

BIBLIOGRAPHY

Allen, J.M. 1961. Multiple Forms of Lactate Dehydrogenase in Tissues of Mouse: Their Specificity, Cellular Localization, and Response to Altered Physiological Conditions. Annual New

York of the Academic Science, 94:937-951.

Amador, E., Dorfman, L.E., and Wacker, W.E.C. 1963. Serum Lactic Dehydrogenase Activity: An Analytical Assessment of Current Assays. Clinical Chemistry 9:391-399.

Amador, E., Reinstein, H., and Benotti, N. 1965. Precision and Accuracy of Lactic Dehydrogenase Assays. The American Journal of Clinical Pathology, 44:62-69.

Anderson, W.A.D. 1966. Pathology, 5 th. ed., Japan: The C.V. Mosby Company Maruzen Company, Ltd.

Annino, J.S. 1966. Normal Values for Serum Glutamic Oxalacetic Transaminase and Lactic Dehydrogenase Activities. The American Journal of Clinical Pathology, 46:397-400.

Appella, E., Markert, C.L. 1961. Dissociation of Lactate Dehydrogenase into Subunits with Guanidine Hydrochloride. Biochemical and Biophysical Research Communications, 6:171-176.

Appella, E., Zito, R. 1968. A Chemical Study of Lactate Dehydrogenase Isozyme B (heart type). Annals of the New York Academy of Science, 151:568-577.

Auvinen, S., and Konttinen, A. 1971. The Diagnostic Value of Serum LDH Isoenzymes and Heat-stable and Urea-stable LDH Measurements. Acta Medica Scandinavica, 189:191-198.

Babson, A.L., Shapiro, P.O., and Phillips, G.E. 1962. A New Assay for Cholesterol and Cholesterol Esters in Serum which is not Affected by Bilirubin. Clinica Chimica Acta, 7:800-804.

Barnett, H. 1962. Electrophoretic Separation of Lactate Dehydrogenase Isoenzymes on Cellulose Acetate. Biochemical Journal, 84: 83p.

Batsakis, J.G., and Briere, R.O. 1966. Enzymatic Profile of Myocardial Infarction. American Heart Journal, 72:274-279.

Bell, R.L. 1963. Separation of Serum Lactic Dehydrogenase Originating in Myocardial and Hepatic Tissue, by Means of Heat Fractionation. The American Journal of Clinical Pathology, 40:216-221.

Blanchaer, M.C. 1961. Electrophoresis of Serum Lactic Dehydrogenase. Clinica Chimica Acta, 7:800-804.

Cabaud, P.G., and Wroblewski, F. 1958. Colorimetric Measurement of LDH Activity of Body Fluids. The American Journal of Clinical Pathology, 30:234-236.

Cahn, R.D., Kaplan, N.O., Levine, L., and Zwilling, E. 1962. Nature and Development of Lactic Dehydrogenase. Science, 136:962-969.

Carlson, L.A., and Wadstrom, L.B. 1959. Determination of Triglycerides in Blood Serum. Clinica Chimica Acta, 4:197-205.

Cawley, L.P. 1969. Principles of Electrophoresis and Immunoelectrophoresis 1st.ed. London:J. & A.Churchill Ltd.

Cawley, L.P., and Eberhardt, L. 1962. Simplified Gel Electrophoresis: I. Rapid Technic Applicable to the Clinical Laboratory. The American Journal of Clinical Pathology, 38:539-547.

Colenbrander, H.J., Genskens, L.M., and Vink, C.L. 1970. On the Inhibitory Influences of the Reaction Products in the Determination of Lactate Dehydrogenase Activity Using Lactate as a Substrate. Clinica Chimica Acta, 28:329-334.

Coodley, E.L. 1968. Evaluation of Enzyme Diagnosis in Myocardial Infarction. The American Journal of the Medical Science, 256:300-305.

Coodley, E.L. 1973. Prognostic Value of Enzymes in Myocardial Infarction. Journal of the American Medical Association, 225:597-600.

Cotton, S.G. 1970. Plasma Cholesterol after Myocardial Infarction. Postgraduate Medical Journal, 46:551-552.

Dietz, A.A., and Lubrano, T. 1967. Separation and Quantitation of Lactic Dehydrogenase. Analytical Biochemistry, 20:246-257.

Dietz, A.A., Lubrano, T., and Rubinstein, H.M. 1970. Disc Electrophoresis of Lactate Dehydrogenase Isoenzyme. Clinica Chimica Acta, 27:225-232.

Dyerberg, J., and Hjorne, N. 1970. Quantitative Plasma Lipoprotein Estimation by Agarose Gel Electrophoresis. Clinica Chimica Acta. 28:203-208.

Dyerberg, J., and Hjorne, N. 1971. Quantitation of the alpha-lipoprotein Complex by Agarose Gel Electrophoresis. Clinica Chimica Acta. 23:458-461.

Elliott, B.A., and Wilkinson, J.H. 1961. Serum alpha-Hydroxybutyric Dehydrogenase in Myocardial Infarction and in Liver Disease. Lancet, 1:698-699.

Emerson, P.M., and Wilkinson, J.H. 1965. Urea and Oxalate Inhibition of the Serum lactate Dehydrogenase. Journal of Clinical Pathology, 18:803-807.

Emery, A.E.H. 1967. The Determination of Lactate Dehydrogenase Isoenzymes in Normal Human Muscle and Other Tissues. Biochemical Journal, 105:599-604.

Enger, S.C., and Ritland, S. 1970. Serum Lipoprotein Pattern in Myocardial Infarction. Acta Medica Scandinavica, 187:365-369.

- Erickson, R.J., and Morales, D.R. 1961. Clinical Use of Lactic Dehydrogenase. The New England Journal of Medicine, 265: 478-482.
- Estrin, H.M., and Aggress, C.M. 1963. The Biochemical Diagnosis of Heart Disease. Illinois:Charles C Thomas.
- Ewen, L.M., and Griffiths, J. 1971. Patterns of Enzyme Activity Following Myocardial Infarction and Ischemia. The American Journal of Clinical Pathology, 56:614-622.
- Fletcher, M.J. 1968. A Colorimetric Method for Estimating Serum Triglycerides. Clinica Chimica Acta, 22:393-399.
- Fredrickson, D.S., Levy, R.I., and Lees, R.S. 1967. Fat Transport in Lipoproteins-an Integrated Approach to Mechanisms and Disorders. The New England Journal of Medicine, 276:34-44, 94-103, 148-156, 215-244, 273-281.
- Frings, C.S., and Dunn, R.T. 1970. A Colorimetric Method for Determination of Total Serum Lipids Base on the Sulfo-phospho-vanillin Reaction. The American Journal of Clinical Pathology. 53:89-91.
- Fritz, P.J. 1965. Rabbit Muscle Lactate Dhydrogenase 5; A Regulatory Enzyme. Science, 150:364-366
- Fritz, P.J. 1967. Rabbit Lactate Dehydrogenase Isoenzymes:Effect of pH on Activity. Science, 156:82-83.

Fritz, P.J., Morrison, W.J., White, E.L., and Vessel, E.S. 1970.

Comparative Study of Methods for Quantitation of Lactate Dehydrogenase Isoenzymes. Analytical Biochemistry, 36:443-453.

Fritz, P.J., Vessel, E.S., White, E.L., and Pruitt, K.M. 1969. The Roles of Synthesis and Degradation in Determining Tissue Concentrations of Lactate Dehydrogenase. Proceedings of the National Academy of Sciences, 62:558-565.

Fyfe, T., Baxter, R.H., Cochran, K.M., and Booth, E.M. 1971. Plasma-lipid Changes After Myocardial Infarction. Lancet 2:997-1001.

Griffiths, P.D. 1966. ATP:Creatine Phosphotransferase in the Diagnosis of Acute Chest Pain. British Heart Journal, 28:199-203.

Hamolsky, M.W. 1967. Enzymes in Acute Myocardial Infarction. Circulation, 38:427-429.

Handa, S.P. 1967. Serum Enzymes in Myocardial Infarction. Indian Journal of Medical Sciences, 21:433-438.

Henry, R.J. 1968. Clinical Chemistry: Principles and Technics. 5th. Printing. New York:Harper and Row Division.

Hill, B.R. 1956. Some Properties of Serum Lactic Dehydrogenase. Cancer Research, 16:460-467.

- Hsieh, K.M., and Blumenthal, H.T. 1956. Serum Lactic Dehydrogenase Levels in Various Disease States. Proceedings of the National Academy of Sciences, 91:626-630.
- Jaenicke, R. 1964. Molecular Weight and Molecular Structure of Multiple Forms of Lactate Dehydrogenase II: The Isozymes of the Heart-Muscle Type. Biochimica Et Biophysica Acta, 85:186-201.
- Jung, D.H., and Parekh, A.C. 1971. A new Reaction for Cholesterol Assay. Clinica Chimica Acta, 35:73-78.
- Kaplan, N.O., Ciotti, M.M., Hamolsky, M., and Bieber, R.E. 1960. Molecular Heterogeneity and Evolution of Enzymes. Science, 131:392-397.
- Kaplan, N.O., Ciotti, M.M., and Stolzenbach, F.E. 1956. Reaction of Pyridine Nucleotide Analogue with Dehydrogenase. The Journal of Biological Chemistry, 221:833-843.
- Konttinen, A., and Halonen, P.I. 1962. Serum alpha-Hydroxybutyric Dehydrogenase (HBD) in Myocardial Infarction Comparison with GOT and LDH. American Journal of Cardiology, 10:525-531.
- Konttinen, A., and Lindy, S. 1967. Assay of Cardiac Lactate Dehydrogenase Isoenzymes. Analytical Biochemistry, 36:192-196.

- Ladue, J.S., Wroblewski, F., and Kainen, A. 1954. Serum Glutamic Oxaloacetic Transaminase Activity in Human Acute Transmural Myocardial Infarction. Science, 120:497-499.
- Lance, B.M. 1966. A Method for Separation and Quantitation of LDH Isoenzymes on Cellulose Acetate. The American Journal of Clinical Pathology, 46:401-404.
- Lazaroni, S.A. Jr., Maier, E.C., and Gorczyca, L.R. 1958. The Stability of Lactic Dehydrogenase in Serum. Clinical Chemistry, 4:379-381.
- Lindy, S., and Konttinen, A. 1967. Urea-stable LDH as an Index of Cardiac Isoenzymes. American Journal of Cardiology, 19:563-571.
- Lyght, C.E., Keefer, C.S., Lukens, F.D.W., Richards, D.W., and Sebrell, W.H. 1966. The Merck Manual of Diagnosis and Therapy. 11th. ed. New York:Merck & Co., Inc.
- Magnani, H.N., and Howard, A.N. 1971. A Quantitative Method for Blood Lipoproteins Using Cellulose Acetate Electrophoresis. Journal of Clinical Pathology, 24:837-845.
- Mahler, H.R., and Cordes, E.H. 1971. Biological Chemistry. 2nd. ed. New York:Harper & Row Publisher.
- Markert, C.L. 1963. Lactate Dehydrogenase Isozymes; Dissociation and Recombination of Subunits. Science, 140:1329-1330.



Markert, C.L., and Moller, F. 1959. Multiple Forms of Enzymes Tissue, Ontogenetic, and Species Specific Patterns. Proceedings of the National Academy of Sciences, 45:753-763.

Marymont, J.H., Cawley, L.P., and Hoffmann, R.G. 1968. A Clinical and Laboratory Comparison of Four Lactate Dehydrogenase Methods. The American Journal of Clinical Pathology, 38:431-435.

McGraw, R.E. 1971. Reaction of Reduced Nicotinamide Adenine Dinucleotide with 2,4-dinitrophenylhydrazine in Serum Lactate Dehydrogenase Assays. The American Journal of Clinical Pathology, 56:225-226.

Mellick, R.S. 1961. Serum Lactic Dehydrogenase in Diagnosis of Myocardial Infarction. Lancet, 1:1232.

Mull, J.D., and Starkweather, W.H. 1965. A Method for Quantitation of Lactate Dehydrogenase in Agar Gel Electrophoresis. The American Journal of Clinical Pathology, 44:231-233.

Neilands, J.B. 1952. Studies of Lactic Dehydrogenase of Heart. I Purity, Kinetics, and Equilibria. Journal of Biological Chemistry, 199:372-381.

Nisselbaum, J.S., and Bodansky, O. 1961. Purification and Properties of Human Heart Lactic Dehydrogenase. Journal of Biological Chemistry, 236:323-327.

- Nissen, N.J., Ranlov, P., and Weis-Fogh, J. 1965. Evaluation of Four Different Serum Enzymes in the Diagnosis of Acute Myocardial Infarction. British Heart Journal, 27:520-526.
- Novoa, W.B., Winer, A.D., Glaid, A.J., and Schwert, G.W. 1959. Lactic Dehydrogenase V. Inhibition by Oxamate and by Oxalate. Journal of Biological Chemistry, 234:1143-1148.
- Papadopoulos, N.M., and Kintzois, J.A. 1969. Determination of Human Serum Lipoprotein Patterns by Agarose Gel Electrophoresis. Analytical Biochemistry, 30:421-426.
- Parekh, A.C., and Jung, D.H. 1970. Cholesterol Determination with Ferric Acetate-Uranium Acetate and Sulfuric Acid-Ferrous Sulfate Reagents. Analytical Chemistry, 42:1423-1427.
- Paton, B.C. 1957. The Accuracy of Diagnosis of Myocardial Infarction. A Clinicopathologic Study. The American Journal of Medicines, 23:761-768.
- Pesce, A., Mckay, R.H., Stolzenbach, F., Cahn, R.D., and Kaplan, N.O. 1964. The Comparative Enzymology of Lactic Dehydrogenase. Properties of Crystalline beef and Chicken Enzymes. Journal of Biological Chemistry, 239:1753-1761
- Peters, T., and Davis. J. 1969. Serum Heat-Stable Lactate Dehydrogenase in the Diagnosis of Myocardial Infarction. Journal of the American Medical Association, 209:1186-1190.

- Plummer, D.T., and Wilkinson, J.H. 1963. Organ Specificity and Lactate Dehydrogenase Activity. Biochemical Journal, 87:423-429.
- Reeves, B.D., Scanlon, E.F., Formann, D.T. and Calhoun, D.W. 1969. A Lactic Dehydrogenase Isozyme Index and Breast Cancer. American Journal of Obstetrics and Gynecology, 105:183-190.
- Ressler, N., and Joseph, R. 1962. Simple Method for Electrophoretic Analysis of Serum Lactic Dehydrogenase. Journal of Laboratory and Clinical Medicine, 60:349-353.
- Richterich, R., Schafroth, P., and Aebi, H. 1963. A Study of Lactic Dehydrogenase Isoenzyme Pattern of Human Tissues by Adsorption Elution an Sephadex-DEAE. Clinica Chimica Acta, 8:178-192.
- Rosalki, S.B. 1963. Serum alpha-Hydroxybutyrate Dehydrogenase: A New Test for Myocardial Infarction. British Heart Journal, 25:795-802.
- Rowan, T. 1970. Diagnostic Enzymology in Myocardial Infarction and Acute Chest Pain. Guy's Hospital Reports, 119:221-233.
- Russek, H. I., and Zohman, B.L. 1971. Coronary Heart Disease. Philadelphia:J.B. Lippincott Company.
- Sabato, G.D., and Kaplan, N.O. 1964. The Denaturation of Lactic Dehydrogenase. The Effect of Sodium Dodecyl Sulfate. Journal of Biological Chemistry, 239:438-443.

Skipinski, V.P., Barclay, M., Barclay, R.K., Fetzer, V.A., Good, J.J., and Archibald, F.M. 1967. Lipid Composition of Human Serum Lipoproteins. Biochemical Journal, 104:340-352.

Stewart, T.W., and Warburton, F.G. 1961. Serum Lactic Dehydrogenase Estimations in Myocardial Infarction. British Heart Journal, 23:236-242.

Strandjord, P.E., and Clayson, K.J. 1961. The Diagnosis of Acute Myocardial Infarction on the Basis of Heat-stable Serum Lactate Dehydrogenase. Journal of Laboratory and Clinical Medicine, 58:962.

Strandjord, P.E., Clayson, K.J., and Freier, E.F. 1962. Heat-stable Lactate Dehydrogenase in the Diagnosis of Myocardial Infarction. Journal of the American Medical Association, 182:1099-1102.

Stuart, J., Crawford, I.C., Forshall, J., and Owen, J.A. 1965. Serum Hydroxybutyrate Dehydrogenase in Myocardial Infarction. British Medical Journal, 1:423-425.

Takenaka, Y., and Schwert, G.W. 1956. Lactic Dehydrogenase, Mechanism of Reaction. Journal of Biological Chemistry, 223:157-170.

Thomson, R.H.S., and Wootton, I.D.P. 1970. Biochemical Disorders in Human Disease. 3rd. ed. London:J & A Churchill, Ltd.

- Van Der Helm, H.J. 1961. Simple Method of Demonstrating Lactic Acid Dehydrogenase Isoenzyme. Lancet 2:108-109.
- Van Der Helm, H.J. 1962. A Simplified Method of Demonstrating Lactic Dehydrogenase Isoenzymes in Serum. Clinica Chimica Acta, 7:124-128.
- Van Der Helm, H.J., Zondac, H.A., Hortoz, H.A., and Van Der Kooi, M.W. 1962. Lactic Dehydrogenase Isoenzymes in Myocardial Infarction. Clinica Chimica Acta, 7:540-544.
- Vessel, E.S. 1966. pH Dependence of Lactate Dehydrogenase Isoenzyme Inhibition by Substrate. Nature, 210:421-422.
- Vessel, E.S., and Bearn, A.G. 1958. The Heterogeneity of Lactic and Malic Dehydrogenase. Annals of the New York Academy of Sciences, 75:286-291.
- Vessel, E.S., Fritz, P.J., and White, E.L. 1968. Effects of Buffer, pH, Ionic Strength and Temperature on Lactate Dehydrogenase Isoenzymes. Biochimica Et Biophysica Acta, 159:236-243.
- Vincent., W.R., and Rapaport, E. 1965. Serum Creatine Phosphokinase in the Diagnosis of Acute Myocardial Infarction. American Journal of Cardiology, 15:17-26.
- Warburton, F.G., Allen, E., and Laing, E.S. 1967. Increased Lactate Dehydrogenase 3 in Serum After Myocardial Infarction. Nature, 215:287-289.

Waburton, F.G., and Waddecar, J. 1966. Use of Cellulose Acetate Gel (Cellogel) for the Demonstration of Lactic Dehydrogenase Isoenzymes. Journal of Clinical Pathology, 19:517-518.

Wieme, R.J. 1959. An Improved Technique of Agar Gel Electrophoresis on Microscope Slides. Clinica Chimica Acta, 4:317-321.

Wieme, R.J. 1966. Improved Agar Support for Electrophoresis of LDH Isoenzyme. Clinica Chimica Acta, 13:138-139.

Wieme, R.J., and Maercke, Y.V. 1961. The Fifth (Electrophoretically Slowest) Serum Lactate Dehydrogenase as an Index of Liver Injury. Annals of the New York Academy of Sciences, 94:898-911.

Wieme, R.J., Seade, M.V., Karcher, D., Lowenthal, A., and Van Der Helm, H.J. 1962. A Modified Technique for Direct Staining with Nitro-Blue Tetrazolium of Lactate Dehydrogenase Isoenzyme Upon Agar Gel Electrophoresis. Clinica Chimica Acta, 7:750-754.

Winer, A.D., and Schwert, G.W. 1958. Lactate Dehydrogenase, the Influence of pH on the Kinetics of the Reaction. Journal of Biological Chemistry, 231:1065-1083.

Wootton, I.D.P. 1964. Micro-Analysis in Medical Biochemistry. 4th.ed. London:J & A Churchill, Ltd.

Wroblewski, F. 1958. The Mechanism of Alteration in Lactic Dehydrogenase Activity of Body Fluids. Annals of the New York Academy of Sciences, 75:322-338.

Wroblewski, F., and Gregory, K.F. 1961. Lactic Dehydrogenase Isoenzyme and their Distribution in Normal Tissues and Plasma in Disease States. Annals of the New York Academy of Sciences, 94:912-932.

Wroblewski, F., and Ladue, J.S. 1955. Lactic Dehydrogenase Activity in Blood. Proceedings of the National Academy of Sciences, 90:210-213.

Yakulis, V.J., Gibson, C.W., and Heller, P. 1962. Agar Gel Electrophoresis for the Determination of Isoenzymes of Lactic and Malic Dehydrogenase. The American Journal of Clinical Pathology, 38:378-380.

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