



National Museum of Health and Medicine

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OHA 148 Draize Collection

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Biographical Note: John H. Draize was born May 21, 1900 in Brussels, Wisconsin. He attended the University of Wisconsin where he received his B.S. in 1922 and his Ph.D. in Pharmacology in 1931. He married Iva De Keyser in 1928 and they had two children, William and James. He worked in Wyoming from 1931-1935 as an Assistant Pharmacologist at an experimental station researching the toxicity of plants. In 1935 he obtained a position at Edgewood Arsenal in Maryland where he worked as a toxicologist from 1935-1939. In 1939 Dr. Draize left Edgewood Arsenal to work at the Food and Drug Administration (FDA) in the Dermal Toxicity Branch. He conducted research and lectured on the anatomy and physiology of the skin; the phenomenon of irritation, irritants, and physical medicine; substances and classes of substances that penetrate the skin; and physiology and histology of the skin. During the 1940s he standardized the scoring system of a preexisting test for eye irritation. This, and a variety of other tests for toxicity, became known as the Draize Tests, although he never personally associated his name to them. The Society of Cosmetic Chemists honored him as their Tenth Medalist in 1957, and in 1963 he retired from his position as Chief of the Dermal Toxicity Branch of the FDA. Draize died on January 28, 1992. **See also:** John H. Draize Obituary, by Dr. Frank Marzulli in the *Journal of Applied Toxicology*, 1992 and "The Development of the Draize Test for Eye Toxicity," by John Parascandola in *Pharmacy in History*, vol. 33, no. 3, 1991, pgs. 111-117. There are copies in the accession file.

Series/Scope and Content Note: The Draize Collection has been arranged into six series, according to document type, on subjects including pharmacology, physiology, pharmacognosy, toxicology, histology and pathology.



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SERIES 001: ACADEMIC PAPERS, 1928-1971

This series is arranged chronologically and consists of notes and papers related to classes attended by John H. Draize at the University of Wisconsin for the attainment of a Ph.D. in Pharmacology, Physiology and Pharmacognosy.

SERIES 002: RESEARCH, 1930-1959

This series is arranged chronologically and contains research materials from experiments Dr. Draize conducted for his Ph.D. thesis on thyrotoxicosis; poisonous plants in Wyoming; and hair spray toxicity.

SERIES 003: LECTURE NOTES, 1929-1960

This series is arranged chronologically. Items with no dates are located at the end of the series and arranged alphabetically by the title of the lecture. This series contains notes on 3x5 cards for lectures given by Dr. Draize.

SERIES 004: MANUSCRIPTS, 1930-1961

This series is arranged chronologically and contains typed manuscripts, one with a handwritten draft authored or co-authored by Dr. Draize.

SERIES 005: PUBLICATIONS, 1926-1963

This series is arranged alphabetically by author , association or title if there is no author listed, and chronologically within the author listing. Materials consist of reprints and publications by Dr. Draize and a variety of other authors.



SERIES 006: PROFESSIONAL ACTIVITIES, 1957-1963

This series is arranged chronologically and contains materials related to Dr. Draize's attendance at professional association conventions.

SERIES 007: CORRESPONDENCE, 1932-1963

This series is arranged chronologically and contains personal and professional correspondence.

SERIES 008: MICROSCOPE SLIDES, CA. EARLY 1930s

This series is arranged by number within each microscope slide box and consists of microscope slides used and produced by Draize.

BOX AND CONTENT LIST

SERIES 001: ACADEMIC PAPERS, 1928-1971

Box 001:

- 00001: "The atomic weights of the more common elements," University of Wisconsin Department of Chemistry, 1928
- 00002: Laboratory Directions for Pharmacology and Toxicology, 1928, with notes, University of Wisconsin Medical School
- 00003: Class notes, notebook and handouts, class or classes unclear, Spring-Fall, 1928
- 00004: Laboratory outline for Medical Physiology, ca. 1928-1929
- 00005: Course notes, Pharmacology, Physiology and Action of Drugs, Spring semester 1929 [Brittle pages]
- 00006: Laboratory experiment results, Spring semester, 1929
- 00007: Laboratory experiment charts, rolled, Spring semester, 1929 [Paper conservation REQUIRED before they can be viewed]
- 00008: Laboratory Directions for Pharmacology and Toxicology, 1930, University of Wisconsin Medical School

Box 002:

- 00001: Special Pathology class notes, Spring semester, 1931
- 00002: Pathology Drawings, ca. 1931 [See also: Microscope slides-Special Pathology, boxes 1-4]
- 00003: Examination in Special Pathology, March 23, 1931 [one page]



SERIES 002: RESEARCH, 1930-1959

Box 002:

- 00004: Bio-assay of Thyroid Preparations, ca. 1930-1932
- 00005: Experimental Thyrotoxicosis, ca. 1930-1932, University of Wisconsin, Madison, Department of Pharmacology and Toxicology [Typed manuscript and handwritten draft]
- 00006: Poisonous Plants-Wyoming-Purcell Project-ca. 1930-1932, Reports, notes, charts [See also: Publications: Draize-"Certain Poisonous Plants of Wyoming Activated by Selenium...", and "Plants Poisonous to Livestock", both 1934]
- 00007: Hair Spray Toxicity, ca. 1958-1959
- 00008: Unidentified notes, possibly Academic Papers: Unidentified Class Notes [1 of 2]
- 00009: Unidentified notes, possibly Academic Papers: Unidentified Class Notes [2 of 2]

SERIES 003: LECTURE NOTES, 1929-1960

Box 002:

- 00010: Poison lecture notes-with related materials: Index card notes, Class notes-spring semester 1929; Publication-7th Annual Bulletin of the State Toxicologist, Madison, Wisconsin, March 1930; Publication-Archives Internationales de Pharmacodynamie et de Therapie "Cardiazol (Metrazol) and Coramine as Cardio-Respiratory Stimulants," by Maloney, A. H. and A. L. Tatum-from the Department of Pharmacology, University of Wisconsin, Madison
- 00011: Lecture on Anatomy and Physiology of the Skin, 1948 [Lecture 1 of 3]
- 00012: Lecture on Phenomenon of Irritation, Irritants, and Physical Medicine, 1948 [Lecture 2 of 3]
- 00013: Lecture on Substances and Classes of Substances that Penetrate the Skin, ca. 1948 [Lecture 3 of 3]
- 00014: Lecture on Physiology and Histology of the Skin, 1951

Box 003:

- 00001: NY Paper TGA Lecture on Ethanolamines Used in Cosmetic and Topical Preparations, Food and Drug Administration Investigation to determine toxic effects of Ethanolamines in both free and combined forms, 1957 [Also includes listing of financial figures (salary?) from 1935-1955]
- 00002: Retirement Speech, 1957 [Two versions, draft and final?] [See Also: Publications: Draize "The Medalist's Address," and Professional Activities: Society of Cosmetic Chemists]
- 00003: Hair Spray Toxicity-Two different versions, ca. 1959-1960 [See Also: Publications: Bergmann]
- 00004: Lecture on Irritation and Irritants [n.d.]
- 00005: JHD Lecture for AJL Class, First Lecture, "Physiology and Histology of the Skin" [n.d.]



- 00006: JHD Lecture for AJL Class, Second Lecture, "Skin Permeability" [n.d.]
- 00007: JHD Lecture for AJL Class, Third Lecture, "Substances which Permeate the Skin" [n.d.]
- 00008: JHD Lecture for AJL Class, Fourth Lecture, "Antiseptics, Germicides, Fungicides, and Parasiticides," also contains: one handwritten page on burns-infection and shock; and a reprint "Coal Tar Colors-Their Use in Foods, Drugs and Cosmetics," by Herbert O. Calvery, from the American Journal of Pharmacy, 1942 [these items may be related to material in the lecture] [n.d.]
- 00009: Lecture about Mercury (Hg) Absorption Through Skin [n.d.]
- 00010: Lecture on Physiology and Pharmacology of Skin [n.d.]
- 00011: Lecture on Procedures to be used for Comprehensive Appraisal of the Pharmacology and Toxicology of Compounds Applied Topically to Skin and Mucous Membranes-2 versions-draft and final? [n.d.]
- 00012: Skin Permeability Lecture-2 versions [n.d.]

SERIES 004: MANUSCRIPTS, 1930-1961

Box 003:

- 00013: "Treatment of 'Blind Stagers' in Cattle," by Dr. John H. Draize, ca. early 1930s
- 00014: "Dermal Toxicity of Acetonitrile (Methyl Cyanide)," by Glenn E. Martin, John H. Draize, W. K. Webb, and Elsie A. Kelley, ca 1960
- 00015: "Appraisal of the Safety of Substances Applied Topically to the Skin and Mucous Membranes," by John H. Draize, Chief, Dermal Toxicity Branch, Division of Pharmacology, Bureau of Biological and Physical Sciences, Food and Drug Administration, U. S. Department of Health, Education and Welfare, ca. 1961

SERIES 005: PUBLICATIONS, 1926-1963

Box 004:

- 00001: American Chemical Society, *The Journal of the American Chemical Society* "Golden Jubilee Number, a Half Century of Chemistry in America, 1876-1926," vol. 48, no. 8-A, August 1926
- 00002: American Chemical Society, "List of Periodicals, Abstracted by Chemical Abstracts, with Key to Library Files and Other Information," October 1926, issued as part 2, vol. 20, no. 20
- 00003: Basic Course for Scientists, 1961 [Introductory Course to the Food and Drug Administration-History, Mission and Goals, and Organization and Functions]
- 00004: Bergmann, Martin, M. D.; I. Jerome Flance, M. D.; and Herman T. Blumenthal, M. D., "Thesaurosis Following Inhalation of Hair Spray, a Clinical and Experimental Study," March 1958, reprint from the *New England Journal of Medicine*
- 00005: Calvery, Herbert O., Ph.D.-Reprints, Co-authors: Howard D. Lightboy, Ph.D.; Benjamin Rones,



M.D.; Geoffrey Woodard

- 00006: "Effects of Some Silver Salts on the Eye (Silver Nitrate, Silver Ammonium Nitrate, Silver Ammonium Sulfate, Silver Ammonium Lactate, and a Mixture of Silver Ammonium Nitrate and Silver Ammonium Sulfate)," *Archives of Ophthalmology*, May 1941, Vol 25, pp. 839-847
- 00007: "Acute and Chronic Toxicity-Public Health Aspects," *Industrial Medicine*, Jan. 1943
- 00008: *Food and Drug Review*, issued by the Food and Drug Administration, Federal Security Agency, Vol. 29, No. 10, October 1945
- 00009: Clawson, A. B., "Some Symptoms and Lesions Produced by Stock-Poisoning," August 1934, *Journal of the American Veterinary Medical Association*, Vol. 38 [Typed copy with handwritten notations]
- 00010: Congress, 86th, S. 1283, July 12, 1960-Public Law 86-613 "Federal Hazardous Substances Labeling Act"
- 00011: Dunlop, Sir Derrick, Lecture, "The Safety of Drugs," *The British Medical Journal*, December 8, 1962 [handwritten]
- 00012: Ewing, P. V. and F. H. Smith, "A Study of the Rate of Passage of Food Residues Through the Steer and Its Influence on Digestion Coefficients," July 1917, reprinted from the *Journal of Agricultural Research*
- 00013: Draize, J. H. and A. L. Tatum, "Experimental Thyrotoxicosis," 1932, *Archives Internationales de Pharmacodynamie et de Therapie* (Note: The work presented herein constitutes partial fulfillment of the requirements for the degree of Doctor of Philosophy)
- 00014: Draize, Dr. John H., "Sodium Tetrathionate and Methylene Blue in Cyanide and Carbon Monoxide Poisoning," 1933, *Science*, Vol. 78, No. 2016 [2 copies] [See Also: Lecture Notes: Poison]
- 00015: Draize, J. H., O. A. Beath, H. F. Eppson, C. S. Gilbert, O. C. McCreary, "Certain Poisonous Plants of Wyoming Activated by Selenium and Their Association with Respect to Soil Types," February 1934, reprint from the *Journal of the American Pharmaceutical Association*, Vol. XXIII, No. 2
- 00016: Draize, J. H., O. A. Beath, C. S. Gilbert, "Plants Poisonous to Livestock," May 1934, University of Wyoming Agricultural Experiment Station, Bulletin No. 200
- 00017: Draize, J. H., G. Woodard, A. W. Lindquist, "Le DDT-Ses Proprietes, Ses Applications," 1946, *Actualites Medicl-Chirurgicales*, No. XII
- 00018: Draize, J. H., "The Medalists Address-the Pharmacologist Delves in Cosmetics," March 1958, reprint from the *Journal of the Society of Cosmetic Chemists*, Vol. IX, No. 3 [Also contains typed manuscript of same name]
- 00019: Draize, John H., G. Martin, and E. A. Kelley, "Anesthetic Action of Cosmetic Surfactants," *Drugs and Cosmetic Industry*, July 1962 [Entire Issue]
- 00020: Dunbar, Paul B., Commissioner of Food and Drugs, "The Food and Drug Administration Looks at Insecticides," reprint from *Food, Drug Cosmetic Law Quarterly*, June 1949
- 00021: Eicholza, Fritz, "Die Toxische Gesamtsituation Auf Dem Gebiet Der Menschlichen Ernährung, Umriss Einer Unbekannten Wissenschaft," 1956
- 00022: Fletcher, Donald G., "A Dangerous Neighbor for Wheat, Oats, Barley, and Rye-the Rust



- Spreading Barberry," October 1933, U.S. Department of Agriculture, Bureau of Plant Industry, Miscellaneous Publication No. 131
- 00023: Geiling, E. M. K. and William D'Aguanno, Division of Pharmacology, F.D.A., "Our Man Made Noxious Environment," ca. 1961-1962, reprint from U. S. Department of Health, Education and Welfare, F.D.A. "Federation Proceedings," Vol. 19, No. 3, Part II
- 00024: Jull, M. A. and A. R. Lee, "Feeding Chickens," 1930, U.S. Department of Agriculture, Bulletin No. 1541
- 00025: Laug, Edwin, Ph.D.-Reprints, Co-authors: Elizabeth A. Vos; Ernest J. Umberger; Frieda M. Kunze
- 00026: "A Multiple Rabbit Holder," *The Journal of Laboratory and Clinical Medicine*, Vol. 29, No. 3, Pages 308-311, March 1944 [2 copies]
- 00027: "A Method for the Determination of Cutaneous Penetration of Mercury," *The Journal of Pharmacology and Experimental Therapeutics*, Vol. 80, No. 1, January 1947
- 00028: "The Penetration of Lead through the Skin," *The Journal of Industrial Hygiene and Toxicology*, Vol. 30, No. 4, July 1948
- 00029: Lehman, A. J., M. D.-Reprints
- 00030: "Proof of Safety: Some Interpretation," *Journal of the American Pharmaceutical Association*, Scientific Edition, Vol. XL, No. 7, July 1951
- 00031: "Plastic Packaging Materials," *Association of Food & Drug Officials of the United States*, Vol. XVIII, No. 4, October 1954
- 00032: "Drugs in Cosmetics-Should They Mix?" *Journal of the Society of Cosmetic Chemists*, Vol. X, No. 5, September 1959
- 00033: "Toxicological Aspects of Cosmetics," *Proceedings of the Scientific Section of the Toilet Goods Association*, No. 33, 1960
- 00034: "Control of Toxicity in Foods, Drugs, and Cosmetics," from "Federation Proceedings," Vol. 19, No. 3, Part III
- 00035: Marlatt, C. L., "Cockroaches," 1927, U.S. Department of Agriculture, Farmers' Bulletin 658
- 00036: Martin, Glenn E., John I. Munn, and Loretta Biskup, F.D.A., "A Spectrophotometric Method for the Determination of Methemoglobin in Blood," reprint from the *Journal of the Association of Official Agricultural Chemists*, Vol. 43, August 1960
- 00037: Patterson, Flora W. and Vera K. Charles, "Some Common Edible and Poisonous Mushrooms," 1922, U.S. Department of Agriculture Bulletin No. 796
- 00038: Pommerenke, W. T., H. F. Hanley, and W. J. Meek, "The Energy Metabolism of Pregnant Rabbits," May 1930, reprinted from the *American Journal of Physiology*, Vol. 93, No. 1
- 00039: Root, W. S., Managing Editor, "Proceedings of the Society for Experimental Biology and Medicine," May 1963, Vol. 113, No. 1

Box 005:

- 00001: Sheets, E. W. and William Jackson, "A Handbook for Better Feeding of Livestock," May 1922, U. S. Department of Agriculture, Miscellaneous Circular 12
- 00002: Spiro, K., "A Few Results Concerning the Occurrence and Effect of the Less Widely-Spread



Elements," (Physiological-chemical Institute of the University of Basel) Ergebnisse der Physiologie 24, 474-516 (1925), translated from the German by C. S. Gilbert [Typed manuscript with notations]

00003: Tannehill, I. R., "The Hurricane," July 1934, U. S. Department of Agriculture, Miscellaneous Publication No. 197

00004: University of Wisconsin, Seventy-eighth Commencement, Randall Stadium, "Commencement Register," June 22, 1931. Page 70-John Henry Draize, Doctor of Philosophy in Pharmacology, Physiology and Pharmacognosy, Studies on Thyroid [Insect damage to cover]

00005: Williams, Rogers J., "Biochemical Individuality," 1956, reprint from *Encyclopedia of Biological Sciences*

SERIES 006: PROFESSIONAL ACTIVITIES, 1957-1963

00006: Society of Cosmetic Chemists Annual Meeting, Program with Menu, in honor of John Henry Draize, Medalist. Also contains reprints of "The Tenth Medal Award, December 10, 1957," from the *Journal of the Society of Cosmetic Chemists* [See Also: Publications: Draize-"The Medalists Address"]

00007: Program-"The Power of an Idea," 66th Toilet Goods Industry Convention, 24th Annual Convention of the Toilet Goods Association, May 12-14, 1959 [Dr. Draize presented paper on Hair Spray Toxicity]

00008: *American Association for the Advancement of Science Bulletin*, February 1963

SERIES 007: CORRESPONDENCE, 1932-1963

00009: 1932-about possibility of leaving his position in Wyoming for one at Howard University

00010: April 1963-May 1963-Correspondence to James Draize from John H. and Mrs. Draize about their trip to Europe; one postcard from a visiting aunt

00011: 1963-Correspondence concerning Hair Spray Toxicity

SERIES 008: MICROSCOPE SLIDES, CA. EARLY 1930s

Box 006: Microscope Slides

- 4 Boxes: Slides for John Draize's Special Pathology Class, Spring semester, 1931 [See Also: Academic Papers: Special Pathology class notes, Spring semester, 1931; Pathology Drawings, ca. 1931; Examination in Special Pathology, March 23, 1931]
- 2 Boxes: Labeled Craighill II Pathology
- 1 Box: No Label-Pathological, tissues on slides are identified on the lid of the box