

ABA-Sponsored Publications

Nutrition Research

- Harrold, J.A., Hill, S., Radu, C., Thomas, P., Thorp, P., Hardman, C.A., Christiansen, P., J.C.G. Halford. **[In Press]** Non-nutritive sweetened beverages versus water after a 52-wk weight management programme: a randomised controlled trial. *International Journal of Obesity*.
- Harrold, J., S. Hill, C. Radu, P. Thomas, P. Thorp, C. Hardman, P. Christiansen, J. Halford. **2023**. Effects of non-nutritive sweetened beverages versus water after a 12-week weight loss program: a randomized controlled trial. *Obesity* 31(8):1996-2008. <https://doi.org/10.1002/oby.23796>
- Lee, H.-Y., M. Jack, T. Poon, D. Noori, C. Venditti, S. Hamamji, and K. Musa-Veloso. **2021**. [Effects of Unsweetened Preloads and Preloads Sweetened with Caloric or Low/No-caloric Sweeteners on Subsequent Energy Intakes: A Systematic Review and Meta-analysis of Controlled Human Intervention Studies](#). *Advances in Nutrition*. 12(4):1481–1499, DOI: 10.1093/advances/nmaa157
- Venditti, C., K. Musa-Veloso, H.-Y. Lee, T. Poon, A. Mak, M. Darch, J. Juana, D. Fronda, D. Noori, E. Pateman, M. Jack. **2020**. [Determinants of Sweetness Preference: A Scoping Review of Human Studies](#). *Nutrients*. 12(3): 718, DOI: 10.3390/nu12030718
- Barraj, L.M., X. Bi, M.M. Murphy, C.G. Scrafford and N.L. Tran. **2019**. [Comparisons of Nutrient Intakes and Diet Quality among Water-Based Beverage Consumers](#). *Nutrients* 11: 314; doi:10.3390/nu11020314 ([Supplemental Materials](#))
- Marriott, B.P., K.J. Hunt, A.M. Malek and J.C. Newman. **2019**. [Trends in Intake of Energy and Total Sugar from Sugar-Sweetened Beverages in the United States among Children and Adults, NHANES 2003–2016](#). *Nutrients*. 11(9): 2004. [Supplementary Materials](#). doi: 10.3390/nu11092004
- Malek, A.M., J.C. Newman, K.J. Hunt, M.M. Jack, and B.P. Marriott. **2019**. [Dietary Sources of Sugars and Calories](#). *Nutrition Today*. 54(6): 296-304. doi: 10.1097/NT.0000000000000378
- Maloney, N.G., P. Christiansen, J.A. Harrold, J.C.G. Halford and C.A. Hardman. 2019. [Do low-calorie sweetened beverages help to control food cravings? Two experimental studies](#). *Physiology & Behavior*. 208: 112500
- Masic, U., J.A. Harrold, P. Christiansen, D.J. Cuthbertson, C.A. Hardman, E. Robinson, J.C.G. Halford. **2017**. [Effects of non-nutritive sweetened beverages on appetite during a 12-week weight loss \(SWITCH\): Protocol for a randomized, controlled trial assessing the effects of non-nutritive sweetened beverages compared to water during a 12-week weight loss period and a follow up weight maintenance period](#). *Contemporary Clinical Trials* 53: 80-88
- Jack, M.M. **2017**. Letter to the Editor – Do Sugar-Sweetened Beverages Cause Obesity and Diabetes? *Annals of Internal Medicine*. 167(1): 72. DOI: 10.7326/L17-0192

- Peters, J.C., J. Beck, M. Cardel, H.R. Wyatt, G.D. Foster, Z. Pan, A.C. Wojtanowski, S.S. Vander Veur, S.J. Herring, C. Brill and J.O. Hill. **2016**. The effects of water and non-nutritive sweetened beverages on weight loss and weight maintenance: A randomized clinical trial. *Obesity* 24(2): 297–304. [DOI: 10.1002/oby.21327](https://doi.org/10.1002/oby.21327)
- Peters, J.C., H.R. Wyatt, G.D. Foster, Z. Pan, A.C. Wojtanowski, S.S. Vander Veur, S.J. Herring, C.Brill and J.O. Hill. **2014**. The effects of water and non-nutritive sweetened beverages on weight loss during a 12-week weight loss treatment program. *Obesity* 22 (6): 1415–1421. [DOI: 10.1002/oby.20737](https://doi.org/10.1002/oby.20737)

Ingredient and Product Safety Research

Preservative (Benzoates)

- Turnbull, D., M.M. Jack, P.S. Coder and J.V. Rodricks. **2021**. [Extended One-generation Reproductive Toxicity Study \(EOGRTS\) of Benzoic Acid in Sprague-Dawley Rats](#). *Reg Tox Pharm.* 122: 104897. <https://doi.org/10.1016/j.yrtph.2021.104897>
- Darch, M., D. Martyn, K. Ngo and M.M. Jack. **2021**. [An updated estimate of benzoates intakes from non-alcoholic beverages in Canada and the United States](#), *Food Additives & Contaminants: Part A*, 38(5): 701-717. DOI: 10.1080/19440049.2020.1859624
- Danika Martyn, Annette Lau, Maryse Darch & Ashley Roberts. **2017**. [Benzoates intakes from non-alcoholic beverages in Brazil, Canada, Mexico and the United States](#), *Food Additives & Contaminants: Part A*, 34:9, 1485-1499, DOI: 10.1080/19440049.2017.1338836
- Hoffman, T.E., and W.H. Hanneman. **2017**. [Physiologically-Based Pharmacokinetic Analysis of Benzoic Acid in Rats, Guinea Pigs and Humans: Implications for dietary exposures and interspecies uncertainty](#). *Computational Toxicology*. 3: 19-32.
- Zu, K., D.M. Pizzurro, J.E. Goodman, and T.A. Lewandowski. **2017**. [Pharmacokinetic data reduce uncertainty in the acceptable daily intake for benzoic acid and its salts](#). *Regulatory Toxicology and Pharmacology*. 89: 83-94.

Colors

- Gentry, R., T. Greene, G. Chappell, I.A. Lea, S. Borghoff, C. Yang, J. Rathman, J.V. Ribeiro, B. Hobocienski, A. Mostrag, J.V.Rodricks and H. Clewell. **2021**. [Response to the Office of Environmental Health Hazard Assessment on comments related to Gentry et al. \(2021\)](#). *Food and Chemical Toxicology*. 152: 112202 <https://doi.org/10.1016/j.fct.2021.112202>
- Gentry, R., T. Greene, G. Chappell, I.A. Lea, S. Borghoff, C. Yang, J. Rathman, J.V. Ribeiro, B. Hobocienski, A. Mostrag, J.V.Rodricks and H. Clewell. **2021**. [Integration of evidence to evaluate the potential for neurobehavioral effects following exposure to USFDA-approved food colors](#). *Food and Chemical Toxicology*. Vol (151): 112097. <https://doi.org/10.1016/j.fct.2021.112097>
- Tran, N.T., L.M. Barraaj, A.P. Hearty, M.M. Jack. **2020**. [Tiered Intake Assessment for Food colours](#). *Food Additives & Contaminants Part A.*, 37:7, 1118-1134, DOI: 10.1080/19440049.2020.1736341

- Chappell, G.A., J.K. Britt, and S.J. Borghoff. 2020. [Systematic assessment of mechanistic data for FDA-certified food colors and neurodevelopmental processes](https://doi.org/10.1016/j.fct.2020.111310). *Food and Chemical Toxicology*. 140: 111310. <https://doi.org/10.1016/j.fct.2020.111310>

Caramel Coloring (4-MeI)

- Borghoff, S., S. Fitch, J.Black, M.B., McMullen, M. Andersen and G. Chappell. 2021. [A Systematic Approach to Evaluate Plausible Modes of Actions for Mouse Lung Tumors in Mice Exposed to 4-Methylimidazole](https://doi.org/10.1016/j.yrtph.2021.104977). *Regulatory Toxicology and Pharmacology*. 104977. <https://doi.org/10.1016/j.yrtph.2021.104977>
- Black, M.B., M.E. Andersen, S.N. Pendse, S.J. Borghoff, M. Streicker, P.D. McMullen. 2021. RNA-Sequencing (transcriptomic) Data Collected in Liver and Lung of Male and Female B6C3F1 Mice Exposed to Various Dose Levels of 4-Methylimidazole for 2, 5, or 28 days. *Regulatory Toxicology and Pharmacology*. Data-in-Brief. <https://doi.org/10.1016/j.dib.2021.107420>
- Brusick, D., M.J. Aardema, W.T. Allaben, D.J. Kirkland, G. Williams, G.C. Llewellyn, J.M. Parker, M.O. Rihner. 2020. [A weight of evidence assessment of the genotoxic potential of 4-methylimidazole as a possible mode of action for the formation of lung tumors in exposed mice](https://doi.org/10.1016/j.fct.2020.111652). *Food and Chemical Toxicology*. 145: 111652, <https://doi.org/10.1016/j.fct.2020.111652>
- Howard, A.S. and N. Choksi. 2020. [Evaluation of two *in silico* programs for predicting mutagenicity and carcinogenicity potential for 4-methylimidazole \(4-MeI\) and known metabolites](https://doi.org/10.1080/15376516.2019.1709237). *Toxicology Mechanisms and Methods*. 30(4): 246-256. DOI: [10.1080/15376516.2019.1709237](https://doi.org/10.1080/15376516.2019.1709237)
- Kelty, J.S., C. Keum, V.J. Brown, P.C. Edwards, S.A. Carratt and L.S. van Winkle. 2020. [Comparison of acute respiratory epithelial toxicity for 4-Methylimidazole and naphthalene administered by oral gavage in B6C3F1 mice](https://doi.org/10.1016/j.yrtph.2020.104761). *Regulatory Toxicology and Pharmacology*. 116: 104761
- Fennell, T.R., S.L. Watson, S. Dhungana, and R.W. Snyder. 2018. [Metabolism of 4-Methylimidazole in Fischer 344 Rats and B6C3F1 Mice](https://doi.org/10.1016/j.fct.2018.10.032). *Food Chem Toxicol* 123:181-194. doi: 10.1016/j.fct.2018.10.032
- C. Beevers and R.H. Adamson. 2016. [Evaluation of 4-methylimidazole, in the Ames/Salmonella test using induced rodent liver and lung S9](https://doi.org/10.1002/em.21968). *Environmental and Molecular Mutagenesis* 57(1): 51–57. DOI: 10.1002/em.21968
- Cruzan, G., J.R. Harkema, H. Hosako, J.M. Wasil and F.J. Murray. 2015. [Evaluation of the mode of action of mouse lung tumors induced by 4-methylimidazole](https://doi.org/10.1016/j.yrtph.2015.10.006). *Regulatory Toxicology Pharmacology* 73(2):501-8. doi: 10.1016/j.yrtph.2015.10.006.

Low- and no-calorie sweeteners

- Goodman, J.E., D.N. Boon, M.M. Jack. 2023. [Perspectives on Recent Reviews of Aspartame Cancer Epidemiology](https://doi.org/10.1016/j.glo.2023.100117). *Global Epidemiology*. 6: 100117.
- Elmore, S.A., J.E. Rehg, T.R. Schoeb, J.I. Everitt, B. Bolon. 2023. Is Statistical Reevaluation of Hemolymphoreticular Neoplasms from Aspartame Studies Valid? *Toxicological Sciences*. 195(2). *In Press*.
- Goodman, J.E., E.G. Anneser, A. Khandaker, D.N. Boon. 2023. [The role of study quality in aspartame and cancer epidemiology study reviews](https://doi.org/10.1016/j.glo.2023.100110). *Global Epidemiology* 5: 100110

- Elmore SA, J.E. Rehg, T.R. Schoeb, J.I. Everitt, and B. Bolon. **2023**. Pathologists' Perspective on the Study Design, Analysis and Interpretation of Proliferative Lesions in Lifetime and Prenatal Rodent Carcinogenicity Bioassays of Aspartame. *Food & Chemical Toxicology*. 171: 113504; doi: <https://doi.org/10.1016/j.fct.2022.113504>
- Borghoff, S.J., S. S. Cohen, X. Jiang, I.A. Lea, W.D. Klaren, G.A. Chappell, J.K. Britt, B.N. Rivera, N.Y. Choski, D. Wikoff. **2023**. Updated Systematic Assessment of Human, Animal and Mechanistic Evidence Demonstrates Lack of Human Carcinogenicity with Consumption of Aspartame. *Food and Chemical Toxicology*. 172: 113549. DOI: [10.1016/j.fct.2022.113549](https://doi.org/10.1016/j.fct.2022.113549)
- Lenighan, Y.M., J. Meetro, D.M. Martyn, M. Darch, L.S. Gwenter, E. Thornton, M.M. Jack. **2023**. Low-/No-Calorie Sweetener intakes from beverages – an up-to-date assessment in four regions: Brazil, Canada, Mexico and the United States. *Food Additives and Contaminants*. 40(1): <https://doi.org/10.1080/19440049.2022.2151647>
- Tran, N.T., L.M. Barraj, A. Hearty, M.M. Jack. **2021**. [Tiered Intake Assessment for Low- and No- Calorie Sweeteners in Beverages](https://doi.org/10.1080/19440049.2020.1843717). *Food Additives & Contaminants, Part A*. 38(2): 208-222, <https://doi.org/10.1080/19440049.2020.1843717>
- Lea, I.A., G.A. Chappell and D.S. Wikoff. **2021**. Overall lack of genotoxic activity among five common low- and no-calorie sweeteners: a contemporary review of the collective evidence. *Mutation Research/Genetic Toxicology and Environmental Mutagenesis*. V. 868–869: 503389. <https://doi.org/10.1016/j.mrgentox.2021.503389> (Co-funded by both CCC and ABA)
- G.A.Chappell, M.M. Heintz, S.J.Borghoff, C.L. Doepker and D.S.Wikoff. **2021**. [Lack of potential carcinogenicity for steviol glycosides – systematic evaluation and integration of mechanistic data into the totality of the evidence](https://doi.org/10.1016/j.fct.2021.112045). *Food and Chemical Toxicology*. Vol 150 (2021): 112045, <https://doi.org/10.1016/j.fct.2021.112045>
- G.A.Chappell, D.S.Wikoff, C.L. Doepker and S.J.Borghoff. **2020**. [Lack of potential carcinogenicity for acesulfame potassium – systematic evaluation and integration of mechanistic data into the totality of the evidence](https://doi.org/10.1016/j.fct.2020.111375). *Food and Chemical Toxicology*. 141:111375. doi: 10.1016/j.fct.2020.111375.
- G.A.Chappell, S.J.Borghoff, L.L. Pham, C.L.Doepker, D.S.Wikoff. **2020**. [Lack of potential carcinogenicity for sucralose – systematic evaluation and integration of mechanistic data into the totality of the evidence](https://doi.org/10.1016/j.fct.2019.110898). *Food and Chemical Toxicology*. 135: 110898 <https://doi.org/10.1016/j.fct.2019.110898>
- D.S. Wikoff, G.A. Chappell, S. Fitch, C.L. Doepker, and S.J. Borghoff. **2020**. [Lack of potential carcinogenicity for aspartame – systematic evaluation and integration of mechanistic data into the totality of the evidence](https://doi.org/10.1016/j.fct.2019.110866). *Food and Chemical Toxicology*. 135: 110866 <https://doi.org/10.1016/j.fct.2019.110866>

Caffeine/Flavoring

- FEMA GRAS 29 published (**2019**) – Caffeine levels for flavorings purposes increased from 120 to 150 ppm in non-alcoholic beverages.

Caffeinated Beverages (Energy Drinks)

- Bi, X., B.J.K. Davis, L.M. Barraj, D. Srinivasan, P. Mahadev, P. Mathew, D. Mishra, C.G. Scrafford, N.L. Tran, M.M. Jack. **2023**. Beverage Consumption Patterns among U.S. Adolescents and Adults from a New 24-h Beverage Recall Survey Compared to the

National Health and Nutrition Examination Survey (NHANES) 2017–2018. *Nutrients*. 15 (16), 3561; <https://doi.org/10.3390/nu15163561>

- Benson, S.M., K.M. Unice, M.E. Glynn. **2019**. Hourly and Daily Intake Patterns among U.S. Caffeinated Beverage Consumers based on the National Health and Nutrition Examination Survey (NHANES 2013-2016). *Food and Chemical Toxicology*. 125: 271-278. <https://www.sciencedirect.com/science/article/pii/S0278691518309359>.
- Tian, D.-D., S. Natesan, J.R. White Jr. and M.F. Paine. **2019**. Effects of Common CYP1A2 Genotypes and Other Key Factors on Intraindividual Variation in the Caffeine Metabolic Ratio: An Exploratory Analysis. *Clin Transl Sci* 12(1): 39-46, [doi:10.1111/cts.12598](https://doi.org/10.1111/cts.12598)
- Martyn, D., A. Lau, P. Richardson and A. Roberts. **2018**. Temporal patterns of caffeine intake in the United States. *Food and Chemical Toxicology*, 111: 71-83. <https://doi.org/10.1016/j.fct.2017.10.059>
- Borron, S.W., P.L. Foster, S.H. Watts, J. Herrera, J. Larson, R.L. Kingston, M. Forrester. **2018**. [Energy drink exposures reported to Texas Poison Centers: Analysis of adverse incidents in relation to total sales, 2010-2014](https://doi.org/10.1016/j.yrtph.2018.05.008). *Regulatory Toxicology and Pharmacology*, 97: 1-14. <https://doi.org/10.1016/j.yrtph.2018.05.008>
- Turnbull, D., J.V. Rodricks, G.F. Mariano and F. Chowdhury. **2017**. Caffeine and Cardiovascular Health. *Regulatory Toxicology and Pharmacology*, 89: 165-185. <http://dx.doi.org/10.1016/j.yrtph.2017.07.025>
- Turnbull, D., J.V. Rodricks and G.F. Mariano. **2016**. Neurobehavioral Hazard Identification and Characterization for Caffeine. *Regulatory Toxicology and Pharmacology*, 74: 81-92. <http://dx.doi.org/10.1016/j.yrtph.2015.12.002>
- Wikoff D, Welsh BT, Henderson R, et al. **2017**. Systematic review of the potential adverse effects of caffeine consumption in healthy adults, pregnant women, adolescents and children. *Food Chem Toxicol*. 109(Pt 1):585-648, <http://dx.doi.org/10.1016/j.fct.2017.04.002> - ILSI NA study, ABA partially funded
- White, J.R. Jr., J.M. Padowski, Y. Zhong, G. Chen, S. Luo, P. Lazarus, M.E. Layton, S. McPherson. **2016**. Pharmacokinetic Analysis and Comparison of Caffeine Administered Rapidly or Slowly in Coffee Chilled or Hot vs. Chilled Energy Drink in Healthy Young Adults. *Clinical Toxicology*, 54:4, 308-312. <http://dx.doi.org/10.3109/15563650.2016.1146740>
- Tran, N.L., L.M. Barraja, X. Bi and Jack, M.M. **2016**. Trends and Patterns of Caffeine Consumption among US Teenagers and Young Adults, NHANES 2003 – 2012. *Food and Chemical Toxicology*, 94: 227-242. <http://dx.doi.org/10.1016/j.fct.2016.06.007>
- Adamson, R.H. **2016**. The acute lethal dose 50 (LD50) of caffeine in albino rats. *Regulatory Toxicology and Pharmacology*. 80: 274-276. [doi: 10.1016/j.yrtph.2016.07.011](https://doi.org/10.1016/j.yrtph.2016.07.011)

Packaging (Bisphenol A)

- AOAC Official Method (First Action) BPA. July **2019**. https://www.aoac.org/wp-content/uploads/2019/08/AMW-Jul_Aug-2019.pdf