6 Minerals.**
- Nowosielski, O. A simplified method for estimation of chemical composition of agricultural material with *Aspergillus niger*. Biological properties of *A. niger* and its suitability for estimating elements. *Roczn. Nauk. rol. (A)* 1963, 87, 201-227; 229-249, (Zakt. Chem. Rol. SGW, Warsaw).
- Agricultural Research Council. Report of a group on comparison of methods of analysis of mineral elements in plants. Agricultural Research Council, Cunard building, 15, Regent St., London, S.W.I. June 1963, pp. 52
- Voth, J. L. Spectrographic method for determination of trace elements in milk. *Anal. Chem.*, 1963, 35, 1957-1958. (Dept. Chem., Univ. California, Davis)
- Szymczak, J. and Zechalko, A. Estimation of minute amounts of arsenic in foods and commonly used objects. *Roczn. Panstwowego Zakl. Hig.*, 1963, 14, 239-244. (Kat nauki Srod. Spozyw. AM, Wroclaw).
- Malmstadt, H.V. and Hadjioannou, T.P. Improvements on the automatic determination of micro amounts of serum calcium. *Clin. Chem.*, 1963, 9, 423-427 (Dept. Chem., Univ. Illinois, Urbana).
- Guichard, C., Vitte, G. and Blanques, P. Flame spectrophotometry and estimation of Ca in biological media. *Bull. Soc. Chim. biol.*, 1963, 45, 1051-1064. (Lab. Pharm. Chim., Fac. Med. Pharm., Bordeaux)
- Vedso, S. and Rud, C. Determination of calcium in urine with EDTA by means of a cation exchange resin. *Scand. J. Clin. Lab. Invest.*, 1963, 15, 395-398. (Dept. Clin. Chem. Vejle Country and City Hosp., Denmark).
- Breault, E.A. Ion exchange resin separation of calcium and strontium. *J. Assoc. Off. Agric. Chem.*, 1963, 46, 675-676.

- Food & Drug Admin , Room 518, Fed. Offise Bldg., San Francisco 2, Calif.
- Olling, C.C.J. A routine method for the estimation of copper in liquid milk and milk powder. *Nederlands Melk Zuiveltijdschr.*, 1963, 17, 295-305. (Coop. Condensfabriek 'Friesland', Leeuwarden.)
- Boersma, P. A rapid method of determining iron in dietetic milk products. *Nederlands Melk Zuiveltijdschr.*, 1963, 17, 288-294. (Coop. Condensfabriek. 'Friesland' Leeuwarden).
- Planas, J. Anticoagulants and estimation of Fe in serum. *Rev. Espanola Fisiol.*, 1963, 19, 73-81. Lab. Biol. Fac. Cienc., Univ. Valladolid).
- Monkman, J. L. Determination of heavy metals in urine by polarography. I. Lead. *Anal. Biochem.* 1963, 6, 255-262. (Environmental Health Centre, Ottawa).
- Fernandez, A.A. Sobel, C., and Jacobs, S. L., Sensitive method for the determination of sub microgram quantities of manganese and its application to human serum. *Anal. Chem.*, 1963, 35, 1721-1724.
- Parks, P. F. and Dunn, D. E. Evaluation of the molybdoavanadate photometric determination of phosphorus in mixed feeds and mineral supplements. *J. Assoc. Off. Agric. Chem.*, 1963, 46, 836-838. (Agric. Anal. Serv., Texas Agric. and Mech. Coll., College Station.)
- Bruenger F. W., Stover, B. J. and Atherton, D. R. Determination of plutonium in biological material by solvent extraction with primary amines. *Anal. Chem.*, 1963, 35, 1671-1673; Div. Radiobiol. Dept. Anat., Univ. Utah Coll. Med., Salt Lake City, 12).
- Dye, W. B., Betthauer, E., Seim, H. J. and Blincoe. C. Fluorometric determination of selenium in plants and animals with 3, 3' diaminobenzidine. *Anal. Chem.*, 1963, 35, 1687-1693. (Univ. Nevada, Univ Stat. . Reno).
- Friedman, S.M., Wong, S. L. and Walton. J. H. Glass electrode measurements of blood sodium and Potassium in man. *J. Appl. Physiol.*, 1963, 18, 950-954. (Dept. Ant., Univ , British Columbia, Vancouver)
- Coats, A. W. and Estes, F. L. Determination of total sulfur in animal tissues. *Anal. Biochem.*, 1963, 6, 251-254. (Dept. Sur., Univ. Texas Med. Branch, Galveston).
- Zitomer, F. F. and Lambert, J. L. Spectrophotometric determination of bromide ion in water *Anal. Chem.*, 1963, 35, 1731-1734. (Dept. Chem Kansas State Univ., Manhattan).
- Crockson, R. A. A rapid colorimetric method for the estimation of urinary chlorides. *J. Clin. Pathol.*, 1963, 6, 473-475. (Dept. Exp. Pathol., Univ. Birmingham).
- Haschen, R.J. and Rehfeld, N. Micromethod of estimating serum protein bound iodine ; standardisation of estimation of PBI. *Deutsch. Gesundheitswesen*, 1963, 18, 1589-1595. (Inst. Exp. Med., Martin Luther Univ., Halle (Saale)).
- Han, K. and Boulange, M. Estimation of thiocyanate in milk by a microdiffusion technique. *Clin. chim. Acta*, 1963, 8, 779-785. (Lab. Chem. Biol., Fac. Med. Pharm., Lille).
- Guthenberg, H. and Beckman, I. Identification of preservatives on paper chromatograms by irradiation with short wave ultraviolet light. *Schr. Lebensmittel. Untersuch. Forsch.*, 1963, 120, 461-464. (Koop. Forbundet, Livsmedelslab, Stockholm).
- 1.7 Enzymes :**
- King, E.J. and Moss, D.W. International enzyme units and isoenzyme nomenclature. *J. Clin. Pathol.*, 1963, 391-393.
- Roth,.. M. Fluorimetric estimation of trypsin (*Clin. chim. Acta*, 1963, 8, 574-578. Lab. Cent. Hop. Cantonal, Geneva).
- Raabo, E. Determination of serum lactic dehydrogenase by the tetrazolium salt method. *Scand. J. Clin. Lab. Invest.*, 1963, 15(3), 233-238. (Central Lab., Central Hosp., Holboek, Denmark)
- Jones, G.R.N., Maple, A.J., Aves, E.K., Chayen,J. and Cunningham, G.J. Quantitative histochemistry of succinate dehydrogenase in tissue sections. *Nature*, 1963, 197, 568-570. (Royal Coll. of surgeons of England, Lincoln's Inn Fields, London).

- Roos, K. Simplified method for the determination of serum alkaline phosphatase activity. *Scand. J. Clin. Lab. Invest.*, 1963, 15 (Suppl. 69) 233-243 (Cent. Lab., Sahlgren's Hosp., Gothenburn, Sweden).
- Babson, A.L. and Shapiro, P.O. Note on the colorimetric assay for transaminase in serum. *Clin. Chim. Acta*, 1963, 8 (2), 326-327 (Warner-Lambert Res. Inst., Morois Plains, N.J., U.S.A.)
- Pallini, V. Pampucci, G. and Martelli, P. Rapid method for the determination of reduced pyridine coenzymes. *Boll. Soc. Ital. Biol. Sper.*, 1963, 39 (4), 236-238 (Chim Biol. Univ., Siena, Italy).
- Oberbacher, M.F. and Vines, H.M. Spectrophotometric assay of ascorbic acid oxidase. *Nature*, 1963, 197, 1203-1204 (Florida Citrus Exp. Sta., Lake Alfred, U.S.A.)
- Amador, E. Dorfman, L.E. and Wacker, W.E.C. Serum lactic dehydrogenase activity; an analytical assessment of current assays. *Clin. Chem.*, 1963, 9 (4), 391-399 (Biophy. Res. Lab., Dept. of Med., Harvard Med. Sch., Boston, Mass., U.S.A.)
- ### 1.8. Clinical and Experimental
- Moodie, E.W., Walker, A.I.T. and Hutton, P.H. The collection of portal and hepatic venous blood in conscious sheep. *Quart. J. Exp. Physiol.*, 1963, 48, 379-387 (Royal (Dick) Sch. Vet. Studies, Edinburgh).
- Moodie, E.W. and Walker, A.I.T. Arterial and portal venous blood for estimating mineral absorption in the conscious sheep. *Quart. J. Exp. Physiol.*, 1963, 48, 388-401. (Royal (Dick) Sch. Vet. Studies, Edinburgh).
- Hansen, P. Studies on determination of erythropoietin using Fe⁵⁹ incorporation in starved rats. *Scand. J. Clin. Lab. Invest.*, 1963, 15, 357-366. Dept. Biochem Statens Seruminst., Copenhagen)
- Rovner, D.R. and Conn, J.W. A simple and precise method for the simultaneous measurement in man of plasma volume, radiobromide space, exchangeable potassium, and exchangeable sodium. *J. Lab. Clin. Med.*, 1963, 62, 492-500 (Dept. Int. Med., Univ. Michigan, Ann Arbor.)
- Stern, B. Determination of body volume by helium dilution, with special reference to the influence of gases, heat, and moisture emitted by transpiration and respiration. *Scand. J. Clin. Lab. Invest.*, 1963, 15, 339-352. (Dept. Clin. Physiol. Karolinska sjukhuset, Stockholm)
- Malhotra, M.S., Gupta, J.S. and Rai, R.M. Pulse count as a measure of energy expenditure. *J. Appl. Physiol.*, 1963, 18, 994-996 (Defence Inst. Physiol. Allied Sci., Metcalfe House, Delhi.)
- Andersin, E. and Finnila, M.J. An apparatus for continuous direct and indirect calorimetric estimations of newborns and prematures under different environmental conditions. *Acta Paediat.*, 1963, Suppl. 146, 11-18. (Dept. Pediat., Univ. Helsinki).
- Robert, A. and Scow, R.O. Perfusion of rat adipose tissue. *Amer. J. Physiol.*, 1963, 205, 405-412. (Lab, Nutrit-Endocrinol., Nat. Inst. Arthritis Metabol. Dis., Bethesda, Md.)
- Bhatnagar, S.P. and Sadhu, D.P. Measurement of surface area in Jamnapuri goats. *Brit. Vet. J.*, 1963, 119, 422-425. (Dept. Physiol. Nutrit., Bengal Vet. Coll., Calcutta).
- Meister, G. and Schindler, R. A new type of cage for rabbits and guineapigs. *Ztschr. Versuchstierk.*, 1963, 3, 21-26. (Bernahard-Nocht-Inst. Schiff-Tropenkrankh., Hamburg).
- Hergott, J. Rearing and feeding experimental animals particularly rabbits. *Ztschr. Versuchstierk.*, 1963, 3, 34-40. (Farbwerke Hochst AG, Frankfurt (Main)).
- Till, A.R., and Downes, A.M. A metabolism cage for sheep. *Lab. Practice*, 1963, 1006-1009. C.S.I.R.O. Div. Animal Physiol., Ian Clunies Ross Animal Res Lab., Prospect, N.S.W.)
- Bensadoun, A., Van Niekerk, B.D.H., Paladines, O.L. and Reid, J.T. Evaluation of antipyrene, N-acetyl-4-aminoantipyrene and shrunk body weight in predicting the chemical composition and energy value of the sheep body. *J. Animal Sci.*, 1963, 22, 604-612. (Dept. Animal Hush., Cornell Univ. Ithaca, N.Y.)
- Loosli, J.K. Primary signs of nutritional deficiencies of laboratory animals. *J.*

- Amer. Vet. Med. Assoc., 1963, 142, 1001-1004. Dept. Animal Husb., Cornell Univ. Ithaca, N.Y.)
- Muller, R. Methods for research with growing rats, especially for evaluation of protein. Deutch. tierdrztl. Wochenschr., 1963, 70, 288-290. (Inst. Tierzucht Tierfutterung, Univ. Bonn.)
- Jayasinghe, J.B. Determination of salt peptizability of nitrogen in some concentrate meals as a technique for preliminary assessment of protein values for ruminants. Ceylon Vet. J., 1963, 11, 41-42. Dept. Vet. Sci., Univ. Ceylon, Colombo.
- Schroder, I. and Bock, H.D. Report on the enquiry made by the research society 'Protein in animal nutrition' on methods of estimating the amino acid composition and the biological value of feed proteins. Arch. Tierernahrung, 1963, 13, 241-246. (Inst. Agric. chem., Univ. Rostock.)
- Carpenter, K.J. March, B.E., Milner, C.K. and Campbell, R.C. A growth assay with chicks for the lysine content of protein concentrates. Brit. J. Nutrition, 1963, 17, 309-323. (Sch. Agric., Univ. Cambridge)
- Suzuki, Y. and Bando, S. Studies on the correction of Sanborn Metabolator's table Especially on adaptability to the Japanese. Tokushima J. Exp. Med., 1963, 9, 177-185.
- Jancarik, A. Analysers for respiratory gases. Ved. Prace. Vyzk. Ustavu Zivoc. Vyrobu CSAZV, 1963, 6, 141-157.
- Pencev, P. Simplification of method for study of gaseous exchange in man. Nahrung, 1963, 7, 139-148. (Inst. Ernahrung, Bulg Akad. Wiss., Sofia).
- Flatt, J.P. and Ball, E.G. Studies on the metabolism of adipose tissue. 14. The manometric determination of total CO₂ production and oxygen consumption in bicarbonate buffer. Biochem. Ztschr., 1963, 338, 73-83. (Dept. Biol. Chem., Harvard Med. Sch., Boston, Mass.)
- Rovelstad, R.A. Gastric analysis. Gastroenterology, 1963, 45, 90-107.
- Cameron, J.R. and Sorenson, J. Measurement of bone mineral in vivo: an improved method. Science, 1963, 142, 230-232. (Dept. Radiol., Univ. Wisconsin, Medison).
- Bluhm, M.M. and Guðmundsson, Th. V. A routine radioiodine thyroid function test in Iceland. Scot. Med. J., 1963, 8, 442-444. (State Hosp. Reykjavik).
- Bank, S., Marks, I.N., Moshal, M.G., Efron, G. and Silber, R. The pancreatic-function test methods and normal values. S. African Med. J. 1963, 37, 1061-1066. (Gastro-Intestinal Serv., Groote Schuur Hosp., Cape Town.)
- Ferrier, P., Hampai, A. and Baumgart, C. Evaluation of D-xylose test in the normal child. Helv. Paediat. Acta, 1963, 18, 203-207. (Clin univ. Pediat., Geneva).
- Saucier, G., Nadeau, G., Brunet, J. and Moisan, A. Clinical use of the glucose disappearance rate. Canad. Med. Assoc. J., 1963, 88, 1231-1237. (Serve. Labs., Hep. St-Sacrement, Quebec).
- Arroyave, G. and De Arroyave, C.M. Use of short collection periods for urine in estimating daily excretion of creatinine. Arch. venezol. Nutricion, 1962, 12, 259-266 (Inst. Nutrit. Cent. America and Panama (INCAP), Guatemala City).
- Altman, K.A. and Stellate, R. Variation of protein content of urine in a 24-hour period. Clin. Chem., 1963, 9, 63-69. (Med. Dept. Roosevelt Hosp., New York).
- Eve, C. and Robinson, S.H. Apparatus for continuous long-term intravenous infusions in small animals. J. Lab. Clin. Med., 1963, 62, 169-174. (Clin. Center, Nat. Insts. Health, Bethesda, Md.).
- Austard, R. Apparatus for continuous intravenous infusion in the dog. J. Small Animal Practice, 1962, 3, 7-8. (Inst. Obstet., Norges Veterinaerhagsk., Oslo).
- Elliot, F.C. The meadow vole (*Microtus pennsylvanicus*) as a bioassay test organism for individual forage plants. Quart. Bull. Michigan Agric. Expt. Stat., 1963, 46, 58-72.
- Dent, J.W. Applications of the two-stage in vitro digestibility method to variety testing. J. Brit. Grassland Soc., 1963, 18, 181-199. (Nat. Inst. Agric. Botony, Cambridge).
- Hartsook, E.W. and Hershberger, T.V. A simplified method for sampling small animal carcasses for analyses. Proc. Soc. Exp. Biol. Med., 1963, 113, 973-977. (Dept. Animal Indust. Nutrit. Pennsylvania State Univ., University Park.)

Lidvigsen, B. Instantaneous tissue homogenization. *Biochim. biophys. Acta*, 1963, 74, 532-541. (Neuromuscular Res. Lab., Univ. Alberta Hosp., Edmonton).

Krauze, S., Bozyk, Z. and Brzeinska, Z. Use of the method of oxidation with chromic acid for estimating the energy value of cooked meals. I. Precision of the method. *Roczn. Panstwowege Zakl. Hig.*, 1963, 14, 353-359 (Zakl. Badan. Srodk. Spozyw. AM. Warsaw).

Hobson, P.N. and Smith, W. Continuous culture of rumen bacteria. *Nature*, 1963, 200, 607-608. (Rowett Res. Inst., Bucksburn, Aberdeen).

2. CHEMICAL COMPOSITION OF FOODSTUFFS

2.1 Foods of Vegetable Origin :

General:

Mathews, R. H., Murphy, E.W., Marsh, A.C. and Dawson, E.H. Baked Products: consumer quality, composition, yield, and preparation time of various market forms. U.S. Dept. Agric. Home Econ. Res Rep. No 22, July 1963, pp. iv * 39.

Lopez, H., Navia, J.M., Clement, D. and Harris, R.S. Nutrient composition of Cuban foods. 3. Foods of vegetable origin. *J. Food Sci.*, 1963, 28, 600-610. (Labs. FIM Nutric., Havana).

De Vuyst, A., Vervack, W., Van Belle, M., Arnould, R. and Moreels, A. Amino acids in oilcakes. *Agricultura*, Louvain, 1963, 11, 385-390. (Center Recherches Zootech, Univ. Louvain).

Daumas, R. Technology and composition of animal feeding cakes in Madagascar. *Rev. Elevage Med. vet. Pays trop.*, 1963, 16, 237-261. (Lab. Fent. Elevage, 'J. Carougeau', Antananarivo).

Weits, J. Nutritive value and organoleptic properties of preserved vegetables. *Voeding*, 1963, 24, 54-560. (Afd. Voeding Voedselbereiding, Inst. Landbouwhuishoudk. Onderzoek, Wageningen.)

Van Ettern, C.H., Miller, R.W., Wolff, I.A. and Jones, Q. Amino acid composition of seeds from 200 angiospermous plant species. *J. Agric. Food Chem.*, 1963, 11, 399-410 (N. Reg. Res. Lab., Peoria, Ill.).

Doll, E.C., Miller, H.F. and Todd, J.R. Effect of phosphorus fertilization and

liming on yield and chemical composition of corn, wheat, and red clover. *Kentucky Agric. Exp. Stat. Bull.* No. 682, April 1963, pp. 23.

Cereals

Elton, G.A.H. and Ewart, J.A.D. Immunological comparison of cereal proteins. *J. Sci. Food Agric.* 1963; 14: 750-758. (Brit. Baking Indust. Res. Assoc., Chorleywood, Rickmansworth, Herts).

Deschreider, A.R. Changes in the proteins of gluten after treatment with γ -rays. Reprinted from *L'energia nucleare in agricoltura*. Comitato Nazionale Energia Nucleare, 1963, 429-437.

Tsen, C.C. and Dempster, C.J. Changes in sulphydryl groups of flour during storage. *Cereal Chem.*, 1963, 40, 586-589. (Grain Res. Lab., Board of Grain Commissioners for Canada, Winnipeg 2, Manitoba).

Bond, A.B. and Glass, R.L. The sugars of germinating corn (*Zea mays*). *Cereal Chem.* 1963, 40, 459-466. (Dept. Biochem., Univ. Minnesota, St. Paul).

Proto, V. Chemical composition, digestibility in vivo and calculated nutritive value of forage maize at different vegetative states. *Prod. animals*, Naples, 1963, 2, 41-55.

Varvarin, B.G. and Ronis, V.E. Effect of nitrogenous fertilisers and foliar application of urea on yield and protein content of maize. *Vestn. sel'skohoz. Nauki*, 1963, No. 11, 98-102.

Schweigart, F. and Fellingham, S.A. A study of fermentation in the production of Mahewu, an indigenous sour maize beverage of Southern Africa. *Milchewissenschaft*, 1963, 18, 241-246. Nat. Nutrit. Res. Inst., S. African Counc. Sci. Indust. Res., Pretoria).

Policicchio, L. Chemical composition, digestibility in vivo and calculated nutritive value of S 114 hybrid sorghum at different vegetative stages. *Prod. animale* Naples, 1963, 2, 25-39.

Schmidt, W.H. and Colville, W.L. Forage yield and composition of teosinte, corn and forage sorghum grown under irrigation. *Agronom. J.* 1963, 55, 327-328. (Nebreska Agric. Exp. Stat. Lincoln).

Pokorný, J., Pliska, V., Pokorna, V., Karvánková-Kubatová, J. and Janicek, G. Studies of the chemistry of oat and its

- products. 6. Activity of oat lipases Prokorny, J., Pliska, V., Janicek, G. and Cmolik, J. 7. Variability of properties of oat lipides.
- Zeman, I., Pokorny, J. and Janicek G. S. The composition of waxy substances from oat hulls. II Higher fatty acids in polar lipides. *Sborn. Vys. Skoly chemtechnol., Potravin. Technol.*, 1962, 6, No. 3, 189-198; 199-203; 205-209. (Dept. Food Chem. Anal, Fac. Technol., Inst. Chem. Technol., Prague).
- Rosewan, A.S. Hogan, J.T., Stone, R.B. and Webb, J.C. Gas plasma irradiation of rice. 3. Influence on brown rice and rice bran. *Cereal Chem.*, 1963, 40, 568-575. (S. Reg. Lab., 1100 Robert E. Lee Blvd., New Orleans, La.)
- Lanning, F.C. Silicon in rice. *J. Agric. Food Chem.*, 1963, 11, 435-437. (Dept. Chem., Kansas State Univ., Manhattan).
- Roots :**
- Bajwa, M.I. Effect of manures (artificial and organic) on the starch and protein contents of potatoes. *Agriculture Pakistan*, 1962, 13, No. 4, 23-26.
- Lichtenstein, E. P. and Casida, J. E. Myristicin, an insecticide and synergist occurring naturally in the edible parts of parsnips. *J. Agric Food Chem.*, 1963, 11, 410-415. (Dept. Entomol., Univ. Wisconsin, Madison)
- Leafy vegetables**
- Vittum, M.T. Effect of fertilizers on the quality of vegetables. *Agronom. J.*, 1963, 55, 425-429. (Dept. Veg. Crops New York State Agric Exp. Stat. Cornell Univ., Geneva).
- Legumes**
- Ronda Lain, E., Morales Gallego, J.F. and Otero Cortes, J. Amino acids in seeds of legumes cultivated in spain. *Rev. Nutricion animal*, Madrid, 1963, 1, 24-32.
- Korytnyk, W. and Metzler, E.A. Composition of lipids of lima beans and certain other beans. *J. Sci. Food Agric.*, 1963, 14, 841-844. (Roswell Park Mem Inst., New York State Dept. Health, Buffalo 3.)
- Samofal, T.S.K. Dependence of the Cu and Mn contents of beans flower colour *Vop. Pitani*, 1963, 22, No. 6, 70-71 (Kaf. biohim., Ivano-Frankovsk. med. inst.)
- Wada H. and Fukushima, S. Estrogenic activity in soybean and its products. *Jap. J. Zootech. Sci.*, 1963, 34, 243-247. (Dept. Animal Husb., Sch., Agric Okayama Univ.) Japan.
- Wagenknecht, A.C. The lipids of green beans. *J. Food Sci.*, 1963, 28, 489-494. (New York State Agric. Exp. Stat., Cornel Unive., Geneva)
- Iverson, J.L., Firestone, D. and Horwitz, W. Fatty acid composition of oil from roasted and unroasted peanuts by gas-liquid chromatography. *J. Assoc. off. Agric. Chem.* 1963, 46, 718-725 (Div. Food, Food. & Drug Admin., Washington 25, D.C.)
- Sajanova, V.V. Seed globulins of the hyacinth bean, *Dolichos lablab* L. *Dokl. Akad. Nauk SSSR*, 1963, 152, 478-480.
- Singh, C.P. and Talapatra, S.K. Yield, chemical composition and nutritive value of the legume *Melilotus indica* *All. Indian J. Vet. Sci.*, 1963, 33, 63-70. (U.P. Coll. Vet Sci. Animal Husb., Mathura).
- Fruits**
- Wagner, D. and Monselise, J.J. The determination of some components of citrus and tomato Juices produced in Israel. *Israel J. Technol.*, 1963, 1, 33-37. (Lab. Assis Ltd., Ramat Gan.)
- Senn, V.J. Changes in total carbonyl content of orange Juice and concentrate during storage. *J. Food Sci.*, 1963, 28, 531-536. (Fruit and Veg. Products Lab., Winter Haven, Fla.)
- Teranishi, R., Schultz, T.H., McFadden, W.H., Lundin, R.E. and Black, D.R. Volatiles from oranges. I. Hydrocarbons, Identified by infrared, nuclear magnetic resonance and mass spectra. *J. Food Sci.*, 1963, 28, 541-545. (W. Reg. Res. Lab. Agric. Res. Serv., U.S. Dept. Agric., Albany, Calif.)
- Gjessing, L. and Armstrong, M.D. Occurrence of (-) sympatol in oranges. *Proc. Soc. Exp. Biol. Med.*, 1963, 114, 226-229, (Dikemark Sykehus, Asker, Norway).
- Gunther, F.A., Carman, G.E., Blinn, R.C. and Barkley, J.H. Persistence of residues of Guthion on and in mature lemons and oranges and in laboratory processed citrus 'pulp' cattle feed. *J. Agric. Food Chem.*, 1963, 11, 424-427. (Univ. Calif.)

- fornia Citrus Res. Center, Riverside.) Erickson, L.C., Brannaman, B.L. and Coggins, C.W. (jr). Residues in stored lemons treated with various formulations of 2, 4-D. *J. Agric. Food Chem.*, 1963, 11, 437-440. (Dept. Biochem., Univ. California, Riverside).
- El Khadem, H. and Abdel Rahman, M.M.A. Constituents of the fruit of *citrulls colocynthis*. *J. Chem. Soc.*, 1963, 4991-4993. (Fac Sci. Alexandria Univ. U.A.R.)
- Lindner, K., Hapka, S., Kramer, M. and Szoke, K. Dietetic value of different varieties of musk melon and water melon grown in Hungary. *Qual. Plant, Materise vegetables*, 1963, 9, 203-216. (Inst. Ernährungswiss., Budapest).
- Braunsdrof, K. Nut pulp, Nehrung, 1963, 7, 256-260. (Bezirks-Hyg. Inst., Magdeburg.)
- Kleeberg, J., Boxer, J. and Steiner, E.J. Studies on almonds, 3. The serotonin content of dried sweet almonds. *Arch. internat. Pharmacodyn.*, 1963, 144, 432-436. (Clin. Res Lab, Rothschild Municip. Hosp, Haifa.)
- De Bruin, A., Heesterman, J.E. and Mills, M.R. A preliminary examination of the fat from *Pachira aquatica*. *J. Sci. Food Agric.*, 1963, 14, 758-760. Royal Trop. Inst., Chem. Biol. Labs, Dept. Trop. Products, Amsterdam)
- Other Types**
- Hardicka, J. Evaluation of protein hydrolysates, especially those of soya. *Sborn, Vys. Skoly chem. technol., Potravin. Technol.*, 1962, 6, No. 3, 145-151.
- Bell, J.M., Downey, R.K. and Wetter, L.R. Oilmeal from Canadian rapeseed. Canada Dept. Agric. Publ. No. 1183 April 1963, pp. 14
- Chowdhury, D.K. and Mukherjea, R.N. Application of paper chromatography to fats. Seed oils rich in oleic acid. Estimation of the constituent fatty acids in the seed oils of margosa (*Azadirachta indica*), cashew (*Anacardium occidentale*) and Putranjiva roxburghii). *Nehrung*, 1963, 7, 111-121. (Dept. Chem., Sunendranath Coll., Calcutta)
- Verescagin, A.G., Skvarcova, S. V. and Ishakov, N.I. Triglyceride composition of cotton seed oil. *Biohimija*, 1963, 28, 868-878. (Inst. fiziol. rasten. Timir jazeva Akad. nauk SSSR, Moscow).
- Fincke, A. The occurrence of caffeine and theobromine in cocoa butter. *Fette: Seifen Anstrichmittel*, 1963, 65, 647-650.
- Wada, H. Estrogenic activity in fresh and dried forages. *Jap J. Zootach. Sci.*, 1963, 34, 248-252. (Dept. Animal Hub, Sch. Agric., Okayama Univ.)
- ### 2.2 Foodstuffs of Animal Origin
- Gorter, A. and De Groot-Polman, H. Analysis of Dutch coned foods. 1. Animal products. *Voeding*, 1963, 24, 587-602. (Cent. Inst. Voedingsonderzoek T.N.O., Utrecht.)
- #### Milk and milk products
- Gurtovoj, B.L. Some trace elements in milk of women in the climatic and geographical conditions of the arid subtropics of the Tadzhik SSR. *Vop. Pitan.*, 1963, 22, No. 5, 70-73. (Tadzhik. med. inst., Dusanne).
- Ghadimi, H. and Pecora, P. Free amino acids of different kinds of milk. *Amer. J. Clin. Nutrition*, 1963, 13, 75-81. (Dept. Pediat., State Univ. New York, Downstate Med. Center, Brooklyn).
- Tremolieres, J. Food value of milk. *Lait*, 1963, 43, 384-390.
- Henningson, R.W. Recent Research concerning the freezing point value of milk produced in the Southeastern United States. The variability of the freezing point of fresh raw milk. *J. Assoc. Off. Agric. Chem.*, 1963, 46, 732-736; 1036-1042 (Dept. Dairy Sci., Clemson Coll., S.C.)
- Ter Horst, M.G. Influence of pasture and housing periods on the composition of bulk milk. *Nederlands Melk Zuiveltijdschr.*, 1963, 17, 162-175.
- Kastly, P. and Gerber, H. Variations in the chemical composition of individual milk samples. *Mitt. Geb. Lebensmittel. Hyg.*, 1960, 54, 258-284. (Eidg. Milchwirtschafts. Versuchsanst. Liberfeld-Berne.)
- Foot, A.S., Line, C. and Rowland, S.J. The effect of pre-partum feeding of heifers on milk composition. *J. Dairy Res.*, 1963, 30, 403-409. (Nat. Inst. Res. Dairying, Shinfield, Reading).
- Kugenev, P. V. and Medvedeva, M. N. Effect of urea in the rations of cows on

- the amino acid composition of the protein in preserved milks. Izv. Timirjazev' Sel'skohoz. Akad., 1963, No. 4, 144-148.
- Kiermeier, F. and Kirchmeier, O. Seasonal variations caused by feeding in the amino acid composition of casein. Biochem. Ztschr., 1963, 337, 519-524. (Milchwirtsch. Inst. Weihenstephan.)
- Davidov, R. and Gal'Ceva, V. Variations in the amount and composition of casein in milk. Mol. Prom., 1963, No. 10, 8-11. (Sel'skohoz. Akad. K.A. Timirjazeva, Moscow.)
- Aristova, V. The polyunsaturated acids of milk fat. Mol. Prom., 1963, No. 10, 38-30.
- Kuksis, A., McCarthy, M.J. and Beveridge J.M.R. Quantitative gas liquid chromatographic analysis of butterfat triglycerides. J. Amer. Oil Chem. Soc., 1963, 40, 530-535. (Dept. Biochem., Queen's Univ., Kingston, Ont.)
- Winter, M., Stoll, M., Warnhoff, E.W., Greuter, F. and Buchi, G. Volatile carbonyl constituents of dairy butter. J. Food Sci., 1963, 28, 554-561. (Res. Labs, Firmenich & Cie, Geneva.)
- Comberg, G. and Meyer, H. Mineral content of cow's milk at the start of lactation. Zuchungskunde, 1963, 35, 363-375. (Inst. Tierzucht, Tierarztl. Hochsch., Hanover.)
- Widstrom, G., Thorell, C.B. and Aberg, B. The iodine content of Swedish dairy milk. Acta chem scand., 1963, 17, Suppl. No. 1, S238-S240. (Dept Clin. Chem., Stockholms lanr Centralasarett, Danderyd.)
- Imamura, T. and Shibata, M. Studies on minerals of milk products. 8 Cobalt content. Jap. J. Zootech. Sci. 1963, 34, 295-299. (Fac. Agric, Okayama Univ.)
- Kiermeier, F. and Haisch, K.H. Output of xanthine dehydrase and Mo in cow's milk. Ztschr. Tiererphysiol. Tirernah-(Milchwirtsch.rung Futtermittelk., 1963, 18, 186-192. Inst., Weihenstephan.)
- Hoff, J.E. and Wick, E.L. Acid-soluble phosphates in cow milk. J. Food Sci., 1963, 28, 510-518 (Dept. Nutrit. Food Sci., Massachusetts Inst Technol. Cambridge.)
- Boulange, M., Han, K. and Vert, P. Seasonal variations in thiocyanates in milk for industrial use: observations for 5 consecutive years. C.R. Soc. Biol., 1963, 157, 1074-1076. (Lab. Physiol. Fac. Med., Nancy.)
- Leathy, J.S. and Brown, F.G. Residues of 4-tert-butyl-2-chlorophenyl methyl methylphosphoramidate in the milk of dairy cows following dermal application. Vet. Rec., 1963, 75, 1000-1001. (Huntingdon Res. Centre.)
- Gil, S.A. and Jakovleva, A.N. Physico-chemical properties of ionite milk and ionite kefir. Vop. Pitan., 1963, 22, No. 5, 74-75. (Ukrain. Inst. chran. mate mater detstva N.K. Krupskoj, Kharkov.)
- Olling, C.C.J. Composition of Friesian Whey. Nederlands Melk Zuiveltijdschr., 1963, 17, 176-184. (Coop. Condensfabriek 'Friesland', Leeuwarden.)
- Lenoir, J. (with Jouan, A.) The N constituents of ripe Camembert, Saint-Paulin and Gruyere de Comte Cheeses. Lait, 1963, 43, 500-507. (Lab. Technol., Ecole nat. super. agronom., Grignon (S. et. O.)
- Kuzdzal-Savoie, S. and Kuzdzal, W. Fatty acids in milk of different species of animals. Lait, 1963, 43, 369-384. (Stat. Cent. Microbiol. Recherches Laitieres, Jouy-en-Josas.)
- De Man, J.M. and Bowland, J.P. Fatty acid composition of sow's colostrum, milk and body fat as determined by gas-liquid chromatography. J. Dairy Res., 1963, 30, 339-343. (Dept. Dairy Sci., Univ. Alberta, Edmonton).
- Cmelik, S.H.W. Some properties of the fat from a transitional milk of the Eland (Taurotragus oryx) Rhodesian J. Agric. Res., 1963, I, 88-89 (Leibigs (Rhodesia) Ltd, Res Lab., West Nicholson.)
- Berge, S. New analyses of reindeer milk. Tidsskr. norske Landbruk, 1963, 70, 27-34. Norwegian.
- Baker, B.E., Bertok, E.I. and Symes, A.L. The protein and lipid constitution of guinea pig milk. Canad. J. Zool., 1963, 41, 1041-1044. (Fac. Agric. McGill Univ., Macdonald Coll. P.O. Que.)
- Baker, B.E., Huang, F.Y.Y. and Harington, C.R. The carbohydrate content of polar bear milk casein. Biochem. Biophys. Res Commun., 1963, 13, 227-230. (Dept.

- Chem., Fac. Agric., McGill Univ., Macdonald Coll., Montreal, Que).
- Baker, B.E., Harrington, C.R. and Symes, A.L. Polar bear milk. I, Gross composition and fat constitution. *Canad. J. Zool.*, 1963, 41, 1035-1039. (Fac. Agric., McGill Univ., Macdonald Coll. P.O., Que).
- Eggs**
- Laporte, P.D., Siegel, P.B. and King, K.W. Proximate and amino acid composition of eggs and chicks from growth-selected lines of White Rocks. *Life Sci.*, 1963, No. 8, 584-593. (Virginia Polytech. Inst., Blacksburg).
- Ostrowski, W. and Krawczyk, A. The riboflavin flavoprotein from egg yolk. *Acta chem. scand.*, 1963, 17, Suppl. No. 1, S241-245. (Dept. Physiol. Chem., Med. Acad., Cracow.)
- Meat (All Kinds)**
- Jones, K.B. Houston, T. W. and Harries, J.M. Studies in beef quality. 2. The influence of sire on the quality and composition of beef. *J. Sci. Food Agric.*, 1963, 14, 637-645. (Food Sci. Plant-Health Div., Minist. Agric. Fish Food, Horseferry Rd., London, S.W.I.)
- Hardlicka, J. and Klein, S. Hydroxyproline and tryptophan in meat in relation to its nutritive value. *Sborn. Vys. Skoly-chem. technol., Potravin. technol.*, 1962, 6, No. 3, 139-144.
- Goll, D.E., Bray, R.W. and Hoekstra, W.G. Age-associated changes in muscle composition. The isolation and properties of a collagenous residue from bovine muscle. *J. Food Sci.*, 1963, 28, 503-509. (Dept. Meat Animal Sci., Univ., Wisconsin, Medison.)
- Cescon, I. and Grieco, D. The fatty acids in the depot lipids of pigs and cattle estimated by gas chromatography. *Boll. Soc. ital. Biol. sper.* 1962, 38, 1803-1805. (Ist Chim. Biol., Univ. Milan.)
- Henning, W. Estimation of the fat content of meat products and sausages, and particularly of Brühwurst. *Ztschr. Lebensmittel-Untersuch. Forsch.*, 1963, 120, 369-375. (Chem. Untersuchungsamt Stadt Stuttgart)
- Hornstein, I., Crowe, P.F. and Sulzbachér, M.L. Flavour of beef and whale meat Nature, 1963, 199, 1252-1254. (Meat Lab., E. Utilization Res. Development Div., U.S. Dept Agric. Beltsville, Md.)
- Hornstein, I. and Crowe, P.F. Meat flavor: lamb. *J. Agric. Food Chem.*, 1963, 11, 147-149. (E. Utilization Res. Development Div., U.S. Dept. Agric., Beltsville, Md.)
- Amirov, A.K. Comyosition of meat and physico-chemical properties of mutton fat. *Zivotnovodstvo*, 1963, No. 8, 82-89 (Sel'skohoz. inst., Samarkand.)
- Schuck, C., Burrill, L.M. and Deethardt. D. Nutritive value of leg of lamb roasts. Moisture, energy, protein,fat, and iodine values. *J. Amer. Dietetic. Assoc.*, 1963, 42, 521-523.
- Read, W.W.C. and Awdeh, Z. The fatty acid composition of depot fats of the Somali sheep. *J. Sci. Food Agric.*, 1963, 14, 770-772 (Nutrit. Res Lab., American Univ. Beirut)
- Tribe, D.E. and Peel, L. Body composition of the kangaroo (*Macropus sp.*) *Austral. J. Zool.*, 1963, 11, 273-289. (Sch. Agric., Univ. Melbourne).
- Saakjan, S.G. Chemical and amino acid composition of broiler meat. *Izv. Akad. Nauk Armjansk. SSR, Biol. Nauki* 1963, 16, No. 9, 33-37.
- Marion, J.E. and Woodroof, J.G. The fatty acid composition of breast, thigh, and skin tissues of chicken broilers as influenced by dietary fats. *Poultry Sci.*, 1963, 42, 1202-1207 (Food Processing Dept., Georgia Exp. Stat., Experiment.)
- Fish**
- Raush-Stroomann, J.G. and Breckwoldt, M. Mineral content of fish. Studies of minerals (Na, K, Ca, P, Mg) in fish and their importance in the diet of healthy and sick people. *Med Ernährung*, 1963, 4, 240-244. (I. Med. Univ.-klin., Hamburg-Eppendorf.)
- Damberg, N. Extractives of fish muscle. 3. Amounts, sectional distribution, and variations of fat, water-solubles, protein and moisture in cod (*Gadus morhua L.*) fillets. *J. fish. Res. Board Canada*, (1963, 20, 909-918.) Technol. Res. Lab., Halifax, N.S.)
- Other types**
- Masson, L. and Schmidt, Hebbel, H.

- Sugars in Chilean honeys. Nutricion. Bromatol., Toxicoi., 1963, 2, 85-88. (Cat, Bromatol., Fac. Quim. Farm., Univ. Chile.)
- Soloveva, T. Ja. and Bazarova, V. I. Free amino acids in some honeys from single flower species. Vop. Pitan., 1963, 22, No. 6, 69-70. (Inst. sovet. torg. F. Engelsa, Leningrad)
- Hadorn, H. and Zurcher, K. Honey from sugar feeding. Mitt. Geb. Lebensmittel. 1963, 54, 322-330. (Lab. VSK. Basle.)
- 2.3 Cooking, preservation and radio activity of foods :**
- Hipsley, E.H. Food enrichment policies in Pacific islands. With special reference to iodised salt, thiamine fortified rice and vitamin A-fortified foods. Food Nutrition, Austral., 1963, 20, 3-8. (Inst. Anat., Commonwealth Dept. Health, Canberra.)
- Ondreicka, R., Simko, V. and Bucko, A. Changes in chemical and physical properties of lard and butter on heating. Vop. Pitan., 1963, 22, No. 6, 43-46. (Inst. isseld. pitan. naselenija, Bratislava.)
- Aldor, T. The behaviour of foods in the high frequency range (microwave region). 1. Losses of weight, moisture, fat, protein and vitamins A and B₁ during grilling of meat in the high-frequency radiation range alone or with additional infrared irradiation compared with conventional cooking.) Ztschr. Lebensmittel-Universuch. Forsch., 1963, 123, 189-195. (Inst. Ernährungswiss., Budapest.)
- Ginesberg, A., Schurian, E. and De Souza, J. St. A.M. Potassium sorbate as a preservative in beef and mutton. Vet. Rec., 1963, 75, 943-945. (Dept. Agric., Wellington, N.Z.)
- Hansen, P. Fat oxidation and storage life of iced trout. 1. Influence of gutting. J. Sci. Food Agric., 1963, 14, 781-786. (Technol. Lab., Minist. Fiso., Copenhagen.)
- Desouches, B. Incorporation of skimmed milk powder in bread. Bull. Soc. Sci. Hyg. Alimen., 1963, 51, 207-208.
- Bojankiewicz, M. Chemical changes during microbiological spoilage of bakery products. Roczn. Państwowege Zakł. Hig., 1963, 14, 225-230.
- Lewis, N.F. and Mathur, P.B. Extension of storage lives of potatoes and onions by cobalt-60 γ -rays. Internat. J. Appl. Radiation, 1963, 14, 447-453. (Atomic Energy Estab., Trombay)
- Lodh, S.B., Mukherjee, S.K. and Bose, A.N. Storage of mandarin oranges, 2. Effect of hormones and wax coatings J. Food Sci., 1963, 28, 519-524. (Div. Food Technol., Biochem. Eng., Jadavpur Univ., Calcutta.)
- Astrup, H. Trials with anti-oxidants in feedingstuffs. Tidsskr. aarske Landbruk, 1963, 70, 101-111.
- Wick, E., Seip, W. and Perenger, O. Ensiled hay as basal feed. The method of preserving fodder with automatic emptying, its organisation and profitability on the farm, with the Harvestore as an example. Verlag Paul Parey, Hamburg : Berlin, 1962, pp.51.
- Trinder, N. Losses in making grass silage in Northern England, I. A survey, Agric. Progr., 1962, 37, 19-26. (Nat. Agric. Advisory Serv., N. Reg., Newcastle upon Tyne.)
- Haken, J.W. and Hardon, H.J. Radioactive contamination of Dutch food. Voeding, 1963, 24, 535-545.
- Smeets, J.G.P.M. Quantitative and qualitative comparison of the occurrence of fission products in the atmosphere and vegetable and animal products. Landbouwk. Tijdschr., 1963, 75, 760-777. (Directoraat Bescherming Gezondheid, Euratom, Brussels.)
- Laug, E.P., Mikalis, A., Bollinger, H.M. and Dimitroff, J.M. Total diet study. A. Strontium-90 and cesium-137 content.
- Deutsch, M.J., Duffy, D., Pillsbury, H.C. and Loy, H.W. Nutrient content.
- Mills, P.A.C. Pesticide residue content. J. Assoc. Off. Agric. Chem., 1963, 46, 749-752; 752-758; 759-762; 762-767. (Radioactivity Branch, Food & Drug Admin. Washington 25, D.C.)
- Seidler, H. and Eschenbach, G. The ⁹⁰Sr activity of milk in relation to fallout ³B-activity and amount of precipitation in the period October 1961 to December 1962. Nahrung, 1963, 7, 588-590. (Inst. Ernährung, Potsdam-Rehbrücke.)
- Audren, M.L., Bertrand, S., Jeanmaire, L. and Michon, G. Testing of radioactive

- contamination of milk by ^{131}I . Bull. Acad. vet France, 1963, 36, 287-290. (Centre d'Etudes Nucleaires Fontenay-aux-Roses).
- Michon, G. Organisation of testing of radio active contamination of milk: short-lived radio-isotopes. (Bull. Acad. vet. France, 1963, 36, 283-285.)
- Acker, L., Henke, G. and Schulte, K.E. The ^{90}Sr activity of wheat samples from the 1962 harvest in Westphalia-Lippe. Ztschr. Lebensmittel Untersuch.-Forsch., 1963, 123, 6-9. (Inst. Pharm. Lebensmittel-chem., Westf. Wilhelms-Univ., Münster.)
- ### 3. EXPERIMENTAL NUTRITION
- #### 3.1 Carbohydrates :
- Cabib, E. Carbohydrate metabolism. Annu. Rev. Biochem., 1963, 32, 321-354. (Inst. Invest. Bioquim., 'Fundaction Campomar,' Buenos Aires.)
- Wood, H.G. Katz, J. and Landau, B.R. Estimation of pathways of carbohydrate metabolism. Biochem. Ztschr., 1963, 338, 809-847. (Dept. Biochem., Western Reserve Univ., Sch. Med., Cleveland, Ohio.)
- Bloom, W.L. and Azar, G.J. Similarities of carbohydrate deficiency and fasting. 1. Weight loss, electrolyte excretion, and fatigue.
- Azar, G.J. and Bloom, W.L. 2. Ketones, nonesterified fatty acids, and nitrogen excretion. Arch. Int. Med., 1963, 112, 333-337; 338-343. (Ferst Res. Center, Piedmont Hosp., Atlanta, Ga.)
- Passmore, R. and Swindells, Y.E. Observations on the respiratory quotients and weight gain of man after eating large quantities of carbohydrate. Brit. J. Nutrition, 1963, 17, 331-339. Dept. Physiol., Univ Edinburgh.
- Mehnert, H., Forster, H., Mehnert, B., Kutzschchenbach, B. V., Thoring, I., and Arbogast, K. Comparative studies of absorption of glucose, galactose and lactose in man and in the rat. 1. Materials and methods, preliminary studies, critique.
- Mehnert, H., Forster, H., Stuhlfauth, K., Kehnert, B., Geser, K. and Langer, M. 2. Glucose and galactose absorption.
- Forster, H., Mehnert, H., Stuhlfauth, K., Mehnert, B., Tamm, H. and Bailer, P. 3. Lactose absorption, conclusions. Kilin, Wochenschr., 1963, 41, 540-543; 544-549; 549-554. (Med. Poliklin., Univ. Munich.)
- Goldenberg, J. and Cummins, A. J. The effect of pH on the absorption rate of glucose in the small intestine of humans. Gastroenterology, 1963, 45, 189-195. (Gastrointestinal Lab., Dept. Med. Univ. Tennessee Coll. Med., Memphis.)
- Jaremko, E.E. Effect of variation of some blood components on glucose absorption in the small intestine. Vop. Pitani., 1963, 22, No. 5, 9-14. Kaf. normal. fiziol., Med. Inst., Lwow).
- Keston, A. S. Inhibition of action of lens mutarotase on glucose by cataractogenic sugars and corresponding polyols. Arch. Biochem. Biophys., 1963, 102, 306-312 (Inst. Med. Res. and Studies, New York.)
- Filsell, O.H., Jarrett, I.G., Atkinson, M.R., Caiger, P. and Morton, R.K. Nicotinamide nucleotide coenzymes and glucose metabolism in the livers of foetal and newborn lambs. Biochem. J., 1963, 89, 92-100. (C.S.I.R.O. Dev. Biochem. Gen. Nutrit., Adelaide.)
- Wood, F.C. (Jr.) and Cahill, G.F. (Jr.) Mannose utilization in man. J. Clin. Invest., 1963, 42, 1300-1312. (Dept. Med., Harvard Med. Sch., Boston, Mass.)
- Dahlqvist, A. and Thomson, D.L. The digestion and absorption of maltose and trehalose by the intact rat. Acta physiol. scand., 1963, 59, 111-125. (Dept. physiol. Chem., Univ. Lund.)
- Henegan, J.B. Influence of microbial flora on xylose absorption in rats and mice. Amer. J. physiol., 1963, 205, 417-420. (Lobund Labs., Dept. Biol. Univ. Notre Dame, Ind.)
- Langemann, F.W. and Comer, C.L.I. The presence of lactose in intestinal tissue. J. Nutrition, 1963, 81, 95-98. (Dept. Physical Biol., New York State Vet. Coll., Cornell Univ., Ithaca.)
- Tudisco, R. and Turner, D.A. Intestinal absorption of sucrose esters with long chain fatty acids. Preliminary study on the rat. Boll. Soc. Ital. Biol. sper., 1963, 39, 1041-1044. (Biochem. Res. Div., Dept. Med., Sinai Hosp., Baltimore, Md.)

- Beringer, A. and Thaler, H. Quantitative studies on the glycogen content of the human liver in health and disease, I. Wien. klin. Wochenschr., 1963, 75, 509-513. (II. Univ. klin. Hals-Nasen-Ohr-krankh., Vicnna.)
- Prasanan, K.G., Rajan, R., and Subrahmanyam, K. Brain glycogen in the fed and fasting state Indian J. Med. Res., 1963, 51, 703-707. (Dept. Biochem., Med. Coll., Pondicherry.)
- Capps, J.C. and Shetlar, M.R. In vivo incorporation of D-glucosamine-1-C14 into acid mucopolysaccharides of rabbit liver. Proc. Soc. Exp. Biol. Med., 1963, 114, 118-120. (Dept. Biochem., Univ. Oklahoma Sch. Med., Oklahoma City.)
- De Venanzi, F., Carnvevali, T. and Pena, F. Further observations on the effect of glucagon on serum inorganic phosphorus. Acta physiol. latino amer., 1962, 12, 351-359 (Cat. Patol. Gen. Fisiopatol. Inst. Ned. Exp., Univ. Cent. Venezuela.)
- Mondon, C.E. Glucose tolerance in mildly and moderately diabetic rats exposed to cold. Proc. Soc. Exp. Biol. Med., 1963, 113, 805-809. (Dept. Physiol. Univ. S. California Sch. Med., Los Angeles.)
- Bassler, K.H. and Dreiss, G. Antiketogenic effect of xylitol in alloxan diabetic rats. Klin. Wochenschr., 1963, 41, 593-595. (Physiol. Chem. Inst., Johannes Cutenberg. Univ. Mainz.)
- Bassler, K.H. and Heesen, D. Formation of glycogen in liver and muscle from xylitol, sorbitol and glucose in healthy and alloxan diabetic rats. Klin. Wochenschr., 1963, 41, 595-598. (Physiol. Chem. Inst., Johannes Gutenberg-Univ., Mainz.)
- 3.2. Fats :**
- Mead, J. F. Lipid metabolism. Annu. Rev. Biochem., 1963, 32, 241-268. (Dept. Biophys. Nuclear Med., Sch. Med., Univ. California, Los Angeles.)
- Jochims J. Adaptation of fat metabolism in early infancy. 1. The slight alimentary lipaemia of the premature. 2. Effect of carbohydrate meals on alimentary lipaemia. Ztschr. Kinderheilk., 1963, 88, 372-378; 379-391. (Kinderklin., Stadt. Krankenhaus Sud, Lubeck.)
- Peterson, M.L. On the reesterification of fatty acids during absorption of fat: studies in patients with chyluria. Gastroenterology, 1963, 44, 774-786. (Div. Gastroenterol., Dept. Med., Washington Univ. Sch. Med., St. Louis, No.)
- Krebs, H.J. and Scharenberg, R. The thymol test after fat loading and its importance for study of blood donors. Deutseh. med. Wochenschr., 1963, 88, 1741-1743. (Zentralinst. Blutspenduelsen, Hamburg.)
- Gries, F.A., Jung, G.F. and Jahnke, K. Chylomicron metabolism. I Intravenous administration of radioactively labelled chylomicrons in normal and hyperlipaemic persons. Klin. Wochenschr., 1963, 41, 628-633. (2. Ned. Klin., Med. Akad., Dusseldorf.)
- Logatkin, M.N. Some characteristics of the utilisation of endogenous fat during partial starvation and physical work. Vop. Pitan., 1963, 22, No. 5, 27-34. (Voennomed. akad. S. M. Kirova Leningr.)
- Glatzel, H. Effects of prolonged high-fat and low-fat feeding on lipid metabolism, carbohydrate tolerance, basal metabolism and intestinal flora. Nutritio et Dieta 1963, 5, 192-212 (Max-Planck Inst. Ernahrungsphysiol., Dortmund.)
- Bobek, P. and Ginter, E. The effect of thermal adjustment of sunflower oil on its resorption in rats. Nutritio et Dieta, 1963, 5, 30-37 (Inst. Human Nutrit. Res., Bratislava.)
- Morin, R. J. and Bernick, S. Acid mucopolysaccharides of the arterial wall in essential fatty acid deficiency. Amer. J. Pathol., 1963, 43, 337-348. (Div. Nutrit. Sci., Sch. Pub. Health, Univ. California, Los Angeles.)
- Saunders, D. R. and Dawson, A. M. The absorption of oleic acid in the bile fistula rat Gut, 1963, 4, 254-260, (Med. Unit, Royal Free Hosp., London).
- Young R. J., Garrett, R. L. and Griffith, M. Factors affecting the absorbability of fatty acid mixtures high in saturated fatty acids. Poultry Sci., 1963, 42, 1146-1154. (Dept. Poultry Husb., Cornell Univ., Ithaca, N. Y.)
- Peluffo, R. O., Brenner, R.R. and Mercuri, O. Action of linoleic and arachidonic acids upon the eicosatrienoic acid

- level in rat heart and liver. *J. Nutrition*, 1963, 81, 110-116. (Cat Quim. Biol., Inst. Fisiol., La Plata, Argentina.)
- Mourhauer, H. and Holman, R. T. Effect of linoleic acid upon the metabolism of linolenic acid. *J. Nutrition*, 1963, 81, 67-74. Univ. Minnesota, Hormel Inst., Austin.)
- Rook, J. A. F., Balch, C.C., Campling, R. C. and Fisher, L. J. The utilization of acetic, propionic and butyric acids by growing heifers. *Brit. J. Nutrition*, 1963, 17, 399-406. (Nat. Inst. Res. Dairy-ing, Shinfield, Reading).
- Borchgrevink, C. F. and Havel, R. J. Transport of glycerol in human blood. *Proc. Soc. Exp. Biol. Med.*, 1963, 113, 946-949. (Cardiovasc. Res. Inst., Univ. California, San Francisco).
- Chevallier, F. and Vyas M. Intestinal absorption of cholesterol. *Sem. Hop.*, 1963, Pathol. Biol., 11 489-494 (Dept. Biol., Commissariat Energetique Atomique, Centre Etudes Nucleaires, Saclay (S- et-O.)
- Kaplan, J. A., Cox, G. E. and Taylor, C. B. Cholesterol metabolism in man: studies on absorption. *Arch. Pathol.*, 1963, 76, 359-368 (Dept. Pathol., Evanston Hosp., Ill.).
- Haust, H. L. and Beveridge, J. M. R. Type and quantity of 3 B-hydroxysterols excreted by subjects subsisting on formula rations high in corn oil. *J. Nutrition*, 1963, 81, 13-16. Dept. Bioche., Queen's Univ., Kingston, Ont.
- Carlson, L A. and Hallberg, D. Studies on the elimination of exogenous lipids from the blood stream. The kinetics of the elimination of fat emulsion and of chylomicrons in the dog after single injection. *Acta physiol. scand.*, 1963, 59, 52-61. (Dept. Int. Med., Karolinska Hosp., Stockholm)
- Kaemmerer, K. Does diet fat influence barbiturate narcosis? *Deutsch. tierarztt. Wochenscher.*, 1963, 70, 290-292. (Vet. med-Lab., Farbensfabrik Bayer AG, W. Elberfeld.)
- Van Den Bosch, J. and Billiau, A. Convulsive syndrome in rabbits injected with fat emulsion and heparin. *J. Exp. Med.*, 1963, 118, 515-526. (Rega Inst. Med. Res., Univ. Louvain.)
- Erwin, E.S., Sterner, W. and Marco, G.J. Effect of type of oil and site of administration on the fate of fatty acids in sheep. *J. Amer. Oil Chem. Soc.* 1963, 40, 344-347. (Monsanto Chem. Co., St. Louis, Mo.)
- Clement, J., Boucrot, P., Loriette, C. and Raulin, J. Influence of the nature of the lipids in the diet on the composition and structure of depot triglycerides of the white rat. *Bull. Soc. Chim. biol.*, 1963, 45, 1031-1042. (Lab. Physiol. animale, Fac. Sci. Dijon.)
- Turchetto, E., Rossi, S. and Gandolfi, M. G. Effect of diet lipids on the fatty acid spectrum of liver and blood lipids in the rat. *Boll. Soc. ital. Biol. sper.* 1962, 38, 1521-1524. (1st Chim. Biol., Univ. Bologna.)
- Fidanza, A. and Constable, B. J. The fatty acids of heart lipids in the rat: effect of different diet fats. *Boll. Soc. ital. Biol. sper.*, 1962, 38 1681-1683. (Dunn. Nutrit. Lab, Univ. Cambridge.)
- Marion, J E. Edwards, H.M. (Jr.) Effect of diet on the uptake of carbon-14-labelled acetate, glucose and leucine into lipids of the chick. *J. Nutrition*, 1963, 81, 55-59. (Poultry Dept. Univ. Georgia, Athens.)
- Holman, R.T. and Mohrhauer, H. A hypothesis involving competitive inhibitions in the metabolism of polyunsaturated fatty acids. *Acta chem. scand.*, 1963, 17, Suppl. No. S84-S90. (Hormel Inst., Univ. Minnesota, Austin.)
- Hayashida, T. and Portman, O.M. Changes in succinic dehydrogenase activity and fatty acid composition of rat liver mitochondria in essential fatty acid deficiency. *J. Nutrition*, 1963, 81, 103-109. (Dept. Nutrit., Harvard Sch. Pub. Health, Boston, Mass.)
- Gollnick, P. D. Chronic effect of exercise on liver cholesterol of normal and hypercholesteremic rats. *Amer. J. Physiol.*, 1963, 205, 453-456. (Coll. Physical Educat., Washington State Univ., Pullman.)
- Duperray, B. and Pacheco, H. and Influence of muscular work and of feed on metabolism of cholesterol in the rats. *C. R. Acad. Sci.*, 1963, 257, 2549-2551.

- (Serv. Biochem., Inst. Nat. Sci. appl., Villeurbanne, Rhone.)
- Rossi, S., Martinelli, M. and Turchetto, E. Diet cholesterol, Heart lipids and their fatty acid composition. *Boll. Soc. Ital. Biol. sper.* 1962, 38, 1517-1519. (1st Chim. Biol., Univ. Bologna.)
- Martinelli, M., Rossi, S. and Turchetto, E. Effect of different intakes of cholesterol on liver lipids and their fatty acid composition. *Boll. Soc. Ital. Biol. sper.* 1962, 38, 1519-1521. (1st Chim. Biol. Univ. Bologna)
- Gerson, T., Shortland, F.B. and Dunckley, G.G. Effect of B-sitosterol on cholesterol and lipid metabolism in the rat. *Nature*, 1963, 200, 579. (Fats Res. Lab., D.S.I.R., Wellington, N.Z.)
- Portman, O. W. and Sugano, M. The hydrolysis and fatty acid exchange of cholesterol esters administered in lipoproteins to Cebus monkeys. *Arch. Biochem Biophys.* 1963, 102, 335-342. (Dept. Nutri. Harvard. Sch. Pub. Health, Boston, Mass.)
- Taylor, C.B., Manalo-Estrella, P. and Cox, G.E. Atherosclerosis in rhesus monkeys. 5. Marked diet-induced hypercholesterolemia with xanthomatosis and severe atherosclerosis.
- Taylor, C.B. Patton, D.E. and Cox, G.E. 6. Fatal myocardial infarction in a monkey fed fat and cholesterol.
- Manalo-Estrella, P., Cox, G.E. and Taylor, C.B. 7. Mechanism of hypercholesterolemia; hepatic cholesterologenesis and the hypercholesterolemic threshold of dietary cholesterol. *Arch. Pathol.*, 1963, 76, 239-249; 404-412; 413-423. (Dept. Pathol., Evanston Hosp., Ill.)
- Friedman, M. and Byers, S.O. Observations concerning the evolution of atherosclerosis in the rabbit after cessation of cholesterol feeding. *Amer. J. Pathol.*, 1963, 43, 349-359 (Harold Brunn Inst., Mount Zion Hosp., San Francisco, Calif.)
- Andreenko G. V., Braks, T. A., Kurcin O. Ja, Popova, A.V. and Komjagina, N.V.K. Role of maize oil in experimental circulatory disorders. *Vop. Pitani*, 1963, 22, No. 6, 33-37. (Lab. fiziol funkcijs. Inst. Pitani. AMN SSSR. Moscow).
- Gallo, L. L. and Treadwell, C. R. Localization of cholesterol esterase and cholesterol in mucosal fractions of rat small intestine. *Proc. Soc. Exp. Biol. Med.*, 1963, 114, 69-72. Dept. Biochem., George Washington, Univ. Sch. Med., Washington D.C.)
- Murthy, S.K., David, J.S.K. and Ganguly, J. Some observations on the mechanism of absorption of cholesterol in rats. *Biochem. biophys. Acta*, 1963, 70, 490-492. Dept. Biochem., India, Inst. Sci., Bangalore.)
- Grande, F., Prediction of serum cholesterol changes produced by dietary fat. *Amer. J. Clin. Nutrition*, 1963, 13, 122-124. (Lab. Physiol. Hyg., Univ. Minneapolis.)
- Ancona, V. C. and Caloza, D. (Jr.) Cod liver oil-its effect on serum cholesterol concentration. *J. Amer. Geriat. Soc.*, 1963, 11, 952-958, St. Clare's Hosp. New York 19.)
- Kahn, S. G., Vandeputte, J., Wind, S and Yacowitz, H. A. Study of the hypcholesterolemic activity of the ethyl esters of the polyunsaturated fatty acids of cod liver oil in the chicken. 1 Effect on total serum cholesterol.
- Kahn, S.G. Wind, S., Slocum, A., Pfeffer, D. and Yacowitz, H. 2. Effect on serum and tissue cholesterol and aortic and coronary atherosclerosis. *J. Nutrition*, 1963, 80, 403-413; 414-424. (Squibb Inst. Med. Res., New Brunswick, N.J.)
- Kaneda, T. and Alfin-Slater, R. B. A comparison of the effects of the polyunsaturated fatty acids of cuttlefish liver oil and cotton seed oil on cholesterol metabolism. *J. Amer. Oil Chem. Soc.*, 1963, 40, 336-338. (Div. Nutri. Sci., Sch. Pub. Health, Univ. California, Los Angeles.)
- Brugemann, J., Niesar, K. H. and Zentz, C. Effect of a triglyceride mixture rich in essential fatty acids on cholesterol blood, liver and brain of the rat.)
- Geroni, L., Valora, N., Lenti, L. and Bonomolo, A. Effect of diet lipids on adrenal cholesterol in the rat. *Boll. Soc. Ital. Biol. sper.*, 1963, 39, 999-1000. (1st Fisiol. Gen. Univ. Rome.)
- Chakrabarti C.H. Saxena, K.L. and Nath, M.C. Effect of rice polishing concentrate on lipid level and cholesterol/phospholipid ratio in cholesterol-fed rats. *Ann.*

- Biochem. Exp. Med., 1963, 23, 249-252. (Dept. Biochem. Nagpur Univ.)
- Armstrong, M. L., Connor, W. E. Melville, R. S. Failure of corn oil and triparanol to prevent hypercholesterolemia and atherosclerosis, Proc. Soc. Exp. Biol. Med., 1963, 113, 960-963, (Veterans Admin. Hosp., Iowa City, Iowa).
- Lisovskij, V.A. Effect of oxygen on biosynthesis of cholesterol in experimental atherosclerosis. Bjull. eksp. Biol. Med., 1963, No 11, 68-71 (Voenno-med. Akad. S. M. Kirova, Leningrad)
- Pick, R., Katz, L. N., Century, D. and Johnson, P. J. Group Isolation and atherosclerosis in cholesterol-fed cockerels. Circulation Res., 1963, 13, 246-252. (Cardiovasc Inst., Michael Reese Hosp., Chicago, Ill.)
- Gresham, G. A. and Howard, A.N. Comparative histopathology of the atherosclerotic lesion. J. Atherosclerosis Res., 1963, 3, 161-177. (Dept. Pathol., Univ. Cambridge,)
- Kobernick, S. D. and Hashimoto, Y. Histochemistry of atherosclerosis. 2. Spontaneous degenerative lesions of aorta of exercised and sedentary rabbits. Lab. Invest., 1963, 12, 685-689. (Div. Labs., Sinai Hosp., Detroit, Mich.)
- Friedman, M. Pathogenesis of the spontaneous atherosclerotic plaque. A study on the cholesterol-fed rabbit. Arch. Pathol., 1963, 76, 318-329. (Harold Brunn Inst., Mount Zinn Hosp. Med. Center. San Francisco, Calif.)
- Lempart, B. L. and Lejtes, F. L. Role of reduced lipolytic activity of the aortic wall in pathogenesis of lipid infiltration. Bjull. eksp. Biol. Med., 1963, 56, No. 10, 25-29. (Cent. inst. usov. vracej, Moscow.)
- Adams, C. W. M., Bayliss, O. B. and Ibrahim, M. Z. M. The distribution of lipids and enzymes in the aortic wall in dietary rabbit atheroma and human atherosclerosis. J. Pathol. Bacteriol., 1963, 86, 421-430. Dept Pathol., Guy's Hosp., Med. Sch., London
- Felt, V., Rohling, S., Hladovec, J. and Vohnout, S. Transfer rate of serum cholesterol into the rabbit aortic wall in various phases of atherosclerosis and after application of cortisone or thyroxine. J. Atherosclerosis Res., 1963, 3, 301-308. (Res. Inst. Endocrinol., Prague).
- ### 3.3 Proteins and Amino acids :
- Giordano, C. Use of exogenous and endogenous urea for protein synthesis in normal and uremic subjects. J. Lab. Clin. Med., 1963, 62, 231-246. (Renal Lab., 1st Patol. Spec. Med., Naples Univ. Sch. Med.)
- Lenkeit, W., Strunz, K., Kemme, J. and Spaarmann, W. Distribution of N and nucleic acid in the body of the baby pig as affected by protein supply (preliminary results). 1. Relative weight gain and distribution of N. Ztschr. Tierphysiol. Tierernahrung Futtermittelk. 1963, 18, 227-239 (Inst. Tierphysiol. Univ., Gottingen.)
- Nicolis, F.B. Variation in weight of some organs of rats in nutritional conditions differing in N intake. Boll. Soc. Ital. Biol. sper., 1962, 38, 1451-1455. (Lab. Direz. Cent. Med., Lepetit, S. P. A., Milan.)
- Bedo, M. Role of different fats in protein metabolism. Nahrung, 1963, 7, 316-320. (Inst. Ernährungswiss., Budapest.)
- Munro, H.N. Importance of mobile depots of body protein. Naringsforskning, 1963, 7, 77-84. (Dept. Biochem., Univ. Glasgow.)
- Spiro, R.G. Glycoproteins; structure, metabolism and biology. New Engl. J. Med., 1963, 269, 566-573; 616-621. (Dept. Biol. Chem., Harvard Med. Scho., Boston, Mass.)
- Keaner, K.M., Smutko, C.J., Krieger, C. H. and Denton, A.E. Water addition to purified diets. 2 Effects of water and carbohydrate on protein efficiency ratio in rats. J. Nutrition, 1963, 81, 87-90. (Campbell Soup Co., Res. Inst., Moorestown, N. J.)
- Squires, B. T. The buccal mucosa in protein-calorie deficiency in the pig. Brit. J. Nutrition, 1963, 17, 303-307. (Human Nutri. Res. Unit, Nutri. Bldg., Nat. Inst. Med. Res., Mill Hill, London, N.W. 7.)
- Roehm, R.R. and Mayfield, H.L. Effects of several low protein diets on the serum.

- iron, total iron-binding capacity, and serum cholesterol of rats. *J. Nutrition*, 1963, 81, 131-138. (Dept Home Econ. Res., Montana State Coll. Agric. Ex. Stat., Bozeman.)
- Beaton, J.R. Protein repletion in rats during cold exposure. *Canad. J. Biochem. Physiol.*, 1963, 41, 1866-1870. (Defence Res. Med. Lab., Toronto).
- Fleck, A. and Munro, H.N. Protein metabolism after injury. *Metabolism*, 1963, 12, 783-789. (Dept. Biochem., Univ, Glasgow.)
- Choitz, H. C., Kurrie, D. and Gaebler, O. H., Utilization of glycine nitrogen at various levels of glycine intake. *J. Nutrition*, 1963, 80, 365-369. (Edsel B. Ford Inst. Med. Res., Henry Ford Hosp., Detroit, Mich.)
- Spolter, P. D. and Harper, A. E. Adaptation of rats to diets containing ethionine or excess leucine. *J. Nutrition*, 1963, 80, 386-390. Dept. Biochem., Univ. Wisconsin, Madison,
- Rerat, A. and Henry, Y. Lysine requirement of the growing rat. Experimental method and results. *C. R. Acad. Sci.*, 1963, 257, 3045-3048 Stat. Recherches pores, C.N.R.Z., Jouy-en Josas (S. et O.).
- Viviani, R., Borri, P. and Ronca, G. Effect of deficiency of lysine and threonine on fatty acid composition of the cerebral lipids in the rat. *Boll. Soc. Ital. Biol. sper.*, 1962, 38, 1776-1778 (1st Chim. Biol. Univ. Bologna).
- Berlinguet, L., Babineau, L. M. Begin, N., Dunnigan, J. and Martel, F. Preliminary biochemical studies of some ϵ -substituted lysines. *Canad. J. Biochem. Physiol.* 1963, 41, 2373-2375. (Dept. Biochem., Fac. Med., Laval Univ. Quebec.)
- Edwards, C. H., Gadson, E. L. and Edwards, G. A. Utilization of methionine by the adult rat. 4. Distribution of the methyl carbon of methionine in tissues, blood, expired carbon dioxide and excreta. *Metabolism*, 1963, 12, 951-958 (Dept. Home Econ., Agric. and Tech. Coll. N. Carolina, Greensboro).
- Williams, J. N. (Jr.) and Jasik, A. D. A markedly anti-lipotropic action of methionine. *Nature*, 1963, 200, 472. (Nat. Inst, Arthritis Metabol. Dis., Bethesda, Md.)
- Pfau, A. and Eyal, Z. Effect of DL-methionine on testicular lesions produced by DL-ethionine in rats. *Lab. Invest.*, 1963, 12, 911-920. (Dept. Pathiol. Hebrew Univ. Hadassah Med. Sch., Jerusalem.)
- Boggs, D. E. McLay, D., Kappy, M. and Waisman, H. A. Excretion of indolyl acids in phenyl-ketonuric monkeys. *Nature*, 1963, 200, 76. (Dept. Pediat., Univ. Wisconsin Med. Sch. Madison).
- Polidora, V. J. Boggs, D.E. and Waisman, H.A. A behavioural deficit associated with phenylketouria in rats. *Proc. Soc. Exp. Biol. Med.*, 1963, 113, 817-820. Wisconsin Keg. Primate Res. Center. Unive. Wisconsin, Madison).
- Tominaga, F., Kobayashi, S., Muta, I., Takei, H. and Ichinase, M. On the isolation and identification of S-methylcysteine from human urine. *J. Biochem., Tokyo*, 1963, 54, 220-231. (Dept. Biochem., Sch. Med., Nagasaki Univ.)
- Horisaka, K. Methylhistidine isolated from poultry urine. *J. Biochem., Tokyo*, 1963, 54, 253-258, (Parmakol. Inst., Soova Med. Hochsch., Tokyo).
- Olsen, E.M. Hill, D.C and Branion, H.D. The effect of dietary diammonium citrate on glutamine and glutamic acid concentration in the blood plasma of chicks. *Poultry Sci.*, 1963, 42, 1177-1181. (Dept. Nutrit., Ontario Agric. Coll., Guelph).
- Zaec, T. L., Guljamov, T.D. and Lektor-skij, B. I. Breakdown of tissue proteins after burns. *Bjull. eskp. Biol. Med.*, 1963, 55, No. 10, 44-48.
- Sakami, W. and Harrington, H. Amino acid metabolism. *Annu. Rev. Biochem.*, 1963, 32, 355-398. (Dept. Biochem., Western Reserve Univ. Sch. Med., Cleveland, 6, Ohio.)
- O'Brien, D. and Butterfield, L.J. Further studies on renal tubular composition of free amino acids in early infancy. *Arch. Dis. childhood*, 1953, 38, 437-442. (Dept. Pediat. Univ. Colorado Med. Center, Denver 20)
- Saini A. S., Singh, I. D. and Singh, A. I. Patterns of urinary amino acids in normal Punjabis. *Indian J. Med. Res.*

- 1963, 51, 941-951. (Dept. Physiol., Govt. Med. Coll. Patiala).
- Sisova, C.A., Klemina, E.A. and Kasatokin, V.I. Rate of absorption of amino acid mixture in the intestine. *Fiziol Z. SSSR* Sechenova, 1963, 49, 1461-1467. (Inst. pitan. AMN LSSR, Moscow).
- Sisova, O.A. Effect of the diet factor on rate of absorption of amino acid mixtures in the intestine. *Vop. Pitan.*, 1963, 22, No. 5, 3-9. Lab. biohim. pitan., Inst. pitan. AMN SSSR, Moscow)
- Munro, H.N., Steel, M.H. and Hutchinson, W.C. Blood corticosterone-levels in the rat after administration of amino-acids. *Nature*, 1963, 199, 1182-1183. (Dept. Biochem., Univ. Glasgow.)
- Hankes, L.V. and Stoner, R.D. Effect of *Trichinella spiralis* infection on incorporation of amino acids into serum and hemoglobin. *Exp. Parasitol.*, 1963, 14 203-209. (Med Res. Center, Brookhaven Nat. Lab., Upton, Long Island, N.Y.)
- Tamir, H. and Ratner, S. A study of ornithine, citrulline, and arginine synthesis in growing chicks. *Arch. Biochem. Biophys.*, 1963, 102, 259-269. (Dept. Biochem., The Public Health Research Institute of the City of New York, Inc., N.Y.)
- Klavins, J.V. Pathology of amino acid excess, 1. Effects of administration of excessive amounts of sulphur containing amino acids; homocystine 2. Effects of administration of excessive amounts of sulphur containing amino acids: L-cystine. *Brit. J. Exp. Pathol.*, 1963, 44, 507-515, 516-519 (Dept. Pathol., Duke Univ. Med. Centre, Durham, N.C.)
- Svaboda, D.J. and Higginson, J. Ultra structural hepatic changes in rats on a necrogenic diet. *Amer. J. Pathol.*, 1963, 43, 477-495. (Dep. Pathol. Oncol., Univ. Kansas Med. Center, Kansas City.)
- ### 3.4 Energy Metabolism :
- Shapiro, B. Endogenous fat energy metabolism. *World Rev. Nutrition dietetics*, 1963, 4, 79-91 (Hebrew Univ. Hadassah Med. Sch., Jerusalem.)
- Mason, E.D., Mundkur, V. and Jacob, M. Basal energy metabolism and heights, weights, arm skinfold and muscle of young Indian women in Bombay, with prediction standards for B.M.R. *Indian J. Med. Res.*, 1963, 31, 925-932. (Dept. Chem. Techol., Univ. Bombay.)
- Ramaswamy, S.S. Dua, G.L. Madhaviah J., Dimri, G.P., Raizada, V.K. and Viswanathan, K.R. The effect of very low environmental temperature on the basal metabolic rate of human subjects. *Indian J. Med. Res.*, 1963, 51, 688-695. (Defences Res. Lab., Landour Cantt., Mussoorie.)
- Thompson, E.M. and Kight, M.A. Effect of high environmental temperature on basal metabolism and concentrations of serum protein bound iodine and total cholesterol. *Amer. J. Clin. Nutrition*, 1963, 13, 219-225. (Sch. Home Econ., Univ. Arizona, Tucson.)
- Grover, R.F. (with Grover, E.B. and Hagerman, J.K.) Basal oxygen uptake of man at high altitude. *J. Appl. Physiol.*, 1963, 18, 909-912. (Cardiovasc. Pulmonary Lab., Dept. Med., Univ. Colorado Sch Ned., Denver.)
- Pencev, P. and Milev, N. Quantitative characteristics of the nutrition of employed persons. *Nahrung*, 1963, 7, 222-232. (Inst. Ernährung, Bulg. Akad. Wiss., Sofia)
- Wirths, W. Physical demands on elderly persons on farms. *Nutritio et Dieta*, 1963, 5, 260-283 (Max-Planck Inst. Ernahrungsphysiol., Dortmund.)
- Cerretelli, P., Margaria, R. and Aghemo, P. Energy cost of running. *Boll. Soc. Ital. Biol. sper.*, 1962, 38, 1645-1647. (Ist Fisiol. Umana, Univ. Milan.)
- Elliot, D.E., Patton, M.B. and Singer, M.E. Energy expenditure of women performing certain household tasks. *Ohio Agric. Exp. Stat. Res. Bull.* No. 939, August 1963, pp. 40.
- Hoopes, J.R. and Patton, M.B. Energy expenditure of home makers performing floorcare activities and an evaluation of floor appearance. *Ohio Agric. Exp. Stat. Res. Bull.* No. 946, August 1963, pp. 32.
- Passmore, R., Strong, J.A., Swindells, Y.E. and El Din, N. The effect of overfeeding on two fat young women. *Brit. J. Nutrition*, 1963, 17, 373-383. (Dept. Physiol., Univ. Edinburgh.)
- Fabry, P., Petrasek, R., Horakova, E.,

- Konopasek, E. and Braun, T. Energy metabolism and growth in rats adapted to intermittent starvation. *Brit. J. Nutrition*, 1963, 17, 295-301. (Physiol. Dept., Inst. Human Nutrit., Prague 4).
- Mount, L.E., Lister, D. and McCance, R. A. Severe undernutrition in growing and adult animals. 11. The first effect of rehabilitation on the metabolic rate and body temperature. *Brit. J. Nutrition*, 1963, 17, 407-413. (Agric. Les. Conn., Inst. Animal Physiol., Babraham, Cambridge.)
- Andersen, K. L., Hellstrom, B. and Lorentzen, F.V. Combined effect of cold and alcohol on heat balance in man. *J. Appl. Physiol.*, 1963, 18, 975-982. (Inst. work Physiol., Royal Norwegian Air-force, Oslo).
- Markovic, P. Thermoregulation in young cattle. *Ved Prace Ustred. Vyzk. Ust. Zivoc. Vyr., Urineves*, 1963, 6, 181-215.
- Petter, C. Adaptation to heat of some wild rodents. *C.R. Soc. Biol.* 1963, 157, 748-751. (Centre Recherches Serv. Cante Armees, Div. Physiol., Hop. Val-de-Grace, Paris)
- DesMarais, and Lachance, P.A. Influence of diet: composition and caloric intake on body weight of warm and cold-acclimated rats. *Canad. J. Biochem. Physiol.* 1963, 41, 2225-2235. (Dept. Biol., Univ. Ottawa).
- Huttunen, M. and Johansson, B.W. The influence of the dietary fat on the lethal temperature in the hypothermic rat. *Acta Physiol scand.*, 1963, 59, 7-11. (Cardiol. Lab., Dept. Med., Allmanna Sjukhuset, Malmo.)
- 3.5. Minerals :**
- General :**
- Pejve, Jn. V.V.I. V.I. Vernadskij and the study of the biological role of trace elements in the life of plants and man. *Izv Akad. Nauk SSSR., Ser Biol.* 1963, No. 5, 641-652. (Akad. Nauk SSR., Riga.)
- Macdonald, W.B. Some aspects of mineral metabolism in children. *Australian Ann. Med.*, 1963, 12, 70-85.
- Tarjan, R. Hygienic importance of contamination of foods with metals *Nahrung*, 1963, 7, 21-32. (Inst. Ernaorungswiss, Budapest).
- Calcium and Phosphorus and Strontium :**
- Doering, p. (with Grebe, B.) Studies on Ca metabolism in man with 47 Ca. *Klin. Wochenschr.*, 1963, 41, 681-690. (Med. Univ. Klin., Gottingen.)
- Itoh, H. and Ino, T. Calcium metabolism in hybrid and inbred fetuses of mice and in those co-existing in the same uterus. *J. Nutrition*, 1963, 81, 5-12. (Dept. Animal Husb., Fac. Agri., Tohoku Unive., Sendai.)
- Quenette, L. and Fournier, P. Prevention and treatment of physiological deficiency of Ca with different carbohydrate compounds or vitamin D. *C.R. Soc. Biol.*, 1963, 157, 968-971. (Inst. Hyk. alimin., Paris.)
- Doboszynska, B., Ganowiak, Z. and Wierzchowski, J. Utilization of Ca and P salts in fish-bone meal from some fresh and preserved fish for feeding. *Nahrana*, 1963, 7, 335-340. (Dept. Lebensmittelchem., Med. Akad., Gdansk.)
- Beaton, J.R. phosphorus metabolism in cold-exposed rats. *Canad. J. Biochem. Physiol.*, 1963, 41, 2209-2214 (Defence Res. Med. Lab., Toronto).
- Magnesium :**
- Story, J.E. and Rook, J.A.F. Magnesium metabolism in the dairy cow. 5. Experimental observations with purified diet low in magnesium. *J. Agric. Sci.* 1963, 61, 167-171. (Nat. Inst. Res. Dairying, Shinfield, Reading).
- Mullick, D.N. and Kakkar, K.B. Effect of supplementing magnesium salt in the milk diet on the growth rate and serum composition in young rats. *Indian J. Med. Res.*, 1963, 51, 742-748. (Animal Nutrit. Div., Indian Vet. Res. Inst., Izatnagar.)
- Kakkar, B. and Mullick, D.N. Effect of intramuscular injection of magnesium sulphate solution on the growth rats and serum composition in rats. *Ann. Biochem. Exp. Med.*, 1963, 23, 229-230. (Animal Nutrit. Div., Indian Vet. Res. Inst., Izatnagar, U.P.)
- Gascon, A. and Tetreault, L. Effect of Mg deficiency and of liberation on the cuta-

- neous pain threshold in the rat. (Rev. canad. Biol., 1963, 22, 39-42. (Dept pharmacol., Fac., med., Univ. Montreal.)
- Morris, E.R. and O'Dell, B.L. Relationship of excess calcium and phosphorus to magnesium requirement and toxicity in guinea pigs. J Nutrition, 1963, 81, 175-181. (Dept. Agric. Chem., Univ. Missouri, Columbia),
- Sodium, Potassium and Sodium chloride:*
- Jagger, P. I., Hine, G. J., Cardarelli, J. A. and Burrows B. A. (with Bikerman, V.) Influence of sodium intake on exchangeable sodium in normal human subjects. J. Clin. Invest., 1963, 42, 1459-1470. (Evans Mem. Dept. Clin. Res., Massachusetts Mem. Hosp. Boston).
- Baldwin, D., Landhi, H. D. and Schwartz, T. B. The role of fluctuations of sodium balance in the regulation of body sodium stores. Metabolism, 1963, 12, 1032-1050. (Sect. Endocrinol. Metabol., Presbyterian St. Luke's Hosp, Chicago, Ill.).
- Wright, H. K., Gann, D.S. and Albertsen, K. Effect of glucose on sodium excretion and renal concentrating ability after starvation in man. Metabolism, 1963, 12, 804-811. (Dept. Surg., Univ. Hosp Cleveland, Ohio.)
- Blair-West, J. R., Coghlan, J. P., Denton, D.A., Goding, J. R., Munro, J. A. and Wright, R.D. The reduction of the pressure action of anio-tensin II in sodium deficient conscious sheep. Austral. J. Exp. Biol. Med. Sci., 1963, 41, 369-376. (Dept. Physiol., Univ. Melbourne.)
- Marx, A.J. and Deane, H.W. Histophysiological changes in the kidney and adrenal cortex in rats on a low-sodium diet. Endocrinology, 1963, 73, 317-328 (Dept. Pathol. Albert Einstein Coll. Med., Bronx 61, N.Y.)
- Flear, C. T. G., Cooke, W.T., Sivyer, A. and Domenent, J. Measurement of total exchangeable potassium. Clin. chim. Acta, 1963, 8, 768-778, (Queen Elizabeth and Gen. Hosps., Birmingham.)
- Morrison, A.B. and Gardner, K. D. (Jr.) The effect of potassium deficiency on the reabsorption of protein in the renal tubule of the rat. J. Exp. Med. 1963, 118, 479-488. (Dept. Pathol Sch. Med. Dent., Rochester, N. Y.)
- Rona, G., Chappel, C. I. and Kahn, D.S. The significance of factors modifying the development of isoproterenol-induced myocardial necrosis. Amer. Heart J., 1963, 66, 389-395. (Dept. Pathol., St. Mary's Mem. Hosp. Montreal.)
- Boyd, E.M. and Shanas, M.N. The acute toxicity of sodium chloride. Arch. internat. Pharmacodyn., 1963, 144, 86-96. (Dept. Pharmacol., Quebec's Univ. Kingston, Ont.)
- Dahl, L. K., Heine, M. and Tassinari, L. Effect of chronic excess salt ingestion. Role of genetic factors in both DOCA-salt and renal hypertension. J. Exp. Med. 1963, 118, 605-617, (Med. Res. Center. Brookhaven Nat. Lab., Upton, N.Y.)
- Fordham, C.C. (III) and Newton, M. Response of salt-loaded rats to abrupt withdrawal of salt. Amer. J. Physiol., 1963, 205, 467-470 (Dept. Med., Univ. N. Carolina Sch. Med., Chapel Hill)
- Nachman, M. Taste preferences for lithium chloride by adrenalectomized rats. Amer. J. Physiol., 1963, 205, 219-221. (Dept. Psychol., Univ. California; Riverside).
- Halogen:*
- Rokert, H. X-ray absorption and X-ray fluorescence micro-analyses of mineralized tissue of rats which have ingested fluoridated water. Acta pathol microbiol. scand., 1963, 59, 32-38. (Dept. Histol., Univ. Gothenburg.)
- Lushbough, C.H. and Urbin, M.C. Effect of diet on serum and muscle chloride and muscle moisture. J. Nutrition, 1963, 81, 99-102. Div. Biochem., Amer. Meat Inst., Found., Chicago, III.)
- Harden, R.M. and Alexander, W.D. Quantitative aspects of iodide excretion in human thermal sweat. Clin. Sci., 1963, 25, 79-87. (Unive. Dept. Med., Gardiner Inst, Western Infirmary, Glasgow.)
- Iron and Copper:*
- Crosby, W.H. The control of iron balance by the intestinal mucosa. Blood, J Hematol., 1963, 22, 441-449. (Dept. Hematol., Walter Reed Army Inst. Res., Washington, DC).
- Hartman, R.S. Conrad, (Jr.) M.E. Hartman, R.E., Joy, R.J.T. and Crosby, W.H. Ferritin-containing bodies in human small intestinal epithelium. Blood, J.

- Hematol. 1963, 22, 397-405. (Walter Reed. Army Inst. Res., Washington D.C.)
- Conrad, M.E. (Jr.) and Crosby, W.H. (with Merrill, B.) Intestinal mucosal mechanisms controlling iron absorption. Blood, J. Hematol., 1963, 22, 406-415. (Dept. Gastroenterol., Walter Reed Army Inst. Res., Washington, D.C.)
- Wheby, M.S. and Crosby, W.H. (with Merrill, B. and Lawson, E.) The gastrointestinal tract and iron absorption. Blood, J. Hematol., 1963, 22, 416-428. Dept. Gastroenterol. Walter Reed Army Inst., Res., Washington, D.C.)
- Brown, E.B. and Rother M.L. Studies of the mechanism of iron absorption 1. Iron uptake by the normal rat. J. Lab. Clin. Med., 1963, 62, 357-373. (Dept. Int. Med., Washington Univ. Sch. Med., St. Louis, Mo.)
- Charlton, R.W., Jacobs, P., Torrance, J.D. and Bothwell, T.H. The role of ferritin in iron absorption. Lancet, 1963, ii, 762-764. (Dept. Med., Univ. Witwatersrand, Johannesburg.)
- Mendel, G. A., Weiler, R. J., and Mangalik, A. Studies on iron absorption. 2. The absorption of iron in experimental anemias of diverse etiology. Blood, J. Hematol. 1963, 22, 450-458. (Argonne Cancer Res. Hosp., Univ. Chicago, Ill.)
- Walsh, R.J., Cantrell, S. and Sanford, R. The distribution of iron following parenteral injection or oral ingestion. Austral. J. Exp. Biol. Med. Sci., 1963, 41, 385-394. (New South Wales Red Cross Blood Transfusion Serv., Sydney)
- Theron, J.J., Hawtrey, A.O., Liebenburg, N. and Schirren, V. The pathogenesis of experimental dietary siderosis of the liver. Amer. J. Pathol., 1963, 43, 73-91. (Nat. Nutrit. Res. Inst., C.S.I.R. Pretoria.)
- Boyd, E.M. and Shanas, M.N. The acute oral toxicity of Reduced Iron. Canad. Med. Assoc. J., 1963, 89, 171-175. (Dept. Pharmacol., Queen's Univ., Kingston, Ont.)
- Other Minerals:*
- Morgareidge, K. Metabolism of two forms of dietary arsenic by the rat. J. Agric. Food Chem., 1963, 11, 377-378. (Food and Drug Research Laboratories, Inc., Maspeth, N.Y.)
- McConnell, K.P. Metabolism of selenium in the mammalian organism. J. Agric. Food. Chem., 1963, 11, 385-388 (Radioisotope Serv., Veterans Admin. Hosp., Univ. Louisville, Ky.)
- Jones, G.B. and Godwin, K.O. Studies on the nutritional role of selenium. 1. The distribution of radioactive selenium in mice. Austral. J. Agric. Res., 1963, 14, 716-723. (Div. Biochem. Gen. Nutrit., C.S.I.R.O., Univ. Adelaide.)
- Robertson, B.T. and Burns, M.J. Zinc metabolism and the zinc-deficiency syndrome in the dog. Amer. J. Vet. Res., 1963, 24, 997-1002. (Dept. Physiol. Pharmacol., Sch. Vet. Med., Auburn Univ. Ala.)
- Ribas, B., Pire, I., Garcia Del Amo, C. and Santos Ruiz, A. Metabolic studies with ^{65}Zn . 2. Effect of gestation on distribution of the isotope in rabbits injected intramuscularly and in their offspring. 2. Accumulation of the isotope in the foetus and placental structures of rabbits as a function of stage of gestation. Rev. espanola Fisiol., 1963, 19, 83-93; 95-103 (Dept. Bioquim., Inst. Espanol Fisiol. Bioquim., Madrid.)
- ### 3.6 Vitamins
- Mohberg, J. and Johnson, M.J. Stability of vitamins in a chemically defined medium for 929-L fibroblasts. J. Nat. Cancer Inst., 1963, 31, 603-610. (Dept. Biochem., Univ. Wisconsin, Madison 6.)
- Tihomirova, A.N., Efremov, V.V. and Maslenikova, B.M. Effect of additional vitamins in the food on the general condition and duration of life of albino rats. Vop. Pitani., 1963, 22, No. 5, 46-50. (Otdel vitaminol., Inst. Pitani., AMN SSSR, Moscow.)
- Terroine, T., Hitler, Y. (with Buisson, L.F., Herbert, A. and Miquet, S.) Enzyme activities and nutritional states. 2 Adenosine deaminase in the spleen and kidneys in deficiency of ascorbic acid, biotin or thiamine. Arch. Sci. physiol., 1963, 17, 345-412. (Center Recherches Nutrit., C.N.R.S., Bellevue (S.-et-O.)
- Maksimovic, Ja. B. and Gajdenko, A.I. Changes in metabolism and organ distribution of vitamins PP and C as affected by Co. Vop. Pitani., 1963, 22,

- No. 5, 50-55. (Kaf. Farmakol., Med. inst. N. I. Pirogova, Odessa.)
- Satyanarayana, M. N. and Kodkol, S. B. Carotene, riboflavin and nicotinic acid content of some Indian foodstuffs. Indian J. Med. Res., 1963, 51, 764-767. (Cent. Food Technol. Res. Inst., Mysore).
- Lindner, K., Kramer, M. and Jaschik, S. Comparison of different varieties of squash and their dietetic value. Qual. Plant. Materiae vegetables, 1963, 9, 156-164. (Inst. Ernahrungswiss., Budapest.)
- Weits, J., Heyting, C. and Lassche, J. B. Organoleptic properties, thiamine and ascorbic acid contents of some bottled and deep-frozen vegetables. Voeding, 1963, 24, 471-478. (Afd. Voeding Voedselbereiding Inst. Landbouwhoudak-Onderzoek, Wageningen.)
- Vitamin A:*
- Turner, R. Modification of the two-column chromatographic apparatus used in the determination of vitamin A in edible fats. Analyst, 1963, 88, 895. (Dept. Customs Exercise, Melbourne.)
- Glick, B. Indirect evidence of the influence of vitamin A on the adrenal cortex of the chick. Poultry Sci., 1963, 42, 1022-1023. (Poultry Sci. Dept., Mississippi State Univ., State College.)
- Roux, C., Fournier, p., Dupuis, Y., and Dupais, R. Teratogenic deficiency of vitamin A. Biol. Neonat., 1962, 4, 371-378. (Lab. Physiol. Nutrit., Fac. Med. Paris.)
- Yaeger, R.G. and Miller, O.N. Effect of malnutrition on susceptibility of rats to Trypanosoma cruzi. 5. Vitamin A deficiency. Exp. Parasitol., 1963, 14, 9-14. (Dept. Trop. Med. Pub. Health, Tulane Univ. Sch. Med., New Orleans, La.)
- Woelfel, C. G., Calhoun, M. C. Rousseau, J E. (Jr.) Eaton, H.D. and Nielsen, S W. Some biochemical constituents in urine of vitamin A-deficient Holstein calves. J. Dairy Sci., 1963, 46, 947-954. (Animal Dis. Dept., Storrs Agric. Exp. Stat., Conn.)
- Cohen C.F. and Barker, R.J. Vitamin A content and spectral response of house flies reared on diets with and without a vitamin A source. J. Cell. Comp. Physiol., 1963, 62, 43-47 (Entomol. Res, Div., Agric. Res., Serv., U.S. Dept. Agric., Beltsville, Md.)
- Mahadevan, S., Sastry, P.S. and Ganguly, J. Studies on metabolism of vitamin A. 3. The mode of absorption of vitamin A esters in the living rat. 4. Studies on the mode of absorption of vitamin A by rat intestine in vitro. Biochem. J., 1963, 88, 531-534; 534-539, (Dept Biochem, Indian Inst. Sci., Bangalore 12.)
- Dietl, C. Effect of dietary protein quality on vitamin A metabolism in some rat tissues. 2. Effects of amino acid supplementation of wheat gluten on vitamin A in liver, kidneys and blood serum in the rat. Roczn. panstwowego Zak. Hig., 1963 14, 259-266. (Zaki. Hig. Zpw. PZH, Warsaw.)
- Tarjan, R. and Kramer, M. The effect of liquid paraffin on the utilization of carotene and vitamin A. Internat. Ztschr. Vitaminforsch., 1963, 33, 304-310. (Inst. Nutrit., Budapest.)
- Moore, T., Sharman, I.M., and Scott, P.P. Vitamin A in the kidney of the cat. Res. Vet. Sci., 1963, 4, 397-407, (Dunn Nutrit. Lab., Univ. Cambridge.)
- Brekkan, O. R. Studies on the absorption of different forms of vitamin A in young chicks. Internat. Ztschr. Vitaminforsch., 1963, 33, 234-253 (Govt. Vitamin Lab., Norwegian Fish. Inst., Bergen.)
- Brekkan, O.R. The isomerization of vitamin A in chicks. Internat. Ztschr. Vitaminforsch., 1963, 33, 279-293 (Govt. Vitamin Lab., Norwegian Fish. Res. Inst., Bergen.)
- Brekkan, O. R. The mode of absorption of vitamin A in chicks, Internat. Ztschr. Vitaminforsch., 1963, 33, 293-303. (Govt. Vitamin Lab., Norwegian Fish. Res. Inst., Bergen.)
- New, D. A. T. Effect of excess vitaamin A on cultures, of skin and buccal epithelium of the embryonic rat and mouse. Brit. J. Dermatol., 1963, 75, 320-325. (Strangeways Res. Lab., Cambridge).
- Aydelotte, M. B. The effects of vitamin A and citral on epithelial differentiation in vitro. 1. The chick tracheal epithelium. 2. The chick oesophageal and corneal epithelia and epidermis. J. Embryol. Exp. Morphol., 1963, 11, 279-291 621-635 (Physiol. Lab., Cambridge.)

- Sinha, S. P. The effect of fluorescent light on the vitamin A and β -carotene content of milk. *Internat. Ztschr. Vitaminforsch.*, 1963, 33, 262-263. (Inst. Nutrit. Res. Green Meadow Found., Ruschlikon-Zurich.)
- Franscois, M. T. and Gauthier, M. Vitamin A in the oil of avocado, *Persea gratissima* Gaerth. *C. R. Soc. Biol.* 1963, 157, 1077-1079. (Lab. Matires Med., Fac. Pharm., Nancy).
- Varma, T.N R. and Murray, T.K. Conversion of retro-vitamin A to vitamin A in the vitamin A deficient rat. *Biochim. biophys. Acta*, 1963, 78, 556-558. (Vitamins Nutrit. Sect., Food and Drug Labs., Dept. Nat. Health Welfare, Ottawa.)
- Marusich, W. and Bauernfeind, J.C. The biological activity of β -carotene in poultry and rats. *Poultry Sci.*, 1963, 42, 942-957. (Hoffman-La-Roche Inc., Nutley, N.J.)
- Davison, K. L. and Seo, J. Influence of nitrate upon carotene destruction during in vitro fermentation with rumen liquor. *J. Dairy Sci.*, 1963, 46, 862-864. (Dept. Agronom., Cornell Univ., Ithaca, N.Y.)
- Blessin, C.W. Brecher, J. D. and Dimler, R. J. Carotenoids of corn and sorghum. 5. Distribution of xanthophylls and carotenes in hand-dissected and dry-milled fractions of yellow dent corn. *Cereal Chem.*, 1963, 40, 582-586. (N. Reg. Res. Lab., Peoria, Ill.)
- Toth, M. Corotene content of lucerne and soya beans during storage. *Alit. tenyesztes*, 1963, 12, 277-288. (Baromfitakarmany. Elettani Oszt., Godollo.)
- Vitamin D:*
- Osada, M. and De Ritter, E. Chemical determination of vitamin D in low potency products by a modified USP procedure. *Feedstuffs*, 1963, 35, No. 36, 26.
- Seidel, E. and Starlinger, H. Effect of exposure to ultraviolet radiation or vitamin D₃ on Sprague Dawley rats on normal or rachitogenic diet. *Strahlentherapie*, 1963, 121, 415-431. (Max Planck-Inst. Arbeitsphysiol., Dortmund.)
- Norman, A.W. and DeLuca, H.F. The preparation of H^3 .vitamins D₂ and D₃ and their localization in the rat. *Biochemistry*, 1963, 2, 1160-1168. (Dept. Biochem., Univ. Wisconsin, Madison.)
- Giza, T., Hanicka, M., Hornic, N., Jelenek, A. and Rembicsa, H. The influence of radioactive strontium on the course of healing of experimental rickets in rats treated with vitamin D₂. *Internat. Ztschr. Vitaminforsch.*, 1963, 33, 227-234.
- Toth, B., Geczy, G.Y., Lakits, G.Y. and Barsy, Gy. Characteristic disturbance of feathering in chickens reared on a diet lacking vitamin D₃. *Aliattenyesztes*, 1963, 12, 251-256. (Phylaxia Allami Oltohnyagtermelo Inst., Budapest.)
- Tanaka T., Takahashi, M., Miyazawa, E., Higaki, M., Inaba, S., Nishikawa, T., Suzuki, T. and Sahashi, Y. Metabolic activities of vitamin D in animals. 2. Action of vitamin D₃ in active sulfate metabolism of chicks. *J. Vitaminol.*, Japan, 1963, 9, 62-73. (Lab. Biochem. Nutrit., Tokyo Agric. Univ., Setagaya-ku, Chitose.)
- Guichard, C., Vitte, G. and Blanquet, P. Pharmacodynamic and statistical study of modifications of Calcium metabolism by excess of vitamin D. *Sem. Hop., Pathol. Biol.*, 1963, 11, 614-617. (Lab. Pharm. Chim., Fac. Med. Pharm., Bordeaux, Gironde.)
- Tuchweber, B., Gabbiani, G. and Selye, H. Effect of vitamin E and methyltestosterone upon the progeria-like syndrome produced by dihydrotachysterol. *Amer J. Clin. Nutrition*, 1963, 13, 238-242. (Inst. Med. Chirurg. Exp., Univ. Montreal.)
- Vitamin E:*
- Taufel, K. and Serzisko, R. Tocopherol content of some fats and oils. 3. Paper chromatographic analysis of some Hungarian oils. *Nahrung*, 1963, 7, 606-611. (Inst. Ernährung, Potsdam-Reh-brücke.)
- Stowe, H.D. Separation of β - and γ -tocopherol. *Arch. Biochem. Biophys.*, 1963, 103, 42-44. (Dept. Vet. Pathol., Coll. Vet Med., Michigan State Univ., East Lansing.)
- Bunyan, J., McHale, D. and Green, J. The vitamin E activity of α -tocopherylquinone and α -tocopherylhydroquinone in

- the rat. Brit. J. Nutrition, 1963, 17, 391-398. (Walton Oaks Exp. Stat. Vitamins Ltd, Dorking Rd., Tadworth, Surrey)
- Dinning, J. S. Vitamin E responsive anemia in monkeys and man. Nutrition Rev., 1963, 21, 289-291. (Dept. Biochem., Univ Arkansas Sch. Med.. Little Rock.)
- Mock, M.B. and Emmel, V.M. Some observations on lipid metabolism and adipose tissue in the vitamin E-deficient rat, Proc. Soc. Exp Biol., Med., 1963, 113, 850-852. (Dept. Ant., Univ Rochester Sch. Med. Dent., N.Y.)
- Bonetti, E. and Stripe, F. Effect of selenium on muscular dystrophy in vitamin E-deficient rats and guinea pigs Proc. Soc. Exp. Biol. Med., 1963, 114, 109-115. (1st Patol. Gen., Univ. Siena.)
- McKay, D G and Kaunitz, H. Studies of the generalized Swartzman reaction induced by diet. 5. Effect of cod liver oil diets on tissue lipids of female rats. 6. Effect of pregnancy on lipid composition of serum and tissues
- Kaunitz, H., McKay, D.G. and Johnson, R.E. 7. Lipid composition of serum and tissues in the Swartzman reaction. Metabolism, 1963, 12, 983-989; 990-995; 996-1006. (Pathol., Coll. Phys. Surg., Columbia Univ., New York)
- Kenney, M. A. and Roderuck, C.E. Fatal Syndrome associated with vitamin E status of pregnant rats Proc. Soc. Exp. Biol. Med., 1963, 114, 257-261. (Food and Nutrit Dept., Iowa State Univ., Sci. Technol., Ames.)
- Mokadi, S. and Budowaki, Relationship between vitamin E and encephalomalacia in chicks. Brit. J. Nutrition 1963, 17, 347-355. (Nat and Univ. Inst. Agric. Rehovot)
- Schmandke, H., Kaludin, I and Ketz, H.A. Metabolism of α -, β -, γ -and δ -tocopherols in the rat. Internat. Ztschr. Vitamingorsch., 1963, 33, 254-261. (Inst. Ernaburgh, Deutsco. Akad. Wiss., Berlin.)
- Booth, V. H. and Bradford, M. P. The effect of cooking on α -tocopherol in vegetables. Internat. Ztschr. Vitaminforsch., 1963, 33, 276-278. (Dunn, Nutrit. Lab., Cambridge.)
- Dubois, M. Tocopherols in some cakes for livestock used in Madagascar and changes during storage. Rev. Elveage Med. Vet. Paas trop., 1963 16, 221-227, (Serve Biochem., Cent Elvege 'Joseph Carougeau', Antananarivo.)
- Paolucci, A.M., Rao P.B.R. and Johnson, B C Vitamin K deficiency and oxidative phosphorylation. J. Nutrition, 1963, 81, 17-22, (Div. Animal Nutrit., Univ. Illinois, Urbana).
- Clark, W.T. and Halliwell, R.E.W. The treatment with vitamin K preparations of warfarin poisoning in dogs. Vet. Rec., 1963, 75, 1210-1213. (Univ. Bristol. Dept. Vet. Surg.)
- Vitamin B-Complex :*
- General :*
- Brown, G.M. and Reynolds, J.S. Biogenesis of the water-soluble vitamins. Annu. Rev. Biochem., 1963, 32, 419-462, (Div. Biochem., Dept. Biol. Massachusetts Inst. Technol., Cambridge.)
- Karlin, R. Biosynthesis of vitamin B₁₂ and other vitamins of the B group by a chromogenic bacterium isolated from cheese. Internat. Ztschr. Vitaminforsch., 1963, 33, 311-320. (Inst. Pasteur, Lyons.)
- Nesterin, M. F. and Mihlin, S. Ja. Processes of enzyme secretion in the main digestive glands in some experimental vitamin deficiencies. Vop. Pitan., 1963, 22, No. 5, 19-22. (Lab. fiziol. patol. piscevar., Inst. pitan. AMN SSSR, Moscow.)
- La Grutta, G. and Abbadessa, S. Effects of thiamine and folic acid on electrical activity of the cerebellum. Boll. Soc. ital. Biol. sper., 1963, 39, 947-950. (1st Fisiol. Umana, Univ. Palermo)
- Hollmann, S., Herlyn, U. and Schiek, W. Effect of sorbitol on intestinal synthesis of vitamins in the rat. Pflugers Arch., 1963, 277, 361-371. (Physiol. Chem Inst. Univ Gottingen)
- Dreizen, S., Spirakis, C. N. and Stone, R.E. The Effect of antimetabolites of selected B-vitamins on experimental dental caries in the rat. Internat. Ztschr. Vitaminforsch., 1963, 33, 321-326, (Dept. Nutr., Northwestern Univ. Med. Sch., Chicago, Ill.)
- Teeri, A. E. and Colovos, N.F. Effect of urea in the ration of cattle on vitamin

- synthesis in the rumen. *J. Dairy Sci.*, 1963, 46, 864-865. (Dept. Biochem., Univ., New Hampshire, Durham.)
- Greenberg, B., and Burkman, A. M. Effect of B-vitamins and a mixed flora on the longevity of germ-free adult houseflies, *Musca domestica* L. *J. Comp. Physiol.*, 1963, 62, 17-22 (Univ. Illinois Coll. Pharm, Chicago)
- Meyer, J.A., Briskey, E. J., Hoekstra, W. G. and Weckel, K. G. Niacin, thiamine, and riboflavin in fresh and cooked pale, soft, watery versus, dark firm, dry pork muscle. *Food Technol.*, 1963, 17, 119-123. (Dept. Meat Animal Sci., Univ. Wisconsin, Madison.)
- Vitamin B₁* (Aneurin, Thiamine) Risinger, G.E. and Parker, P.N. Thiamine: a novel conversion from thiochrome. *Science*, 1963, 141, 1280-1281. Dept. Chem., Louisiana (Polytech inst. Ruston.)
- Reid, J. M. Hove, E. L., Braucher, P. F., and Mickelsen, O. Thiamine deficiency in rabbits. *J. Nutrition*, 1963, 80, 381-385. (Lab Nutrit, Endocrinol., Nat. Arthritis Metabol. Dis., Bethesda, Md.)
- Ceriani, T., Cappelli, V. and De Caro, L. Intestinal absorption of glucose (rat) in relation to thiamine content of the intestinal wall. *Boll. Soc. Ital. Biol. sper.*, 1962, 38, 1718-1722 (1st. Fisiol. Umana, Univ. Pavia)
- Gassman, B., Ketz, H. A. and Haenel, H. Vitamin B₁ metabolism of the rat on diets with sorbitol. *Nahrung*, 1963, 7, 9-20. (Inst Ernährung, Postdam-Rehbrücke.)
- Nagy, Z. and Skolnik, J. The effect of cocarboxylase on cardiac output in acute hypoxia. *Acta med. hung.*, 1963, 19, 59-66 (Second Dept. Med., Univ. Med. Sch., Budapest.)
- Garanina, I. P. and Petrov, G. A. Effect of large doses of vitamin B₁ on a respiratory centre. *Ucen. Zap. Kazan. vet. Inst.*, 1962, 86, 177-185.
- Ostrovskij, Ju. M and Nikitin, V. S. Comparative biochemical and histochemical study of liver and heart lipids in experimental excess of vitamin B₁ in the pigeon. *Bjull. eksp. Biol. Med.*, 1963, 55, No. 10, 32-35. (Kaf. biohim., Med. inst., Grodno.)
- Rindi, G., De Giuseppe, L. and Ventura, U. Distribution and phosphorylation of oxythiamine in rat tissues. *J. Nutrition*, 1963, 81, 147-154. (Inst. Human Physiol., Univ. Pavia.)
- Utsumi, I., Harada, K. and Kohno, K. Studies on interaction of thiamine or its related compounds with proteins. Interaction of O-benzoylthiamine disulfide with protein. 1.2.3. *J. vitaminol.*, Japan, 963, 9, 41-49; 50-57; 89-93. (Osaka Res. Lab., Tanabe Seiyaku Co. Ltd, Higashiyodogawa-ku)
- Yunezawa, W. On the discovery of *Bacillus thiaminaseus*. *J. Vitaminol.*, Japan, 1963, 9, 37-40. (Dept. Microbiol. Tokyo Dent. Coll., Kanda, Chiyodaku.)
- Riboflavin*:
- Midtvæt, T. The effect of thalidomide on the growth curve of a riboflavin deficient microbe. *Acta pathol. microbiol. Scand.*, 1963, 58, 355-362 (Kapt. W. Wilhelmson og Frues Bakteriol. Inst., Oslo.)
- Gupte, K., Karmarkar, M.G., Modi, V.V. and Tate, S.S. Riboflavin in human milk. *Experientia*, 1963, 19, 400-401. (Dept Biochem, Fac Sci, M S. Univ Baroda.)
- Nicotinic acid* (Niacin):
- Princivalle, M. and Cardonna, C. Microbiological estimation of some B vitamins. 6. A new method of estimating nicotinic acid. *Rend. Ist. super. Sanita*, Rome, 1963, 26, 75-80. (Lab. Microbiol., Ist Super. Sanita, Rome)
- Boddeker, H. and Mishkin, A. R. Determination of nicotinic acid in coffee by paper chromatography. *Anal. Chem.*, 1963, 35, 1662-1663. (Westreco. Inc., Marysville, Ohio).
- Chaudhuri, D.K. Studies on the isolation of bound nicotinic acid from rice-bran. *Ann. Biochem. Exp. Med.*, 1963, 23, 277-278. (Dept. Appl. Chem., Univ. Coll. Sci. Technol., Calcutta 9.)
- Quagliariello, E. Research on tryptophan-nicotinic acid metabolism and observations on the biochemical lesions occurring along this metabolic pathway. *Ital. J. Biochem.*, 1963, 12, 65-128. (1st. Chim. Bio, Univ. Bari.)
- Morrison, M. A., Reynolds, M. S. and

- Harper, A E. Effect of increments of tryptophan and niacin on growth and on the concentrations of blood and liver pyridine nucleotides. *J. Nutrition* 1963, 80, 441-446. (Dept. Home Econ., Univ. Wisconsin, Madison.)
- Pompucci, G. Pallini, V. Martelli, P. and Ricci, C. Variations in the pool of acid-soluble nucleotides in the liver of rats treated with nicotinamide. *Boll. Soc. Ital. Biol. sper.*, 1962, 38, 1734-1735. (1st Chim Biol., Univ. Siena) Italian.
- Coper, H. and Herken, H. Damage to the central nervous system by antimetabolites of nicotinamide. Molecular pathology of the pyridine nucleotides. *Deutsch. med. Wochenschr.*, 1963, 88, 2025-2036. *Pharmakol. Inst.*, Frell Univ. Berlin.)
- Volkova, L P. Vitamin nutrition of yeasts of the genus torulopsis. *Mikrobiologija*, 1963, 32, 778-782.
- Clegg, K.M. Bound nicotinic acid in dietary wheaten products. *Brit. J. Nutrition*, 1963, 17, 325-329. (Dept. Food Sci., Royal Coll. Sci. Technol., Glasgow.)
- Asenjo, C.F. Diaz-Rivera, A.C.A. and Recio, E. Niacin in Puerto Rican coffees. *J. Agric. Univ. Puerto Rico*, 1963, 47, 186-192.
- Vitamin B₆ (Pyridoxine, Adermin):*
- Jirsak, J. Determination of pyridoxine and pyridoxal in blood and serum. *Internat. Ztschr. Vitaminforsch.*, 1963, 33, 268-275. (Endocrinol. Res. Inst., Prague)
- Mandal, E H. A new anticoagulant, vitamin B₆: results of a comparative study with hydroxychloroquine sulphate, in vitro. *Nature*, 1963, 200, 590. (New York Med. Coll., Metropole. Hosp. Center, N.Y.)
- Den Hartog, C., Pol, G., Keller, G H.M., Dalderup, L.M. and Meijknecht, E.A. M. Studies on pyridoxine and lipid metabolism in rat. *Voeding*, 1963, 24, 500-511. (Nederlands Inst. Volksvoeding Wageningen.)
- Fidanza, A., De Cicco, A. and Ceroni, L. Effect of pyridoxine and of polyunsaturated fatty acids on serum cholesterol. *Boll. Soc. Ital. Biol. sper.*, 1962, 38, 1683-1665. (1st Fisiol. Gen., Univ. Rome.)
- Williams, M.A. Shubb, S. and Pertel, R. Liver nonprotein sulphydryl in vitamin B₆-deficient rats. Effect of age, feeding, and fasting. *Proc. Soc. Exp. Biol. Med.* 1963, 113, 869-872. (Dept. Nutrit. Sci., Univ. California, Berkeley.)
- Benton, D.A. The effect of adrenalectomy and pyridoxine deficiency on the growth of 3, 4, 9, 10-dibenzpyrene-induced tumors. *Cancer Res.*, 1963, 23, 1016-1020. (Dept. Exp. Therap., Roswell Park Mem. Inst., New York State Dept. Health, Buffalo.)
- Delost, P. and Terroine, T. Treatment of the male genitalia disorders caused by pyridoxine deficiency with testosterone and with vitamin B₆. *C. R. Soc. Biol.*, 1963, 157, 537-540. (Lab. Physiol. Animal. Fac. Sci., Clermont-Ferrand.)
- Faragalla, F.F. and Gershoff, S.N. Interrelations among magnesium, vitamin B₆, sulfur and phosphorus in the formation of kidney stones in rat. *J. Nutrition*, 1963, 81, 60-66. (Dept. Nutrit., Harvard Sch. Pub. Health, Boston, Mass.)
- Holden, J.T. Dependence of amino acid transport and accumulation on osmotic factors in vitamin B₆-deficient *Lactobacillus arabinosus*. *Biochem. Biophys. Acta*, 1963, 74, 401-417. (Dept. Biochem., Med. Res. Inst., City of Hope Med. Center, Duarte, Calif.)
- Cartwright, G.E., Kurth, D and Wintrobe, M.M. Hematologic response of pyridoxine deficient swine to pyridoxine. *Proc. Soc. Exp. Biol. Med.*, 1963, 114, 7-9. (Dept. Med., Univ. Utah Coll. Med., Salt Lake City.)
- Kirchgessner, M. and Friesecke, H. Growth and body composition of chickens given different amounts of vitamin B₆. *Arch. Geflugelk.*, 1963, 27, 412-418. (Instit. Tierernahrung Techn Hochsch. Munchen, Freising-Weihestphan.)
- Aleksandrova, I.B. and Batalova, L. V. Effect of vitamin B₆ on cholesterol metabolism. Effect of prolonged administration of vitamin B₆ on cholesterol content of organs and tissues of rabbits and rats. *Vop. Pitani.*, 1963, 22, No. 5, 43-46. (Kaf. biohim., Med. Inst. Karaganda.)

- Torcinskij, Jr. M. Interaction of aspartate glutamate apotransaminase with pyridoxal phosphate and some of its derivatives. *Biohimija*, 1963, 28, 731-740. (Inst. Rad. fiziko-him. biol. Akad Nauk SSSR, Moscow.)
- Pal, P. R. Effect of vitamin B₆ and its analogues on the swelling of rat liver mitochondria. *Nature*, 1963, 200, 173. (Dept. Biochem., Indian Statist. Inst., Calcutta.)
- Pantothenic acid:*
- Bonati, F., Bertoni, L. and Zanichelli, V. Biological activity of homopantethine. *Boll. Soc. Ital. Biol. sper.*, 1962, 38, 1501-1504 (Lab. Ricerche Bracco Ind. Chim., Milan.)
- Fidanza, A. and Constable, B.J. Metabolic effect of pantothenic acid. *Acta Vitaminol.*, 1963, 17, 95-99. (Dunn Nutrit. Lab., Univ. Cambridge.)
- Maruyama, F.T. and Morgan, A.F. Metabolism of sodium acetate-1-C¹⁴ and palmitic acid-1-C¹⁴ in pantothenic acid-deficient rat. *J. Nutrition*, 1963, 81, 152-162. (Dept. Nutrit. Sci. Univ. California, Berkeley.)
- Inoi, S. Clinical and experimental studies on α-Keto acids in the urine of pantothenic acid deficient rats to which fructose, sodium glutamate and aspartic acid are administered. *Tokushima J. Exp. Med.*, 1963, 9, 252-261.
- Fukuta, Y. Influence of hexose on detoxication. I. Influence of hexose loading on acetylation in animals with metabolic disturbance. *Shikoku Acta med.*, 1963, 19, 167-183. (Dept. Int. Med., Sch. Med., Tokushima Univ.)
- Fidanza, A., De Cicco, A. and Ceroni, L. Metabolism of pantothenic acid in the rat; coenzyme A and acetylation. *Boll. Soc. Ital. Biol. sper.*, 1962, 38, 1685-1687. (Ist Fisio., Gen., Univ. Rome.)
- Biotin:*
- Eisenberg, M.A. Biotin biosynthesis. I. Biotin yields and biotin vitamers in culture of *Phycomyces blakesleeanus*. *J. Bacteriol.*, 1963, 86, 673-680. Dept. Biochem., Coll. Phys. Surg., Columbia Univ., New York.)
- Suomolainen, H. and Keranen A, J A. The effect of biotin deficiency on the synthesis of fatty acids by yeast. *Biochem. biophys. Acta*, 1963, 70, 493-503. (Res. Labs., State Alcohol Monopoly (Alko), Helsinki.)
- Allen, S.H G., Stjernholm, R. and Wood, H.G. The noninvolvement of the ureido carbon of biotin in transcarboxylation. *J. Biol. Chem.*, 1963, 238, PC2889-PC2892, (Dept. Biochem., Western Reserve Univ. Sch. Med., Cleveland 6, Ohio.)
- p-Aminobenzoic acid:*
- Rysova, A.F. Effect of p-aminobenzoic acid on synthesis and breakdown of cholesterol in liver of intact and 'atherosclerotic' rabbits. *Bjull. eksp. Biol. Med.*, 1963, 55, No. 10, 41-44. (Kaf. farmakol., Him.-farmacevt. Inst., Leningrad.)
- Folic acid (Pteroylglutamic acid):*
- Kelley, A. and Davis, R.E. Folic acid absorption studies. A comparison of two microbiological assay techniques. *J. Vitaminol. Japan*, 1963, 9, 58-61. (Dept Haematol., Royal Perth Hosp., W. Australia)
- Creek, R.D. and Vasaitis, V. The effect of excess dietary protein on the need for folic acid by the chick. *Poultry Sci.*, 1963, 42, 1136-1141. (Poultry Sci Dept. Univ. Maryland, College Park.)
- Friedkin, M. Enzymatic aspects of folic acid. *Annu. Rev. Biochem.*, 1963, 32, 185-214. (Dept. Pharmacol., Tufts Univ. Sch. Med., Boston 11, Mass.)
- Cherrick G. R., Baker, H. Frank, O and Leevy, C.M. Conversion of diopterin and teropterin into folic and folinic acid activity by the rat liver. *Proc. Soc. Exp. Biol. Med.*, 1963, 113, 867-869. (Div. Hepatic Metabol., Nutrit., Dept. Med., Seton Hall Coll. Med., Jersey City, N.J.)
- Muller, R. and Knapp, A. Production of phenylketonuria in rats and the effect on it of folic acid and other pteridine derivatives. *Ernahrungsorschung*, 1963, 8, 303-313.
- Trufanov, A.V. and Kjul'Jan, G.M. Effect of antivitamin B₁₂ on excretion of formiminoglutamic acid in guineapigs and monkeys. *Biohimija*, 1963, 28, 753-758. (Inst. eksp. patol. terap. Akad. med. nauk SSSR, Suhumi.)
- Vitamin B₁₂:*
- Lisenkova, L.L. and Konova, I.V.K. Esti-

- mation of vitamin B_{12} with Escherichia coli 113-3 by the diffusion method. *Mikrobiologija*, 1963, 32, 885-890.
- Kato, T. and Shimizu, S. Chemical studies on vitamin B_{12} and its related compounds. 3. On the biological activity of hydroxocobalamin for *Ochromonas malhamensis*. *J. Vitaminol.*, Japan, 1963, 9, 32-36. (Dept. Indust. Chem., Fac. Eng., Kyoto Univ., Sakyo.)
- Rothenberg, S. P. Radioassay of serum vitamin B_{12} by quantitating the competition between ^{57}Co B_{12} and unlabeled B_{12} for the binding sites of intrinsic factor. *J. Clin. Invest.* 1963, 42, 1391-1398. (Blood. Res. Lab., Dept. Med. New York. Med. Coll.)
- Janicki, J., Pedziwil, F. and Kisza, J. The use of certain species or strains or propionic acid bacteria to produce distinct varieties of cheese with high vitamin B_{12} content. *Nahrung*, 1963, 7, 406-410. (Landwirtsch. Hochsch., Inst. Landwirtsch. Technol. Poznan.)
- Icayan, E.E. Effect of vitamin B_{12} anilide on the production of hemorrhagic lesions in the chick embryo from Rous sarcoma virus infection. *J. Philippine Med. Assoc.*, 1963, 39, 142-145.
- Bengmark, S. and Olsson, R. Effect of vitamin B_{12} on liver regeneration after partial hepatectomy. *Gastroenterologia*, 1963, 100, 75-86. (Dept. Anat. Univ. Gothenburg.)
- Tantengco, V.O., Okuda, K., Gabriel, A.R. and Chow, B.F. Intracellular distribution of vitamin B_{12} and vitamin B_{12} coenzyme (5,6-dimethylbenzimidazole cobamide) in normal and injured rat liver. *J. Philippine Med. Assoc.*, 1963, 39, 146-156. (Inst. Hyg., Univ. Philippines.)
- Cresseri, A. and Bergamaschi, M. Fixation of free or bound vitamin B_{12} by the liver in vivo. *Boll. Soc. Ital. Biol. sper.*, 1962, 38, 1504-1507. (Lab. Biol. 1st Carlo Erba Ricerche Terap., Milan.)
- Sullivan, L.W., Herbert, V. and Carstle, W.B. In vitro assay for human intrinsic factor. *J. Clin. Invest.*, 1963, 42, 1443-1458. (Thorndike Mem. Lab., Boston City Hosp., Mass.)
- Welsh, J.D., Hartzog, J.T., Rohrer, G.V., Russell, L. and Wolf, S. Chromatogra-
- phic separation of human gastric juice; electrophoretic characterization. B_{12} binding capacity, and intrinsic factor activity of the various fractions. *Gastroenterology*, 1963, 45, 215-228. (Univ. Oklahoma Med. Center, Oklahoma City.)
- Moruzzi, G., Viviani, R. and Borri, P. Vitamin B_{12} and fatty acids of the cerebral lipids in the chicken. *Boll. Soc. Ital. Biol. sper.*, 1962, 38, 1774-1776. (1st Chim. Biol., Univ. Bologna.)
- Baliga, B.R., Bhagavan, H.N. and Rajagopalan, R. Vitamin B_{12} and the nutritive value of raw soyabean. *Indian J. Med. Res.*, 1963, 51, 749-757. (Cent. Food Technol. Res. Inst., Mysore.)
- Baliga, B.R. and Rajagopalan, R. Vitamin B_{12} and the nutritive value of heat treated soyabean. *Indian J. Med. Res.*, 1963, 51, 758-763. (Cent. Food Technol. Res. Inst., Mysore.)
- Rabbi, A., Castelli, A. and Sechi, A.M. Excretion of ^{58}Co -vitamin B_{12} given to rats treated with dl-ethionine. Incorporation of ^{58}Co -vitamin B_{12} into liver slices of rats treated with dl-ethionine. *Boll. Soc. Ital. Biol. sper.*, 1962, 38, 1912-1913; 1913-1914. (1st Chim. Biol., Univ. Urbino.)
- Floyd, K.W. and Whitehead, R.W. On the role of cobalamin in methionine synthesis of *E. coli*, 113-3. *Biochem. Biophys. Res. Commun.*, 1963, 12, 215-219. (Dept. Pharmacol., Univ. Colorado Med. Center, Denver 20.)
- Johnson, A.W., Mervyn, L., Shaw, N. and Smith, E.L. A partial synthesis of the vitamin B_{12} co-enzyme and some of its analogues. *J. Chem. Soc.* 1963, August, 4146-4156. (Glaxo Research, Ltd., Greenford, Middlesex).
- Whitlock, H.W. (Jr.) Concerning the mechanism of a reaction catalyzed by coenzyme B_{12} . *J. Amer. Chem. Soc.*, 1963, 85, 2343-2344. (Dept. Chem., Univ., Wisconsin, Madison.)
- Banerjee, D.K. and Chatterjea, J.B. Vitamin B_{12} content of some articles of Indian diets and effect of cooking on it. *Brit. J. Nutrition*, 1963, 17, 385-389.
- Banerjee, D.K. and Chatterjea, J.B. Vitamin B_{12} content of some Indian diets and the effects boiling on its availability.

- lity. Bull. Calcutta Sch. Trop. Med., 1963, 11, 11-12.
- St. Pierre, P., Blais, M. and Beaudoin, R. Vitamin B₁₂ content of fresh pasteurised and homogenised milk sold in Montreal. Rev. Canad. Biol. 1963, 22, 7-13. (Inst. Dietet. Nutrit., Univ. Montreal)
- Other B Vitamins*
- Caldarera, C.M., Puddu, P. and Marchetti, M. Effect of adenine on nucleotide metabolism in the liver of rats treated with large amounts of orotic acid. Boll. Soc. Ital. Biol. sper., 1962, 38, 1818-1820 (1st Chim. biol. Univ. Bologna).
- Paddu, P., Marchetti, M. and Caldarera, C.M. Metabolism of nucleic acids in liver of rats treated with different amounts of orotic acid. Boll. Soc. Ital. Biol. sper., 1962, 38, 1820-1821. (1st Chim. biol., Univ. Bologna).
- Marchetty, M., Puddu, P. and Caldarera, C.M. Ratios between free nucleotides and lipids in liver of rats treated with orotic acid. Boll. Soc. Ital. Biol. sper., 1962, 38, 1822-1823. (1st. Chim. biol., Univ. Bologna).
- Moruzzi, G., Marchetti, M. and Viviani, R. Effect of orotic acid on the synthesis of citrovorum factor and of methionine in liver of chick. Nature, 1963, 199, 695-696. (1st Chim. biol., Univ. Bologna).
- Vitamin C (Ascorbic acid):*
- Spanyar, P. and Kavei, E. (with Blazovich, M., Demel, I. and Kutz, T.) The stabilisation of Vitamin C in foods. 1. Ztschr. Lebensmittel-Untersuch.-Forsch., 1963, 120, 1-17 (Zentralforschungsinst. Lebensmittelindust., Budapest).
- Spanyar, P., Kevei, E. and Blazovich, M. (with Demal, I. and Kutz, T.) Estimation of the actual ascorbic acid and dehydroascorbic acid contents of foods. Ztschr. Lebensmittel-Untersuch Forcsh., 1963, 123, 93-102. (Zentralforschungsinst. Lebensmittelindust., Budapest.)
- Spanyar, P., Kevei, E. and Blazovich, M. A new method for estimating dehydroascorbic acid Ztschr. anal. Chem., 1963, 195, 268-274 (Zentralforschungsinst. Lebensmittelindust. Budapest.)
- Herrmann, J. and Andrae, W. Oxidative breakdown products of L-ascorbic acid. 1. Detection by paper chromatography. 2. Polarographic detection. Nahrung, 1963, 7, 243-255; 411-425. (Inst. Technol., Humboldt-Univ., Berlin.)
- Bertetti, C. Behaviour of L-ascorbic acid in the oocyte of the guinea pig in different stages of vitamin deficiency. 1. Histochemical and experimental findings Ateneo parmense, 1963, 34, 3-19. (1st Anat. Umana Normale, Univ. Parma.)
- Spencer, R.P., Purdy, S., Hoeldtke, R., Bow, T.M. and Markulis, M.A. Studies in intestinal absorption of L-ascorbic acid 1-C¹⁴. Gastroenterology, 1963, 44, 768-773. (Dept. Biophys., State Univ. New York, Buffalo.)
- Des Marais, A. and Akpabio, I.I.U. Effects of cold exposure and ascorbate administration on ascorbic acid biosynthesis and thyroid secretion rate of the Wistar rat. Rev. Canad. Biol., 1963, 22, 27-31 (Dept. Biol., Univ. Ottawa)
- Buhonova, A.I. Micro-structural changes in experimental wounds brought about by ascorbic acid with cortisone and ACTH. Dokl. Akad. Nauk SSSR, 1963, 152, 761-764. (Gosud. med inst., Voronez.)
- Morita, T. and Takeuchi, M. Effect of L-ascorbic acid on connective tissue formation in alginic acid granuloma of rat. I. Biochemical study. Kurume Med. J., 1963, 10, 192-206. (Dept. Pathol. Kurume Univ Sch. Med., Kurumeshi.)
- Herrman, J. and Grossman, H.G. Relations between L-ascorbic acid and milk. Nahrung, 1963, 7, 149-154 (Inst. Technol., Humboldt-Univ. Berlin.)
- Tomana M., Svabensky, O. and Otta, K. Effect of γ radiation on L-ascorbic acid. Nahrung, 1963, 7, 212-221. (Zentralforschungsinst. Lebensmittelindust., Prague.)
- Jackson, G.C. Ascorbic acid content of some Kalpighia spp. J. Agric. Univ. Puerto Rico, 1963, 47, 201-204.
- Other Vitamins:*
- Das, D.N. Effect of tea and its tannins upon capillary resistance of guinea-pigs. Ann. Biochem. Exp. Med., 1963, 23, 219-222. (Dept. Appl. Chem Univ. Coll. Sci. Technol., Calcutta)
- Texl, A. Effect of catechol complexes from tea leaves on experimental inflammation. Cas. Lek. ces., 1963, 102, 515-519.

- (Farmakol. ustav, Lek. fak UNJEvP, Brno.)
- Adami, E. and Marazzi-Uberti, E., The presumed anti-ulcer effect of glutamine. *Boll. Soc. Ital. Biol. sper.*, 1962, 38, 1376-1477. (Ist De Angeli, Milan)
- 3.7. Digestion and absorption :**
- Wilson, A. D. and Tribe, D. E. The effect of diet on the secretion on the parotid saliva by sheep. I. The daily secretion of saliva by caged sheep. *Austral. J. Agric. Res.*, 1963, 14, 670-679; 680-689. (Sch. Agric., Univ. Melbourne.)
- Care, R.D. Secretion of magnesium and calcium in parotid saliva of sheep. *Nature*, 1963, 199, 818-819. (Agric. Res. Counc., Inst., Animal Physiol, Babraham, Cambridge.)
- Penick, S.B., Smithe, G.P., Wieneke, K. (Jr.) and Hinkle, L.E. (Jr.) An experimental evaluation of the relationship between hunger and gastric motility. *Amer. J. Physiol.*, 1963, 205, 421-426. (Div. Human Ecol., Dept. Med., New York Hosp. Cornell Med. Center, New York.)
- Canzler, H. and Glatzel, H. Radiological studies of digestion. Secretory and motor activity of stomach and small intestine after introduction of several fish preparations. *Nahrung*, 1963, 7, 187-198. (Max-planck-Inst. Ernahrungsphysiol, Dortmund)
- Fillaster, J.P., Blaise, P., Bernier, J. J. and Richet, G. Effect of intravenous injection of calcium gluconate on gastric secretion. *Presse med.*, 1963, 71, 1738-1740. (Sserve. Nephrol., Hop. Tenon, Paris)
- Ottenjann, R., Widmaier, F. and Demling-L. Hypercalcaemia and gastric secretion. *Klin. Wochenschr.*, 1963, 41, 717-719. (Med. Klin., Krankenhaus Stuttgart-Bad Cannstatt.)
- Piper, D. W., Macoun, M.L., Buildern, J.E. and Fenton, B.H. Nonproteolytic enzymes in gastric juice. *Amer. J. Digest. Dis.*, 1963, 8, 701-708. (Dept. Med., Univ. Sydney.)
- Rumjanceva, M. F. Effect of alimentary hypersecretion on the gastric mucosa of dogs. *Vop. Pit. 1963*, 22, No. 5, 14-19. *Klin. lec. pit. inst. pit. AMN SSSR, Moscow.)*
- Hunt, J.N. The duodenal regulation of gastric emptying. *Gastroenterology*, 1963, 45, 149-156. (Physiol. Lab., Guy's Hosp, London.)
- McCoy, E.J. and Bass, P. Chronic electrical activity of gastro-duodenal area; effect of food and certain catecholamines. *Amer. J. Physiol.*, 1963, 205, 439-445. (Parke, Davis & Co., Res. Labs, Ann Arbor, Mich.)
- Tsuda, T. Physiology of the rumen. *Jap. I. Zootech. Sci.*, 1963, 34, 235-242. (Fac. Agric., Tohoku Univ.)
- Engelhardt, W.V. Regulation of water content in the rumen of the goat. I. Volume of rumen fluid, flow of rumen fluid into the omasum, net flow of fluid into the rumen and exchange of fluid through the rumen wall. 2. Influence of net flow of fluid into the rumen. *Pflugers Arch.*, 1963, 278, 141-151; 152-161. (Physiol. Inst. Tierarztl. Hochsch., Hanover.)
- Seidler, S., Frens, A.M. and Adrichem, P.W.M. v. Influence of several factors on NH₃, crude protein, dry matter, ash, sugar, fatty acids values in rumen fluid and Mg and urea in blood. *Ztschr. Tierphysiol. Tierernährung Futtermittelk.*, 1963, 18, 193-239. (Inst. Tierernährungsforsch., Hoorn.)
- Zerebcov, P.I., Solncev, A.I. and Muhina, N.A. Carbohydrate metabolism in the rumen. *Izv. Timirjazev. Selskohoz. Akad.*, 1963, No. 4, 134-143.
- Williams, W.F., Hoernicke, H., Waldo, D.R., Flatt, W.P. and Allison, M.J. Ruminal carbonate as a precursor of eructed methane and carbon dioxide. *J. Dairy Sci.*, 1963, 46, 992-993. (Dept. Dairy Sci., Univ. Maryland.)
- Colvin, H.W. (Jr.) Peterson, H.P. and Ivy, J.T. Physiologic rumenectomy of dairy calves. I. Growth and health data. *Amer. J. Vet. Res.*, 1963, 24, 933-938. (Dept. Animal Indust. Vet. Sci., Univ. Arkansas, Fayetteville.)
- Becker, R.B., Marshall, S.P. and Arnold, P. T. D. Anatomy, development, and functions of the bovine omasum. *J. Dairy Sci.*, 1963, 46, 835-839. (Dept.

- Dairy Sci., Florida Agric. Exp. Stat. Gainesville.)
- Dotevall, G. and Kock, N.G. The effect of glucagon on intestinal motility in man. *Gastroenterology*, 1963, 45, 364-367. (Dept. Med. I, Univ. Gothenburg.)
- Dzeliava, Z.N. Intestinal secretion in the monkey. *Bjull. eksp. Biol. Med.*, 1963, 55, No. 10, 18-21. (Inst. eksp. patol. terap. AMN SSSR, Suhumi.)
- Mjasnikov, A.P. Physiology of the human pancreas. *Fiziol. Z. SSSR. Secenova*, 1963, 49, 1234-1239. (Voenno-med. Akad. S.M. Kirova, Leningard.)
- Ben Abdeljlil, A., Visani, A.M. and Desnuelle, P. Adaptation of the exocrine secretion of rat pancreas to the composition of the diet. *Biochem. Biophys. Res. Commun.*, 1963, 10, 112-116. Inst. Chim. Biol., Fac. Sci., Marseilles.)
- Reboud, J. P., Ben Abdeljlil, A. and Desnuelle, P. Variation of the enzymic content of rat pancreas as a function of the composition of the diet. *(Biochim. biophys. Acta)*, 1962, 58, 326-337. (Lab. Chim. Biol. Fac. Sci., Marseilles.)
- Marchis-Mouren, G., Pasero, L. and Desnuelle, P. Further studies on amylase biosynthesis by pancreas of rats fed on a starch-rich or a casein-rich diet. *Biochem. Biophys. Res. Commun.*, 1963, 13, 262-266. (Inst. Chim. Biol., Fac. Sci., Marseilles.)
- Howard, F. and Yudkin, J. Effect of dietary change upon the amylase and trypsin activities of rat pancreas. *Brit. J. Nutrition*, 1963, 17, 281-294. (Dept. Nutrit. Queen Elizabeth Coll., Univ. London.)
- Szafran, H. and Szafran, Z. Studies on hydrolases of digestive juices. S. Cholinesterase of dog pancreatic juice. *Acta biochem. polon.*, 1963, 10, 141-150. (Dept. Physiol. Chem., Med. Sch., Cracow.)
- Laws, B. M. and Moore, J. H. Some observations on the pancreatic amylase and intestinal maltase of the chick. *Canad. J. Biochm. Physiol.*, 1963, 41, 2107-2121. (Dept. Physiol. Chem. Univ. Reading.)
- Schedl, H.P. and Clifton, J.A. Solute and water absorption by the human small intestine. *Nature*, 1963, 199, 1264-1267. (Dept. Med., State Univ. Iowa, Iowa City.)
- Fargeas, M.J., Fargeas, J., Le Bars, N. and Servez, C. Study of caecal motility in the fowl by the permanent fistula technique. *Rev. Med. Vet.*, Toulouse, 1963, 114, 693-707.
- Lee, M. and Lucia, S.P. Some relationships between caloric restriction and body weight in the rat. 4. Fecal nitrogen, fat, energy and ash and urinary creatinine. *J. Nutrition*, 1963, 81, 117-122. (Dept. Prev. Med. Univ. California Sch. Med., San Francisco.)
- 3.8. Digestibility and nutritive value of foods:**
- Njaa, L. R. A study on the Mitchell method for determination of the biological value of protein. *Fiskeridirektorats Skrifter*, 1963, 4, No. 5, pp. 118. (Govt. Vitamin Lab., Norwegian Fish, Res. Inst., Bergen.)
- Chalupa, W. and Fisher, H. Comparative protein evaluation studies by carcass retention and nitrogen balance methods. *J. Nutrition*, 1963, 81, 139-146. (Dept. Poultry Sci., Rutgers Univ., New Brunswick, N.J.)
- Wieneke, J. Serial trials with Sprague Dawley and hooded rats with regard to reproducible data on protein evaluation, indicated with dried skimmed milk. Thesis, Rheinisch. Friedrich-Wilhelms. Univ., Bonn, 1963, pp. 124.
- Sanchez, A., Scharffenberg, J. A. and Register, U.D. Nutritive value of selected proteins and protein combinations. 1. The biological value of proteins singly and in meal patterns with varying fat composition. 2. Biological value predictability. *Amer. J. Clin. Nutrition*, 1963, 13, 243-249; 250-253. (Dept. Biochem., Sch. Med., Loma Linda Univ., Calif.)
- Morrison, A.B. Evaluation of protein in foods. 10. Effects of source and concentration of dietary fat on protein efficiency ratio (PER) values. *J. Assoc. Off. Agric. Chem.*, 1963, 46, 909-912. (Food and Drug Labs., Dept. Nat. Health Welfare, Ottawa, Ont.)
- Karandaeva, V. P. Comparative nutritive values of meat dehydrated in a hot-air drier and by freeze-drying. *Vop. Pitani*, 1963, 22, No. 6, 12-16. (Inst. gigieny E.F. Erismana, Moscow.)

- Sydow, B. Influence of type of animal maintenance and feeding on biological evaluation of protein with albino rats and a contribution to the evalution of milk. Thesis, Rheinisch. Friedrich Wilhelms-Univ. Bonn, 1961, pp. 148.
- Schiller, K. and Ocio, E. Nutritional and Physiological value of casein. Ztschr. Tierphysiol. Tiererndhrung Futtermittelk., 1963, 18, 166-174. (Inst Tierernährung, Forschungsanst. Landwirtsch. Brunswick-Volkenrode.)
- Gonasvili, S. G. Digestion of cheese proteins in vitro. Vop. Pitan., 1963, 22, No. 6, 9-12. (Gruzinsk. zoovet. Inst, Tiflis.)
- Canzler, H., Kofranyi, E. and Zimmermann, H. Digestibility of hen's eggs cooked in different ways. Nutritio et Dieta, 1963, 5, 149-186 (Max-Planck-Inst. Ernährungsphysiol Dortmund)
- Meffert, M.E. and Pabst, W. Possibility of using the substance of Scenedesmus obliquus as source of protein in rat balance trials. Nutrio et Dieta, 1963, 5, 235-254. (Forderergesellsch. Kohlenstoffbiol., Dortmund.)
- Cook, BB., Lau, E.W. and Bailey, B.M. The protein quality of waste-grown green algae. I Quality of protein in mixtures of algae, non fat powdered milk, and cereals. J. Nutrition, 1963, 81 23-29. (Dept. Nutrit. Sci., Univ. California, Berkeley.)
- Parkesko, V. G. O. Physiological and hygienic characteristics of sun flower phosphatide concentrates. Vop. Pitan., 1963, 22, No. 5, 39-43. (Kaf. gig., Inst. usov. vracej, Leningrad.)
- Tudisco R. Studies on rats fed on diets containing palm oil sucro-glycerides Boll. Soc. Ital. Biol. sper., 1963, 39, 1037-1040. (Lab. Direz. Cent. Med. Lepetit, S.P.A., Milan.)
- Booth, A. N., Hendrickson A. P. and DeEds, F. Physiologic effects of three microbial polysaccharides on rats. Toxicol. Appl. Pharmacol., 1963, 5, 478-484. W. Reg. Lab., Albany, Calif.)
- Mosolov, V.V. and Afanas'ev, P.V. Effect of fatty acids on the enzymic properties of trypsin. Dokl. Akad. Nauk SSSR, 1963, 152, 748-750. (Inst. biohim. A. N. Baha, Akad. nauk SSSR, Moscow.)
- Jayasinghe, J.B. Some evidence to show that coconut meal could be detrimental to the physiological activities of rumen micro-organisms. Ceylon Vet. J., 1963, 11, 87-90. (Dept. Vet. Sci., Univ. Ceylon Colombo.)
- Ottova, L. and Hatleova, A. Effect of urea on formation of volatile fatty acids in rumen fluid in vitro. Ved. Prace Ustred. Vyzk. Ust. Zivoc. Vyr., Uhrinevas, 1963, 6, 231-242.
- Thomas, B., Ketz, H. A., Tunger, L. and Erhardt, V. Effect of different bread diets on development of growing albino rats. Nahrung, 1963, 7, 347-366, (Inst. Ernährung, Potsdam-Rehbrucke.)
- Bressani, R., Braham, J. E., Jarquin, R. and Elias, L. G. Vegetable proteins mixtures for human feeding. 9. Evaluation of the nutritive value of the proteins in the INCAP vegetable mixture 9 for different experimental animals.
- Bressani R., and Elias, L. G. 11. Limiting amino acids in the INCAP vegetable mixture 9 and the effect of adding small quantities of protein concentrates of vegetable and animal origin. Arch. venezol. Nutricion. 1962, 12, 229-244; 245-257. (Inst. Nutrit. Cent. America and Panama (INCAP), Guatemala City.)
- Bressani, R. and De Villarreal, E.M. Nitrogen balance of dogs fed lime-treated corn supplemented with proteins and amino acids, J. Food Sci., 1963, 28, 611-615. (Inst. Nutrit. Cent. America and Panama (INCAP), Guatemala City.)
- Taskar, P.K., Joseph, A.A., Parthasarathy, H.N. Jayaraj, A.P., Rao, M.N., Swaminathan, M., Sreenivasan, A. and Subrahmanyam, V. Supplementary value of groundnut flour and blends of groundnut flour with skim milk powder to a poor maize diet. Ann. Biochem. Exp. Med., 1963, 23, 261-270. (Cent. Food Technol. Res. Inst., Mysore)
- Tasker, P. K., Joseph, K., Rao, D. R., Rao M. N., Indiramma, K., Swaminathan, M., Sreenivasan, A. and Subrahmanyam, V. Effect of feeding groundnut protein fortified with limiting essential amino acids on growth and composition of liver, blood, carcasses and certain

- liver enzymes in albino rats. Ann. Biochem. Exp. Med., 1963, 23, 279-284. (Cent. Food. Technol. Res. Inst., Mysore).
- Nehring, K., Bock, H.D. and Wunsche, J. Protein quality of toasted (steam heated) and untoasted soya extraction meal. Nahrung, 1963, 7, 233-242. (Oskar-Kellner Inst. Tierernahrung, Rostock)
- Hohls, H.W. Influence of different toasting processes on quality of soya meal. Arch. Geflugelk., 1963, 27, 388-400. (Bundesforschungsans. Kleintierz., Celle.)
- Rackis, J.J., Smith, A.K., Nash, A. M., Robbins, D. J. and Booth, A. N. Feeding studies on soyabeans. Growth and pancreatic hypertrophy in rats fed soyabean meal fractions. Cereal Chem., 1963, 40, 531-538. (N. Reg. Res. Lab., Peoria, Ill.)
- Kagade, M. L. and Evans, R. J. Effect of heat on *in vitro* digestion of navy beans (*Phaseolus vulgaris*). Quart. Bull. Michigan Agric. Exp. Stat., 1963, 46, 87-91.
- 3.9. Composition of body fluids and tissues :**
- Blood :**
- Usher, R. Shephard, M. and Lind, J. The blood volume of the newborn infant and placental transfusion. Acta paediat. 1963, 52, 497-512. (Pediat Clin, Karolinska Sjukhuset, Stockholm.)
- Natvig, H., Bjerkedal, T. and Jovassen, O. Studies on hemoglobin values in Norway. 3. Seasonal variations. Acta med. scand., 1963, 174, 351-359. Inst. Hyg., Univ. Oslo.)
- Whyte, H.M. Body build and blood pressure of men in Australia and New Guinea. Austral. J. Exp. Biol. Med. Sci., 1963, 41, 395-404. (Med. Res. Dept. Kanematsu Mem. Inst., Sydney Hosp.)
- Ringsdorf, W.M. (Jr.) Cheraskin, E. and Hollis, C.F. Effect of a low-refined-carbohydrate diet on the nonfasting hemoglobin level. New Engl. J. Med., 1963, 269, 555-558. (Dept. Oral Med., Univ. Med. Center, Birmingham, Ala.)
- Varshney T.R. and Katiyar, R.D. Blood study of sheep in India. Ceylon Vet. J., 1963, 11, 49-52. (Cent. Sheep Wool Res. Stat., Pashylok-Rishikesh (Dehradun), India.)
- Walker, B. L. and Kummerow, F. A. Dietary fat and the structure and properties of rat erythrocytes. I. Effect of dietary fat on the erythrocyte lipids. J. Nutrition, 1963, 81, 75-80. (Burnsides Res. Lab., Univ. Illinois, Urbana.)
- Sobel, H., Parsa, K. and Masserman, R. The Effect of age on the clearance of C^{14} -labeled tripalmitin in dogs after oral-feeding. J. Gerontol., 1963, 18, 340-342. (Aging Res., Lab., Veterans admin. Hosp., Sepulvada, Calif.)
- Bandyopadhyay, A. and Banerjee, S. Dietary fats and plasma lipids in chicks Proc. Soc. Exp. Biol. Med., 1963, 114, 222-224. (Dept. Physiol., Sardar Patel Med. Coll., Bikaner)
- Reitan, R. M. and Shipley, R.E. The relationship of serum cholesterol changes to psychological abilities. J. Gerontol., 1963, 18, 350-357. (Dept. Neurol., Indiana Univ. Med. Center, Indianapolis.)
- Fairhurst, B. J. and Waterhouse, C. Effect of previous dietary intakes on the fatty acid composition of plasma cholesterol esters. Amer. J. Clin. Nutrition, 1963, 13, 92-67. (Dept. Med., Univ. Rochester Sch. Med. Dent., N. Y.)
- Scott, R. F., Limimani, J.C., Morrison, E.S., Thuku, J.J. and Thomas, W. A. Esterified serum fatty acids in subjects eating high and low cholesterol diets. A comparative study of serum lipid metabolism in New Yorkers, Indigenous poor East Africans and upper class east Africans. Amer. J. Clin. Nutrition, 1963, 13, 82-91. (Dept. Pathol. Albany Med. Coll., N. Y.)
- Mathur, K.S., Wahi, P. N. and Sharma, R.D. Effect of dietary fats and proteins on serum cholesterol and lipids phosphorus in rats. J. Indian Med. Assoc., 1963, 41, 379-383. (Dept. Med., Pathol. S.N. Med. Coll., Agra.)
- Vacca, Lombardi, S., Amati, A. and Vacca, L. Variations of unesterified fatty acids in the blood of human subjects after heavy muscular work in the bicycle ergometer. Boll. Soc. Ital. Biol. sper., 1962, 38, 1582-1585. (1st Fisiol. Umana, Univ. Naples.)
- Soloff, L. A. and Schwartz, H. (with Baldwin, F.) Plasma and red blood cell free fatty acid responses to glucose loading with a note on the effect of tobacco. Amer. J. Med. Sci., 1963, 246

- 200-205. (Dept. Med., Temple Univ. Med. Center, Philadelphia, Pa.)
- Whitlock, J. H. The influence of heredity and environment on maximum hematocrit values in sheep. Cornell Vet., 1963, 53, 534-550. (New York State Vet. Coll., Ithaca.)
- Srivastava, G.N., Roy, A.K., Chakravarti, R.N. and Zaidi, S.H. Induction of blood hypercoagulability and thrombosis in rats by systemic factors. Indian J. Med. Res., 1963, 51, 661-666. (Cent. Drug Res. Inst., Lucknow.)
- Andreenko, G.V., Kurcin O Ja., Komjakin, N.V., Braks, T.A., Kazakova, Z.A. and Popova, A. V. Changes in some biochemical blood values during development of experimental hypertension. Vop. Pitan., 1963, 22, No. 5, 22-27 (Lab. obemena vescetv. Inst. pitan' AMN SSSR, Moscow.)
- Felbo, M., Kristensen, K.H. and Melchior, J.C. Total plasma protein values in premature and mature newborn infants. A preliminary report. Danish Med. Bull., 1963, 10, 150-152. (Obstet. Dept. B. Rigshosp., Copenhagen.)
- Chida, N. Paper electrophoretic analysis of serum lipoproteins of normal infants and children. Tohoku J. Exp. Med., 1963, 79, 385-388. (Dept. Pediat. Fac. Med., Tohoku Univ., Sendai)
- Kayden, H.J., Karmen, A. and Demont, A. Alterations in the fatty acid composition of human lymph and serum lipoproteins by single feedings. J. Clin. Invest., 1963, 42, 1373-1383. (Dept. Med., New York Univ. Med. Center, N.Y.)
- Shaper, A.G., Jones, K.W., Jones, M. and Kyobe, J. Serum lipids in three nomadic tribes of Northern Kenya. Amer. J. Clin. Nutrition, 1963, 13, 135-146. (Dept. Med., Makerere Univ. Coll. Med. Sch., Kampala.)
- Feldman, E.B., Benkel, P. and Nayak, R.V. Physiologic factors influencing circulating triglyceride concentration in women: age, weight gain, and ovarian function. J. Lab. Clin. Med., 1963, 62, 437-448. (Dept. Med., State Univ. New York Downstate Med. Center, Brooklyn.)
- Hollister, L.E. Successive trials of induced alimentary lipemia. Amer. J. Clin. Nutrition, 1963, 13, 214-218. (Veterans Admin. Hosp., Palo Alto, Calif.)
- Fidanza, F., Fidanza Alberti, A. and Lavitolà, G. Effect of fasting on blood lipids in men. Boll. Soc. Ital. Biol. sper., 1962, 38, 1603-1607. (1st Fisiol. Umana, Univ. Naples.)
- Westerman, M.P., Pierce, L.E. and Jensen, W.N. Erythrocyte lipids; a composition of normal young and normal old populations. J. Lab. Clin. Med., 1963, 62, 394-400. (Hematol. Div., Dept. Int. Med., Univ. Pittsburgh Med. Center, Pa.)
- Emmerson, B.T. and Sandilands, P. The Normal range of plasma urate levels. Australasian Ann. Med., 1963, 12, 46-52. Univ. Queensland Dept. Med., Brisbane Hosp.)
- Charton, A., Faye, P., Hervy, A., Bernard, C. and Gueslin, M. Levels of some constituents of serum and their ratios useful for the study of N. metabolism in the normal ewe kept indoors. Rec. Med. vet., 1963, 139, 445-454. (Ecole Nat. Vet. Alfort.)
- Chowdhury, N.R., Dutta, B. and Mukherjee, A.K. Comparative haematological studies of iron and phosphorus blood levels in mother and newborn baby. Amer. J. Obstet. Gynecol., 1963, 87, 540-542. (Dept. Obstet. Gynaecol., Med Coll., Presidency Coll., Calcutta.)
- Lymph, Cerebrospinal fluid and sweat:*
- Prasad, A.S., Schullert, A.R., Sandstead, H.H., Miale, A. (Jr.) and Farid, Z. Zinc, iron and nitrogen content of sweat in normal and deficient subjects. J. Lab. Clin. Med., 1963, 62, 84-89. (Dept. Biochem., Vanderbilt Univ., Nashville, Tenn.)
- Tissues:*
- Friis-Hansen, B. The body density of newborn infants. Acta paediat., 1963, 52, 513-521. (Dept. Pediat., Rigshosp., Copenhagen.)
- Parizkova, J. and Poupa, O. Some metabolic consequences of adaptation to muscular work. Brit. J. Nutrition, 1963, 17, 341-355. (Physical Culture Res. Inst. Czech. Acad. Sci., Prague.)
- Young, C.M., Blondin, J., Tensuan, R. and Fryer, J.H. Body composition of 'Older' women. J. Amer. Dietetic Assoc., 1963,

- 43, 344-348. (Grad. Sch. Nutrit. Cornell Univ., Ithaca, N.Y.)
- Boling, E.A. and Lipkind, J.B. (with Rossmeisl, E., McLean, R., Alpert, H., Halpin, M., and Gardner, R.) Body composition and serum electrolyte concentrations. *J. Appl. Physiol.*, 1963, 18, 943-949. (Med. Serv., Veterans Admin Hosp., Boston, Mass.)
- Pitts, G. C. and Hollifield, G. Fatness of the total body as estimated from measurements on the eviscerated carcass. *Science*, 1963, 141, 718-719. (Dept. Physiol Sch. Med., Univ. Virginia, Charlottesville.)
- Bitman, J., Cecil, H. C., Gilliam, D. R. and Wrenn, T.R. Chemical composition of sheep mammary gland. *J. Dairy Sci.*, 1963, 46, 941-946. (Dairy Cattle Res. Branch, U. S. Dept Agric., Beltsville, Md.)
- Schryver, H. F. The bone marrow of the cat. *Amer. J. Vet. Res.*, 1963, 24, 1012-1017. (Lab. Pathol., Sch. Vet. Med., Univ. Pennsylvania, Philadelphia.)
- DeLeo, T., Caccia Perugini, I. and Foti, L. The liver lipids of the adult male Wistar rat. 1. Neutral lipids. 2. Phospholipids. *De Leo, T., Trara Genoino, I., and Foti, L. 3. Intracellular distribution of lipids. Boll. Soc. Ital. Biol. sper.*, 1962, 38, 1782-1784; 1785-1787; 1787-1791. (1st Fisiol. Gen., Univ. Naples.)
- Khan, B., Cox, G.E. and Asdel, K. Cholesterol in human tissues; new considerations. *Arch. Pathol.*, 1963, 76, 369-381. (Dept. Pathol., Evanston Hosp., Ill.)
- Schroeder, H.A., Balassa, J.J. and Tipton, I. H. Abnormal trace metals in man-vanadium. *J. Chron. Dis.*, 1963, 16, 1047-1071. (Dept. Physiol., Dartmouth Med. Sch., Hanover; N.H.)
- 3.10. Hormones :**
- Sasson, C.Y. and Rosenberg, I.N. Depletion of thyroid glandular iodine after administration of thyrotropin. *Endocrinology*, 1963, 73, 155-164. (Fifth and Sixth (Boston Univ.) Med. Serv., Boston City Hosp., Mass.)
- Skovsted, L., Funch, J.P. and Dam, H. In vivo stimulation by adrenocorticotrophin (ACTH) of rat adrenals in relation to dietary fat. *J. Endocrinol.*, 1963, 26, 457-461. (Danish Fat. Res. Inst., Copenhagen.)
- Perkoff, G. T., Parker, V., McCall, J. C. and Tyler, F.H. Early effect of cortisol on glucose metabolism in man. *J. Lab. Clin. Med.*, 1963, 62, 431-436. (Dept. Med., Univ. Utah Coll. Med., Salt Lake City.)
- Bassett, J. M. The influence of cortisol on food intake and glucose metabolism in sheep. *J. Endocrinol.*, 1963, 26, 539-553. (C.S.I.R.O., Div. Animal Physiol, Ian Clunies Ross Animal Res. Lab., prospect, N.S.W.)
- Hulth, A. and Olerud, S. The effect of cortisone on growing bone in the rat. *Brit. J. Exp. Pathol.*, 1963, 44, 491-496. (Dept. Orthopaed., Academic Hosp., Uppsala.)
- De Stefano, F. Control of level of circulating eosinophils in the rat during inanition. *Boll. Soc. Ital. Biol. sper.*, 1962, 38, 1455-1467. (1st Patol. Geh., Univ. Siena.)
- Ghiringhell, F., Gerzeli, G. and Mira, E. Histochemical evaluation of some enzyme activities of the adrenal cortex in experimental starvation. *Folia endocrinol* 1962, 15, 823-849. (1st Anat. comp., Univ. Studi, Pavia.)
- De Luca, F., Pinchera, A., Bellabarba, D., Menzinger, G., Di Circolamo, M., Gramarossa, L. Chromatographic study of thyroid hormones in plasma, urine and faeces. Research on man after administration of I^{131} . *Folia endocrinol.*, 1962, 15, 786-803. (1st Pathol. spec. med., Univ. Studi, Rome.)
- Hendrich, C.E. and Turner, C.W. Time relations in the alteration of thyroid gland function in fowls. *Poultry Sci.*, 1963, 42, 1190-1192. (Dept. Dairy Husb., Univ. Missouri, Columbia).
- Brown-Grant, K. Thyroid hormone metabolism in guinea-pigs, mice and rats. *J. Physiol.*, 1963, 168, 599-612. (Dept. Physiol., Univ. Birmingham.)
- Simon, C. The iodide pool of the thyroid studies by means of the isotopic equilibrium method and double labelling with I^{125} and I^{131} . *Biochim. biophys. Acta*, 1963, 74, 565-567. (Dept. Biol., Commissariat Energie Atom., Saclay.)
- Srebnik, H.H., Evans, E.S. and Rosenberg,

- L L. Thyroid function in female rats maintained on the protein-free diet. *Endocrinology*, 1963, 73, 267-270 (Dept. Anat., Univ. California, Berkeley.)
- Ekholm, R., Zelander, T. and Agrell, P S. Incorporation of iodide into organic compounds in the guinea pig thyroid. *Acta endocrinol.*, 1963, 43, 110-118. (Dept. Anat., Univ. Gothenburg.)
- Balogh, I.R. and Kertai, P. Dynamic study of iodine-containing amino acids in serum. *Acta med. hung.*, 1963, 19, 155-160. (Pathophysiol. Abt., Landesins. Gesundheitswesen, Budapest.)
- Macho, L. (with Ondrejkova, J) The influence of endocrine glands on carbohydrate metabolism. 4. The effect of thyroid hormones on pyruvic acid metabolism. The effects of thyroxine and thyroectomy on the metabolism of alfaketoglutaric acid in rabbits. 6 The effect of thyroid hormones on citric acid metabolism. *Arch. internat. Physiol.*, 1962, 70, 507-514; 515-522; 1963, 71, 582-587 (Endocrinol. Inst., Slovak Acad. Sci. Bratislava).
- Sedlak, J. Changes in protein-bound sulfhydral group concentration in the liver of rats fed cabbage. *Experientia*, 1963, 19, 478-479. (Endocrinol. Inst., SAV, Bratislava.)
- Follis, R.H. (Jr.) Studies on iodinated proteins in experimental hyperplastic and colloid goiters of hamsters. *Lab. Invest.*, 1963, 12, 943-947 (Lab. Anat Pathol. Res., Armed Forces Inst. Pathol., Washington, D.C.)
- Abramow, M and Corvilain, J. (with Bergans, A.) Metabolic effects of human growth hormone in the adult and the child. *Ann. Endocrinol.*, Paris 1963, 24, 146-156. (Clin. Med., Hop. Univ. Brugmann, Brussels.)
- Conti, C., Negri, M., Isidori, A., Recchia, O. and Sereno, L. Metabolism of human growth hormone labelled with I^{131} . *Folio endocrinol.*, 1962, 15, 721-729. (1st Patol. spec. med., Univ. Studi, Rome)
- Ratsimamanga, A.R., Diot, J. and Contensou, C. Nutritional role of folliculoids in the feed of growing rats. *C. R. Soc. Biol.*, 1963, 157, 751-755. (Lab. Physiol. Nutrit. Vitamines Fac. Med., Paris.)
- Lefebvres-Boisselot, J. and Susbielle, H. Demonstration of the hepatic regulation of hormones by nutritional criteria; catabolising effects of oestradiol in the female rat as affected by the type of implantation of the hormone. *Arch. Sci. physiol.*, 1963, 17, 297-304 (Centre Recherches Nutrit., C.N.R.S. Bellevue (S-et-O).)
- Elghamry, M.I. Stimulatory and inhibitory influence of Ladino clover (*Trifolium repens*) phytoestrogens on uterine weight and histology. *Zentralbl. Vet. med.*, 1963, 10A, 263-269. (Dept. Physiol., Fac. Vet. Med., Cairo Univ.)
- 3.11. Metabolism of Water :**
- Gauer, O.H. and Henry, J.P. Circulatory basis of fluid volume control. *Physiol. Rev.*, 1963, 43, 423-481. (Dept Physiol., Freie Univ. Berlin).
- Fisher, D.A., Pyle, H.R., (Jr.), Porter, J.C. Beard, A.G. and Panos, T.C. Control of water balance in the newborn. *Amer. J. Dis. Child.*, 1963, 106, 137-146. (Dept. Pediat., Univ. Arkansas Med. Center, Little Rock.)
- Kopfler, E.L. and Wilkinson, W.S. Water metabolism disturbances related to mortality in day-old chicks force-fed glucose solutions. *Poultry Sci.*, 1963, 42, 1166-1171. (Dept. Poultry Sci., Louisiana State Univ., Baton Rouge, 3.)
- Fertig, D. S. and Layne, J. N. Water relationships in the Florida mouse. *J. Mammal.* 1963, 44, 322-334. (Dept. Biol., Univ. Florida, Gainesville.)
- 3.12. Cellular Metabolism :**
- Kayne, H.L., Taylor, N. and Alpert, N.R. Oxygen uptake and nucleotide levels in liver slices from fed, fasted and refed rats. *Metabolism*, 1963, 12, 1012-1016. (Dept. Physiol., Univ. Illinois Coll, Med., Chicago.)
- Moore, R.O. Influence of fasting and refeeding on response of adipose tissue to insulin. *Amer. J. Physiol.*, 1963, 205, 222-244. (Dept. Agric Biochem, Ohio State Univ., Columbus.)
- Szarkowska, and Klinkenberg, M. On the role of ubiquinone in mitochondria. Spectrophotometric and chemical measurements of its redox reaction. *Biochem Ztschr.*, 1963, 338, 674-697. (Physiol. Chem. Inst., Univ. Marburg.)

- Danielson, L. and Ernster, L. Energy-dependent reduction of triphophopyridine nucleotide by reduced diphosphopyridine nucleotide, coupled to the energy-transfer system of the respiratory chain. *Biochem. Ztschr.*, 1963, 338, 188-205. (Wenner-Gren Inst., Univ. Stockholm.)
- Landau, B.R., Hastings, A.B. and Zottu, S. Substrat concentration and metabolic pathways in liver slices in vitro. *Biochem. biophys. Acta*, 1963, 74, 621-628. (Dept. Biol. Chem., Harvard Med. Sch., Boston, Mass.)
- Grodsky, G.M., Batts, A.A., Bennett, L.L., Vcela, C., McWilliams, N.B. and Smith, D.F. Effects of carbohydrates on secretion of insulin from isolated rat pancreas. *Amer. J. Physiol.*, 1963, 205, 638-644. (Metabol., Res. Unit, Univ. California Sch. Med., San Francisco)
- Kinoshita, J.H., Futterman, S., Satoh, K. and Merola, L.O. Factors affecting the formation of sugar alcohols in ocular lens. *Biochim. Biophys. Acta*, 1963, 74, 340-350. (Howe Lab. Ophthalmol. Harvard Med. Sch., Boston, Mass.)
- Esposito, G., Faelli, A. and Capraro, V. Effect of Amino acid transport on glucose and Na transport across the small intestine of the albino rat in vitro. *Boll. Soc. Ital. Biol. sper.*, 1963, 39, 1058-1061. (1st. Fisiol Gen., Univ. Milan.)
- Herskovic, T., Alarcon-Segovia, D., Wakim, K.G., Brown, A.L. (Jr.) and Green P.A. Effect of a gluten fraction on the isolated intestine of normal, gluten sensitized, and gluten-fed rabbits. *Gastroenterology*, 1963, 45, 388-393. Sect. Med., Mayo Clin. Rochester, Minn.)
- Greco, A.V., Gecchi, F., Carbonin, P.U., Sensi, S. and Gambassi, G. Incorporation of glycine- I-C^{14} into reduced glutathione of red cells. I. In subjects with malignant neoplasma. *Acta Vitaminol.*, 1963, 17, 113-117. (Inst. Clin. Med., Univ. Ferrara)
- Salvatore, F., Zappia, V. and Palmieri, F. Deamination of l-leucine in liver and kidney tissues of rats. *Boll. Soc. Ital. Biol. sper.*, 1962, 38, 1882-1885 (1st. Chim. Biol., Univ. Naples.)
- Mohberg, J. and Johnson, M.J. Amino acid utilization by 929-L fibroblasts in chemically defined media. *J. Nat. Cancer Inst.*, 1963, 31, 611-625. (Dept. Biochem., Univ. Wisconsin, Madison, 6.)
- Davtjan, N.K. Lipolytic activity of adipose tissue in experimental alloxan diabetes. *Bjall. eksp. Biol. Med.*, 1963, 56, No 10, 29-32. (Cent. inst. usov. vracej, Moscow)
- Morris, B. The metabolism of free fatty acids and chylomicron triglycerides by the isolate perfused liver of the rat. Some factors affecting the metabolism of free acids and chylomicron triglycerides by the perfused rat's liver. *J. Physiol.*, 1963, 168, 564-583; 584-598. (Dept. Exp. Pathol., John Curtin Sch. Med. Res., Australian Nat. Univ., Canberra)
- Pynadath, T.I. and Kumar, S. Incorporation of fatty acids into milk glycerides. *Life Sci.*, 1963, No. 8, 594-598. (Chem. Dept Georgetown Univ., Washington 7, DC.)
- Abraham, S., Matthes, K.J. and Chaikoff, I.L. The role of microsomes in fatty acids synthesis from acetate by cell-free preparations of rat liver and mammary gland. *Biochim. biophys. Acta*, 1963, 70, 357-369. (Dept. Physiol. Univ. California, Berkeley.)
- Morgan, T.E., Tinker, D.O. and Hanahan, D.J. Phospholipid metabolism in kidney. I. Isolation and identification of lipids of rabbit kidney. Tinker, D.O., Koch, A. and Hanahan, D.J. 2 Potassium uptake lipid composition, and P^{32} labelling of the phospholipids in rabbit kidney cortex slices in vitro, and the effects of diphenylhydantoin. *Arch. Biochem. Biophys.*, 1963, 103, 54-65; 66-73. (Dept. Biochem., Univ. Washington, Seattle.)
- Bennett, J.R. The esterification of cholesterol by rat-liver preparations. *Biochim. biophys. Acta*, 1963, 70, 465-466. (Div. Appl. Bio., Nat. Res. Coun. Ottawa.)
- Metabolism of other substances:*
- Bergman, E.N., Kon, K. and Katz, M.L. Quantitative measurements of acetoacetate metabolism and oxidation in sheep. *Amer. J. Physiol.*, 1963, 205, 658-662. (Dept. Physiol., New York State Vet. Cornell Univ., Ithaca.)
- Herbich, J. and Prokop, L. Influence of intake of food and fluid on the blood

- alcohol level. Wien, klin. Wochenschr., 1963, 75, 421-427. (Inst. Gerichtl. Med., Univ. Vienna.)
- Stein, S. W., Lieber, C. S., Leevy, C. M., Cherrick, G. R. and Abelmann, W. H. The effect of ethanol upon systemic and hepatic blood flow in man. Amer. J. Clin. Nutrition 1963, 13, 68-74. (Thordike Mem. Lab., Boston City Hosp., Mass.)
- Proja, M. Effect of alcohol on fibrinolytic activity, sedimentation rate and viscosity of blood I. Alcohol and fibrinolytic activity. Quad. Nutrizione, 1962, 22, 187-193. (Serv. Nutriz. Miuit. Sanita. Rome.)
- Kalant, H., Hawkins, R.D. and Watkin, G.S. The effect of ethanol on the metabolic rate of rats. Canad. J. Biochem. Physiol., 1963, 41, 2197-2203. (Dept. Pharmacol. Univ. Toronto, Ont.)
- Nikkila, E.A. and Ojala, K. Role of hepatic L α -glycerophosphate and triglyceride synthesis in production of fatty liver by ethanol. Proc. Soc. Exp. Biol. Med., 1963, 113, 814-817. (Dept. Med. Chem., Univ. Helsinki.)
- Knott D.H., Barlow, G. and Beard, J.D. Effect of alcohol ingestion on the production of and response to experimental hemorrhagic stress. New. Engl. J. Med. 1963, 269, 292-295. (Inst. Clin. Invest., Univ. Tennessee Coll. Med. Memphis.)
- Farber, E., Lombardy, B. and Castillo, A. E. The prevention by adenosine triphosphate of the fatty liver induced by ethionine. Lab. Invest., 1963, 12, 873-883. (Dept. Pathol., Univ. Pittsburgh Sch. Med., Pa.)
- Musil, F. and Suva, J. Influence of choline and orotic acid on lipids metabolism. Fette. Seifen : Anstrichmittel, 1963, 65, 831-834. (Chem. Inst., Med. Fak., Karls-Univ., Pilson.)
- Patek, A. J. (Jr) and DeFritsch, N. M. Evidence for genetic factors in the resistance of the rat to dietary cirrhosis. Proc. Soc. Exp. Biol. Med. 1963, 113, 820-824. (Res. Serv., Columbia Univ. Div., Goldwater Mem. Hosp., New York).
- Beaveri D.L., Ashburn, L.L., McDaniel, E.G. and Brown, N. D. Lipid deposits in the lungs of germ-free animals. Arch. Pathol., 1963, 76, 565-570. (Nat. Inst. Arthritis Metabol. Dis., Bethesda, Md.)
- Bianchini, P., Sovieni, A. and Oslma, B. Pancreatic lipid-regulating factors. Effect of lipocaic on total fatty acids. Boll. Soc. Ital. Biol. sper., 1962, 38, 1540-1543. (Lab. Ricerche Crinos, Civello di Villaguardia, Como.)
- Tashjian, A.H. (Jr.) and Whedon, G. D. (with Hurt, C.) Kinetics of human citrate metabolism : studies in normal subjects and in patients with bone disease. J. Clin. Endocrinol., 1963, 23, 1029-1043. (Metabolism. Div. Branch. Nat. Inst. Arthritis Metabol. Dis., Bethesda, Md.)
- Bortz, W.M. and Lynen, F. Elevation of long chain acyl CoA derivatives in livers of fasted rats. Biochem. Ztschr., 1963, 339, 77-82. (Max Planck-Inst. Zellchem., Munich.)
- Joshi, V.C. Jayaraman, J. and Ramasarma, T. On the biosynthesis of ubichromenol. Biochem. Biophys. Res. Commun., 1963, 12, 247-251. (Dept. Biochem., Indian Inst. Sci., Bangalore 12.)
- Olson, R. E., Bentley, R., Aiyar, A.S., Dialameh, G.H., Gold, P.H., Ramsey, V.G. and Springer, C.M. Benzoate derivatives as intermediates in the biosynthesis of coenzyme Q in the rat. J. Biol. Chem., 1963, 238, PC3146-PC3148. (Dept. Biochem. Nutrit., Grad. Sch. Pub. Health, Univ. Pittsburgh, Pa.)
- Sanford, J. Formation of histamine in ruminal fluid. Nature, 1963, 199, 829-830. (Univ. Glasgow Vet. Hosp., Bearsden.)
- Growth & metabolism of tumour cells :*
- Humphery, D. W. Tumor growth in potassium-deficient mice. Cancer Res., 1963, 23, 1121-1124. (Dept. Surg., Minneapolis Veterens Hosp., Minn.)
- Truhaut, R. Evaluation of carcinogenic activity of food additives and contaminants. Arch. Environmental Health, 1963, 7, 351-358 (Dept. Toxicol. Indust. Hyg., Fac. Pharm., Unive. Paris.)
- Boutwell, R.K. A carcinogenicity evaluation of potassium arsenite and arsanilic acid. J. Agric. Food Chem., 1963, 11, 381-385. (McArdle Mem. Lab. Cancer Res., Univ. Wisconsin Med. Sch., Madison.)

- Chany, E., Boy, J. and Le Breton, E. Production of liver cancer in the rat by DAB. Influence of strain and nutrition on the effects of adrenalectomy and of cortisone. *Arch. Sci. physiol.*, 1963, 17, 327-344. (Center Recherches physiol cell., C.N.R.S., Ville juif (Seine).)
- Sartorelli, A.C. and Upchurch, H.F. Physiological disposition and therapeutic consequences of adenine administered via the gastrointestinal tract in normal and tumor-bearing mice. *Cancer Res.*, 1963, 23, 1077-1383. (Dept. Pharmacol., Yale Univ. Sch. Med. New Haven, Conn.)
- 3.13. Growth and Reproduction :**
- Basu, A.K. and Puri, R.K. Relation of some maternal factors to birth weight of offsprings. A study of 1000 cases. *Indian J. Child Health.* 1963, 12, 233-231. (Dept. Pediat., Safdarjang Hosp., New Delhi.)
- Barnes, R. A comparison of growth curves of infants from two weeks to 20 months in various areas of the Chimbu Subdistrict of the Eastern High lands of New Guinea. *Med. J. Austral.*, 1963, ii, 262-266.
- Takkunen, S.L., Frisk, M. and Holmstrom G. Small prematures at 6-7 years of age, 1. Developmental state. Frisk, M. Takkunen, R.L. and Holmstrom, C. 2. School maturity. *Ann. Pediat. Fenn.*, 1963, 9, 183-196; 197-212. (Child Hosp., Univ. Helsinki.)
- Rederuck, C.E. Nutrition and growth of Iowa school girls. Mixed longitudinal data, *Amer. J. Clin. Nutrition*, 1963, 13, 173-685. (Food Nutrit. Dept., Coll Home Econ., Iowa State Univ., Ames.)
- King, W.W., Foucauld, J., Fougere, W. and Severinghaus, E. L. Height and weight of Haitian children. *Amer. J. Clin. Nutrition*, 1963, 13, 106-109. (Inst. Nutrit. Sci., Columbia Univ., New York.)
- Knott, V.B. Stature, leg girth, and body weight of Puerto Rican private school children measured in 1962. *Growth*, 1963, 27, 157-174. (State Univ. Iowa, Iowa City.)
- Voedingsraad (Netherlands Nutrition Council) Height and weight of the Dutch population. *Voeding*, 1963, 24, 603-613.
- Tran Vy and Nguyen Huynh Thi Lien Some biological constants of the normal Vietnamese. *J. Physiol.*, Paris, 1963, 55, 445-452. (Lab. Physiol., Fac. Med., Saigon.)
- Reproduction and Lactation : Mammals :*
- Lee, M.M.C., Chang, K.S.F. and Chan, M.M.C. Sexual maturation of Chinese girls in Honkong. *Pediatrics*, 1963, 32, 389-398. (Dept. Ant. Univ. Honk Kong.)
- Apte, S.V. and Venkatachalam, P.S. Iron losses in Indian women. *Indian J. Med. Res.* 1963, 51, 958-962. (Nutrit. Res. Labs, Indian Counc. Med. Res., Hyderabad, 7.)
- Hauck H.M. Weight changes during pregnancy, Awo Omamma, Nigeria, 1960. *J. Obstet. Gynaecol. Brit. Commonwealth*, 1963, 70, 885-890. (Cornell. Univ., Ithaca, N.Y.)
- Naser, M.L. Weight gain during pregnancy of urban Bantu women. *S. African Med. J.*, 1963, 37, 900-905. (Nat. Nutrit. Res. Inst., C.S.I.R., Pretoria.)
- Reboud, P., Groulade, J., Grosland, P. and Colomb, M. The influence of normal pregnancy and the postpartum state on plasma proteins and lipids. *Amer. J. Obstet. Gynecol.*, 1963, 86, 820-828. (Clin. Obstet. Center Hosp. Reg. Grenoble, La Tronche, Isere.)
- Meade, B.W. and Rosalki, S.B. Serum enzyme activity in normal pregnancy and the new born. *J. Obstet. Gynaecol. Brit. Commonwealth*, 1963, 70, 693-700. (Dept. Chem. Pathol., Group Lab., Kingston-upon-Thames.)
- Konttinen, A. and Pyorala, T. Serum enzyme activity in late pregnancy, at delivery, and during puerperium. *Scand. J. Clin. Lab. Invest.*, 1963, 15, 429-435 (Wihuri Res. Inst., Helsinki.)
- Kleeberg, J. and Polishuk, W.Z. Lipid determinations in maternal and foetal blood. *J. Obstet. Gynaecol. Brit. Commonwealth*, 1963, 70, 701-704. (Res. Lab., Rothschild Municip. Hosp., Haifa.)
- Ford, E.J.H. Glucose utilization in pregnant sheep. *Biochem. J.* 1963, 88, 427-435. (Agric. Res. Counc., Inst. Animal Physiol., Babraham, Cambridge.)
- Dalton, D.C. and Bywater, T.L. The effects of section for litter size and litter weight at weaning in mice maintained

- on two diets. *Animal. Prod.*, 1963, 5, 317-326. (Dept. Agric., Univ. Leeds)
- Leavitt, W.W. and Wright, P.A. Effects of legumes on reproduction in mice. *J. Reprod. Fertility*, 1963, 6, 115-123. (Agric. Exp. Stat., Univ. New Hampshire, Durham.)
- Kinzey, W.G. and Srebnik, H-H. Maintenance of pregnancy in protein-deficient rats with short term injections of ovarian hormones. *Proc. Soc. Exp Biol. Med.*, 1963, 114, 158-160. (Dept. Anat., Univ. California, Berkeley.)
- Barnabei, O. and Ninni, A. Possible role of a placental lipid fraction in the transport of (1-C^{14}) glycine from maternal to fetal blood. *Biochem. biophys. Acta*, 1963, 70, 586-588. *Inst. Gen. Physiol.*, Univ. Bari.)
- Karmarkar, M.G. Rajalakshmi, R. and Ramakrishnan, C.V. Studies on human lactation. 1. Effect of dietary protein, and fat supplementation on protein, fat and essential amino acid contents of breast milk. *Acta paediat.*, 1963, 52, 473-480. (Dept. Biochem. Baroda Univ., India.)
- Virtanen, A.I. Production of cow's milk without protein with urea and ammonium salts as source of N and purified carbohydrates as source of energy. *Biochem. Ztschr.*, 1963, 338, 443-453. (Biochem. Forschungsinst., Helsinki)
- Grillmaier, H. and Bassler, R.A. Effect of parenteral methionine and ethionine on lactation in the rat. Biometric, chromatographic, light and electronoptic studies. *Ztschr. ges. exp. Med.*, 1963, 137, 299-320. (Pathol. Inst., Univ. Mainz.)
- Barry, J.M., Bartley, W., Linzell, J.L. and Robinson, D.S. The uptake from the blood of triglyceride fatty acids of chylomicra and low-density lipoproteins by the mammary gland of the goat. *Biochem. J.*, 1963, 89, 6-11. (Dept. Agric., Univ. Oxford.)
- Gacev, E.P. Role of prolactin in maintaining the lactose content of milk. *Z. obsc. Biol.*, 1963, 24, 382-383. (Inst. Pediat., Sofia.)
- ### 3.14. Immunity and Infection
- Squibb, R.L. Nutrition and biochemistry of survival during Newcastle virus infection. 1. Liver nucleic acid, protein and lipid patterns in chicks. *J. Nutrition*, 1963, 81, 48-54. (Bur. Biol. Res., Rutgers Univ., New Brunswick, N.J.)
- Yaeger, R.G. and Miller, O.N. Effect of lysine deficiency on Chagas' disease in laboratory rats. *J. Nutrition*, 1963, 81, 169-174. (Dept. Trop. Med. Pub. Health, Tulane Univ. Sch. Med., New Orleans, La.)
- Hopkins, D.T., Witter, R.L. and Nesheim, M.C. A respiratory disease syndrome in chickens fed essential fatty acid deficient diets. *Proc. Soc. Exp. Biol. Med.*, 1963, 114, 82-86. (Dept. Poultry Husb, Cornell Univ., Ithaca, N.Y.)
- Trumic, P. and Panjevic, Dr. Influence of trace elements on immunogenic response of guineapigs. 1. CuSO_4 . *Acta. vet.*, Belgrade, 1963, 13, No. 1, 23-28. (Inst. Klin. Zaraze, Vet. Fak., Univ. Belgrade.)
- Dhar, H.L. and Sanyal, R.K. Carbohydrate metabolism and anaphylaxis. *J. Pharm. Pharmacol.*, 1963, 15, 628-629. (Dep. Pharmacol., Maulana Azad Med. Coll., New Delhi.)
- Holmes, J.E. and Miller, N.E. Effects of bacterial endotoxin on water intake, food intake, and body temperature in the albino rat. *J. Exp. Med.*, 1963, 118, 649-658. (Dept. Psychol., Yale Univ., New Haven, Conn.)
- Berry, L.J. and Smyth, D.S. Effects of bacterial endotoxins on metabolism 6. The role of tryptophan pyrolase in response mice to endotoxin. *J. Exp. Med.*, 1963, 118, 587-603.
- Haenel, H., Amanuiloff, I., Natschef, L., Muller-Beuthow, W. and Daov, T. Influence of Bulgarian acid milk (yoghurt) on the faecal microecology of healthy adults. *Milchwissenschaft*, 1963, 18, 454-461. (Inst. Ernährung, Potsdam Rehbrücke.)
- Barskov, A.A. Effect of small doses of biomycin on quantitative composition of the gut microflora of young rabbits after weaning. *Ucen. Zap. Kazan. Vet. Inst.*, 1962, 87, 73-79.
- Bruggemann, J. and Giesecke, D. Comparison of microbial activity in the rumen and caecum of cattle. *Ztschr. Tierphysiol. Tierernährung Futtermittek.*, 1963, 18, 215-226. (Inst. Poysiol. Tiere, Univ. Munich.)

- Purser, D.B. and Weiser, H.H. Influence of time of addition of antibiotic on the *in vitro* life of rumen holotrich protozoa. *Nature*, 1963, 200, 290. (Inst. Nutrit. Food Technol., Ohio State Univ. Columbus).
- Abou Akkada, A. R., Eadie, J. M. and Howard, B-H., The biochemistry of rumen protozoa. 7. The carbohydrases of *Polyplastron multivesiculatum* (Dogiel and Fedorowa) *Biochem. J.*, 1963, 89, 268-272. (Rowett Res. Inst., Bucksburn, Aberdeen.)
- Bailey, R. W. and Clarke, R. T. J. Carbohydrases of the rumen oligotrich *Eremoplastron bovis*. *Nature*, 1963, 199, 1291-1292. (D.S.I.R., Plant Chem. Div., Palmerston North, N Z.)
- Halliwell, G. and Bryant, M.P. The cellulolytic activity of pure strains of bacteria from rumen of cattle. *J. Gen. Microbiol.*, 1963, 32, 441-448. (Dept. Enzymol., Rowett Res. Inst., Bucksburn, Aberdeen)
- Ogimoto, K. and Suto, T. Bacteria producing propionic acid in the rumen. 1. Isolation of *Veilionella alcalescens* from the alimentary tract of ruminants and its decarboxylation of succinic acid. *Jap. J. Zootech. Sci.*, 1963, 34, 282-287. (Nat. Inst. Animal Health, Kodaira-shi, Tokyo).
- Hungate, R. E. Polysacharide storage and growth efficiency in *Ruminococcus albus*. *J. Bacteriol.*, 1963, 86, 848-854. (Dept. Bacteriol., Univ. California, Davis).
- Margherita, S. S. and Hungate, R. E. Serological analysis of *Butyrivibrio* from the bovine rumen. *J. Bacteriol.*, 1963, 86, 855-860. (Dept. Bacteriol., Univ. California, Davis.)
- Lagoste, A. M. (with Gastou, M.) The tryptophanase of rumen bacteria. *Arch. Sci., physiol.*, 1963, 17, 313-325. (Inst. Physiol., Fac. Sci., Toulouse.)
- #### 4. CLINICAL NUTRITION
- ##### 4.1 Deficiency Diseases (including anaemia) :
- General and Protein malnutrition*
- Umlaub, W.G. Malnutrition in the Americas. *Southern Med. J.*, 1963, 56, 465-471. (Internat. Med. Unit., Dept., Tulane Univ. Sch. Med., New Orleans, La.)
- Victor, M. Tobacco-alcohol amblyopia. *Arch. Ophthalmol.*, 1963, 70, 313-318. (Neurol. Serv., Cleveland Metropol. Gen. Hosp., Ohio.)
- Ferber, E. Nutritional conditions in Yugoslavia and their reflection on health. *World Rev. Nutrition Dietetics*, 1963, 4, 25-33. (Dept. Nutrit., Cent. Inst. Hyg., Zagreb.)
- Furnass, S.B. Nutrition and palatability. *Lancet*, 1963, ii, 579-580.
- Ludmany, K. Total α -amino N excretion by atrophic infants in the humid warm environment. *Ann. paediat.*, 1963, 201, 113-124. (Univ. Kinderklin., Debrecen.)
- Fateeva, F.M. and Troickaja, N.A Amino acids in serum and urine during hypotrophy. *Pedijatrija*, 1963, No. 11, 24-29.
- Ramon, Guerra, A. u., Korc, I., Sculpini, V., Bidagain, S. and Birenbaum, H. Hypoglycemia produced by ethanol. *Arch. Pediat. Uruguay*, 1963, 34, 207-212.
- Mandrowska, A. and Konieczna, W. Nutritional status of children in two rural schools in the Zielona Gora province. *Roczn. panstwowego Zakl. Hig.*, 1963, 14, 293-298. (Zakl. Hig. Zyw., Warsaw.)
- Makarova, A. P. and Blinova, N. E. O. Amino acids in urine of children with chronic Nutritional disorders. *Pedijatrija*, 1963, No. 11, 37-43. (Pediat. med. inst., Lening grad.)
- Wishahy, A. and Khattab, A. The effect of failure of growth due to undernutrition on the different parts of the body in infancy. *J. Egypt. Med. Assoc.*, 1962, 45, 1029-1037. (Pediat. Sect., Ein-Shams Univ., Cairo).
- Mayberry, R.H. and Lindeman, R.D. A survey of chronic disease and diet in Seminole Indians in Oklahoma. *Amer. J. Clin. Nutrition*, 1963, OKlahoma Med. Center, Oklahoma City.
- Tabrah, F. L. and Hauck, H. M. Some aspects of health and nutritional status, Awo Omamma, Nigeria. *J. Amer. Dietetic Assoc.*, 1963, 43, 321-326. (Dept. Food Nutrit. Cornell Univ., Ithaca, N.Y.)
- Bailey, K.V. Blood-pressure in undernourished Javanese. *Brit. Med. J.*, 1963, ii, 775-776. (Indonesian Nutrit. Inst., Wonosari, Gunung Kidul, Djakarta)

- Sos, J. Dietary deficiency as a cause of disease. *Polski Tyg. lek.* 1963, 18, 684-689. (Kat. Potofiziol., Akad. Med., Budapest-)
- Lansot, Blanco, M. Economic and social factors in infant malnutrition. Study of a sample of 200 families of children admitted to the 'Dr. Pedro Visca' Hospital, August-September 1961. *Arch. Pediat. Uruguay*, 1963, 34, 143-147. (Hosp Dr. Pedro Visca, Montevideo, Uruguay.)
- Moody, C.O. Malnutrition in children under five years of age in the Dagomba village of Northern Ghana. *J. Roy. Inst. Pub. Health Hyg.*, 1963, 26, 224-241.
- Joffe N. Pancreatic calcification in childhood associated with protein malnutrition. *Brit. J. Radiol.* 1963, 36, 758-761. Diagnostic X-ray Dept., Baragwanath Hosp. Johannesburg.)
- Stewart, R.J.C. Protein-calorie deficiency. *Nutrition*, 1963, 16, 103-106. (Human Nutrit. Res. Unit. Nat. Inst. Med., Res. Mill. Hill, London, N.W. 7.)
- Bowie, M. D., Brinkman, G. L. and Hansen, J.D.L. Diarrhoea in protein-calorie malnutrition. *Lancet*, 1963, ii, 550-551. (Dept. Med., Univ Cape Town.)
- Gopalan, C., Reddy, V. and Mohan, V S. Some aspects of copper metabolism in protein- calorie malnutrition. *J. Pediat.*, 1963, 63, 246-249. (Nutrit. Res. Labs., Indian Counc. Med. Res., Hyderabad 7.)
- Williams, C.D. The story of kwashiorkor, *Courrier*, 1963, 13, 361-367. (Sch. Püb. Health American Univ., Beirut.)
- Cat, I., Campello, A. P., Voss, D. H., Braga, H. and Bacila, M. Respiration rates and oxidative phosphorylation of hearts arcosomes in kwashiorkor. *Lancet*, 1963, ii, 415-416. (Dept. Pediat Hosp. Clin. Curitiba, Parana, Brazil).
- Yarom, R. and McFac, J. Kwashiorkor in the Congo. A Clinical survey of a hundred successive cases in the Kasai Province. *J. Trop. Pediat.*, 1963, 9, 56-63. Luluabourg Gen. Hosp.)
- Lawless, J. and Lawless, M.M. Kwashiorkor, The result of cold injury in a malnourished child? *Lancet*, 1963, ii, 972-974. (Llewellyn Hosp., Kitwe, N. Rhodesia).
- Chaudhuri, R. N., Bhattacharyya, A. K. and Chatterjee, S. Fat balance studies with whole milk in kwashiorkor and marasmus. *Bull. Calcutta Sch. Trop. Med.*, 1962, 10, 154.
- Chaudhuri, R.N. Sen, A.K. and Bhattacharyya, A.K. Fat in faecal smears in kwashiorkor and marasmus; preliminary report. *Bull. Calcutta Sch. Trop. Med.*, 1962, 10, 155.
- Bhattacharyya A.K. and Chaudhuri, R.N. Kwashiorkor and marasmus: a note on fatal cases. *Bull. Calcutta Sch. Trop. Med.*, 1962, 11, 1-2.
- Bailey, K.V. Malnutrition in New Guinea children and its treatment with solid peanut foods. *J. Trop. Pediat.*, 1963, 9, 35-43. (Nutrit. Res. Unit., Dept. Pub. Health, Kundiawa, of Papua and New Guinea.)
- Cronje, R.E. Pretorius, P.J. and Davel, J. G. A. Marasmus in South African Bantu childrens. *3. African Med. J.* 1963, 37, 867-870. (Dept. Pediat., Univ. Pretoria)
- Reddy, V., Belavady, B. and Srikantia S.G. Partition of urinary nitrogen in marasmus Indian J. Med. Res., 1963, 51, 952-357. (Nutrit. Res., Indian J. Med. Res., 1963, 51, 952-957. Indian Counc. Med. Res. Taranka, Hyderabad-7.)
- Vitamin A :*
- McLaren, D.S. Bitot's spots. A review of their significance after 100 years. *Brit. Med J.*, 1963, ii, 926. (American Univ., Beirut.)
- Gupta, S. and Rao, M.V.N. Vitamin A studies in malnourished children. *J. Indian Pediat. Soc.*, 1963, 2, 201-204. (Med. Coll., Pondicherry)
- Roderuck, C.E., Sidwell, V.D., Jebem E.H. and Eppright, E.S. Studies of serum carotenoids and vitamin A in Iowa school children. *Amer. J. Clin. Nutrition*, 1963, 13, 186-193. (Food Nutrit. Dept., Coll. Home Econ., Iowa State Univ., Amer.)
- Pallotta, M.A. and Krause, R.F. Effect of vitamin A on certain blood constituents of geriatric subjects. *Amer. J. Clin. Nutrition*, 1963, 13, 201-208. (Dept. Biochem., Med. Center, W. Virginia Univ. Morgantown.)
- Soler-Bechara, J. and Soscia, J.L. Chronic hypervitaminosis A. Report of a case in an adult. *Arch. Int. Med.*, 1963, 112, 463-466. (Dept. Med. St. Vincent's Hosp. New York).

Vitamin D:

- Ruys, J. H. Diagnosis of rickets. Voëding, 1963, 24, 687-691. Nederlands Tijdschr. Geneesk., 1964, 108, 69-71. (Kinderklin. Acad. Ziekenhuis, Leyden.)
- Arneil, G.C. and Grosbie, J.C. Infantile rickets returns to Glasgow. Lancet, 1963, ii, 423-425. (Dept. Chld Health, Univ. Glasgow.)
- Aboul-Dahab, Y.W. and Zaki K. Studies on rickets and malnutrition in the under-nourished child. Arner. J. Clin. Nutrition, 1963, 13, 98-105. (Ein-Shams Fac. Med., Cairo.)
- Pache, H.D., Keuth, U. and Sailer, K. Infantile tetany and prevention of rickets. Munch. Med. Wochenschr., 1963, 105, 1321-1328. Univ. Kinderklin., Munich.)
- Paci, A., Giorgi, P.L. and Ceccarelli, M. The electrocardiogram and infantile hypocalcemia. Rev. Clin. pediat., 1962 70, 386 399 (1st Clin. pediat., Univ. Paisa.)
- Sydow, G.V., and Hedvall, G. The effect of different amounts of Vitamin D on growth and serum levels of calcium, in organic phosphorus and alkaline phosphatase in premature infants. Acta paediat., 1963, Suppl. 146, 137-140, Dept. Peadiat, Country Hosp. Sundsvall, Sweden.)
- Bakwin, H. Prophylactic vitamin D dosage after infancy. Pediatrics, 1963, 32, 308.
- Ruys, J.H. Directives for vitamin D dosage. Voëding, 1963, 24, 692-695; Nederlands Tijdsch, Geneesk. 1964, 108, 71-72. (Kinderklin., Acad Ziekenhuis, Leyden.)
- Cassimos, C., Tsenghi, C., Michael, S. Liaromati, A. and Metaxotou, K. Continuous intravenous infusion of calcium in vitamin D deficient rickets. Pediatrics 1963, 32, 272-279 (Pediat. Clin. Univ. Athens.)
- Vaandrager, G.J. and Weyer's, H.A. Primary vitamin D-refractory rickets. 1. The value of calciuria determination in the therapeutic regulation with high doses of vitamin D. 2. The calcium infusion test as a means of determining the calcium avidity of the skeleton. (Calcium retention test). 3. The calcium infusion test as a means of determining the function of the parathyroid glands Ann. paediat. 1963, 201, 73-85; 185-198 287-295 (Child. Hosp., State Univ., Utrecht.)
- Lafferty, F.W., Herndon, C.H., Pearson, O.H. Pathogenesis of vitamin D-resistant rickets and the response to high calcium intake. J. Clin. Endocrinol 1963, 23, 903-917. (Dept. Med., Western Reserve Univ. Sch. Med., Cleverland, Ohio).
- Frame, B., Smith, R. W. (Jr.), Fleming, J.L., and Manson, G. Oral phosphates in vitamin D-refractory rickets and osteomalacia. Amer. J. Dis Child., 1963, 106, 147-153. (Dept. Med. Henry Ford Hosp., Detroit, Mich.).
- Gentil, C., Paupe, J., Schepens, G., Antener, I., Colin, J., Satge, P., Canlorbe, P., and Lelong, M. Iodopathic vitamin-resistant rickets. Five cases with estimation of vitamin D activity of serum. Critical review of the literature. Sem. Hop., 1963, 39, Ann. Pediat. No. 31 1053/P. 214-1084/P. 244 (Clin. Pediat Puericult., Hop. Saint-Vincent-de-Paul, Paris.)
- Milhaud, G., Job, J.C. and Gentil, C. Calcium metabolism in man studied with Ca⁴⁵. idiopathic vitamin-resistant rickets. Rev. franc. Etudes clin. biol., 1963, 8, 179-182. (Lab. Isotopes, Inst. Pasteur, Paris)
- Schwarz, G. and Kruck, F. Changes of Ca and phosphate metabolism in vitamin D resistant rickets. Klin. Wochenschr., 1963, 41, 416-419. (Med. Univ. Poliklin., Heidelberg.)
- Bittel-Dobrzynska, N., Bordzitowska, J. and Mostowiec, St. Three cases of rickets resistant to treatment with vitamin D. Polski Tyg. lek.. 1963, 18, 1398-1402. (I. Klin. Chorob. Dziecięcych AM, Gdansk.)
- Stickler, G.B. and Brueke, E.C. External calcium and phosphorus balances. A comparative study of renal disease and the celiac syndrome. Amer. J. Dis. Child., 1963, 106, 154-160. (Mayo Clin., Rochester, Minn.)
- Wilson, D.R. and Yendt, E.R. Treatment of the adult fanconi syndrome with oral phosphate supplements and alkali. Report of two cases associated with nephrolithiasis Amer. J. Med., 1963,

- 35, 487-511. (Dept. Med., Univ Toronto, Ont.)
- Barltrop, Hypercalcaemia associated with neonatal subcutaneous fat necrosis. Arch. Dis. Childhood, 1963, 38, 516-518. Hosp. Sick Child., Gt. Ormond St., London.)
- Hooft,C., Vermassen, A. and Blancquaert, A. Observations concerning the evolution of the chronic form of idiopathic hypercalcaemia in children. Helv. paediat. Acta, 1963, 18, 138-147. (Paediat, Clin., Univ. Ghent.)
- Berven, H. The physical working capacity of healthy children. Seasonal variations and effect of ultraviolet irradiation and vitamin-D supply. Acta paediat., 1963, 52, Suppl. 148, pp. 23. (Lab. Clin. Physiol., Karolinska Sjukhuset, Stockholm.)
- Gokinaeva, L.I. Effect of vitamin D₂ on human sexual function. Akuserstvo Ginekol., 1963, No. 2, 18-20. (I. med. inst. I.P. Pavlova, Leningrad.)
- Vitamin E :*
- Dinning, J.S., Majaj, A.S., Azzam, S.A., Darby, W.J., Shunk, C.H. and Folkers, K. Response of macrocytic anemia in children to the coenzyme Q₄-chromanol. Amer J. Clin. Nutrition, 1963, 13, 169-172. (Dept. Pediat., Augusta Victoria Hosp., Jerusalem)
- Dyggve, H.V. and Probst, J.H. Vitamin E to premature infants. Influence on serum bilirubin, hemoglobin and alkaline phosphatase. Acta Paediat., 1963, Suppl. 146, 48-56. (Dept Pediat., Rigshosp., Copenhagen.)
- Vitamin B Complex :*
- Monekosso, G.L. An epidemiological relationship between stomatoglossitis and defective vision. J. Trop. Med. Hyg., 1963, 66, 255-258. (Univ. Ibadan, Nigeria.)
- Markkanen, T. and Sotaniemi, E. Intestinal sterilization with neomycin. Effect on the blood level of riboflavin, nicotinic acid, pantothenic acid and urinary excretion of folic acid and vitamin B₆ in man. Ann. Med. Int. Fenn., 1963, 52, 75-79. (Dept Med. Microbiol., Univ. Turku.)
- Rothe, M. and. Tunger, L. Meeting the requirement for vitamin B₁ and riboflavin from four varieties of bread with reference to present-day consumption, Deutsch. Gesundheitswesen. 1963, 18, 727-730. (Abt. Getreideforsch., Inst. Ernährung, Potsdam-Rehbrücke.)
- Buckle, R.M. The glyoxylic acid content of human blood and its relationship to thiamine deficiency. Clin. Sci., 1963, 25, 207-217. (Med. Professorial Unit, Dunn Labs., St Bartholomew's Hosp., London E.C.I)
- Korytko, M. I. Effect of different food proteins and of season on riboflavin status of children in the third year of life. Vop. Pitan., 1963, 22, No. 5. 60-63 (Otdel. fiziol. rebenka, last. ohran, mater. detstva, Lwow)
- Abdallah, A. and Gad-El-Mawla, N. 5-Hydroxyindole acetic acid in pellagra. J. Egypt. Med. Assoc., 1963, 46, 97-99. (Inst. Res. Trop. Med. Cairo.)
- Cunakova, E.P. Possibility of endogenous synthesis of nicotinic acid in patients with total gastrectomy. Vop. Pitan., 1963, 22, No. 6, 27-30 (Klin. lec. pitan., Inst. pitan. AMN SSSR, Moscow.)
- Sacchetti, G., Giovannini, M. and Tenconi, L.T. Metabolism of nicotinic acid in infants with mongoloid idiocy. Acta vitaminol., 1963, 17, 107-112. (Lab. Direzione Cent. Med., Lepetit S.P.A., Milan.)
- Parsons, W.B. (Jr.) Use of nicotinic acid to reduce serum cholesterol and remove tissue cholesterol. Southern Med. J., 1963, 56, 427-433. (Jackson Clin., Madison, Wis.)
- Consolo, F., Buda, A. and De Gregoric, Analysis of pharmacodynamic action of nicotinic acid on the arterial systemic circulation. Boll. Soc. Ital. Biol. sper., 1963, 39, 1073-1074. (Ist Patol. Spec. Med. Univ. Messina.)
- Weiner, M. The fibrinolytic response to nicotinic acid in abnormal liver states. Amer. J. Med. Sci., 1963, 246, 294-300. (New York Univ. Res Serv. Goldwater Mem. Hosp., Welfare Island.)
- Waldinger, C. and Berg, R.B. Signs of pyridoxine dependency manifest at birth in siblings. Pediatrics, 1963, 32, 161-168. (Newborn Div., New England hosp. Boston, Mass)
- Obrant, K.O., Hassen, H. A. and Persson,

- E. Chemotherapeutically induced vitamin B₆ deficiency in patients with urogenital tuberculosis. *Acta chirurg. scand.*, 1963, 126, 156-166.
- Gehrman, G., Vitamin B₆ and haemopoiesis. *Deutsch. med. Wochenschr.*, 1963, 88, 2261-2266. (I. Med. Klin., Med. Akad., Dusseldorf.)
- Lele, R.D. Solanki, B.R and Bhagwat, R.B Pyridoxine responsive anaemia. *J Indian Med Assoc.*, 1963, 41, 199-202. (Dept. Med., Med. Coll., Aurangabad)
- Cronje, R.E., Savage, D.J. and Theron, J.J. The effect of vitamin B₆ administration on the anaemia of kwashiorkor. *S. African J. Lab. Clin. Med.*, 1963, 9, 122-126. (Dept. paediat., Univ. Pretoria).
- Wedell, J., Jahnke, K., Daweke, H. and Zimmermann, H. Significance of pyridoxin in diabetes mellitus, *Klin. Wochedchr.*, 1963, 41, 451-457. (II. Med. Klin. Med. Akad., Dusseldorf.)
- Barton-Wright, E.C. and Elliott, W.A. The pantothenic acid metabolism of rheumatoid arthritis. *Lancet*, 1963, ii, 862-863. (St. Alfege's Hosp., London, S.E.10).
- Gough, K. R., Read, A.E., McCarthy, C.F. and Waters, A.H. Megaloblastic anaemia due to Nutritional deficiency of folic acid. *Quart. J. Med.*, 1963, 32, 243-256 (Univ. Dept Med. Bristol Royal Infirmary.)
- Cooke, W.T., Fone, D.J., Cox, E.V., Meynell, M.S. and Gaddie, R. Acute folic acid deficiency of unknown aetiology : temperate sprue. *Gut*, 1963, 4, 292-298 (Gen. Hosp., Birmingham)
- Kinnear, D.G., Johns, D.G., MacIntosh, P.C., Burgen, A.S.V. and Cameron, D.G. Intestinal absorption of tritium-labelled folic acid in idiopathic steatorrhoea : effect of gluten-free diet. *Canad. Med. Assoc. J.*, 1963, 89, 975-979. (Dept. Med. Montreal Gen. Hosp.)
- Husain, O.A.N., Rothman, D. and Ellis, L. Folic acid deficiency in pregnancy. *J. Obstet. Gynaecol. Brit. Commonwealth*, 1963, 70, 821-827. (Dept. Obstet, Lambeth Hosp. London, S.E. 11)
- Berry, V., Booth, M.A., Chanarin, I. and Rothman, D. Urinary formimino-glutamic acid excretion in pregnancy. *Brit. Med. J.*, 1963, ii, 1103-1104. (Dept. Haematol., St. Mary's Hosp. Med. Sch. London.)
- Martin, J. D., Davis, R. E. and Hahnel, R. Association of reduced urinary oestrone excretion and low serum-folic acid activity in pregnancy. *Lancet*. 1963, ii, 716-717. (Dept. Obstet. Gynaecol., Univ. W; Australia, Perth.)
- Kohler, H.G. and Garrett, Leucopenia as manifestation of folic acid deficiency in pregnancy. *J. Obstet. Gynaecol. Brit. Commonwealth*, 1963, 70, 828-832. (Dept. Pathol., Birmingham Maternity Hosp.)
- Kahn, S.B., Lischner H., Baker, L. and Williams, W.J. Megaloblastic anemia associated with the ingestion of phenobarbital and pyrimidone. Report of a case in a six year-old child. *Pediatrics*, 1963, 32, 376-383. (Dept. Med., Hosp. Univ. Pennsylvania, Philadelphia.)
- Odeberg, B., Hansen, H.A. and Lanner, L.O. Megaloblastic bothriocephalus anemia mainly due to folic acid deficiency. *Acta med. scand.*, 1963, 174, 155-162. (Dept. Med. II, Saulgrenska sjukhuset, Univ. Gothenburg.)
- Villako, K.P. Absorption of vitamin B₁₂ labelled with Co⁵⁸ from the small intestine in dipylidiobothriosis. *Klin. Med.*, Moscow, 1963, 41, No. 6, 106-108. (Kaf. propedet. vnutr. bolezni, Gosud. univ., Tartu)
- Palva, I.P. Influence of thyroid function upon vitamin B₁₂ deficiency in carriers of the fish tapeworm. *Ann. Med. int. Fenn.*, 1963, 52, 81-84 (Second Dept. Med., Univ Helsinki.)
- Palva, I.P. Hypothyroidism and absorption of vitamin B₁₂ in fish tapeworm carriers. *Ann. Med. int. Fenn.*, 1963, 52, 85-87. (Second Dept Med., Univ. Helsinki.)
- Connor, P.M. and Pirola, R.C. Nutritional vitamin B₁₂ deficiency. *Med. J. Austral.*, 1963, ii, 451-453. (Dept. Haematol., Royal Perth Hosp.)
- Van Dommelen, C.K.V., Slagboom, G., Meester, G. T. and Wadman, S. K. Reversible hypogammaglobulinaemia in cyanocobalamin (B₁₂) deficiency. *Acta med. scand.*, 1963, 174, 193-200. (Dept. Int. Med., Zuiderziekenhuis, Rotterdam.)

- Gibson, I.I.J.M., Kelly, A.M. and Wang, I. The iron deficiency of pernicious anaemia. *Scot. Med. J.*, 1963, 8, 357-364. (Victoria Infirmary, Glasgow.)
- Lange, J. Vitamin B₁₂ deficiency and psychiatry. Reflections on two patients, *Tidsskr. norske Loegeforening*, 1963, 83, 1538-1540. (Psykiat.add., Sentral-sykehuset Ostfold, Fredrikstad.)
- El-saadani, A.M. Abu-Zikry, A., Ali, A. M. and Talaat, H.A.F. A study of radioactive B₁₂ absorption in gastrectomy cases. (A preliminary report.) *J. Egypt. Med. Assoc.*, 1963, 46, 57-62. (Fac. Med. Univ. Cairo)
- Nelson, E.G. and Vedso, S. Experience with the vitamin B₁₂ preparation Betol-vex. *Ugeskr. Loeger*, 1963, 125, 1446-1448. (Amts og bys sygehus, Vejle.)
- Schrumpf, A. Vitamin B₁₂ as a depot preparation, *Tidsskr. norske Loegeforening*, 1963, 84, 1541-1542; 1537.
- Waelsch, J.H. Evaluation of different methods of testing preparations containing vitamin B₁₂ in the treatment of pernicious anaemia with special reference to preparations produced in Czechoslovakia. *Cas. Lek. ces.*, 1962, 102, 624-636 (Hematol. odd., Thomayerov., nemocn., Prague, Krc.)
- Abels, J., Bouma, W., Janez, A., Woldring, M.G., Bakker, A. and Nieweg, H. Experiments on the intrinsic factor antibody in serum from patients with pernicious anaemia. *J. Lab. Clin. Med.*, 1963, 61, 893-906. (Div. Hematol., Dept. Med., Univ. Groningen.)
- Abels, J., Bouma, W. and Nieweg, H.O. Assay of intrinsic factor with anti-intrinsic factor serum in vitro. *Biochim. biophys. Acta*, 1963, 71, 227-229 (Div. Haematol., Dept. Med., State Univ., Groningen.)
- Heaton J.M. Methylmalonic-acid excretion and tobacco amblyopia. *Lancet*, 1963, ii, 789-790. (Inst. Ophthalmol., Judd St., London, W.C.1.)
- Stahlgberg, K.G., Olsson, I., Gahrton, G. Norden, A. Serum vitamin B₁₂ determinations and cytochemical reactions in the differential diagnosis of acute leukaemia. *Acta. med. scand.*, 1963, 174, 105-114. (Dept. Med., Univ. Lund.)
- Jeske, R. A. The Vitamin B₁₂ content of human liver tissues obtained by aspiration biopsy. *Gut*, 1963, 4, 231-235. (Dept. Med., Univ. W. Australia, Perth)
- Reizenstein, P., Cronkite, E.P. and Cohn, S.A. Plasma clearance and whole body turnover of injected absorbed radioactive vitamin B₁₂ in man. *J. Lab. Clin. Med.*, 1963, 62, 255-262. (Med. Res. Center, Brookhaven Nat. Lab., Upton, N.Y.)
- Vitamin C:*
- Maxwell, G.M. and Wurfel, L. Some observations on the background of scurvy. *Med. J. Austral.*, 1963, ii, 646-648. (Dept. Child Health, Univ. Ade. lalde.)
- Hyams, D.E. and Ross, E.J. Scurvy, megaloblastic anaemia and osteoporosis *Brit. J. Clin. Practice*, 1963, 332-343.)
- Bascoulergue, P. and Le Berre, S. Seasonal deficiency of vitamin C in inhabitants of northern Camcroun. *Nutritio et Dieta*, 1963, 5, 62-68.
- McDonald, B.S. Gingivitis-ascorbic acid deficiency in the Navajo. 3. Dietary aspects. *J. Amer. Dietetic Assoc.*, 1963, 43, 331-335. (Div. Indian Health, U.S. Pub. Health Serv., Window Rock, Ariz.)
- Natvig, H., Bjerkedal, T. and Jonassen, O. Studies on hemoglobin values in Norway. 2. The effect of supplementary intake of ascorbic acid and iron on the hemoglobin level of school-children and men. *Acta med. scand.*, 1963, 174, 341-350. (Inst. Hyg. Univ. Oslo.)
- Ksienzy, S. Changes in the vitamin C content of white cells, blood serum and urine after 500-mg doses of L-ascorbic acid. *Roz. panstwego Zekl. Hig.*, 1963, 14, 267-273. (Zakl. Hig xyw. PZH, Warsaw.)
- Rivers, J.N., Huang, E.D. and Dodds, M.L. Human metabolism of L-ascorbic acid and erythorbic acid. *J. Nutrition*, 1963, 81, 163-168.
- Hoogerwerf, A. and Hoitink, A.W.J.H. The influence of vitamin C. administration on the mechanical efficiency of the human organism. *Internat. Ztschr. angew. Physiol. Arbeitsphysiol.*, 1963, 20, 164-172. (Physiol. Lab., Free Univ., Amsterdam.)
- Andrae, W. Meeting vitamin C requirements with fruit and vegetable juice.

- Deutsch. Gesundheitswesen, 1963, 18, 336-340. (Bezirks-Hy. Inst., Zwickau).
- Wefring, K. W. Hemorrhage in the new born and vitamin K prophylaxis, 2. Jaundice in the new born following prophylactic treatment of the mothers with vitamin K. J. Pediat., 1963, 63, 663-666. (Dept. Pediat., Vestfold sentralpfichns. Tonsberk, Norway.)
- Anaemia :*
- Haughton, J.C., Nutritional anemia of infancy and childhood. Amer. J. Pub. Health, 1963, 53, 1121-1126. (Bur. Med. Servs., New York City Dept. Health.)
- Githens, J. H. and Hathaway, W. E., Iron deficiency anaemia of infancy. Pathogenesis, diagnosis and management. Clin. Pediat., 1963, 3, 477-483 (Dept. Pediat., Univ. Colorado Med. Center.)
- Florio, A., Gatta, A. M. and Poggini, G. Absorption of Fe and therapeutic results in treatment of hypochromic anaemia in infancy with iron (II) polymaltose by the intramuscular route. Riv. Clin. Pediat., 1962, 70, 301-311. (1st Clin. Pediat., Univ. Florence.)
- Ross, J. D. Failure of iron-deficiency infants to respond to an orally administered iron-carbohydrate complex. Report of four cases. New Engl. J. Med., 1963, 269, 399-401. (Boston Floating Hosp., Mass.)
- De Silva, C.C. Anaemias of protein calorie malnutrition in Ceylonese children. J. Indian Pediat. Soc., 1963, 2, 179-194. (Dept. Pediat., Univ. Ceylon)
- Moore, C.V. Hypochromic anaemias not caused by iron deficiency. Australasian Ann. Med., 1963, 12, 16-20. (Dept. Med., Washington Univ. Sch. Med., St. Louis, Mo.)
- Friend, D.G. Iron therapy. Clin. Pharmacol. Therap., 1963, 4, 419-422. (Peter Bent Brigha Hosp., Boston, Mass.)
- Lane, R.S. Iron-dextran: total dose-infusion technique. Lancet, 1963, ii, 1015, (Royal Samaritan Hosp. Women, Glasgow)
- Ryan B.P.K. Chronic anaemia with body deformities in Papuan children. Med. J. Austral., 1963, ii, 603-607. (Child. Hosp., Lagos.)
- Crosby, W. H., Conrad, M. E. (Jr.) and Wheby, M.S. The rate of iron accumula- tion in iron storage disease. Blood, J. Hematol., 1963, 22, 422-440. (Dept. Hematol. Walter Reed Army Inst. Res., Washington, D.C.)
- 4.2 Dental Diseases**
- Robinson, S. and Naylor, S.R. The effects of late weaning on the deciduous incisor teeth: a pilot survey. Brit. Dent. J., 1963, 115, 250-252. (Westminster Child. Hosp.)
- Ludwig, T. C., Healy, W.B. and Malthus, R.S. Dental caries prevalence in specific soil areas at Napier and Hastings. Food Nutrition, Austral., 1963, 20, 78-81.
- Bramstedt, F. Biochemistry of dental caries. Med. Ernährung, 1963, 4, 181-185. (Biochem. Lab., Univ-Klin Poliklin. Zahn, Mund u Kieferkrankheiten, Univ. Hamberg)
- Englander, H. R., Kesel, R.G. and Gupta, O.P. The Aurora-Rockford, Ill. study II. Effect of natural fluoride on the periodontal health of adults. Amer. J. Pub. Health, 1963, 53, 1233-1242 (Univ. Illinois Coll. Dent., Chicago)
- Ross, W.S. Fluoridation: the present position in Great Britain. Brit. Dent. J., 1963, 115, 397-405.
- Krusic V. Our experiences with the preparation Calcipet, F. Med. Ernährung, 1963, 4, 216-220 (Stomatol. Abt., Med. Fak., Univ. Ljubljana.)
- 4.3 Geriatric Nutrition :**
- Fuller, W.A., Wakely, R.E., Lunden, W. A., Swanson, P. and Willis, E. Characteristics of persons 60 years of age and older in Inn Country, Iowa. Iowa Agric. Home Econ. Exp. Stat. Spec. Rep., No. 33, June 1963, pp. 56
- Gasster, M. The Banana in geriatric and low calorie diets. Geriatrics, 1963, 18, 782-786.
- Mohnike, G. and Lisewski, G. Metabolic disorders in old age. Deutsch. Gesundheitswesen, 1963, 18, 213-221. (I. Med. Univ. klin. Charite, Berlin)
- Nathan, D. G., Cahill, G. F. (Jr.) and Gardener, F. H. (with Linauro, A.L.) The effect of large doses, testosterone on the body fat of elderly men. Metabolism, 1963, 12, 850-862. (Curtis Hematol. Res. Lab., Peter Bent Brigham Hosp., Boston, Mass.)

- 4.4 Metabolic diseases (including thyroid disorders):**
- Barnes, P.H. Prediabetes and pregnancy. *Canad. Med. Assoc. J.*, 1963, 89, 301-303. (Fac. Med., Dept. Obstet. Gynecol., Univ. Manitoba, Winnipeg.)
- Spaulding, W. B., Spitzer, W.O. and Truscott, P.W. Aglycosuric diabetes. *Canad. Med. Assoc. J.*, 1963, 89, 329-333. (Dept. med., Univ. Toronto.)
- Mirouze, J., Jaffiol, C. and Sany, C. Continuous diurnal recording of blood sugar in diabetes mellitus. Hypoglycemias of diabetes mellitus treated with insulin. Value of continuous diurnal recording of blood sugar. *Sem. Hop., Pathol. Biol.* 1963, 11, 553-564; 565-571; 572-579, (Clin. Malad. Metabol. Endocrin., Clin. Saint Eloi, Montpellier (Heraut).)
- Arrieta Alvarez, F., Larrodera, L. and Herrera Pombo, J. L. Utilisation of fructose in normal subjects and in patients with diabetes. *Rev. clin. española*, 1963, 90, 277-283.
- Cuppage, F.E. Fat embolism in diabetes mellitus. *Amer. J. Clin. Pathol.*, 1963, 40, 270-275. (Inst. Pathol., Western Reserve Univ., Cleverland, Ohio.)
- Favre, H. and Siegenthaler, P. Sodium chloride content of sweat in adults with diabetes. *Sem. Hop.*, 1963, *Pathol. Biol.*, 11, 455-461. (Policlin. Univ. Med., Geneva.)
- Zlotopol'skij, A. R. and Hazanov, A.I. Diabetes mellitus and myocardial infarction. *Klin. Med.*, Moscow, 1963, 41, No. 5, 39-44
- Politzer, W.M. Diabetes mellitus in South African Bantu school children. *S. African J. Clin. Med.*, 1963, 9, 109-112. (S. African Inst. Med. Res., Johannesburg.)
- Mazaud, R., Andre, L.J., Castera, P. Migeon, A. and Ton, that Gia, Diabetes mellitus in Vietnam. *Med. trop.*, 1963, 23, 189-207. (Mission culture franc. Vietnam, Hop. Grall, Saigon.)
- Campbell, C.H. Diabetes mellitus in the Territory of Papua and New Guinea. *Med. J. Austral.*, 1963, ii, 607-610. (Gen. Hosp., Port Moresby.)
- Romero, E. Diet treatment of diabetes. *Rev. clin. española*, 1963, 90, 329-338. (Fac. Med., Valladolid.)
- Dreosti, J.M. Practical therapeutic dietetic 3. Diabetes. *S. African Med. J.*, 1963, 37, 944-946. (Dietetic Dept., Groote Schuur Hosp., Cape Town.)
- Beiseher, N.A. and Lowry, J. The detection and management of abnormal glucose tolerance during pregnancy. *J. Obstet. Gynaecol. Brit. Commonwealth*, 1963, 70, 685-692. (Lurgan and Partdown Hosp., Co., Armagh, N. Ireland.)
- King, R. C. and Dobree, J. H. Corn oil in the treatment of exudative diabetic retinopathy. *Proc. Roy. Soc. Med.*, 1963, 56, 759-760. (St. Bartholomew's Hosp., London.)
- Koch, R., Acosta, P., Ragsdale, N. and Donnell, G.N. Nutrition in the treatment of galactosemia. *J. Amer. Dietetic Assoc.*, 1963, 43, 216-222 (Dept. Pediat., Univ. Southern California Sch., Med. Los Angeles.)
- Lal, S.K., Surya, N.C. and Anantharaman, V. Galactosaemia : an interesting case of survival *Indian J. Med. Res.*, 1963, 51, 677-682. (Dept Physiol., Med. Coll., Pondicherry.)
- Missale, G., Cocconi, G., Conterio, E., Mainardi, D. and Canaletti, R. Study of a family with fructosuria and fructose intolerance. *Boll. Soc. Ital. Biol. sper.*, 1962, 38, 1749-1753. (Ist Patol. Spec. Med., Univ. Parma.)
- Knorr, D. and Wittermann, E. Fructose intolerance and behaviour of unesterified fatty acids after a fructose load. *Klin. Wochenschr.*, 1963, 41, 565. (Univ. Kinderklin., Munich.)
- Careddu, P., Giovannini, M. and Cevini, G. Temporary disaccharide intolerance in nutritional disorders in infancy *Helv. Paediat. Acta*, 1963, 18, 97-106. (Univ. kinderklin., Milan.)
- Farquhar, J.W., Richmond, J. and Tait, H.P. Phenylketonuria in pediatric practice. A review. *Clin. Pediat.*, 1963, 2, 504-516. (Unive. Edinburgh)
- Sobral, D.T. Metabolic disturbances in phenylketonuria *Arq. Brasil Endocrinol. Metabol.*, 1962, 11, 233-257.
- Bickel, H. Early diagnosis of phenylketonuria in the population. *Deutsch. med. Wochenschr.*, 1963, 88, 1850-1854. (Unive. Kidarklin., Marburg a.d. Lahm.)
- Krupanidhi, I. and Punekar, B.D. A study

- of the incidence of phenylketonuria in India, Indian J. Med. Res., 1963, 51, 696-702. (All India Inst. Mental Health, Bangalore-11.)
- Koch, R., Acosta, P., Ragsdale, N. and Donnel, G.N. Nutrition in the treatment of phenylketonuria. J. Amer. Dietetic Assoc., 1963, 43, 212-215. (Dept. Pediat., Univ. Southern California Sch. Med., Los Angeles.)
- Van Sprang, F.J. Head Circumference of children with phenylketonuria during dietary treatment. Lancet, 1963, ii, 888-899 (Kindergeneesk., Rijksuniv. Wilhelmina Kinderziekenhuis, Utrecht.)
- La Du, B.N., Howell, R.R., Jacoby, G.A., Seegmiller, J.E., Sober, E.K., Zannoni, V.G., Canby, J.P. and Ziegler, L.K. Clinical and biochemical studies on two cases of histidinemia. Pediatrics, 1963, 32, 216-227. (Nat. Inst. Arthritis Metabol. Dis., Bethesda, Md.)
- Carson, N. A. J., Cusworth, D. C., Dent, C.E., Field, C.M.B., Neill, D.W. and Westall, R.G. Homocystinuria: a new inborn error of metabolism associated with mental deficiency. Arch. Dis. Childhood, 1963, 38, 425-436. (Royal Belfast Hosp. Sick Child.)
- McMurray, W.G., Rathbun, J.C., Mohyuddin, F. and Koegler, S.J. Citrullinuria. Pediatrics, 1963, 32, 347-357. (Dept. Biochem., Univ. W. Ontario, London)
- Gerner, G., Digestive and metabolic disorders: disturbances of fat metabolism. Munch. med. Wochenschr., 1963, 105, 1871-1879. (Med. Klin., Univ Erlangen-Nurnberg)
- Shah, S., Pomeroy, V., Michaels, G., Coelh, M. and Kinsell, L.W. Glyceride and fatty acid response fat loading in normal and abnormal subjects. Metabolism, 1963, 12, 887-898. (Inst. Metabol. Res., Highland-Alameda Country Hosp., Oakland, Calif.)
- Lonsdale, D., Mercer, R.D. and Faulkner, W.R. Maple syrup urine disease Report of two cases. Amer. J. Dis. Child., 1963, 106, 258-266. (Dept. Pediat., Cleveland Clin. Found., Ohio)
- Dancis, J., Hutzler, J. and Levitz, M. The diagnosis of maple syrup urine disease (branched chain ketoaciduria) by the in vitro study of the peripheral leukocyte. Pediatrics, 1963, 32, 234-238. (Dept. Pediat., New York Univ. Sch. Med.)
- Westall, R.G. Dietary treatment of a child with maple syrup urine disease (branched chain ketoaciduria). Arch. Dis. Childhood, 1963, 38, 485-491. (Med. Unit University Coll. Hosp. Med. Sch., London.)
- Beveridge, J. Clinical aspects of diseases due to enzyme deficiency. Food Nutrition Austral., 1963, 20, 63-67. (Dept. Pediat., Univ. New South Wales)
- Rogers, J. Nutritional aspects of enzyme deficiency diseases. Food Nutrition, Austral., 1963, 20, 67-73. (Royal Prince Alfred Hosp., Sydney.)
- Salvioli, G.P. (Jr.) and Babini, B. The incidence of glucose-6-phosphate dehydrogenase in new born infants in the city of Bologna. Arch., Franc. Pediat., 1963, 20, 459-462. (Inst. Clin. Puericult., Univ. Bologna.)
- MacDonald, R.A. Wine as source of iron in haemochromatosis. Nature, 1963, 199, 922. (Harvard Med. Sch., Boston, Mass.)
- Sunderman, F.W. (Jr.) Disturbance of indole metabolism in hepatolenticular degeneration. Amer. J. Med. Sci., 1963, 246, 165-171. (Dept. Med., Jefferson Med Coll., Philadelphia, Pa.)
- Thyroid Disease:*
- Dumont, J.E., Ermans, A.M. and Bastenie, P. A. Thyroid function in a goitre endemic. 5. Mechanism of thyroid failure in the Uele endemic cretins. J. Clin. Endocrinol., 1963, 23, 847-860. (Lab. Med. Exp. Fac. Med. Univ. Brussels.)
- Black, J.A. Neonatal goitre and mental deficiency. The role of iodides taken during pregnancy. Arch. Dis. Childhood, 1963, 38, 526-529. (Royal Hosp. Sick Child., Glasgow.)
- Clements, F.W. and Gibson, H.B. Effects of thyroxine on thyroid size and body weight of Tasmanian children with endemic goitre. Med. J. Austral., 1963, ii, 663-666. (Inst. Child Health, Sydney.)
- Danowski, T.S. Subtle hypothyroidism and atherosclerosis. Nutrition Rev., 1963, 21, 225-227. (Univ. Pittsburgh Sch. Med., Pa.)

4.5 Gastro-intestinal disorders:

- Rodewyk, L. and Surmann, T. Therapeutic modification of gastric secretion by amino acids. *Deutsch. med. Wochenschr.*, 1963, 88, 1689-1694. (Med. Abt., St. Elisabeth-Krankenhaus, Essen.)
- Bal'Jan, M.A. Nitrogen balance in infants with gastro-intestinal disorders fed on ionite milk. *Pediatrija*, 1963, No. 11, 33-37.
- Ligny, G., Renault, H. and Cattan, R. Oral and intravenous blood sugar tolerance tests in disorders of the small intestine. Estimation of the amounts of glucose appearing in the glucose appearing in the glucose space during the oral test. *Sem. Hop.*, 1963, *Pathol. Biol.*, 11, 438-444. (Hop. Saint-Antoine, Paris)
- Gruttner, R. Biochemical and clinical studies on the pathogenesis and diagnosis of celiac disease. 1. Development of the study of celiac disease up to the present position of pathogenetic concept of the disorder, with a note on original experimental studies on the pathogenesis. 2. Methods of detecting celiac disease. *Ztschr. Kinderheilk.*, 1963, 88, 413-421; 422-430. (Univ. Kinderklin., Hamburg Eppendorf.)
- Pena, J. Theories and facts about celiac disease. Concept, etiology and pathogenesis of celiac disease. *Rev. espanola Pediat.*, 1963, 191, 377-396.
- Bauza, C.A., Brunser, O., Reid, A. and Matteo, A.L. Morphological study of the gastric mucosa in celiac disease. *Arch-Pediat. Uruguay*, 1963, 34, 168-174.
- Cooke, W.T., Fone, D.J., Cox, E.V., Meynell, M.J. and Gaddie, R. Adult celiac disease. *Gut*, 1963, 4, 279-291. (Gen. Hosp. Birmingham.)
- Burman, D. Celiac disease. 1. Diagnosis by jejunal biopsy. *Clin. Pediat.*, 1963, 2, 581-588. (St. Mary's Hosp., London, W. 2.)
- Hubble, D. and Littlejohn, S. The d-xylose excretion test in celiac disease in childhood. *Arch Dis Childhood*, 1963, 38, 476-480. (Dept. Pediat., Univ. Birmingham.)
- Hubble, D. Diagnosis and management of celiac disease in childhood. *Brit. Med.* J. 1963, ii, 701-706. (Dept. Pediat., Univ. Birmingham.)
- Zentner, H. Celiac disease-biochemical and technological aspects. *Food Nutrition, Austral.*, 1963, 20, 74-77; reprinted from *Food Technol., Austral.*, 1963, 15, 126. (Bread Res. Inst. Australia., Ryde, N.S.W.)
- Kleinbaum, H. How long should children with celiac disease receive a gliadin-free diet? *Deutsch. Gesundheitswesen*, 1963, 18, 1198-1201. (Univ. Kinderklin., Greifswald)
- Hansky, J. and Shiner, M. Gastric studies in idiopathic steatorrhea. *Gastroenterology*, 1963, 45, 49-56. (Dept. Gastroenterol., Cent. Middlesex Hosp., London).
- Texter, E.C. (Jr.) Chejfec, G. and Cooper, J.A.D. (with Roecker, B.N.) The I^{131} triolein absorption test. 1. Effect of the nonradioactive meal on the rate of absorption of radioactive-labeled triolein.
- Vidinli, M., Texter E.C. (Jr.) and Cooper, J.A.D. (with Roecker, B.N.) 2. Use of I^{131} triolein milk emulsion as an index of fat absorption in normal subjects and patients with malabsorption. *Amer. J. Digest. Dis.*, 1963, 8, 729-741; 742-762. (Med. Serv., Veterans Admin. Res. Hosp., Chicago, Ill.)
- McPherson, J.R. and Summerskill, W.H.J. An acute malabsorption syndrome with reversible mucosal atrophy. *Gastroenterology*, 1963, 44, 900-904. (Sect. Med., Mayo Clin., Rochester, Minn.)
- Miller, A. The significance of serum magnesium levels. *Med. J. Austral.*, 1963, ii, 406-407. (Clin. Res. Unit, Walter and Eliza Hall Inst. Med. Res., Melbourne.)
- Rothefeld, B. and Osborne, D. Malabsorption syndrome produced by neomycin. *Amer. J. Digest. Dis.*, 1963, 8, 763-768. (Med. Serv., Veterans Admin. Hosp., Perry Point, Md.)
- Hillman, H.S. The diagnosis and management of malabsorption. *Med. J. Austral.*, 1963, ii, 180-182 (Prince Henry's Hosp., Melbourne).
- Wormsley, K.G. Use of labelled triolein vitamin A, and D-xylose in the diagnosis of malabsorption. *Gut*, 1963, 4, 261-272. (Royl Infirmary, Manchester).

- Fleming, W.H., Avery, G.B. Morgan, R.I. and Cone, T.E. (Jr.) Gastrointestinal malabsorption associated with cystinuria Report of a case in a Negro. *Pediatrics*, 1963, 32, 358-370. (Dept. Nuclear Med., U.S. Naval Hosp., Nat. Naval Med. Center, Bethesda, Md.)
- Lederer, J. Differentiation of diet in steatorrhoea. *Voeding*, 1963, 24, 670-680.
- Berndt, H. The differential diagnosis of steatorrhoea *Deutsch. Gesundheitswesen*, 1963, 18, 691-698. (Inst. Med Biol. Forschungsgem. Deutsch. Akad. Wissenschaft. Berlin.)
- Demole, M. Dietetic indications in enteropathy with microscopic steatorrhoea. *Voeding*, 1963, 24, 660-669. (Fac. Med., Geneva.)
- Cohen, M. Diet in the management of disorders of the small intestine in adults. *Bull. Soc. sci. Hyg. aliment*, 1963, 51 192-198.
- Knapp, A. and Gruschwitz, E. Our experience in diagnosis and treatment of idiopathic sprue with special reference to a case with a syndrome of antibody deficiency. *Deutsch. Gesundheitswesen*, 1963, 18, 1033-1040. (Inst. Ernahrung. Potsdam-Rehbrücke.)
- Winslow, I. and Mosbech, J. Sprue-course and prognosis illustrated by a follow-up study. *Nord. Med.*, 1963, 70, 1063-1055. (Med. afd. Set. Elisabeths hosp., Copenhagen)
- Sheehy, T.W., Cohen, W.H. and Brodsky, J.P. The intestinal lesion in the initial phase of tropical (military) sprue. *Amer. J. Digest. Dis.*, 1963, 8, 826-836 (Med. Div., U.S. Army Trop. Res. Med. Lab., San Juan, Puerto Rico.)
- Komarov, F.I., Ivanov, A.I. and Lebedev, N.F. Influence of the character of the evening meal on nocturnal gastric secretion in healthy person and patients with chronic gastritis. *Vop. Pitani*, 1963, 22, No. 6, 16-21. (Voennomed. Akad. S.M. Kirova, Leningrad.)
- White, T.T., Elmslie, R.G. and Magee, D.F. The disappearing enzymes. A study of pancreatic enzymes in normal patients and after Billroth I and II and gastric resections. *Amer. J. Surg.*, 1963, 106, 307-316. (Dept. Surg., Univ. Washington Sch. Med., Seattle.)
- Hamburger, J.I., Cutler, R.M., Sugarman, M.H., Brown, S., Berk, J.E. and Sandweiss, D.J. Intestinal absorption and jejunal morphology in duodenal ulcer patients. With particular reference of the influence of subtotal gastric resection. *Amer. J. Digest. Dis.*, 1963, 8, 709-717 (Dept. Med., Sinai Hosp., Detroit, Mich.)
- Olesen, E.S., Sprechler, M. and Amdrup, E. Supply of protein by mouth to patients in poor nutritional condition. Importance of drinks rich in protein. *Nord. Med.*, 1963, 70, 1108-1112 (Kommunehosp., Copenhagen.)
- Solem, G., Olesen, E.S., and Amdrup, E. Protein and energy intake before and after gastrectomy and removal of the colon. Experiences with a high-protein diet. *Nord. Med.*, 1963, 70, 1103-1108 (Kommunehosp., Copenhagen.)
- Saakjan, A.G. and Nanazasvili, I.S. Influence of some foods and mineral waters on motor activity of the small intestine in patients with chronic colitis. *Vop. Pitani*, 1963, 22, No. 6, 21-26. (Gastroenterol. otdel. Klin., Essentuki.)
- Lindquist, B. and Meeuwisse, G.W. Intestinal transport of monosaccharides in generalized and selective malabsorption. *Acta Paediat.*, 1963, Suppl. 146, 110-115. (Dept. Pediat., Univ. Umea Med. Sweden.)
- Roy, J., Frezal, J., Jos, J., Bauche, P. and Lamy, M. Diarrhoea caused by impaired intestinal hydrolysis of sucrose, maltose and isomaltose. *Arch. franc. Pediat.*, 1963, 20, 381-400. (Hop. (Enfants-Malades, 149 rue de Sevres Paris)
- Van De Kamer, J.H. Diagnosis and treatment of fermentative diarrhoeas; *Voeding*, 1963, 24, 711-718.
- Cozzetto, F.J. Intestinal lactase deficiency in a patient with cystic fibrosis. Report of a case with enzyme assay. *Pediatrics*, 1963, 32, 228-233. (Dept. Pediat. Univ. Colorado Med. Center, Denver.)
- Reimers, E., Weselmann, U. and Klimaszewski, E. Does an artificial bifidus flora protect the infant against dyspepsia? *Monatsschr. Kinderheilk.* 1963,

- 111, 214-217. (Univ. Kinderklin., Gottingen.)
- 4.6. Cardiovascular disorders**
- Adams, C.W.M. Multiple factors in the pathogenesis of atherosclerosis. Guy's Hosp. Rep., 1963, 112, 222-253.
- Keys, A. and Blackburn, H. Background of the patient with coronary heart disease Progr. Cardiovasc. Dis., 1963, 6, 14-44. (Lab. Physiol. Hyg., Univ. Minnesota, Minneapolis.)
- Van Buchem, F.S.P. Stress and cardiovascular disturbances. Nederland Tijdschr. Geneesk., 1963, 107, 1668-1672.
- Rassohin, V.M. Effect of fat, protein and carbohydrate test meals on blood coagulation in patients with atherosclerosis. Klin. Med., Moscow, 1963, 41, No. 6, 35-38. (Terap. Klin. No.1, Novokuzneck, GIDUV.)
- Reaven, G., Calciano, A., Cody, R., Lucas, C. and Miller, R. Carbohydrate intolerance and hyperlipidemia in patients with myocardial infarction without known diabetes mellitus. J. Clin. Endocrinol., 1963, 23, 1013-1023. (Dept. med., Stanford Univ. Sch. Med., Calif.)
- Cramer, K. Serum β -lipoprotein lipids and protein in elderly male survivors of myocardial infarction. Acta med. scand., 1963, 174, 421-424. (Med. Serv. I, Sahlgrenska sjukhuset, Gothenburg.)
- Prior, I.A.M., Armstrong, W.E and Carr, A.H. Oral triolein- I^{131} tolerance curves in normal, atherosclerotic and hyperlipaemic subjects. Australasian Ann. Med., 1963, 12, 208-215. (Med. Unit, Wellington Hosp., N.Z.)
- Erdelyi, G., Keller, L. and Balazsi, I. Studies with I^{131} I-labelled triolein in patients with atherosclerosis. Acta Med. Hung., 1963, 19, 85-94. (III. Med. Klin., Med. Univ., Budapest.)
- Hejdeberg, K. K. Fat metabolism in patients with atherosclerotic 'coronary disease' 2. Klin. Med., Moscow, 1963, 41, No. 5, 67-70.
- Geill, T. Effect of cream intake on ECG and blood coagulation in coronary sclerosis. Geriatrics, 1963, 18, 867-870.
- Watson, W.C., Buchanan, K.D. and Dickson, C. Serum cholesterol levels after myocardial infarction. Brit. Med. J., 1963, ii, 709-712. (Glasgow Royal Infirmary)
- Freedman, M.J. and Frajola, W.J. Serum lipid patterns in men under 45 years with myocardial infarction. Amer. J. Med. Sci., 1963, 246, 277-284. (Med. Serv. Branch USAF Hosp., Wright Patterson Air Force Base, Ohio.)
- Solun, M.N. Characteristics of lipid metabolism in patients with atherosclerosis Klin. Med., Moscow, 1963, 41, No. 6, 123-127. (Med. inst., Saratov.)
- Pell, S. and D'Alonzo, C.A. Acute myocardial infarction in a large industrial population. Report of a 6-year study of 1,356 cases. J. Amer. Med. Assoc., 1963, 185, 831-838. (Med. Div., E.I du Pont de Nemours & Co., Inc., Wilmington, Del.)
- Warren, J.E. Myocardial infarction in an industrial population. Arch. Environmental Health, 1963, 7, 210-216. (Med. Dept., Consolidated Edison Co., New York.)
- Schwartz, M.J., Rosensweig, B., Toor, M. and Lewitus, Z. Lipid metabolism and arteriosclerotic heart disease in Israelis cf Bedouin, Yemenite and European origin. Amer. J. Cardiol., 1963, 12, 157-168. (Dept. Radioisotopes, Bellinson Hosp., Petah Tikva, Israel.)
- Sestel, H.C., Keeley, K.J. and Walker, A.R.P. Characteristics of South African Bantu who have suffered from myocardial infarction. Amer. J. Cardiol., 1963, 12, 148-156. (Baragwanath Non-European Hosp., Johannesburg.)
- Walker, A.R.P. Extremes of coronary heart disease mortality in ethnic groups in Johannesburg, South Africa. Amer. Heart J., 1963, 66, 293-295. (S. African Inst. Med. Res., Johannesburg.)
- Marier, J.R., Rose, D. and Belanger, L.F. Hard waters and heart disease. Brit. Med. J., 1963, ii, 686-687. (Div. Appl. Biol. Nat. Res. Counc., Ottawa, 2.)
- Walker, W.J. and Sherman, J.L. (Jr.) Dietary fat and general public. Amer. Heart J., 1963, 66, 272-273 (cardiol. Serv., Walter Reed Gen. Hosp., Washington 12, DC.)
- Bierenbaum, M.L., Green, D.P., Gherman C., Fiorin, A. and Caldwell, A.B. The effects of two low fat dietary patterns

- on the blood cholesterol level of young male coronary patients J. Chron. Dis., 1963, 1073-1083. (Atherosclerosis Res. Group, St. Vincent's Hosp., Montclair, N.J.)
- Barneit, A.J. and Carson, V.J. Reduction of plasma cholesterol levels in atherosclerosis by diet and drug treatment. Australasian Ann. Med., 1963, 12, 37-45. (Baker Med Res. Inst., Melbourne.)
- Kuo, P.T. and Bassett, D.R. Primary Hyperlipidemias and their management. Ann. Int. Med., 1963, 59, 495-507. (Edward B. Robinette Found., Cordio-vasc. Sect. 3400 Spruce St., Philadelphia, Pa.)
- Black, J.A. and Carter R.E.B. Association between aortic stenosis and facies of severe infantile hypercalcaemia Lancet, 1963, ii, 745-749 (Hosp. Sick. Child. Gt Ormond St., London.)
- #### 4.7. Assessment of Nutritional Status.
- Davies, C.T.M., Drysdale, H.C. and Passmore, R. Does exercise promote health? Lancet, 1963, ii, 930-932 (Dept. Physiol., Univ. Edinburgh.)
- Haustova, T.N. Indicators of adequacy of nutrition in children. Vop. Pitani, 1963, 22, No. 5, 67-70. (Otdel detsk. pitani, Inst. Pitani AMN SSSR, Moscow.)
- Ferro-Luzzi, A. and Ferro-Luzzi, G. Nutritional status of Italian school communities. 5 Nutritional status of a group of young Italians on adequate and well balanced diet Quad. Nutrizione, 1962, 22, 206-213. (Ist. Naz. Nutriz., Rome.)
- Gastol, B. and Koltek, K. Haemoglobin level, red cell count and serum protein as indices of nutritional status in industrial workers, Roczn. Panstwowego Zakl. Hig., 1963, 14, 275-281. (Zakl. Hig. Am. Cracow.)
- Puyet, J.H., Downs, E.F. and Budeir, R. Nutritional and growth characteristics of Arab refugee children in Lebanon. Amer. J. Clin. Nutrition, 1963, 13, 147-157. (Pediat. Dept., American Univ. Beirut.)
- Ferro-Luzzi, G. Study on skinfold thickness of Polynesians. Quad. Nutrizione, 1962, 22, 200-205. (Minist. Sanita, serv. Nutriz., Rome.)
- Keller, W. and Kopf, H. Anthropometric data on East African workers compared with those on young West German men. Nitritio et Dieta, 1963, 5, 224-234. (Max-Planck-Inst., Ernahrungsphysiol., Dortmund.)
- ### 5. DIETETICS
- #### 5.1 Miscellaneous feeding experiments
- Ponick, S.B. and Hinkle, L.E. (Jr.) The effect of glucagon, phenmetrazine and epinephrine on hunger, food intake and plasma nonesterified fatty acids Amer. J. Clin. Nutrition, 1963, 13, 110-114. (Div Human Ecol., New York Hosp. Cornell Med. Center, N.Y.)
- Miller, S.A. and Dymsha, H.A. Artificial feeding of neonatal rats. Science, 1963, 141, 517-518. (Dept. Nutrit. Food Sci., Massachusetts Inst. Technol., Cambridge.)
- Henry, Y. and Rerat, A. (with Theron, M.C., Houlier, F. and Daniel, Y.) Voluntary intake of energy and protein of the growing rat as studied by the self-selection method. Ann. Biol. animale, Biochim. Biophys., 1963, 3, 103-117. (Stat. Recherches Elevage Porcs, C.N.R.Z., Jouy-en-Josas, (S) et-o)
- McDonald, D.G., Stern, J.A. and Hahn, W.W. Effects of differential housing and stress on diet selection, water intake, and body weight in the rat. J. Appl. Physiol., 1963, 18, 937-942 (Dept. Psychiat. Neurol., Washington Univ. Sch. Med., St. Louis, Mo.)
- Hamilton, C.L. Interaction of food intake and temperature regulation in the rat. J. Comp. Physiol. Psychol., 1963, 56, 476-488. (Veterans Admin. Hosp., Coatesville, Pa.)
- Bolles, R.C. Effect of food deprivation upon the rat's behaviour in its home cage. J. Comp. Physiol. Psychol., 1963, 56, 456-460.
- Duda, J. and Bolles, R.C. Effects of prior deprivation, current deprivation, and weight loss on the activity of hungry rat. J. Comp. Physiol. Psychol., 1963, 56, 569-571.
- Candland, D.K. and Culbertson, J.L. Age, type and duration of deprivation, and consummatory preference in the rat. J.

- Comp. Physiol. Psychol., 1963, 56, 565-568.
- Howe, E.E. and Dooley, C.L. Effect of alternate depletion-repletion on the laboratory rat. J. Nutrition, 1963, 81, 35-38. (Merck Inst. Therap. Res. Rahway, N.J.)
- Galamini Ligori, M., Ligori, G. und Palma, A. (Regeneration of the liver and fasting in albino rats. Rend. Ist. super. Sanita, Rome, 1962, 25, 1007-1016.
- Widdowson, E.M. and McCance, R.A. The effect of finite periods of undernutrition at different ages on the composition and subsequent development of the rat. Proc. Roy. Soc. (B), 1963, 158, 329-342. Med. Res. Counc. Dept. Exp. Med., Univ. Cambridge.)
- Nachman, M. Learned aversion to the taste of lithium chloride and generalization to other salts. J. Comp. Physiol Psychol, 1963, 56, 343-349. (Univ. California, Riverside.)
- Kennedy, G.C. and Parker, R.A. The islets of Langerhans in rats with hypothalamic obesity, Lancet 1963, ii, 981-982. (Dept. Exp. Med., Univ. Cambridge.)
- Fink, H. Experimental dietary liver necrosis as a sensitive indicator of heat damage to milk. Drying of skimmed milk Nahrung, 1963, 7, 277-299. (Inst Garungswiss Univ. Cologne.)
- Fenelli, G.M. and Halliday, S.L. Relative toxicity of chlortetracycline and sodium bezoate after oral administration to rats. Arch. internat. Pharmacodyn., 1963, 144, 120-125. (Lederle Labs. Div. American Cyanamid Co., Pearl River, N.Y.)
- Barkalaja, A.I. Mechanism of the production of fatty liver dystrophy by tetracycline and its prevention. Antibiotiki, 1963, 8, 1027-1031.
- Morozova, A.K. Changes in some indices of carbohydrate metabolism brought about by penicillin in healthy and infected animals. Antibiotiki, 1963, 8, 1015-1018. (Kaf. biol. him., Med. inst., Kursk.)
- Sanyal, A.K., Banerji, C.R. and Das, P.K. Banana and restraint ulcer in albino rats. J. Pharm. Pharmacol., 1963, 15, 775-776. (Dept. Pharmacol., Coll. Med. Sci. Benaras Hindu Univ., Varanasi 5.)
- Nakaya, T. and Nakamura, R. Studies on the feeding effect of rapeseed oilmeal. 2. Influence of different treatments of oilmeal and castration on the specific effects of rapeseed oilmeal 3. Influence of hot water extract from rapeseed oilmeal upon rats. Jap. J. Zootech. Sci., 1963, 34, 253-261; 263-268 (Lab Animal Nutrit., Fac. Agric. Ibaraki Univ.)
- Wysocki, E. and Ziombski, H. Effect of different dietary fats on change in teeth and gums of rats. (Preliminary report). Rucz. panstwowego Zakl. Hig., 1963, 14, 299-306. (Zakl. Hig. Zyw. PZH; Warsaw.)
- Sharma, D.N. Osteolathyrism in adult rats and the role of cod-liver oil in its prevention. Indian J. Med. Res., 1963, 51, 683-685. (Dept. Physiol., Darbhanga Med. Coll., Laheriasarai, Bihar.)
- ### 5.2 Dietary requirements :
- Swaminathan M. Amino acid and protein requirements of infants, children and adults. Indian J. Pediat., 1963, 30, 189-199. (Cent. Food Technol. Res. Inst., Mysore)
- Soderhjelm, L. Requirement of infants for linoleic acid. Naringsforskning, 1963, 7, 68-70. (Lasarettet, Skelleftea.)
- Consolazio, C.F. The energy requirements of men living under extreme environmental conditions. World Rev. Nutrition Dietetics, 1963, 4, 53-77. (Bioenergetics Div., U.S. Army Med. Res. Nutrit. Lab., Fitzsimons Gen. Hosp., Denver, Colo.)
- Tremolieres, J. The energy nitrogen standards used in France. Voeding, 1963, 24, 564-576
- Glatzel, H. The desirable level of fat intake. Voeding, 1963, 24, 577-580.
- ### 5.3 Feeding of Infants and children:
- Beard, A.G., Panos, T.C., Burroughs, J.C., Marasigan, B.V. and Oztalay, A.G. Perinatal stress and the premature neonate. 1. Effect of fluid and calorie deprivation. J. Pediat., 1963, 63, 361-385. (Dept. Pediat., Univ. Arkansas Med. Center, Little Rock.)
- Schnegans, E., De Muralt, G., Heumann, G. and Levy-Silagy, J. Comparison of serum proteinograms of premature in-

- fants fed on colostrum and on mature breast milk. *Arch. Franc. Pediat.*, 1963, 20, 551-565. (Inst. Puericult., Strasburg.)
- Gyorgy, P., Rose C.S. and Chu, E.G. Serum cholesterol and lipoproteins in premature infants. Effect of different formulas, *Amer. J. Dis. Child.*, 1963, 106, 165-169. (Dept. Pediat., Philadelphia Hosp., Pa.)
- Pototschnig, C. and Verga, A. Clinical trials of a new milk with modified lipid composition, for premature infants. *Nutritio et Dieta*, 1963, 5, 38-44. (Clin. Pediat., Univ. Milan.)
- Guerrero, R.M., Songco, R.S. and Gonzalez, M. G. Evaporated filled milk in Premature infant feeding. *J. Philippine Med. Assoc.*, 1963, 39, 28-41. (Dept. Pediat., Fac. Med. Surg., Univ., Santo Tomas, Manila)
- Ingerslev, M. Current problems in the clinical management of breast-feeding. *Danish Med. Bull.*, 1963, 10, 145-149. (Dept. Obstet. Gynaecol., Univ. Aarhus.)
- Barasneva, S.M. Drinking regimen for infants. *Vop. Pitan.*, 1963, 22, No. 5, 63-77. (Otdel detsk. Pitan, Inst. pitan, AMN SSSR, Moscow.)
- Kisljakovckaja, V.G. Feeding infants in the first six months of life on mixtures of milk, vegetables and fruit with the use of tinned infant foods. *Pediatrija*, 1963, No. 11, 43-47.
- Filer, L.J. and Martinez, G.A. Caloric and iron intake by infants in the United States, An evaluation of 4000 representative six-month-olds. *Clin. Pediat.*, 1963, 2, 470-476. (Med. Dept., Ross Labs., Columbus, Ohio.)
- Hauck, H.M. and Tabrah, F.L. Infant feeding and growth in Awo Omamma Nigeria. *J. Amer. Dietetic Assoc.*, 1963, 43, 327-330. (Dept. food Nutrit., Cornell Univ., Ithaca, N.Y.)
- Wishahy, A., El-Zawahry, M.R. Abd El-Rahman, M.K. and Abd El-Fattah, M. Fermented milk in feeding of Egyptian infants. Analytical and bacteriological studies, and review of literature. *J. Egypt. Med. Assoc.*, 1963, 46, 111-120 (Dept. Pediat. Ein-Shams Fac. Med., Cairo.)
- Muller, E. A new type of biologically adequate infant food with high fat tolerance. *Med. Ernahrung*, 1963, 4, 211-215.
- Paupe, J., Colin, J. and Halvorson Politis, E. Serum cholesterol of the newborn and the normal infant up to 2 years age. Influence of feeding on the observed variations. *Arch. franc. Pediat.*, 1963, 20, 513-530. (Hop. St-Vincent-de-Paul, 74 av. Denfert Rochereau, Paris.)
- Farquhar, J. D. Iron supplementation during first year of life. *Amer. J. Dis. Child.*, 1963, 106, 201-206. (Lankenau Med. Bldg., Lancaster and City Line Avs, Philadelphia, Pa.)
- Reuter, G. Possibility of modifying the intestinal flora of infants and adults by the food, especially by its content of lactobacilli. *Med. Ernahrung*, 1963, 4, 188-190. (Inst. Lebensmittelhyg. Freie Univ., Berlin.)
- Heinstein, M.I. Behavioral correlates of breast-bottle regimes under varying parent-infant relationships. *Monogr. Soc. Res. Child Development*, 1963, 28 No. 4, pp. 61. (Dept. Health, 2151 Berkeley Way, Berkeley 4, Calif.)
- Hinton, M.A., Eppright, E.S., Chadderton H. and Wolins, L. Eating behavior and dietary intake of girls 12 to 14 years old. *J. Amer. Dietetic Assoc.*, 1963, 43, 223-227. (Iowa State Univ., Ames.)
- Rao P. T. A review of the methods of upbringing of infant and children in India and the need of immediate parental education. *J. Indian Pediat. Soc.*, 1962, 1, 373-379. (Gandhi Med. Coll., Hyderabad.)
- Doraiswamy, T. R., Shurpalekar, S. R., Moorjani, M.N., Lahiry, N.L., Sankaran, A.N., Swaminathan, M., Sreenivasan, A. and Subrahmanyam, V. The effect of a supplementary protein food containing fish flour, groundnut flour and Bengal gram flour and fortified with vitamins on the growth and nutritional status of children. *Indian J. Pediat.*, 1963, 30, 266-271. (Cent. Food Technol. Res. Inst., Mysore.)
- Shurpalekar, S.R., Daniel, V.A., Doraiswamy, T.R., Lahiry, N.L., Moorjani, M.N. and Swaminathan, M. The effect of a supplementary protein food containing fish flour (from oil sardine) on the

- metabolism of nitrogen, calcium and phosphorus in children. Indian J. Pediat., 1963, 30, 272-275. (Cent Food Technl. Res. Inst, Mysore.)
- Western Australia Federation of Parents and Citizens' Associations' Organization and administration of high school canteens in Western Australia. Food Nutrition, Austral., 1963, 20, 23-55..
- 5.4. Diet Surveys :**
- Abramson, J.H., Sloane, C. and Kosovsky, C. Food frequency interview as an epidemiological tool. Amer. J. Pub. Health, 1963, 53, 1093-1101. (Dept. Social Med, Hadassah Univ. Hosp., Jerusalem.)
- Glatzel, H. Emotional consequences of prolonged nutritional studies-are they sources of physiological misinterpretation ? Nutritio et Dieta, 1963, 5, 1-11. (Max-Planck-Inst, Ernahrungsphysiol., Dortmund)
- Ministry of Agriculture, Fisheries and Food-Domestic food consumption and expenditure : 1961. Annual Report of the National Food Survey Committee. H.M.S.O., London, 1963, pp. viii 124.
- Bramsel, H. Do the average results of the survey of household accounts made by the Statistics Office of West Germany on index families in 1958 guarantee an adequate diet ? Nutritio et Dieta, 1963, 5, 120-132. (Max-Plansck-Inst. Ernahrungsphysiol., Dortmund.)
- Verzar, F. and Gsell, D. The nutritional status of mountain populations in Switzerland, World Rev. Nutrition Dietetics, 1963, 4, 35-51. (Inst. Exp. Gerontol, Basle.)
- Vivanco, F. and Palagios, J.M. (with Curz, L. and Court, M.I.) Feeding and nutrition in rural areas. I. Belinchon. Rev. clin. espanola, 1963, 90, 22-36.
- Fidanza, F. and Fidanza Alberti, A. Diet study on three different groups of citizens of Naples. Boll. Soc. Ital. Biol. sper, 1962, 38, 1447-1451. (Ist Fisiol. Umana, Univ. Napels.)
- Shamima'a, M. and Al-Khalidi, G. Dietary carbohydrates and serum cholesterol in man. Amer. J. Clin. Nutrition, 1963, 13, 194-196. (Dept. Med., Med. Sch., American Univ. Beirut.)
- Trenholme, M. and Milne, H. Studies of teenage eating in Ontario. 1. Evaluation of teenage food selection.
- Milne, H., Kerr, C., Trenholme, M. and Beaton, G.H. 2. Evaluation of a diet scoring method. Canad. J. Pub. Health, 1963, 54, 455-462 ; 463-470. (Ontario Dept Health, Toronto)
- Myers, M.L., Sullivan, E.M. and Stare, F.J. Foods consumed by university students. Selected nutrients and their sources. J. Amer. Dietetic Assoc., 1963, 43, 336-343. (Dept, Nutrit, Sch. Pub. (Health, Harvard Univ., Boston, Mass.)
- Caceres, C. A., Calatayud, J. B., Orvis, H.H., Fawl, I.A., Thomas, R., Kelser, G.A. (Jr.) Abraham, S. and Anderson, A. An evaluation of clinical and laboratory findings in male subjects on long-term low-fat, low-protein diets. New Engl. J. Med. 1963, 269, 550-555. (George Washington Univ. Hosp., Washington, D.C.)
- Velez, Boza, F. and Baumgartner, J. General clinical and nutritional study on native tribes of the Amazon Federal Territory of Venezuela. Arch. venezol Nutricion, 1962, 12, 143-225.
- Rosales, E., Munoz, M., Arteaga, A. and SantaMaria, J V. Pilot study of nutrition in rural areas. Nutricion, Bromatol., 1963, 2, 89-97. (Cat. Aliment., Esc. Salub., Univ. Chile.)
- Pham-van-So, Taufel, K. and Iwainsky, H. The nutritional position in Vietnam. 1. The present nutritional situation
- Pham-Van-So, Iwainsky, H. and Taufel, K. 2. Effect of extent of husking on the composition, digestibility and keeping quality of processed rice. Nahrung, 1963, 7, 545-552 ; 553-562. (Hyg. Inst., Hanoi, D R Vietnam.)
- 5.5. Food Economics and statistics**
- Cariage, J. and Bresard, M. Consumption of bread in the Doubs district. Bull. Inst. Nat. Hyg., Paris, 1963, 18, 601-638.
- Droste, H. The trend of food consumption by working class households of four persons of the middle consumer group for the period 1951 to 1961. Nutritio et Dieta, 1963, 5, 187-191. (Max-Planck-Inst. Ernahrungs physiol., Dortmund.)
- Payne, W.J.A. Relation of animal hus-

- bandry to human nutritional needs in East Africa. E. African Agric. Forestry J., 1963, 29, 17-25. (E. A. A. F. R. O. Kikuyu, Kenya.)
- Ericson, L.E. Agricultural protein production and public health. Kungl. Skogs och Lantbruksakad. Tidskr., 1963, 102, 183-199. (Inst. Livsmédeleskemi, Kungl. Tekn. Hogsk., Stockholm 70.)
- San Martin, H. Public health, a product of the economic and social development of the community. Rev. Confed. med. panamer., 1963, 10, 77-86.
- Afzal, M. The food situation in Pakistan. Agriculture Pakistan, 1962, 13, 645-659. (Amin Agencies Ltd., Karachi)
- Usher, D. The national income at United Kingdom prices. Bull. Inst. Econ. Statist., Oxford, 1963, 25, 199-214. (Econ. Dept., Univ. Manchester)
- 5.6. Diet Planning and Education:**
- Tremolieres, J. Nutrition and public health World Rev. Nutrition Dietetics 1963, 4, 1-24. (Nutrit. Sect., Nat. hyg. Inst., Hop. Bichat, Paris)
- National Academy of Sciences-National Research Council-Recommendations on administrative policies for international food and nutrition programmes. A Statement of the Food and Nutrition Board. Washington, D. C. April 1963, pp. 5.
- Morrow, R.C. Food for survival. Canad. J. Pub. Health, 1963, 54, 426-430.
- Stobnicka-Szczyglowa, H. Opinions on the division of the daily diet into individual meals. Roczn. panstwowego Zakl. Hig., 1963, 14, 287-290. (Zakl. Hig. Zyw. PZH, Warsaw)
- Glatzel, H. and Rettemier, G. Comparison of different breads in the physiology of nutrition. 5. Capillary venous blood sugar difference. Nutritio et Dieta, 1963, 5, 45-61. (Max-Planck-Inst. Ernährungsphysiol, Dortmund.)
- Donoso, G., Munoz, M., Barja, I., Duran, E., Urrea, M. and Santa Maria, J.V. Enrichment of bread with fish flora for human consumption. 1. Study of bread making and acceptability trials. Nutricion, Bromatol., Toxicol., 1963, 2, 75-84. (Fac. Med., Univ. Chile.)
- Breasard, M. and Chabert. Note on the relation between consumption of alcohol and that of sugar (Marseilles 1962). Bull. Inst. nat. Hyg., Paris, 1963, 18, 639-649.
- Imaichi, K., Michaels, G. D., Gunning, B., Grasso, S., Fukayama, G. and Kinsell, L. W. Studies with the use of fish oil fractions in human subjects. Amer. J. Clin. Nutrition, 1963, 13, 158-168. (Inst. Metabol. Res., Highland Almeda County Hosp., Oakland, Calif.)
- Ismailov, M.N. Nutritive value of trans-esterified cottonseed oil and mixtures of it with mutton fat. Vop. Pitan., 1963, 22, No. 5, 34-39. (Uzbek. inst. sanit., gig. professional. zabolovanij. Taskent.)
- Schultheiss, W. Meaning and function of 'health foods' Voeding, 1963, 24, 561-563.
- Harper, R. Some attitudes to vegetables, and their implications, Nature, 1963, 200, 14-18. (Dept. Psychol., Univ. Leeds).
- Bojko, N.N., Kijusquina, N.S. and Kon Drat'ev, Ju. I. Use of unicellular algae in human nutrition (review) Vop. Pitan., 1963, 22, No. 6, 3-8.
- Aebi, H. Our nutritional habits over the years. Mitt. Geb. Lebensmittel. Hyg., 1963, 54, 230-258. (Med. Chem. Inst., Univ. Berne.)
- Stitt, K.R. Nutritive value of diets today and fifty years ago, Nutrition Rev., 1963, 21, 257-259 (Sch. Home Econ., Univ. Alabama.)
- Miller, R. Medical aspects of exploration in the Queensland area 1605 to 1805. Med., J. Austral. 1963, ii, 301-307.