

Candace L. Doepker, Ph.D.

SENIOR VICE PRESIDENT, FOOD AND CONSUMER PRODUCTS
PRINCIPAL SCIENTIST

CONTACT INFORMATION

ToxStrategies LLC
201 East Fifth Street
Suite 1900 – #1353
Cincinnati, OH 45202
Phone (513) 206-9929
Cell (513) 746-5623
cdoepker@toxstrategies.com

PROFESSIONAL PROFILE

Dr. Candace Doepker is Senior Vice President of ToxStrategies' Food and Consumer Products Practice, as well as a Principal Scientist, and she is based in the Cincinnati, Ohio, area. She was trained in the field of cytogenetic toxicology and has 20 years' experience providing toxicological and scientific issues management support for many different multi-billion-dollar food, health, beauty and oral care brands. Relevant to the food industry, Dr. Doepker spent 16 years working for multibillion-dollar industries, helping to ensure consumer safety, worker safety, and general product stewardship in all of the following categories: coffee, snack foods, jams, jellies, baking mixes, juices, peanut butter, flavors, and oils. Recently, she has developed a strong working knowledge of the Food Safety Modernization Act and is experienced in facilitating discussions with multi-disciplinary teams to prepare for its implementation. Additionally, she has helped to evaluate risk and guide the strategic direction of companies involved with topics such as actives in drug products, caffeine, California Proposition 65 regulations, heat-formed toxicants, nuisance dusts, workplace allergens, and carbon monoxide.

Dr. Doepker is recognized in the food industry for her strong working knowledge of diacetyl and workplace flavor safety. Dr. Doepker has served multiple years as the Chairwoman of the Caffeine and Food Ingredients Committee of the International Food Information Council, as well as serving on the Council's Board of Directors. She has been on the Scientific Advisory Board of the National Coffee Association for 5 years and has been an active member of both the Grocery Manufacturers Association and International Life Science Institute's science and regulatory committees.

Specifically related to experience with the Generally Recognized as Safe (GRAS) process, Dr. Doepker has participated on a GRAS expert panel. In addition, she has helped over the past four years to prepare numerous dossiers, both for notification to the FDA and for self-GRAS without formal notification. She has helped as part of a multi-disciplinary team to facilitate and guide clients through the process successfully. As a consultant, Dr. Doepker has become familiar with the FEMA-GRAS process and is currently helping clients in the pet food and animal feed industry navigate the pilot GRAS program at the FDA's Center for Veterinary Medicine (CVM), as well as helping trade associations to consider future direction options.

EDUCATION AND DEGREES EARNED

- 1995 University of Cincinnati, Department of Environmental Health, Ph.D., Toxicology
- 1990 Xavier University, B.S., Biology (*cum laude*)

PROFESSIONAL ASSOCIATIONS

- Grocery Manufacturers Association, co-founder, Diacetyl Workplace Environment Exposure sub-committee
- International Food Information Council, Chair, Caffeine Committee
- International Food Information Council, Co-chair, Food Ingredients Committee
- National Coffee Association, Active Member, Scientific Advisory Group

PROFESSIONAL EXPERIENCE

Product Safety & Scientific Affairs Management

Helped to facilitate implementation of Food Safety Modernization Act compliance measures at a \$4.5B food company.

Established a Product Safety & Scientific Affairs Section that could support a \$1.6B stand-alone coffee company.

Responsible for identifying, understanding, and prioritizing risks (perceived or real) associated with coffee manufacturing and consumption.

Led a Diacetyl Assessment Team, which effort had multimillion-dollar cost avoidance implications.

Used toxicology mastery and leadership/collaboration skills to help guide Government Relations' and trade associations' strategic direction related to legislative/ regulatory activities at state and federal levels.

Monitored FDA and OSHA regulations relevant to food manufacturing, and provided simplified explanations of complex regulatory language, as well as strategic guidance, to brand managers.

Monitored and developed strategies for addressing proposed regulations related to flavor and food safety.

Developed safety programs for marketing clearance of new beauty care, oral care, personal health care, and snack and coffee products.

MANUSCRIPTS

Doepker C, Rabert C, Heard P, Dubnicka T, Choksi N, Eapen A. 2024. An investigation of the genotoxic potential of a well-characterized yerba mate extract. *Toxicol Rep* 12:477–484; doi: [10.1016/j.toxrep.2024.04.007](https://doi.org/10.1016/j.toxrep.2024.04.007).

Thompson CM, Brorby G, Keig-Shevlin Z, Smith R, Franzen A, Ulrich K, Blanchette AD, **Doepker C**. 2023. Assessment of the in vivo genotoxic potential of three smoke flavoring primary product mixtures. *Environ Mol Mutagen* 64(8–9):420–431; doi: [10.1002/em.22576](https://doi.org/10.1002/em.22576).

Henderson RG, Vincent M, Rivera BN, Bonn-Miller MO, **Doepker C**. 2023. Cannabidiol safety considerations: Development of a potential acceptable daily intake value and recommended upper intake limits for dietary supplement use. *Regul Toxicol Pharmacol* 144:105482; doi: [10.1016/j.yrtph.2023.105482](https://doi.org/10.1016/j.yrtph.2023.105482).

Doepker C. 2023. Response to Dr. Kawada's letter (Coffee consumption and health risk: A causal association). *Food Chem Toxicol* 113790; doi: [10.1016/j.fct.2023.113790](https://doi.org/10.1016/j.fct.2023.113790).

Doepker C, Movva N, Cohen SS, Wikoff DS. 2022. Benefit-risk of coffee consumption and all-cause mortality: A systematic review and disability adjusted life year analysis. *Food Chem Toxicol* 170:113472; doi: [10.1016/j.fct.2022.113472](https://doi.org/10.1016/j.fct.2022.113472).

Doepker CD, Heintz MM, van de Ligt JLG, Wikoff DS. 2021. Review of potential risks associated with supplementary dietary exposure to nitrate-containing compounds in swine — A paradox in light of emerging benefits. *Trans Anim Sci* 5(4):txab203; doi: [10.1093/tas/txab203](https://doi.org/10.1093/tas/txab203).

Heintz MM, **Doepker CL, Wikoff DS, Hawks SE.** 2021. Assessing the food safety risk of ochratoxin A in coffee: A toxicology-based approach to food safety planning. *J Food Sci* 86(11):4799-4810; doi: [10.1111/1750-3841.15938](https://doi.org/10.1111/1750-3841.15938).

Fitch SE, Payne LE, van de Ligt JLG, **Doepker C, Handu D, Cohen SM, Anyangwe N, Wikoff D.** 2021. Use of acceptable daily intake (ADI) as a health-based benchmark in nutrition research studies that consider the safety of low-calorie sweeteners (LCS): A systematic map. *BMC Public Health* 21(1):956; doi: [10.1186/s12889-021-10934-2](https://doi.org/10.1186/s12889-021-10934-2).

Chappell GA, Heintz MM, Borghoff SJ, **Doepker CL, Wikoff DS.** 2021. Lack of potential carcinogenicity for steviol glycosides — Systematic evaluation and integration of mechanistic data into the totality of evidence. *Food Chem Toxicol* 150:112045; doi: <https://doi.org/10.1016/j.fct.2021.112045>.

Chappell GA, Wikoff DS, **Doepker CL, Borghoff SJ.** 2020. Lack of potential carcinogenicity for acesulfame potassium — Systematic evaluation and integration of mechanistic data into the totality of the evidence. *Food Chem Toxicol* 141:111375 [open access]; doi: <https://doi.org/10.1016/j.fct.2020.111375>.

Chappell GA, Borghoff SJ, Pham L, **Doepker CL, Wikoff DS.** 2019. Lack of potential carcinogenicity for sucralose — Systematic evaluation and integration of mechanistic data into the totality of the evidence. *Food Chem Toxicol* 135:110898 [open access]; doi: <https://doi.org/10.1016/j.fct.2019.110898>.

Wikoff DS, Chappell GA, Fitch S, **Doepker CL, Borghoff SJ.** 2019. Lack of potential carcinogenicity for aspartame — Systematic evaluation and integration of mechanistic data into the totality of the evidence. *Food Chem Toxicol* 135:110866 [open access]; doi: <https://doi.org/10.1016/j.fct.2019.110866>.

Wikoff DS, Thompson C, Rager J, Chappell G, Fitch S, **Doepker C.** 2018. Benefit-risk analysis for foods (BRAFO): Evaluation of exposure to dietary nitrates. *Food Chem Toxicol* 120:709–723; doi: <https://doi.org/10.1016/j.fct.2018.08.031>.

Doepker C, Franke K, Myers E, Goldberger JJ, Lieberman HR, O'Brien C, Peck J, Tenenbein M, Weaver C, Wikoff D. 2018. Key findings and implications of a recent systematic review of the potential adverse effects of caffeine consumption in healthy adults, pregnant women, adolescents, and children. *Nutrients* 10:1536; doi: [10.3390/nu10101536](https://doi.org/10.3390/nu10101536).

Wikoff D, Welsh BT, Henderson R, Brorby GP, Britt J, Myers E, Goldberger J, Lieberman HR, O'Brien C, Peck J, Tenebein M, Weaver C, Harvey S, Urban J, **Doepker C.** 2017. Systematic review of the potential adverse effects of caffeine consumption in healthy adults, pregnant women, adolescents, and children. *Food Chem Toxicol* 109(Pt1):585–648; doi: <https://doi.org/10.1016/j.fct.2017.04.002>.

Doepker C, Lieberman HR, Smith AP, Peck JD, El-Sohemy A, Welsh BT. 2016. Caffeine: Friend or foe? *Annu Rev Food Sci Technol* 7:117–137; doi: [10.1146/annurev-food-041715-033243](https://doi.org/10.1146/annurev-food-041715-033243).

Doepker CL, Dumont KW, O'Donoghue J, English JC. 2000. Lack of induction of micronuclei in human peripheral blood lymphocytes treated with hydroquinone. *Mutagenesis* 15(6):479–487; doi: [10.1093/mutage/15.6.479](https://doi.org/10.1093/mutage/15.6.479).

Doepker CL, Livingston GK, Schumann BL, Srivastava AK. 1998. Structural and numerical chromosomal aberrations in a metabolically competent human lymphoblast cell line (MCL-5). *Mutagenesis* 13(3):275–380; doi: [10.1093/mutage/13.3.275](https://doi.org/10.1093/mutage/13.3.275).

BOOK CHAPTERS

Doepker CL, Maier A, Willis A, Hermansky S. 2012. Chapter 7: Toxicology of flavors in the food industry. In: Bingham E, Cofrancesco J, eds. *Patty's Toxicology*, Sixth ed. Wiley and Sons, New York.

Doepker CL. 2001. Aliphatic nitro, nitrate and nitrite compounds. Chapter 55 in Bingham E, Cofrancesco J, Powell C, eds: *Patty's Toxicology*, John Wiley & Sons, New York.

PROTOCOL

Fitch S, van de Ligt J, Payne L, **Doepker C**, Kleinman R, Handu D, Cohen SM, Anyangwe N, Wikoff D. 2019. Systematic map protocol: A systematic map of the use of acceptable daily intake (ADI) as a health-based benchmark in nutrition research studies that consider the safety of low-calorie sweeteners (LCS). *Open Science Framework*, <https://osf.io/6x3ks/>.

ABSTRACTS AND PRESENTATIONS

Franzen AC, Thompson CM, Brorby GP, Wikoff DS, Ilkbahar Z, **Doepker C**. Risk assessment of three smoke flavoring primary products currently under re-evaluation by EFSA. Poster presented at Society of Toxicology Annual Meeting, Nashville, TN, March 2023.

Henderson RG, **Doepker C**, Lopez JG. Safety evaluation of L-theanine administered via hard chew to dogs. Poster at Society of Toxicology Annual Meeting, March, Baltimore, MD, March 2019.

Wikoff DW; Welsh BT, Henderson R, Brorby G, Britt J, Myers E, Goldberger J, Lieberman HR, O'Brien C, **Doepker C**. 2017. Application of systematic review in the evaluation of caffeine safety: Potential adverse effects of caffeine consumption in healthy adults, pregnant women, adolescents, and children. *Society of Risk Analysis Annual Meeting*, Arlington, VA, December 10-14 2017.

Doepker D, Tyndall K, Lane R, Wikoff D, Thompson C, Harvey S, Schmitt D. 2017. A proposed ADI for nitrate. Poster presented at Society of Toxicology Annual Meeting, Baltimore, MD, March 2017.

Lippoli CM. 1995. The effects of benzo(a)pyrene and benz(a)anthracene on the integrity of human chromosomes (Doctoral Dissertation, University of Cincinnati, OH).

Lippoli CM, Livingston GK, Talaska G. 1995. The effects of benzo(a)pyrene and benz(a)anthracene on the integrity of human chromosomes. *Environ Molec Mutagen* 25:31. (Abstract).

Lippoli CM, Livingston GK. 1995. Induction of micronuclei in human peripheral blood lymphocytes treated with benzo(a)pyrene. *The Toxicologist* (Abstract).

Lippoli CM, Livingston GK, Schumann BL, Srivastava AK. 1994. Cytogenetic characterization of a metabolically competent human lymphoblast cell line. *Environ Molec Mutagen* 23:39. (Abstract).