

# Division of Laboratory Sciences

## First Quarter 2022 Publications.

### National Biomonitoring Program.

[Urinary phthalate and DINCH metabolite concentrations and gradations of maternal glucose intolerance.](#) James-Todd T, Ponzano M, Bellavia A, Williams PL, Cantonwine DE, Calafat AM, Hauser R, Quinn MR, Seely EW, McElrath TF. Environ Int. 2022 Mar;161:107099. doi: 10.1016/j.envint.2022.107099. Epub 2022 Jan 24.

[Pregnancy exposure to phthalates and DNA methylation in male placenta - An epigenome-wide association study.](#) Jedynek P, Tost J, Calafat AM, Bourova-Flin E, Broséus L, Busato F, Forhan A, Heude B, Jakobi M, Schwartz J, Slama R, Vaiman D, Lepeule J, Philippat C. Environ Int. 2022 Feb;160:107054. doi: 10.1016/j.envint.2021.107054. Epub 2022 Jan 13.

[Identification of profiles and determinants of maternal pregnancy urinary biomarkers of phthalates and replacements in the Illinois Kids Development Study.](#) Pacyga DC, Haggerty DK, Nicol M, Henning M, Calafat AM, Braun JM, Schantz SL, Strakovsky RS. Environ Int. 2022 Apr;162:107150. doi: 10.1016/j.envint.2022.107150. Epub 2022 Mar 2.

[Correlates of non-persistent endocrine disrupting chemical mixtures among reproductive-aged Black women in Detroit, Michigan.](#) Schildroth S, Wise LA, Wesselink AK, Bethea TN, Fruh V, Taylor KW, Calafat AM, Baird DD, Claus Henn B. Chemosphere. 2022 Jul;299:134447. doi: 10.1016/j.chemosphere.2022.134447. Epub 2022 Mar 28.

### Tobacco Laboratory.

[Changes in Biomarkers of Tobacco Exposure among Cigarette Smokers Transitioning to ENDS Use: The Population Assessment of Tobacco and Health Study, 2013-2015.](#) Anic GM, Rostron BL, Hammad HT, van Bommel DM, Del Valle-Pinero AY, Christensen CH, Erives G, Faulcon LM, Blount BC, Wang Y, Wang L, Bhandari D, Calafat AM, Kimmel HL, Everard CD, Compton WM, Edwards KC, Goniewicz ML, Wei B, Hyland A, Hatsukami DK, Hecht SS, Niaura RS, Borek N, Ambrose BK, Chang CM. Int J Environ Res Public Health. 2022 Jan 27;19(3):1462. doi: 10.3390/ijerph19031462.

[Cigarette smoking is associated with acrylamide exposure among the U.S. population: NHANES 2011-2016.](#) Kenwood BM, Zhu W, Zhang L, Bhandari D, Blount BC. Environ Res. 2022 Jun;209:112774. doi: 10.1016/j.envres.2022.112774. Epub 2022 Jan 22.

[High-Performance Liquid Chromatography-Tandem Mass Spectrometry Analysis of Carbonyl Emissions from E-Cigarette, or Vaping, Products.](#) McGuigan M, Chapman G, Lewis E, Watson CH, Blount BC, Valentin-Blasini L. ACS Omega. 2022 Feb 21;7(9):7655-7661. doi: 10.1021/acsomega.1c06321. eCollection 2022 Mar 8.

[Variability in Urinary Nicotine Exposure Biomarker Levels Between Waves 1 \(2013-2014\) and 2 \(2014-2015\) in the Population Assessment of Tobacco and Health Study.](#) Ashley DL, Zhu W, Wang L, Sosnoff

C, Feng J, Del Valle-Pinero AY, Cheng YC, Chang CM, van Bommel D, Borek N, Kimmel HL, Silveira ML, Blount BC. Nicotine Tob Res. 2023 Mar 22;25(4):616-623. doi: 10.1093/ntr/ntac056.

[Nicotine Exposure in the U.S. Population: Total Urinary Nicotine Biomarkers in NHANES 2015-2016.](#) Mazumder S, Shia W, Bendik PB, Achilihu H, Sosnoff CS, Alexander JR, Luo Z, Zhu W, Pine BN, Feng J, Blount BC, Wang L. Int J Environ Res Public Health. 2022 Mar 19;19(6):3660. doi: 10.3390/ijerph19063660.

## **Nutrition, Chronic, and Infectious Disease Laboratories.**

[Reduced Kidney Function Is Associated with Increasing Red Blood Cell Folate Concentration and Changes in Folate Form Distributions \(NHANES 2011-2018\).](#) Wang A, Yeung LF, Ríos Burrows N, Rose CE, Fazili Z, Pfeiffer CM, Crider KS. Nutrients. 2022 Mar 2;14(5):1054. doi: 10.3390/nu14051054.

# Second Quarter 2022 Publications.

## National Biomonitoring Program.

[Evaluating predictive relationships between wristbands and urine for assessment of personal PAH exposure.](#) Dixon HM, Bramer LM, Scott RP, Calero L, Holmes D, Gibson EA, Cavalier HM, Rohlman D, Miller RL, Calafat AM, Kincl L, Waters KM, Herbstman JB, Anderson KA. Environ Int. 2022 May;163:107226. Epub 2022 Apr 4.

[Per- and polyfluoroalkyl substances and incident diabetes in midlife women: the Study of Women's Health Across the Nation \(SWAN\).](#) Park SK, Wang X, Ding N, Karvonen-Gutierrez CA, Calafat AM, Herman WH, Mukherjee B, Harlow SD. Diabetologia. 2022 Jul;65(7):1157-1168. Epub 2022 Apr 11.

[Pregnancy urinary concentrations of bisphenol A, parabens and other phenols in relation to serum levels of lipid biomarkers: Results from the EARTH study.](#) Mínguez-Alarcón L, Frueh L, Williams PL, James-Todd T, Souter I, Ford JB, Rexrode KM, Calafat AM, Hauser R, Chavarro JE, Earth Study Team. Sci Total Environ. 2022 Aug 10;833:155191. Epub 2022 Apr 12.

[Gestational and childhood phthalate exposures and adolescent body composition: The HOME study.](#) Etzel TM, Braun JM, Kuiper JR, Calafat AM, Cecil KM, Chen A, Lanphear BP, Yolton K, Kalkwarf HJ, Buckley JP. Environ Res. 2022 Sep;212(Pt B):113320. Epub 2022 Apr 22.

[Lead poisoning among asymptomatic individuals with a long-term history of opiate use in Golestan Cohort Study.](#) Etemade A, Hariri S, Hassanian-Moghaddam H, Poustchi H, Roshandel G, Shayanrad A, Kamangar F, Boffetta P, Brennan P, Dargan PI, Dawsey SM, Jones RL, Freedman ND, Malekzadeh R, Abnet CC. Int J Drug Policy. 2022 Jun;104:103695. Epub 2022 Apr 25.

[A nested case-control study of serum polychlorinated biphenyls and papillary thyroid cancer risk among U.S. military service members.](#) Zhuo H, Huang H, Sjodin A, Jin L, Ma S, Denic-Roberts H, Warren JL, Jones R, Davis M, Sun P, Yu H, Ward MH, Udelsman R, Zhang Y, Rusiecki JA. Environ Res. 2022 Sep;212(Pt C):113367. Epub 2022 May 2.

[Early-pregnancy plasma per- and polyfluoroalkyl substance \(PFAS\) concentrations and hypertensive disorders of pregnancy in the Project Viva cohort.](#) Preston EV, Hivert M, Fleisch AF, Calafat AM, Sagiv SK, Perng W, Rifas-Shiman SL, Chavarro JE, Oken E, Zota AR, James-Todd T. Environ Int. 2022 Jul;165:107335. Epub 2022 Jun 6.

[Per- and Polyfluoroalkyl Substances and Incident Hypertension in Multi-Racial/Ethnic Women: The Study of Women's Health Across the Nation.](#) Ding N, Karvonen-Gutierrez CA, Mukherjee B, Calafat AM, Harlow SD, Park SK. Hypertension. 2022 Aug;79(8):1876-1886. Epub 2022 Jun 13.

[Association of Urinary Phthalate and Phthalate Replacement Metabolite Concentrations with Serum Lipid Biomarker Levels among Pregnant Women Attending a Fertility Center.](#) Mínguez-Alarcón L, Williams PL, James-Todd T, Souter I, Ford JB, Rexrode KM, Calafat AM, Hauser R, Chavarro JE. Toxics. 2022 May 28;10(6):292.

[Exposure assessment of polycyclic aromatic hydrocarbons in refined coal tar sealant applications.](#) McCormick S, Snawder JE, Chen I, Slone J, Calafat AM, Wang Y, Meng L, Alexander-Scott M,

Breitenstein M, Johnson B, Meadows J, Estill CF. Int J Hyg Environ Health. 2022 May;242:113971. Epub 2022 Apr 25.

## Tobacco Laboratory.

[Early Changes in Puffing Intensity When Exclusively Using Open-Label Very Low Nicotine Content Cigarettes.](#) White CM, Watson C, Cardenas RB, Ngac P, Valentin-Blasini L, Blount BC, Koopmeiners JS, Denlinger-Apte RL, Pacek LR, Benowitz NL, Hatsukami DK, Donny EC, Carpenter MJ, Smith TT. Nicotine Tob Res. 2022 May 7;ntac118.

[The Quantitation of Squalene and Squalane in Bronchoalveolar Lavage Fluid Using Gas Chromatography Mass Spectrometry.](#) Cowan EA, Tran H, Watson CH, Blount BC, Valentín-Blasini L. Front Chem. 2022 Apr 7;10:874373.

[Geometric Mean Serum Cotinine Concentrations Confirm a Continued Decline in Secondhand Smoke Exposure among U.S. Nonsmokers-NHANES 2003 to 2018.](#) Caron KT, Zhu W, Bernert JT, Wang L, Blount BC, Dortch K, Hunter RE, Harmon T, Akins JR, Tsai J, Homa DM, Pirkle JL, Sosnoff CS. Int J Environ Res Public Health. 2022 May 11;19(10):5862.

[Hydrogen Cyanide and Aromatic Amine Yields in the Mainstream Smoke of 60 Little Cigars.](#) Ai J, Hassink M, Taylor KM, Deycard VN, Hearn B, Williams K, McGuigan M, Valentin-Blasini L, Watson CH. Chem Res Toxicol. 2022 Jun 20;35(6):940-953. Epub 2022 May 25.

[Mitigating Matrix Effects in LC-ESI-MS/MS Analysis of a Urinary Biomarker of Xylenes Exposure.](#) Bowman BA, Ejzak E, Reese CM, Blount BC, Bhandari D. J Anal Toxicol. 2022 Jun 29;bkac046.

## Nutrition, Chronic, and Infectious Disease Laboratories.

[High-Resolution Mass Spectrometry for the Measurement of PTH and PTH Fragments: Insights into PTH Physiology and Bioactivity.](#) Ulmer CZ, Kritmetapak K, Singh RJ, Vesper HW, Kumar R. J Am Soc Nephrol. 2022 Apr 8.

[Current State of Pediatric Reference Intervals and the Importance of Correctly Describing the Biochemistry of Child Development: A Review.](#) Lyle AN, Pokuah F, Dietzen DJ, Wong ECC, Pyle-Eilola AL, Fuqua JS, Woodworth A, Jones PM, Akinbami LJ, Garibaldi LR, Vesper HW. JAMA Pediatr. 2022 Jul 1;176(7):699-714. Epub 2022 Apr 25.

## Newborn Screening.

[Newborn Screen for X-Linked Adrenoleukodystrophy Using Flow Injection Tandem Mass Spectrometry in Negative Ion Mode.](#) Teber TA, Conti BJ, Haynes CA, Hietala A, Baker MW. Int J Neonatal Screen. 2022 Apr 14;8(2):27.

# Third Quarter 2022 Publications.

## National Biomonitoring Program.

[Assessing urinary phenol and paraben mixtures in pregnant women with and without gestational diabetes mellitus: A case-control study.](#) Chen WJ, Robledo C, Davis EM, Goodman JR, Xu C, Hwang J, Janitz AE, Garwe T, Calafat AM, Peck JD. Environ Res. 2022 Nov;214(Pt 2):113897. doi: 10.1016/j.envres.2022.113897. Epub 2022 Jul 15.

[Associations Between Prenatal Urinary Biomarkers of Phthalate Exposure and Preterm Birth: A Pooled Study of 16 US Cohorts.](#) Welch BM, Keil AP, Buckley JP, Calafat AM, Christenbury KE, Engel SM, O'Brien KM, Rosen EM, James-Todd T, Zota AR, Ferguson KK, Alshawabkeh AN, Cordero JF, Meeker JD, Barrett ES, Bush NR, Nguyen RHN, Sathyanarayana S, Swan SH, Cantonwine DE, McElrath TF, Aalborg J, Dabelea D, Starling AP, Hauser R, Messerlian C, Zhang Y, Bradman A, Eskenazi B, Harley KG, Holland N, Bloom MS, Newman RB, Wenzel AG, Braun JM, Lanphear BP, Yolton K, Factor-Litvak P, Herbstman JB, Rauh VA, Drobnis EZ, Sparks AE, Redmon JB, Wang C, Binder AM, Michels KB, Baird DD, Jukic AMZ, Weinberg CR, Wilcox AJ, Rich DQ, Weinberger B, Padmanabhan V, Watkins DJ, Hertz-Picciotto I, Schmidt RJ. JAMA Pediatr. 2022 Sep 1;176(9):895-905. doi: 10.1001/jamapediatrics.2022.2252.

[Urinary nitrate and sodium in a high-risk area for upper gastrointestinal cancers: Golestan Cohort Study.](#) Etemadi A, Buller ID, Hashemian M, Roshandel G, Poustchi H, Espinosa MM, Blount BC, Pfeiffer CM, Keshavarzi B, Flory AR, Nasser-Moghaddam S, Dawsey SM, Freedman ND, Abnet CC, Malekzadeh R, Ward MH. Environ Res. 2022 Nov;214(Pt 2):113906. doi: 10.1016/j.envres.2022.113906. Epub 2022 Jul 19.

[Early life organophosphate ester exposures and bone health at age 12 years: The Health Outcomes and Measures of the Environment \(HOME\) Study.](#) Kuiper JR, Vuong AM, Lanphear BP, Calafat AM, Ospina M, Cecil KM, Xu Y, Yolton K, Kalkwarf HJ, Braun JM, Chen A, Buckley JP. Sci Total Environ. 2022 Dec 10;851(Pt 2):158246. doi: 10.1016/j.scitotenv.2022.158246. Epub 2022 Aug 26.

[Maternal urinary organophosphate ester metabolite concentrations and glucose tolerance during pregnancy: The HOME Study.](#) Yang W, Braun JM, Vuong AM, Percy Z, Xu Y, Xie C, Deka R, Calafat AM, Ospina M, Yolton K, Cecil KM, Lanphear BP, Chen A. Int J Hyg Environ Health. 2022 Aug;245:114026. doi: 10.1016/j.ijheh.2022.114026. Epub 2022 Aug 24.

[Individual-level permethrin exposure biomarkers in U.S. army soldiers: comparison of two treatment formulations for military uniforms.](#) Proctor SP, Nguyen VT, Hebert AA, Taylor KM, McClung HL, Heaton KJ, Ospina M, Calafat AM. J Expo Sci Environ Epidemiol. 2023 Jan;33(1):132-139. doi: 10.1038/s41370-022-00466-1. Epub 2022 Aug 23.

[Maternal diet quality moderates associations between parabens and birth outcomes.](#) Pacyga DC, Talge NM, Gardiner JC, Calafat AM, Schantz SL, Strakovsky RS. Environ Res. 2022 Nov;214(Pt 3):114078. doi: 10.1016/j.envres.2022.114078. Epub 2022 Aug 11.

[Serum per- and polyfluoroalkyl substance concentrations in four municipal US fire departments.](#) Burgess JL, Fisher JM, Nematollahi A, Jung AM, Calkins MM, Graber JM, Grant CC, Beitel SC, Littau SR, Gulotta JJ, Wallentine DD, Hughes RJ, Popp C, Calafat AM, Botelho JC, Coleman AD, Schaefer-Solle N,

Louzado-Feliciano P, Oduwole SO, Caban-Martinez AJ. Am J Ind Med. 2023 May;66(5):411-423. doi: 10.1002/ajim.23413. Epub 2022 Jul 21.

[Longitudinal Changes in Maternal Serum Concentrations of Per- and Polyfluoroalkyl Substances from Pregnancy to Two Years Postpartum.](#) Oh J, Bennett DH, Tancredi DJ, Calafat AM, Schmidt RJ, Hertz-Picciotto I, Shin HM. Environ Sci Technol. 2022 Aug 16;56(16):11449-11459. doi: 10.1021/acs.est.1c07970. Epub 2022 Jul 29.

[Association of preconception mixtures of phenol and phthalate metabolites with birthweight among subfertile couples.](#) Zhang Y, Mustieles V, Williams PL, Souter I, Calafat AM, Demokritou M, Lee A, Vagios S, Hauser R, Messerlian C. Environ Epidemiol. 2022 Aug 31;6(5):e222. doi: 10.1097/EE9.000000000000222. eCollection 2022 Oct.

[Gestational per- and polyfluoroalkyl substances exposure and infant body mass index trajectory in the New Hampshire Birth Cohort Study.](#) Romano ME, Heggeseth BC, Gallagher LG, Botelho JC, Calafat AM, Gilbert-Diamond D, Karagas MR. Environ Res. 2022 Dec;215(Pt 3):114418. doi: 10.1016/j.envres.2022.114418. Epub 2022 Sep 23.

[Associations of individual and cumulative urinary phthalate and replacement biomarkers with gestational weight gain through late pregnancy.](#) Pacyga DC, Patti MA, Papandonatos GD, Haggerty DK, Calafat AM, Gardiner JC, Braun JM, Schantz SL, Strakovsky RS. Sci Total Environ. 2023 Jan 10;855:158788. doi: 10.1016/j.scitotenv.2022.158788. Epub 2022 Sep 16.

[Childhood urinary organophosphate esters and cognitive abilities in a longitudinal cohort study.](#) Percy Z, Chen A, Yang W, Braun JM, Lanphear B, Ospina M, Calafat AM, Xie C, Cecil KM, Vuong AM, Xu Y, Yolton K. Environ Res. 2022 Dec;215(Pt 1):114265. doi: 10.1016/j.envres.2022.114265. Epub 2022 Sep 11.

[Prenatal exposure to polybrominated diphenyl ethers and BMI Z-scores from 5 to 14 years.](#) Kupsco A, Sjödin A, Cowell W, Jones R, Oberfield S, Wang S, Hoepner LA, Gallagher D, Baccarelli AA, Goldsmith J, Rundle AG, Herbstman JB. Environ Health. 2022 Sep 8;21(1):82. doi: 10.1186/s12940-022-00893-5.

[Blood cadmium, lead, manganese, mercury, and selenium levels in American Indian populations: The Strong Heart Study.](#) Li Z, Lewin M, Ruiz P, Nigra AE, Henderson NB, Jarrett JM, Ward C, Zhu J, Umans JG, O'Leary M, Zhang Y, Ragin-Wilson A, Navas-Acien A. Environ Res. 2022 Dec;215(Pt 3):114101. doi: 10.1016/j.envres.2022.114101. Epub 2022 Aug 14.

## Tobacco Laboratory.

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## Nutrition, Chronic, and Infectious Disease Laboratories.

[Assessing the Impacts of Preanalytical Field Sampling Challenges on the Reliability of Serum Aflatoxin B1-Lysine Measurements by Use of LC-MS/MS.](#) Zitomer NC, Rybak ME, Sternberg MR. *Toxins (Basel)*. 2022 Sep 1;14(9):612. doi: 10.3390/toxins14090612.

[Maternal Periconceptional Folic Acid Supplementation and DNA Methylation Patterns in Adolescent Offspring.](#) Crider KS, Wang A, Ling H, Potischman N, Bailey RL, Lichen Y, Pfeiffer CM, Killian JK, Rose C, Sampson J, Zhu L, Berry RJ, Linet M, Yu W, Su LJ. *J Nutr*. 2023 Jan 14;152(12):2669-2676. doi: 10.1093/jn/nxac184.

## Radiologic Threats Laboratory.

[Rapid determination of thorium in urine by quadrupole inductively coupled plasma mass spectrometry \(Q-ICP-MS\).](#) Liu, Yongzhong, Xiao, Ge, Jones, Robert L.. *Journal of Radioanalytical and Nuclear Chemistry* 331, 3957-3964 (2022). <https://doi.org/10.1007/s10967-022-08408-9>.

# Fourth Quarter 2022 Publications.

## National Biomonitoring Program.

[Urinary Phenols in Early to Midpregnancy and Risk of Gestational Diabetes Mellitus: A Longitudinal Study in a Multiracial Cohort.](#) Zhu Y, Hedderson MM, Calafat AM, Alexeeff SE, Feng J, Quesenberry CP, Ferrara A. *Diabetes*. 2022 Dec 1;71(12):2539-2551. doi: 10.2337/db22-0028.

[Gestational exposure to organophosphate esters and infant anthropometric measures in the first 4 weeks after birth.](#) Yang W, Braun JM, Vuong AM, Percy Z, Xu Y, Xie C, Deka R, Calafat AM, Ospina M, Burris HH, Yolton K, Cecil KM, Lanphear BP, Chen A. *Sci Total Environ*. 2023 Jan 20;857(Pt 1):159322. doi: 10.1016/j.scitotenv.2022.159322. Epub 2022 Oct 8.

[Exposure to glyphosate in the United States: Data from the 2013-2014 National Health and Nutrition Examination Survey.](#) Ospina M, Schütze A, Morales-Agudelo P, Vidal M, Wong LY, Calafat AM. *Environ Int*. 2022 Dec;170:107620. doi: 10.1016/j.envint.2022.107620. Epub 2022 Nov 4.

[Interpreting biomonitoring data: Introducing the international human biomonitoring \(i-HBM\) working group's health-based guidance value \(HB2GV\) dashboard.](#) Nakayama SF, St-Amand A, Pollock T, Apel P, Bamai YA, Barr DB, Bessems J, Calafat AM, Castaño A, Covaci A, Duca RC, Faure S, Galea KS, Hays S, Hopf NB, Ito Y, Jeddi MZ, Kolossa-Gehring M, Kumar E, LaKind JS, López ME, Louro H, Macey K, Makris KC, Melnyk L, Murawski A, Naiman J, Nassif J, Noisel N, Poddalgoda D, Quirós-Alcalá L, Rafiee A, Rambaud L, Silva MJ, Ueyama J, Verner MA, Waras MN, Werry K. *Int J Hyg Environ Health*. 2023 Jan;247:114046. doi: 10.1016/j.ijheh.2022.114046. Epub 2022 Nov 7.

[Urinary phenol concentrations and fecundability and early pregnancy loss.](#) Rosen Vollmar AK, Weinberg CR, Baird DD, Wilcox AJ, Calafat AM, Deziel NC, Johnson CH, Jukic AMZ. *Hum Reprod*. 2023 Jan 5;38(1):139-155. doi: 10.1093/humrep/deac230.

[Associations of gestational exposure to organophosphate esters with gestational age and neonatal anthropometric measures: The HOME study.](#) Yang W, Braun JM, Vuong AM, Percy Z, Xu Y, Xie C, Deka R, Calafat AM, Ospina M, Burris HH, Yolton K, Cecil KM, Lanphear BP, Chen A. *Environ Pollut*. 2023 Jan 1;316(Pt 1):120516. doi: 10.1016/j.envpol.2022.120516. Epub 2022 Oct 28.

[Variability in urinary phthalates, phenols, and parabens across childhood and relation to adolescent breast composition in Chilean girls.](#) Yoon LS, Binder AM, Pereira A, Calafat AM, Shepherd J, Corvalán C, Michels KB. *Environ Int*. 2022 Dec;170:107586. doi: 10.1016/j.envint.2022.107586. Epub 2022 Oct 19.

[Early exposure to flame retardants is prospectively associated with anxiety symptoms in adolescents: A prospective birth cohort study.](#) Strawn JR, Xu Y, Cecil KM, Khoury J, Altaye M, Braun JM, Lanphear BP, Sjodin A, Chen A, Yolton K. *Depress Anxiety*. 2022 Dec;39(12):780-793. doi: 10.1002/da.23284. Epub 2022 Oct 11.

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[Childhood exposures to environmental chemicals and neurodevelopmental outcomes in congenital heart disease.](#) Gaynor JW, Burnham NB, Ittenbach RF, Gerdes M, Bernbaum JC, Zackai E, Licht DJ, Russell WW, Zullo EE, Miller T, Hakonarson H, Clarke KA, Jarvik GP, Calafat AM, Bradman A, Bellinger DC, Henretig FM, Coker ES. PLoS One. 2022 Nov 17;17(11):e0277611. doi: 10.1371/journal.pone.0277611. eCollection 2022.

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## **Nutrition, Chronic, and Infectious Disease Laboratories.**

[Variant APOL1 protein in plasma associates with larger particles in humans and mouse models of kidney injury.](#) Andrews M, Yoshida T, Henderson CM, Pflaum H, McGregor A, Lieberman JA, de Boer IH, Vaisar T, Himmelfarb J, Kestenbaum B, Chung JY, Hewitt SM, Santo BA, Ginley B, Sarder P, Rosenberg AZ, Murakami T, Kopp JB, Kuklenyik Z, Hoofnagle AN. PLoS One. 2022 Oct 24;17(10):e0276649. doi: 10.1371/journal.pone.0276649. eCollection 2022.

[Integrated Quantitative Targeted Lipidomics and Proteomics Reveal Unique Fingerprints of Multiple Metabolic Conditions.](#) Ivanova AA, Rees JC, Parks BA, Andrews M, Gardner M, Grigorutsa E, Kuklenyik Z, Pirkle JL, Barr JR. Biomolecules. 2022 Oct 8;12(10):1439. doi: 10.3390/biom12101439.

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