

CHAPTER 8. REFERENCES

- +3M. 1983. Two year oral (diet) toxicity/carcinogenicity study of fluorochemical FC-143 in rats. Washington, DC: U.S. Environmental Protection Agency. Submitted to the U.S. Environmental Protection Agency under TSCA Section 8E. OTS0204926-1.
- 3M. 1999. The science of organic fluorochemistry. U.S. Environmental Protection Agency. OPPT-2002-0043-0006. <http://www.fluoridealert.org/pesticides/pfos.fr.final.docket.0006.pdf>. July 08, 2008.
- 3M. 2000. Sulfonated perfluorochemicals in the environment: Sources; dispersion, fate and effects. 3M Company submission to the U.S. Environmental Protection Agency's Administrative Record. OPPT-2002-0043-0005.
- +3M. 2001. A 28-day oral (gavage) toxicity study of T-7485 in Sprague-Dawley rats. St Paul, MN: 3M Corporate Toxicology.
- +3M. 2007a. A 5-day repeat dose oral toxicity screening study in rats with a 7-day recovery period with MTDID. St. Paul, MN: 3M Corporate Toxicology.
- 3M. 2007b. Remedial investigation report. Phase 2. Fluorochemical (FC) data assessment report for the Cottage Grove, MN site. St. Paul, MN: 3M Corporate Toxicology.
- 3M. 2008a. Information about PFOS and PFOA. 3M Company. http://solutions.3m.com/wps/portal/3M/en_US/PFOS/PFOA/. April 01, 2008.
- 3M. 2008b. Data assessment report. 3M Decatur, Alabama facility PFOA site-related environmental monitoring program. St. Paul, MN: 3M Company.
- 3M. 2008c. Screening level human exposure assessment report. 3M Decatur, Alabama facility PFOA site-related environmental monitoring program. St. Paul, MN: 3M Company.
- 3M. 2010. GLP10-01-01, Interim report 10: Analysis of PFBS, PFHS, and PFOS in groundwater samples collected at off-site wells located in Decatur, AL in October 2010. In: Docket EPA-HQ-2004-0112-0155. Letter to USEPA, Docket Center, from Gary A. Hohenstein, Manager of Environmental and Regulatory Affairs, 3M Company. 3M. <https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OPPT-2004-0112-0155&attachmentNumber=9&contentType=pdf> February 28, 2017.
- 3M. 2012. E12-0849 Revised final report- Decatur soils- December 2012. <https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OPPT-2004-0112-0155&attachmentNumber=36&contentType=pdf> February 28, 2017.
- Abbott BD. 2009. Review of the expression of peroxisome proliferator-activated receptors alpha (PPAR α), beta (PPAR β), and gamma (PPAR γ) in rodent and human development. *Reprod Toxicol* 27(3-4, Sp. Iss. SI):246-257. 10.1016/j.reprotox.2008.10.001.
- +Abbott BD, Wolf CJ, Das KP, et al. 2009. Developmental toxicity of perfluorooctane sulfonate (PFOS) is not dependent on expression of peroxisome proliferator activated receptor-alpha (PPAR α) in the mouse. *Reprod Toxicol* 27(3-4):258-265.
- +Abbott BD, Wolf CJ, Schmid JE, et al. 2007. Perfluorooctanoic acid (PFOA)-induced developmental toxicity in the mouse is dependent on expression of peroxisome proliferator activated receptor-alpha. *Toxicol Sci* 98(2):571-581.
- Abbott BD, Wood CR, Watkins AM, et al. 2010. Peroxisome proliferator-activated receptors alpha, beta, and gamma mRNA and protein expression in human fetal tissues. *PPAR Res* 10.1155/2010/690907.
- Abbott BD, Wood CR, Watkins AM, et al. 2012. Effects of perfluorooctanoic acid (PFOA) on expression of peroxisome proliferator-activated receptors (PPAR) and nuclear receptor-regulated genes in fetal and postnatal CD-1 mouse tissues. *Reprod Toxicol* 33(4):491-505.

+ Cited in supplemental document

8. REFERENCES

- Abdellatif A, Al-Tonsy AH, Awad ME, et al. 2004. Peroxisomal enzymes and δ -hydroxydeoxyguanosine in rat liver treated with perfluorooctanoic acid. *Dis Markers* 19(1):19-25.
- Abdellatif AG, Preat V, Taper HS, et al. 1991. The modulation of rat liver carcinogenesis by perfluorooctanoic acid, a peroxisome proliferator. *Toxicol Appl Pharmacol* 111:530-537.
- ACGIH. 2016. CAS Number index. TLVs and BEIs based on the documentation of the threshold limit values for chemical substances and physical agents and biological exposure indices. Cincinnati, OH: American Conference of Governmental Industrial Hygienists, 233-250.
- Ahmed DY, Abd Ellah MR. 2012. Effect of exposure to perfluorooctanoic acid on hepatic antioxidants in mice. *Comp Clin Pathol* 21(6):1643-1645.
- AIHA. 2015. Current ERPG Values (2015). Fairfax, VA: American Industrial Hygiene Association. <https://www.aiha.org/get-involved/AIHAGuidelineFoundation/EmergencyResponsePlanningGuidelines/Documents/2015%20ERPG%20Levels.pdf>. March 22, 2016.
- +Albrecht PP, Torsell NE, Krishnan P, et al. 2013. A species difference in the peroxisome proliferator-activated receptor α -dependent response to the developmental effects of perfluorooctanoic acid. *Toxicol Sci* 131(2):568-582.
- Alexander BH, Olsen GW. 2007. Bladder cancer in perfluorooctanesulfonyl fluoride manufacturing workers. *Ann Epidemiol* 17(6):471-478.
- Alexander BH, Olsen GW, Burriss JM, et al. 2003. Mortality of employees of a perfluorooctanesulphonyl fluoride manufacturing facility. *Occup Environ Med* 60:722-729.
- Allen BC, Covington TR, Clewell HJ. 1996. Investigation of the impact of pharmacokinetic variability and uncertainty on risks predicted with a pharmacokinetic model for chloroform. *Toxicology* 111(1-3):289-303.
- Alves A, Jacobs G, Vanermen G, et al. 2015. New approach for assessing human perfluoroalkyl exposure via hair. *Talanta* 144:574-583. 10.1016/j.talanta.2015.07.009.
- Andersen CS, Fei C, Gamborg M, et al. 2010. Prenatal exposures to perfluorinated chemicals and anthropometric measures in infancy. *Am J Epidemiol* 172(11):1230-1237.
- Andersen CS, Fei C, Gamborg M, et al. 2013. Prenatal exposures to perfluorinated chemicals and anthropometry at 7 years of age. *Am J Epidemiol* 178(6):921-927.
- Andersen ME, Butenhoff JL, Chang SC, et al. 2008. Perfluoroalkyl acids and related chemistries-toxicokinetics and modes of action. *Toxicol Sci* 102(1):3-14.
- Andersen ME, Clewell HJ, Tan YM, et al. 2006. Pharmacokinetic modeling of saturable, renal resorption of perfluoroalkylacids in monkeys - probing the determinants of long plasma half-lives. *Toxicology* 227(1-2):156-164.
- Anderson RH, Long GC, Porter RC, et al. 2016. Occurrence of select perfluoroalkyl substances at U.S. Air Force aqueous film-forming foam release sites other than fire-training areas: Field-validation of critical fate and transport properties. *Chemosphere* 150:678-685. 10.1016/j.chemosphere.2016.01.014.
- Anderson-Mahoney P, Kotlerman J, Takhar H, et al. 2008. Self-reported health effects among community residents exposed to perfluorooctanoate. *New Solut* 18(2):129-143.
- Apelberg BJ, Goldman LR, Calafat AM, et al. 2007a. Determinants of fetal exposure to polyfluoroalkyl compounds in Baltimore, Maryland. *Environ Sci Technol* 41:3891-3897.
- Apelberg FJ, Witter FR, Herbstman JB, et al. 2007b. Cord serum concentrations of perfluorooctane sulfonate (PFOS) and perfluorooctanoate (PFOA) in relation to weight and size at birth. *Environ Health Perspect* 115:1670-1676.
- Armitage J, Cousins I, Buck RC, et al. 2006. Modeling global-scale fate and transport of perfluorooctanoate emitted from direct sources. *Environ Sci Technol* 40:6969-6975.
- Ashley-Martin J, Dodds L, Arbuckle TE, et al. 2016. Maternal and neonatal levels of perfluoroalkyl substances in relation to gestational weight gain. *Int J Environ Res Public Health* 13(1):146. 10.3390/ijerph13010146.

8. REFERENCES

- Ashley-Martin J, Dodds L, Levy AR. 2015. Prenatal exposure to phthalates, bisphenol A and perfluoroalkyl substances and cord blood levels of IgE, TSLP and IL-33. *Environ Res* 140:360-368.
- ATSDR. 1989. Decision guide for identifying substance-specific data needs related to toxicological profiles; Notice. Agency for Toxic Substances and Disease Registry, Division of Toxicology. *Fed Regist* 54(174):37618-37634.
- ATSDR. 2003. Guidance for the preparation of toxicological profiles. Agency for Toxic Substances and Disease Registry. <https://www.atsdr.cdc.gov/toxprofiles/index.asp#profiledevelopment>. July 6, 2017.
- ATSDR. 2005. Health consultation. 3M chemolite. Perfluorochemical releases at the 3M-Cottage Grove facility. Atlanta, GA: Agency for Toxic Substances and Disease Registry. http://www.atsdr.cdc.gov/HAC/pha/3M-CGF021805-MN/3M-CGF021805-MN_pt1.pdf. June 27, 2008.
- ATSDR. 2008. Public health Assessment for perfluorochemical contamination in Lake Elmo and Oakdale, Washington County, Minnesota. EPA facility ID: MND980704738 and MND980609515 August 29, 2008. Agency for Toxic Substances and Disease Registry. <http://www.health.state.mn.us/divs/eh/hazardous/sites/washington/lakeelmo/phaelmoakdale.pdf>. November 13, 2008.
- ATSDR. 2013. Health consultation. Exposure investigation report. Perfluorochemical serum sampling in the vicinity of Decatur, Alabama, Morgan, Lawrence, and Limestone counties. Atlanta, GA: Agency for Toxic Substances and Disease Registry, U.S. Department of Health and Human Services.
- ATSDR. 2017. Perfluoroalkyls. Full SPL data. Substance priority list (SPL) resource page. Agency for Toxic Substances and Disease Registry, Centers for Disease Control and Prevention. <http://www.atsdr.cdc.gov/SPL/resources/index.html>. October 6, 2017.
- Bach CC, Bech BH, Nohr EA, et al. 2016. Perfluoroalkyl acids in maternal serum and indices of fetal growth: The Aarhus Birth Cohort. *Environ Health Perspect* 10.1289/ehp.1510046.
- Bach CC, Bech BH, Nohr EA, et al. 2015a. Serum perfluoroalkyl acids and time to pregnancy in nulliparous women. *Environ Res* 142:535-541. 10.1016/j.envres.2015.08.007.
- Bach CC, Liew Z, Bech BH, et al. 2015b. Perfluoroalkyl acids and time to pregnancy revisited: An update from the Danish National Birth Cohort. *Environ Health* 14:59. 10.1186/s12940-015-0040-9.
- Bach CC, Liew Z, Bech BH, et al. 2015c. Additional file to perfluoroalkyl acids and time to pregnancy revisited: An update from the Danish National Birth Cohort [Environ Health 14:59]. *Environ Health* 10.1186/s12940-015-0040-9.
- Bae J, Kim S, Schisterman EF, et al. 2015. Maternal and paternal serum concentrations of perfluoroalkyl and polyfluoroalkyl substances and the secondary sex ratio. *Chemosphere* 133:31-40. 10.1016/j.chemosphere.2015.03.015.
- Barbarossa A, Masetti R, Gazzotti T, et al. 2013. Perfluoroalkyl substances in human milk: A first survey in Italy. *Environ Int* 51:27-30.
- Barber JL, Berger U, Chaemfa C, et al. 2007. Analysis of per- and polyfluorinated alkyl substances in air samples from Northwest Europe. *J Environ Monit* 9:530-541.
- Barnes DG, Dourson M. 1988. Reference dose (RfD): Description and use in health risk assessments. *Regul Toxicol Pharmacol* 8(4):471-486.
- Barrett ES, Chen C, Thurston SW, et al. 2015. Perfluoroalkyl substances and ovarian hormone concentrations in naturally cycling women. *Fertil Steril* 103(5):1261-1270 e1263. 10.1016/j.fertnstert.2015.02.001.
- Barry V, Darrow LA, Klein M, et al. 2014. Early life perfluorooctanoic acid (PFOA) exposure and overweight and obesity risk in adulthood in a community with elevated exposure. *Environ Res* 132:62-69.
- Barry V, Winquist A, Steenland K. 2013. Perfluorooctanoic acid (PFOA) exposures and incident cancers among adults living near a chemical plant. *Environ Health Perspect* 121(11-12):1313-1318.

8. REFERENCES

- Bartell SM, Calafat AM, Lyu C, et al. 2010. Rate of decline in serum PFOA concentrations after granular activated carbon filtration at two public water systems in Ohio and West Virginia. *Environ Health Perspect* 118(2):222-228.
- Barton CA, Butler LE, Zarzecki CJ, et al. 2006. Characterizing perfluorooctanoate in ambient air near the fence line of a manufacturing facility: Comparing modeled and monitored values. *J Air Waste Manag Assoc* 56:48-55.
- Barton CA, Kaiser MA, Russell MH. 2007. Partitioning and removal of perfluorooctanoate during rain events: The importance of physical-chemical properties. *J Environ Monit* 9:839-846.
- Beesoon S, Martin JW. 2015. Isomer-specific binding affinity of perfluorooctanesulfonate (PFOS) and perfluorooctanoate (PFOA) to serum proteins. *Environ Sci Technol* 49(9):5722-5731.
- Begley TH, White K, Honigfort P, et al. 2005. Perfluorochemicals: Potential sources of and migration from food packaging. *Food Addit Contam* 22(10):1023-1031.
- Benninghoff AD, Bisson WH, Koch DC, et al. 2011. Estrogen-like activity of perfluoroalkyl acids *in vivo* and interaction with human and rainbow trout estrogen receptors *in vitro*. *Toxicol Sci* 120(1):42-58.
- Benninghoff AD, Orner GA, Buchner CH, et al. 2012. Promotion of hepatocarcinogenesis by perfluoroalkyl acids in rainbow trout. *Toxicol Sci* 125(1):69-78. 10.1093/toxsci/kfr267.
- Benskin JP, De Silva AO, Martin LJ, et al. 2009. Disposition of perfluorinated acid isomers in Sprague-Dawley rats: Part 1: Single dose. *Environ Toxicol Chem* 28(3):542-554.
- Berg V, Nost TH, Hansen S, et al. 2015. Assessing the relationship between perfluoroalkyl substances, thyroid hormones and binding proteins in pregnant women; a longitudinal mixed effects approach. *Environ Int* 77:63-69. 10.1016/j.envint.2015.01.007.
- +Biegel LB, Hurtt ME, Frame SR, et al. 2001. Mechanisms of extrahepatic tumor induction by peroxisome proliferators in male CD rats. *Toxicol Sci* 60(1):44-55.
- +Biegel LB, Liu RC, Hurtt ME, et al. 1995. Effects of ammonium perfluorooctanoate on Leydig cell function: *In vitro*, *in vivo*, and *ex vivo* studies. *Toxicol Appl Pharmacol* 134(1):18-25.
- +Bijland S, Rensen PC, Pieterman EJ, et al. 2011. Perfluoroalkyl sulfonates cause alkyl chain length-dependent hepatic steatosis and hypolipidemia mainly by impairing lipoprotein production in APOE*3-Leiden CETP mice. *Toxicol Sci* 123(1):290-303. 10.1093/toxsci/kfr142.
- Bilott RA. 2004. PFOA-exposed community blood sample results (for AR-226 and OPPT-2003-0012). Submitted to the U.S. Environmental Protection Agency under TSCA Section FYI. http://www.epa.gov/oppt/tsca8e/pubs/8ehq/2004/oct04/fyi_1004_01480a.pdf. May 5, 2014.
- Bilott RA. 2005a. Perfluorochemical residential exposure data for Washington County, Minnesota. Submitted to the U.S. Environmental Protection Agency.
- Bilott RA. 2005b. Perfluorochemical residential exposure data for Washington County, Minnesota. Submitted to the U.S. Environmental Protection Agency. [http://yosemite.epa.gov/sab/sabproduct.nsf/1BF9ABCD791BDDE38525711F000156BE/\\$File/pfoa_sab_lett-bilott_05-20-05.pdf](http://yosemite.epa.gov/sab/sabproduct.nsf/1BF9ABCD791BDDE38525711F000156BE/$File/pfoa_sab_lett-bilott_05-20-05.pdf). May 5, 2014.
- Bilott RA. 2007. Perfluorochemical residential exposure data for Washington County, Minnesota. EPA-HQ-OPPT-2003-0012-1230. <https://www.regulations.gov/document?D=EPA-HQ-OPPT-2003-0012-1230>. February 28, 2017.
- Bischel HN, MacManus-Spencer LA, Zhang C, et al. 2011. Strong associations of short-chain perfluoroalkyl acids with serum albumin and investigation of binding mechanisms. *Environ Toxicol Chem* 30(11):2423-2430.
- Bjermo H, Darnerud PO, Pearson M, et al. 2013. Serum concentrations of perfluorinated alkyl acids and their associations with diet and personal characteristics among Swedish adults. *Mol Nutr Food Res* 57(12):2206-2215.
- Bjerregaard-Olesen C, Bach CC, Long M, et al. 2016. Time trends of perfluorinated alkyl acids in serum from Danish pregnant women 2008-2013. *Environ Int* 91:14-21. 10.1016/j.envint.2016.02.010.

8. REFERENCES

- Bjork JA, Wallace KB. 2009. Structure-activity relationships and human relevance for perfluoroalkyl acid-induced transcriptional activation of peroxisome proliferation in liver cell cultures. *Toxicol Sci* 111(1):89-99.
- Bjork JA, Butenhoff JL, Wallace KB. 2011. Multiplicity of nuclear receptor activation by PFOA and PFOS in primary human and rodent hepatocytes. *Toxicology* 288(1-3):8-17. 10.1016/j.tox.2011.06.012.
- Björklund JA, Thuresson K, de Wit CA. 2009. Perfluoroalkyl compounds (PFCs) in indoor dust: Concentrations, human exposure estimates, and sources. *Environ Sci Technol* 43(7):2276-2281.
- Blaine AC, Rich CD, Hundal LS, et al. 2013. Uptake of perfluoroalkyl acids into edible crops via land applied biosolids: Field and greenhouse studies. *Environ Sci Technol* 47:14062-14069.
- Blaine AC, Rich CD, Sedlacko EM, et al. 2014a. Perfluoroalkyl acid distribution in various plant compartments of edible crops grown in biosolids-amended soils. *Environ Sci Technol* 48(14):7858-7865. 10.1021/es500016s.
- Blaine AC, Rich CD, Sedlacko EM, et al. 2014b. Perfluoroalkyl acid uptake in lettuce (*Lactuca sativa*) and strawberry (*Fragaria ananassa*) irrigated with reclaimed water. *Environ Sci Technol* 48:14361-14368.
- Bloom MS, Kannan K, Spliethoff HM, et al. 2010. Exploratory assessment of perfluorinated compounds and human thyroid function. *Physiol Behav* 99(2):240-245.
- Bogdanska J, Borg D, Sundstrom M, et al. 2011. Tissue distribution of ³⁵S-labelled perfluorooctane sulfonate in adult mice after oral exposure to a low environmentally relevant dose or a high experimental dose. *Toxicology* 284(1-3):54-62.
- Bogdanska J, Sundstrom M, Bergstrom U, et al. 2014. Tissue distribution of ³⁵S-labelled perfluorobutanesulfonic acid in adult mice following dietary exposure for 1-5 days. *Chemosphere* 98:28-36.
- Boiteux V, Dauchy X, Rosin C, et al. 2012. National screening study on 10 perfluorinated compounds in raw and treated tap water in France. *Arch Environ Contam Toxicol* 63(1):1-12. 10.1007/s00244-012-9754-7.
- Bonefeld-Jorgensen EC, Long M, Bossi R, et al. 2011. Perfluorinated compounds are related to breast cancer risk in Greenlandic Inuit: A case control study. *Environ Health* 10:88. 10.1186/1476-069X-10-88.
- Bonefeld-Jorgensen EC, Long M, Fredslund SO, et al. 2014. Breast cancer risk after exposure to perfluorinated compounds in Danish women: A case-control study nested in the Danish National Birth Cohort. *Cancer Causes Control* 25(11):1439-1448. 10.1007/s10552-014-0446-7.
- Borg D, Bogdanska J, Sundstrom M, et al. 2010. Tissue distribution of ³⁵S-labelled perfluorooctane sulfonate (PFOS) in C57Bl/6 mice following late gestational exposure. *Reprod Toxicol* 30(4):558-565.
- Bossi R, Riget FF, Dietz R. 2005. Temporal and spatial trends of perfluorinated compounds in ringed seal (*Phoca hispida*) from Greenland. *Environ Sci Technol* 39:7416-7422.
- Boulanger B, Peck AM, Schnoor JL, et al. 2005. Mass budget of perfluorooctane surfactants in Lake Ontario. *Environ Sci Technol* 39:74-79.
- Boulanger B, Vargo J, Schnoor JL, et al. 2004. Detection of perfluorooctane surfactants in Great Lakes water. *Environ Sci Technol* 38:4064-4070.
- Brantsaeter AL, Whitworth KW, Ydersbond TA, et al. 2013. Determinants of plasma concentration of perfluoroalkyl substances in pregnant Norwegian women. *Environ Int* 54:74-84.
- Braun JM, Chen A, Romano ME, et al. 2016a. Prenatal perfluoroalkyl substance exposure and child adiposity at 8 years of age: The HOME study. *Obesity (Silver Spring, Md.)* 24(1):231-237. 10.1002/oby.21258.

8. REFERENCES

- Braun JM, Chen A, Romano ME, et al. 2016b. Supplemental material for: Prenatal perfluoroalkyl substance exposure and child adiposity at 8 years of age: The HOME study. [Obesity 24(1):231-237]. Obesity (Silver Spring, Md.) 24(1):231-237. <http://onlinelibrary.wiley.com/store/10.1002/oby.21258/asset/supinfo/oby21258-sup-0001-supinfo01.docx?v=1&s=cac722d8275d428f198a62d78041881f25813e38>.
- Braun JM, Kalkbrenner AE, Just AC, et al. 2014. Gestational exposure to endocrine-disrupting chemicals and reciprocal social, repetitive, and stereotypic behaviors in 4- and 5-year-old children: The HOME study. Environ Health Perspect 122(5):513-520. 10.1289/ehp.1307261.
- +Brewster DW, Birnbaum LS. 1989. The biochemical toxicity of perfluorodecanoic acid in the mouse is different from that of 2,3,7,8-tetrachlorodibenzo-p-dioxin. Toxicol Appl Pharmacol 99:544-554.
- Brochot C, Smith TJ, Bois FY. 2007. Development of a physiologically based toxicokinetic model for butadiene and four major metabolites in humans: Global sensitivity analysis for experimental design issues. Chem Biol Interact 167(3):168-183. 10.1016/j.cbi.2007.02.010.
- Buck RC, Franklin J, Berger U, et al. 2011. Perfluoroalkyl and polyfluoroalkyl substances in the environment: Terminology, classification, and origins. Integr Environ Assess Manag 7(4):513-541.
- Buck Louis GM, Chen Z, Schisterman EF, et al. 2015. Perfluorochemicals and human semen quality: The LIFE study. Environ Health Perspect 123(1):57-63. 10.1289/ehp.1307621.
- Buck Louis GM, Peterson CM, Chen Z, et al. 2012. Perfluorochemicals and endometriosis. The ENDO study. Epidemiology 23(6):799-805.
- Buist SCN, Klaassen CD. 2004. Rat and mouse differences in gender-predominant expression of organic anion transporter (OAT1-3; SLC22A6-9) mRNA levels. Drug Metab Dispos 32(6):620-625.
- Burns DC, Ellis DA, Li H, et al. 2008. Experimental pK_a determination for perfluorooctanoic acid (PFOA) and the potential impact of pK_a concentration dependence on laboratory-measured phenomena and environmental modeling. Environ Sci Technol 42(24):9283-9288.
- Buser MC, Scinicariello F. 2016. Perfluoroalkyl substances and food allergies in adolescents. Environ Int 88:74-79. 10.1016/j.envint.2015.12.020.
- +Butenhoff JL, Bjork JA, Chang SC, et al. 2012a. Toxicological evaluation of ammonium perfluorobutyrate in rats: Twenty-eight-day and ninety-day oral gavage studies. Reprod Toxicol 33(4):513-530.
- +Butenhoff JL, Chang S, Ehresman DJ, et al. 2009a. Evaluation of potential reproductive and developmental toxicity of potassium perfluorohexanesulfonate in Sprague Dawley rats. Reprod Toxicol 27:331-341.
- +Butenhoff JL, Chang SC, Olsen GW, et al. 2012b. Chronic dietary toxicity and carcinogenicity study with potassium perfluorooctanesulfonate in Sprague Dawley rats. Toxicology 293(1-3):1-15.
- +Butenhoff J, Costa G, Elcombe C, et al. 2002. Toxicity of ammonium perfluorooctanoate in male Cynomolgus monkeys after oral dosing for 6 months. Toxicol Sci 69(1):244-257.
- +Butenhoff JL, Ehresman DJ, Chang SC, et al. 2009b. Gestational and lactational exposure to potassium perfluorooctanesulfonate (K+PFOS) in rats: Developmental neurotoxicity. Reprod Toxicol 27(3-4):319-330.
- Butenhoff JL, Gaylor DW, Moore JA, et al. 2004a. Characterization of risk for general population exposure to perfluorooctanoate. Regul Toxicol Pharmacol 39(3):363-380.
- +Butenhoff JL, Kennedy GL, Frame SR, et al. 2004b. The reproductive toxicology of ammonium perfluorooctanoate (APFO) in the rat. Toxicology 196(1-2):95-116.
- Butenhoff JL, Kennedy GL, Hinderliter PM, et al. 2004c. Pharmacokinetics of perfluorooctanoate in Cynomolgus monkeys. Toxicol Sci 82:394-406.
- Butenhoff JL, Kennedy GL, Jung R, et al. 2014. Evaluation of perfluorooctanoate for potential genotoxicity. Toxicol Rep 1:252-270.
- Butenhoff JL, Pieterman E, Ehresman DJ, et al. 2012c. Distribution of perfluorooctanesulfonate and perfluorooctanoate into human plasma lipoprotein fractions. Toxicol Lett 210(3):360-365. 10.1016/j.toxlet.2012.02.013.

8. REFERENCES

- Butt CM, Mabury SA, Kwan M, et al. 2008. Spatial trends of perfluoroalkyl compounds in ringed seals (*Phoca hispida*) from the Canadian Arctic. *Environ Toxicol Chem* 27(3):542-553.
- Butt CM, Mabury SA, Muir DCG, et al. 2007a. Prevalence of long-chained perfluorinated carboxylates in seabirds from the Canadian Arctic between 1975 and 2004. *Environ Sci Technol* 41:3521-3528.
- Butt CM, Muir DCG, Stirling I, et al. 2007b. Rapid response of arctic ringed seals to changes in perfluoroalkyl production. *Environ Sci Technol* 41(1):42-49.
- Calafat AM, Kuklenyik Z, Caudill SP, et al. 2006a. Perfluorochemicals in pooled serum samples from United States residents in 2001 and 2002. *Environ Sci Technol* 40:2128-2134.
- Calafat AM, Kuklenyik Z, Reidy JA, et al. 2007a. Serum concentrations of 11 polyfluoroalkyl compounds in the U.S. population: Data from the National Health and Nutrition Examination Survey (NHANES) 1999-2000. *Environ Sci Technol* 41:2237-2242.
- Calafat AM, Needham LL, Kuklenyik Z, et al. 2006b. Perfluorinated chemicals in selected residents of the American continent. *Chemosphere* 63:490-496.
- Calafat AM, Wong L, Kuklenyik Z, et al. 2007b. Polyfluoroalkyl chemicals in the U.S. population: Data from the National Health and Nutrition Examination Survey (NHANES) 2003-2004 and comparisons with NHANES 1999-2000. *Environ Health Perspect* 115:1596-1602.
- Cariou R, Veyrand B, Yamada A, et al. 2015. Perfluoroalkyl acid (PFAA) levels and profiles in breast milk, maternal and cord serum of French women and their newborns. *Environ Int* 84:71-81.
- Carr CK, Watkins AM, Wolf CJ, et al. 2013. Testing for departures from additivity in mixtures of perfluoroalkyl acids (PFAAs). *Toxicology* 306:169-175. 10.1016/j.tox.2013.02.016.
- CAS. 2008. Registry. Columbus, OH: Chemical Abstracts Service. <http://stnweb.cas.org/>. March 14, 2008.
- +Case MT, York RG, Christian MS. 2001. Rat and rabbit oral developmental toxicology studies with two perfluorinated compounds. *Int J Toxicol* 20(2):101-109.
- Cattley RC, DeLuca J, Elcombe C, et al. 1998. Do peroxisome proliferating compounds pose a hepatocarcinogenic hazard to humans? *Regul Toxicol Pharmacol* 27:47-60.
- CDC. 2013. Fourth national report on human exposure to environmental chemicals. Updated tables, September 2013. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.
- CDC. 2015. Fourth national report on human exposure to environmental chemicals. February 2015. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. https://www.cdc.gov/biomonitoring/pdf/fourthreport_updatedtables_feb2015.pdf. May 25, 2017.
- CDC. 2018. Fourth national report on human exposure to environmental chemicals. Updated Tables, March 2018. Atlanta, GA: Centers for Disease Control and Prevention, Department of Health and Human Services. https://www.cdc.gov/exposurereport/pdf/FourthReport_UpdatedTables_Volume1_Mar2018.pdf. April 23, 2018.
- Celik A, Eke D, Ekinici SY, et al. 2013. The protective role of curcumin on perfluorooctane sulfonate-induced genotoxicity: Single cell gel electrophoresis and micronucleus test. *Food Chem Toxicol* 53:249-255.
- CEMN. 2008. CEMC focussing on ionizing surfactants. Canadian Environmental Modelling Network. <http://www.trentu.ca/academic/aminss/envmodel/cemn/NewsReports/CEMNnews200804.pdf>. June 24, 2008.
- Chan E, Burstyn I, Cherry N, et al. 2011. Perfluorinated acids and hypothyroxinemia in pregnant women. *Environ Res* 111(4):559-564.
- Chang ET, Adami H, Boffetta P, et al. 2014. A critical review of perfluorooctanoate and perfluorooctanesulfonate exposure and cancer risk in humans. *Crit Rev Toxicol* 44:1-81.
- Chang S, Das K, Ehresman DJ, et al. 2008a. Comparative pharmacokinetics of perfluorobutylate (PFBA) in rats, mice, monkeys, and humans and relevance to human exposure via drinking water. *Toxicol Sci* 104(1):40-53.

8. REFERENCES

- +Chang S, Ehresman DJ, Bjork JA, et al. 2009. Gestational and lactational exposure to potassium perfluorooctanesulfonate (K+PFOS) in rats: Toxicokinetics, thyroid hormone status, and related gene expression. *Reprod Toxicol* 27(3-4):387-399.
- Chang S, Noker PE, Gorman GS, et al. 2012. Comparative pharmacokinetics of perfluorooctanesulfonate (PFOS) in rats, mice, and monkeys. *Reprod Toxicol* 33(4):428-440.
- +Chang S, Thibodeaux JR, Eastvold ML, et al. 2008b. Thyroid hormone status and pituitary function in adult rats given oral doses of perfluorooctanesulfonate (PFOS). *Toxicology* 243:330-339.
- Château-Degat ML, Pereg D, Dallaire R, et al. 2010. Effects of perfluorooctanesulfonate exposure on plasma lipid levels in the Inuit population of Nunavik (Northern Quebec). *Environ Res* 110(7):710-717.
- ChemIDplus. 2008. Perfluoroalkyls. ChemIDplus. Bethesda, MD: U.S. National Library of Medicine. <http://sis.nlm.nih.gov/chemical.html>. July 10, 2008.
- ChemIDplus. 2017. Ammonium perfluorooctanoate. Bethesda, MD: ChemIDplus. U.S. National Library of Medicine. <http://sis.nlm.nih.gov/chemical.html>. December 22, 2017.
- Chen MH, Ha EH, Liao HF, et al. 2013. Perfluorinated compound levels in cord blood and neurodevelopment at 2 years of age. *Epidemiology* 24(6):800-808. 10.1097/EDE.0b013e3182a6dd46.
- Chen MH, Ha EH, Wen TW, et al. 2012a. Perfluorinated compounds in umbilical cord blood and adverse birth outcomes. *PLoS ONE* 7(8):e42474.
- +Chen T, Zhang L, Yue JQ, et al. 2012b. Prenatal PFOS exposure induces oxidative stress and apoptosis in the lung of rat off-spring. *Reprod Toxicol* 33(4):538-545.
- Chen YM, Guo LH. 2009. Fluorescence study on site-specific binding of perfluoroalkyl acids to human serum albumin. *Arch Toxicol* 83(3):255-261.
- +Cheng J, Fujimura M, Zhao W, et al. 2013. Neurobehavioral effects, c-Fos/Jun expression and tissue distribution in rat offspring prenatally co-exposed to MeHg and PFOA: PFOA impairs Hg retention. *Chemosphere* 91(6):758-764.
- Cheng W, Ng CA. 2017. A permeability-limited physiologically based pharmacokinetic (PBPK) model for perfluorooctanoic acid (PFOA) in male rats. *Environ Sci Technol* 51(17):9930-9939. 10.1021/acs.est.7b02602.
- Cheng X, Klaassen CD. 2008a. Critical role of PPAR- α in perfluorooctanoic acid- and perfluorodecanoic acid-induced downregulation of oatp uptake transporters in mouse livers. *Toxicol Sci* 106(1):37-45. 10.1093/toxsci/kfn161.
- Cheng X, Klaassen CD. 2008b. Perfluorocarboxylic acids induce cytochrome P450 enzymes in mouse liver through activation of PPAR-alpha and CAR transcription factors. *Toxicol Sci* 106(1):29-36. 10.1093/toxsci/kfn147.
- Chengelis CP, Kirkpatrick JB, Myers NR, et al. 2009. Comparison of the toxicokinetic behavior of perfluorohexanoic acid (PFHxA) and nonafluorobutane-1-sulfonic acid (PFBS) in *Cynomolgus* monkeys and rats. *Reprod Toxicol* 27:400-406.
- Christensen KY, Maisonet M, Rubin C, et al. 2011. Exposure to polyfluoroalkyl chemicals during pregnancy is not associated with offspring age at menarche in a contemporary British cohort. *Environ Int* 37(1):129-135.
- Christensen KY, Raymond M, Thompson BA, et al. 2016. Perfluoroalkyl substances in older male anglers in Wisconsin. *Environ Int* 91:312-318. 10.1016/j.envint.2016.03.012.
- Clara M, Gans O, Weiss S, et al. 2009. Perfluorinated alkylated substances in the aquatic environment: An Austrian case study. *Water Res* 43(18):4760-4768. 10.1016/j.watres.2009.08.004.
- Clarke BO, Smith SR. 2011. Review of 'emerging' organic contaminants in biosolids and assessment of international research priorities for the agricultural use of biosolids. *Environ Int* 37(1):226-247. 10.1016/j.envint.2010.06.004.
- Clewell HJ, Andersen ME. 1985. Risk assessment extrapolations and physiological modeling. *Toxicol Ind Health* 1(4):111-131.

8. REFERENCES

- Conder JM, Hoke RA, De Wolf W, et al. 2008. Are PFCAs bioaccumulative? A critical review and comparison with regulatory criteria and persistent lipophilic compounds. *Environ Sci Technol* 42(4):995-1003.
- Consonni D, Straif K, Symons JM, et al. 2013. Cancer risk among tetrafluoroethylene synthesis and polymerization workers. *Am J Epidemiol* 178(3):350-358.
- +Cook JC, Murray SM, Frame SR, et al. 1992. Induction of Leydig cell adenomas by ammonium perfluorooctanoate: A possible endocrine-related mechanism. *Toxicol Appl Pharmacol* 113(2):209-217.
- Corsini E, Luebke RW, Germolec DR, et al. 2014. Perfluorinated compounds: Emerging POPs with potential immunotoxicity. *Toxicol Lett* 230(2):263-270. 10.1016/j.toxlet.2014.01.038.
- Corton JC, Cunningham ML, Hummer BT, et al. 2014. Mode of action framework analysis for receptor-mediated toxicity: The peroxisome proliferator-activated receptor alpha (PPAR α) as a case study. *Crit Rev Toxicol* 4444(1):1-49. 10.3109/10408444.2013.835784.
- Costa G. 2004. Report on the meeting held on Friday 20th and Saturday 21st 2004 at the Inn at Montchanin Village (Wilmington, USA) with 3M and DuPont delegations. DuPont. Submitted to the U.S. Environmental Protection Agency. AR226-1866.
- Costa G, Sartori S, Consonni D. 2009. Thirty years of medical surveillance in perfluorooctanoic acid production workers. *J Occup Environ Med* 51(3):364-372.
- +Cui L, Zhou QF, Liao CY, et al. 2009. Studies on the toxicological effects of PFOA and PFOS on rats using histological observation and chemical analysis. *Arch Environ Contam Toxicol* 56(2):338-349.
- +Curran I, Hierlihy SL, Liston V, et al. 2008. Altered fatty acid homeostasis and related toxicologic sequelae in rats exposed to dietary potassium perfluorooctanesulfonate (PFOS). *J Toxicol Environ Health A* 71(23):1526-1541.
- Dai J, Li M, Jin Y, et al. 2006. Perfluorooctanesulfonate and perfluorooctanoate in red panda and giant panda from China. *Environ Sci Technol* 40:5647-5652.
- Dallaire R, Ayotte P, Pereg D, et al. 2009. Determinants of plasma concentrations of perfluorooctanesulfonate and brominated organic compounds in Nunavik Inuit adults (Canada). *Environ Sci Technol* 43(13):5130-5136.
- Dalsager L, Christensen N, Husby S, et al. 2016. Association between prenatal exposure to perfluorinated compounds and symptoms of infections at age 1-4 years among 359 children in the Odense Child Cohort. *Environ Int* 96:58-64.
- Darrow LA, Groth AC, Winquist A, et al. 2016. Modeled perfluorooctanoic acid (PFOA) exposure and liver function in a mid-Ohio Valley community. *Environ Health Perspect* [Advance publication]. 10.1289/ehp.1510391.
- Darrow LA, Howards PP, Winquist A, et al. 2014. PFOA and PFOS serum levels and miscarriage risk. *Epidemiology* 25(4):505-512. 10.1097/ede.000000000000103.
- Darrow LA, Stein CR, Steenland K. 2013. Serum perfluorooctanoic acid and perfluorooctane sulfonate concentrations in relation to birth outcomes in the Mid-Ohio Valley, 2005-2010. *Environ Health Perspect* 121(10):1207-1213.
- +Das KP, Grey BE, Zehr RD, et al. 2008. Effects of perfluorobutyrate exposure during pregnancy in the mouse. *Toxicol Sci* 105(1):173-181.
- +Das KP, Grey BE, Rosen MB, et al. 2015. Developmental toxicity of perfluorononanoic acid in mice. *Reprod Toxicol* 51:133-144. 10.1016/j.reprotox.2014.12.012.
- Das KP, Wood CR, Lin MT, et al. 2017. Perfluoroalkyl acids-induced liver steatosis: Effects on genes controlling lipid homeostasis. *Toxicology* 378:37-52. 10.1016/j.tox.2016.12.007.
- Dauchy X, Boiteux V, Rosin C, et al. 2012. Relationship between industrial discharges and contamination of raw water resources by perfluorinated compounds. Part I: Case study of a fluoropolymer manufacturing plant. *Bull Environ Contam Toxicol* 89(3):525-530. 10.1007/s00128-012-0704-x.
- Davis KL, Aucoin MD, Larsen BS, et al. 2007. Transport of ammonium perfluorooctanoate in environmental media near a fluoropolymer manufacturing facility. *Chemosphere* 67:2011-2019.

8. REFERENCES

- de Cock M, de Boer MR, Lamoree M, et al. 2014. First year growth in relation to prenatal exposure to endocrine disruptors - a Dutch prospective cohort study. *Int J Environ Res Public Health* 11(7):7001-7021. 10.3390/ijerph110707001.
- Delinsky AD, Strynar MJ, McCann PJ, et al. 2010. Geographical distribution of perfluorinated compounds in fish from Minnesota lakes and rivers. *Environ Sci Technol* 44(7):2549-2554. 10.1021/es903777s.
- Delinsky AD, Strynar MJ, Nakayama SF, et al. 2009. Determination of ten perfluorinated compounds in bluegill sunfish (*Lepomis macrochirus*) filets. *Environ Res* 109:975-984.
- D'eon JC, Mabury SA. 2007. Production of perfluorinated carboxylic acids (PFCAs) from the biotransformation of polyfluoroalkyl phosphate surfactants (PAPS): Exploring routes of human contamination. *Environ Sci Technol* 41(13):4799-4805.
- D'eon JC, Crozier PW, Furdui VI, et al. 2009. Observation of a commercial fluorinated material, the polyfluoroalkyl phosphoric acid diesters, in human sera, wastewater treatment plant sludge, and paper fibers. *Environ Sci Technol* 43(12):4589-4594.
- D'eon JC, Hurley MD, Wallington TJ, et al. 2006. Atmospheric chemistry of n-methyl perfluorobutane sulfonamidoethanol, C₄F₉SO₂N(CH₃)CH₂CH₂OH: Kinetics and mechanism of reaction with OH. *Environ Sci Technol* 40:1862-1868.
- De Silva AO, Benskin JP, Martin LJ, et al. 2009. Disposition of perfluorinated acid isomers in Sprague-Dawley rats. Part 2: Subchronic dose. *Environ Toxicol Chem* 28(3):555-567.
- De Silva AO, Mabury SA. 2006. Isomer distribution of perfluorocarboxylates in human blood: Potential correlation to source. *Environ Sci Technol* 40:2903-2909.
- De Silva AO, Spencer C, Scott BF, et al. 2011. Detection of a cyclic perfluorinated acid, perfluoroethylcyclohexane sulfonate, in the Great Lakes of North America. *Environ Sci Technol* 45:8060-8066.
- de Vos MG, Huijbregts MAJ, van den Heuvel-Greve MJ, et al. 2008. Accumulation of perfluorooctane sulfonate (PFOS) in the food chain of the Western Scheldt estuary: Comparing field measurements with kinetic modeling. *Chemosphere* 70:1766-1773.
- +DeWitt JC, Copeland CB, Luebke RW. 2009. Suppression of humoral immunity by perfluorooctanoic acid is independent of elevated serum corticosterone concentration in mice. *Toxicol Sci* 109:106-112.
- +DeWitt JC, Copeland CB, Strynar MJ, et al. 2008. Perfluorooctanoic acid-induced immunomodulation in adult C57BL/6J or C57BL/6N female mice. *Environ Health Perspect* 116(5):644-650.
- DeWitt JC, Peden-Adams MM, Keller JM, et al. 2012. Immunotoxicity of perfluorinated compounds: Recent developments. *Toxicol Pathol* 40(2):300-311. 10.1177/0192623311428473.
- +DeWitt JC, Williams WC, Creech NJ, et al. 2016. Suppression of antigen-specific antibody responses in mice exposed to perfluorooctanoic acid: Role of PPARalpha and T- and B-cell targeting. *J Immunotoxicol* 13(1):38-45. 10.3109/1547691x.2014.996682.
- Dhingra R, Darrow LA, Klein M, et al. 2016a. Perfluorooctanoic acid exposure and natural menopause: A longitudinal study in a community cohort. *Environ Res* 146:323-330. 10.1016/j.envres.2015.12.037.
- Dhingra R, Lally C, Darrow LA, et al. 2016b. Perfluorooctanoic acid and chronic kidney disease: Longitudinal analysis of a Mid-Ohio Valley community. *Environ Res* 145:85-92. 10.1016/j.envres.2015.11.018.
- Dinglasan-Panlilio MJA, Mabury SA. 2006. Significant residual fluorinated alcohols present in various fluorinated materials. *Environ Sci Technol* 40:1447-1453.
- Dixon D, Reed CE, Moore AB, et al. 2012. Histopathologic changes in the uterus, cervix and vagina of immature CD-1 mice exposed to low doses of perfluorooctanoic acid (PFOA) in a uterotrophic assay. *Reprod Toxicol* 33(4):506-512. 10.1016/j.reprotox.2011.10.011.
- Dobraca D, Israel L, McNeel S, et al. 2015. Biomonitoring in California firefighters: Metals and perfluorinated chemicals. *J Occup Environ Med* 57(1):88-97. 10.1097/jom.0000000000000307.

8. REFERENCES

- DOE. 2016a. Table 3: Protective Action Criteria (PAC) Rev. 29 based on applicable 60-minute AEGLs, ERPGs, or TEELs. The chemicals are listed by CASRN. May 2016. Oak Ridge, TN: U.S. Department of Energy. https://sp.eota.energy.gov/pac/teel/Revision_29_Table3.pdf. February 28, 2017.
- DOE. 2016b. Protective Action Criteria (PAC) with AEGLs, ERPGs, & TEELs: Rev. 29 for Chemicals of Concern - May 2016. Oak Ridge, TN: U.S. Department of Energy. <https://energy.gov/ehss/protective-action-criteria-pac-aegls-erpgs-teels-rev-29-chemicals-concern-may-2016>. February 28, 2017.
- Domingo JL, Ericson-Jogsten I, Perello G, et al. 2012a. Human exposure to perfluorinated compounds in Catalonia, Spain: Contribution of drinking water and fish and shellfish. *J Agric Food Chem* 60(17):4408-4415.
- Domingo JL, Jogsten IE, Eriksson U, et al. 2012b. Human dietary exposure to perfluoroalkyl substances in Catalonia, Spain. Temporal trend. *Food Chem* 135:1575-1582.
- Donauer S, Chen A, Xu Y, et al. 2015. Prenatal exposure to polybrominated diphenyl ethers and polyfluoroalkyl chemicals and infant neurobehavior. *J Pediatr* 166(3):736-742. 10.1016/j.jpeds.2014.11.021.
- +Dong GH, Liu MM, Wang D, et al. 2011. Sub-chronic effect of perfluorooctanesulfonate (PFOS) on the balance of type 1 and type 2 cytokine in adult C57BL/6 mice. *Arch Toxicol* 85(10):1235-1244.
- Dong GH, Tung KY, Tsai CH, et al. 2013. Serum polyfluoroalkyl concentrations, asthma outcomes, and immunological markers in a case-control study of Taiwanese children. *Environ Health Perspect* 121(4):507-513.
- +Dong GH, Zhang YH, Zheng L, et al. 2009. Chronic effects of perfluorooctanesulfonate exposure on immunotoxicity in adult male C57BL/6 mice. *Arch Toxicol* 83(9):805-815.
- DRBC. 2013. Contaminants of emerging concern in the tidal Delaware River: Pilot monitoring survey 2007-2009. Delaware River Basin Commission. <http://www.nj.gov/drbc/library/documents/contaminants-of-emerging-concernAug2013rev.pdf>. July 6, 2017.
- Ducatman AM, Zhang J, Fan H. 2015a. Letter to the editor. (Prostate-specific antigen and perfluoroalkyl acids in the C8 health study population. *J Occup Environ Med* 57(1):111-114). *J Occup Environ Med* 57(6):e61. 10.1097/jom.0000000000000470.
- Ducatman A, Zhang J, Fan H. 2015b. Prostate-specific antigen and perfluoroalkyl acids in the C8 health study population. *J Occup Environ Med* 57(1):111-114. 10.1097/jom.0000000000000319.
- DuPont. 2008. Information on PFOA. http://repanet.de/PFOA2/en_US/index.html. April 07, 2008.
- DWQI. 2015. Maximum contaminant level recommendation for perfluorononanoic acid in drinking water. Trenton, NJ: New Jersey Drinking Water Quality Institute. <http://www.nj.gov/dep/watersupply/pdf/pfna-recommend-final.pdf>. December 18, 2017.
- DWQI. 2017a. Maximum contaminant level recommendation for perfluorooctanoic acid in drinking water. Trenton, NJ: New Jersey Drinking Water Quality Institute. <http://www.nj.gov/dep/watersupply/pdf/pfoa-recommend.pdf>. December 18, 2017.
- DWQI. 2017b. Public review draft: Perfluorooctane sulfonate (PFOS) (CAS #: 1763-23-1; Chemical Formula: C₈HF₁₇O₃S). Health-based maximum contaminant level support document. Trenton, NJ: Health Effects Subcommittee, New Jersey Drinking Water Quality Institute. <http://www.nj.gov/dep/watersupply/pdf/dwqi-pfos-mcl-draft.pdf>. December 18, 2017.
- Eggen T, Moeder M, Arukwe A. 2010. Municipal landfill leachates: A significant source for new and emerging pollutants. *Sci Total Environ* 408:5147-5157.
- Ehresman DJ, Froehlich JW, Olsen GW, et al. 2007. Comparison of human whole blood, plasma, and serum matrices for the determination of perfluorooctanesulfonate (PFOS), perfluorooctanoate (PFOA), and other fluorochemicals. *Environ Res* 103:176-184.
- Eke D, Celik A. 2016. Curcumin prevents perfluorooctane sulfonate-induced genotoxicity and oxidative DNA damage in rat peripheral blood. *Drug Chem Toxicol* 39(1):97-103. 10.3109/01480545.2015.1041601.

8. REFERENCES

- +Elcombe CR, Elcombe BM, Foster JR, et al. 2010. Hepatocellular hypertrophy and cell proliferation in Sprague-Dawley rats following dietary exposure to ammonium perfluorooctanoate occurs through increased activation of the xenosensor nuclear receptors PPAR α and CAR/PXR. *Arch Toxicol* 84(10):787-798.
- +Elcombe CR, Elcombe BM, Foster JR, et al. 2012b. Evaluation of hepatic and thyroid responses in male Sprague Dawley rats for up to eighty-four days following seven days of dietary exposure to potassium perfluorooctanesulfonate. *Toxicology* 293(1-3):30-40.
- +Elcombe CR, Elcombe BM, Foster JR, et al. 2012a. Hepatocellular hypertrophy and cell proliferation in Sprague-Dawley rats from dietary exposure to potassium perfluorooctanesulfonate results from increased expression of xenosensor nuclear receptors PPAR α and CAR/PXR. *Toxicology* 293(1-3):16-29.
- Eldasher LM, Wen X, Little MS, et al. 2013. Hepatic and renal Bcrp transporter expression in mice treated with perfluorooctanoic acid. *Toxicology* 306:108-113.
- Ellis DA, Martin JW, De Silva AO, et al. 2004. Degradation of fluorotelomer alcohols: A likely atmospheric source of perfluorinated carboxylic acids. *Environ Sci Technol* 27:3316-3321.
- Emmett EA, Shofer FS, Zhang H, et al. 2006a. Community exposure to perfluorooctanoate: Relationships between serum concentrations and exposure sources. *J Occup Environ Med* 48:759-770.
- Emmett EA, Zhang H, Shofer FS, et al. 2006b. Community exposure to perfluorooctanoate: Relationships between serum levels and certain health parameters. *J Occup Environ Med* 48(8):771-779.
- Emmett EA, Zhang H, Shofer FS, et al. 2009. Development and successful application of a "community-first" communication model for community-based environmental health research. *J Occup Environ Med* 51(2):146-156.
- EPA. 1988. Recommendations for and documentation of biological values for use in risk assessment. Washington, DC: U.S. Environmental Protection Agency. PB88179874.
- EPA. 2002. Perfluoroalkyl sulfonates; significant new use rule. U.S. Environmental Protection Agency. *Fed Regist* 67(236):72854-72867.
- EPA. 2005a. Draft risk assessment of the potential human health effects associated with exposure to perfluorooctanoic acid and its salts. U.S. Environmental Protection Agency. <http://www.epa.gov/opptintr/pfoa/pubs/pfoarisk.pdf>. June 26, 2007.
- EPA. 2005b. Toxic chemical release inventory reporting forms and instructions: Revised 2004 version. Section 313 of the Emergency Planning and Community Right-to-Know Act (Title III of the Superfund Amendments and Reauthorization Act of 1986). U.S. Environmental Protection Agency. Office of Environmental Information. EPA260B05001.
- EPA. 2005c. Guidelines for carcinogen risk assessment. Washington, DC: U.S. Environmental Protection Agency. EPA630P03001F. http://www.epa.gov/raf/publications/pdfs/CANCER_GUIDELINES_FINAL_3-25-05.PDF. December 10, 2014.
- EPA. 2006. SAB review of EPA's draft risk assessment of potential human health effects associated with PFOA and its salts. U.S. Environmental Protection Agency. [http://yosemite.epa.gov/sab/sabproduct.nsf/A3C83648E77252828525717F004B9099/\\$File/sab_06_006.pdf](http://yosemite.epa.gov/sab/sabproduct.nsf/A3C83648E77252828525717F004B9099/$File/sab_06_006.pdf). April 24, 2008.
- EPA. 2007a. Perfluoroalkyl sulfonates; significant new use rule. U.S. Environmental Protection Agency. *Fed Regist* 72:57222-57235.
- EPA. 2007b. Quarterly MOU status report #6: Phase II monitoring/sampling work plan, DuPont Washington Works (PFOA site-related environmental assessment program), Appendices 3.1 through 5.1. U.S. Environmental Protection Agency. EPA-HQ-OPPT-2004-0113-0242.1. <http://www.regulations.gov/fdmspublic/component/main?main=DocketDetail&d=EPA-HQ-OPPT-2004-0113>. May 18, 2009.

8. REFERENCES

- EPA. 2008a. Perfluorooctanoic acid (PFOA) and fluorinated telomers. U.S. Environmental Protection Agency. <http://www.epa.gov/oppt/pfoa/>. May 29, 2008.
- EPA. 2008b. Non-confidential IUR production volume information. Inventory updating reporting. U.S. Environmental Protection Agency. <http://www.epa.gov/opptintr/iur/tools/data/2002-vol.htm>. July 09, 2008.
- EPA. 2008c. Perfluoroalkyls. Substance registry system. U.S. Environmental Protection Agency. <http://www.epa.gov/srs/>. July 10, 2008.
- EPA. 2008d. Quarterly MOU status report #10: Phase II monitoring/sampling work plan, DuPont Washington Works (PFOA site-related environmental assessment program), text, tables 4.1 through 5.10. U.S. Environmental Protection Agency. EPA-HQ-OPPT-2004-0113-0430. <http://www.regulations.gov/fdmspublic/component/main?main=DocketDetail&d=EPA-HQ-OPPT-2004-0113>. May 18, 2009.
- EPA. 2009a. PFOS chromium electroplater study. Cleveland, OH: U.S. Environmental Protection Agency- Region 5.
- EPA. 2009b. Perfluorocarboxylic acid content in 116 articles of commerce. Research Triangle Park, NC: U.S. Environmental Protection Agency, National Risk Management Research Laboratory, Office of Research and Development. EPA600R09033.
- EPA. 2009c. Method 537. Determination of selected perfluorinated alkyl acids in drinking water by solid phase extraction and liquid chromatography/tandem mass spectrometry (LC/MS/MS). U.S. Environmental Protection Agency. http://www.epa.gov/microbes/documents/Method%20537_FINAL_rev1.1.pdf. May 5, 2014.
- EPA. 2009d. National primary drinking water regulations. Washington, DC: Office of Ground Water and Drinking Water, U.S. Environmental Protection Agency. EPA816F090004. https://www.epa.gov/sites/production/files/2016-06/documents/npwdr_complete_table.pdf. February 28, 2017.
- EPA. 2010. Quarterly MOU Status Report #17. Phase II. Monitoring/sampling work plan. DuPont Washington Works (OPPT-2004-0113 PFOA site-related environmental assessment program). U.S. Environmental Protection Agency. Project No: 18984356.05013.
- EPA. 2014. Health effects document for perfluorooctanoic acid (PFOA). U.S. Environmental Protection Agency. EPA822R14001. <https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=P100IRZ1.txt>. December 21, 2017.
- EPA. 2015. Long-chain perfluoroalkyl carboxylate and perfluoroalkyl sulfonate chemical substances: Significant new use rule. Fed Regist 80(13):2885-2898.
- EPA. 2016a. 2010/2015 PFOA Stewardship Program- 2014 annual progress reports. U.S. Environmental Protection Agency. <https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/20102015-pfoa-stewardship-program-2014-annual-progress#summary>. August 08, 2016.
- EPA. 2016b. Compiled AEGL values. Acute Exposure Guideline Levels (AEGLs) Values. U.S. Environmental Protection Agency. https://www.epa.gov/sites/production/files/2016-03/documents/compiled_aegl_update_.pdf. February 28, 2017.
- EPA. 2016c. The Third Unregulated Contaminant Monitoring Rule (UCMR 3): Data summary, July 2016. U.S. Environmental Protection Agency, Office of Water.
- EPA. 2016d. Chemical Data Access Tool (CDAT). U.S. Environmental Protection Agency. https://java.epa.gov/oppt_chemical_search/. December 09, 2016.
- EPA. 2016e. Drinking water health advisory for perfluorooctanoic acid (PFOA). U.S. Environmental Protection Agency. https://www.epa.gov/sites/production/files/2016-05/documents/pfoa_health_advisory_final-plain.pdf. March 3, 2017.
- EPA. 2016f. Drinking water health advisory for perfluorooctane sulfonate (PFOS). U.S. Environmental Protection Agency. https://www.epa.gov/sites/production/files/2016-05/documents/pfos_health_advisory_final-plain.pdf. March 3, 2017.
- EPA. 2016g. Toxic chemical release inventory reporting forms and instructions: Revised 2016 version. Section 313 of the Emergency Planning and Community Right-to-Know Act (Title III of the

8. REFERENCES

- Superfund Amendments and Reauthorization Act of 1986). U.S. Environmental Protection Agency, Office of Environmental Information. EPA740B16001. https://ofmpub.epa.gov/apex/guideme_ext/guideme_ext/r/files/static/v3321/rfi/RY_2016_RFI.pdf. July 5, 2017.
- EPA. 2016h. Health effects support document for perfluorooctanoic acid (PFOA). U.S. Environmental Protection Agency. EPA822R16003. https://www.epa.gov/sites/production/files/2016-05/documents/pfoa_hesd_final-plain.pdf. July 6, 2017.
- EPA. 2016i. Health effects support document for perfluorooctane sulfate (PFOS). U.S. Environmental Protection Agency. EPA822R16002. https://www.epa.gov/sites/production/files/2016-05/documents/pfos_hesd_final_508.pdf. July 6, 2017.
- EPA. 2016j. Lifetime health advisories and health effects support documents for perfluorooctanoic acid and perfluorooctane sulfonates. Federal Register. U.S. Environmental Protection Agency. Vol. 81 FR 33250 (May 25, 2016). <https://www.epa.gov/sites/production/files/2016-05/documents/2016-12361.pdf>. December 18, 2017.
- +Era S, Harada KH, Toyoshima M, et al. 2009. Cleft palate caused by perfluorooctane sulfonate is caused mainly by extrinsic factors. *Toxicology* 256(1-2):42-47.
- EPA. 2017. The third Unregulated Contaminant Monitoring Rule (UCMR 3): Data summary, January 2017. U.S. Environmental Protection Agency. <https://www.epa.gov/sites/production/files/2017-02/documents/ucmr3-data-summary-january-2017.pdf>. July 6, 2017.
- Ericson I, Domingo JL, Nadal M, et al. 2009. Levels of perfluorinated chemicals in municipal drinking water from Catalonia, Spain: Public health implications. *Arch Environ Contam Toxicol* 57(4):631-638. 10.1007/s00244-009-9375-y.
- Ericson I, Gómez M, Nadal M, et al. 2007. Perfluorinated chemicals in blood of residents in Catalonia (Spain) in relation to age and gender: A pilot study. *Environ Int* 33:616-623.
- Eriksen KT, Raaschou-Nielsen O, McLaughlin JK, et al. 2013. Association between plasma PFOA and PFOS levels and total cholesterol in a middle-aged Danish population. *PLoS ONE* 8(2):e56969.
- Eriksen KT, Raaschou-Nielsen O, Sorensen M, et al. 2010. Genotoxic potential of the perfluorinated chemicals PFOA, PFOS, PFBS, PFNA and PFHxA in human HepG2 cells. *Mutat Res* 700(1-2):39-43. 10.1016/j.mrgentox.2010.04.024.
- Eriksen KT, Sorensen M, McLaughlin JK, et al. 2009. Perfluorooctanoate and perfluorooctanesulfonate plasma levels and risk of cancer in the general Danish population. *J Natl Cancer Inst* 101(8):605-609.
- Fábrega F, Kumar V, Schuhmacher M, et al. 2014. PBPK modeling for PFOS and PFOA: Validation with human experimental data. *Toxicol Lett* 230(2):244-251.
- Fábrega F, Nadal M, Schuhmacher M, et al. 2016. Influence of the uncertainty in the validation of PBPK models: A case-study for PFOS and PFOA. *Regul Toxicol Pharmacol* 77:230-239. 10.1016/j.yrtph.2016.03.009
- +Fairley KJ, Purdy R, Kearns S, et al. 2007. Exposure to the immunosuppressant, perfluorooctanoic acid, enhances the murine IgE and airway hyperreactivity response to ovalbumin. *Toxicol Sci* 97(2):375-383.
- +Fang X, Feng Y, Shi Z, et al. 2009. Alterations of cytokines and MAPK signaling pathways are related to the immunotoxic effect of perfluorononanoic acid. *Toxicol Sci* 108(2):367-376. 10.1093/toxsci/kfp019.
- +Fang X, Feng Y, Wang J, et al. 2010. Perfluorononanoic acid-induced apoptosis in rat spleen involves oxidative stress and the activation of caspase-independent death pathway. *Toxicology* 267(1-3):54-59. 10.1016/j.tox.2009.10.020.
- +Fang X, Gao G, Xue H, et al. 2012a. Exposure of perfluorononanoic acid suppresses the hepatic insulin signal pathway and increases serum glucose in rats. *Toxicology* 294(2-3):109-115.
- +Fang X, Gao G, Xue H, et al. 2012b. *In vitro* and *in vivo* studies of the toxic effects of perfluorononanoic acid on rat hepatocytes and Kupffer cells. *Environ Toxicol Pharmacol* 34(2):484-494.

8. REFERENCES

- +Fang X, Zhang L, Feng Y, et al. 2008. Immunotoxic effects of perfluorononanoic acid on BALB/c mice. *Toxicol Sci* 105(2):312-321.
- Fasano WJ, Carpenter SC, Gannon SA, et al. 2006. Absorption, distribution, metabolism, and elimination of 8-2 fluorotelomer alcohol in the rat. *Toxicol Sci* 91(2):341-355.
- Fasano WJ, Kennedy GL, Szostek B, et al. 2005. Penetration of ammonium perfluorooctanoate through rat and human skin *in vitro*. *Drug Chem Toxicol* 28(1):79-90.
- FDA. 2013. Everything added to food in the United States (EAFUS). Washington, DC: U.S. Food and Drug Administration. <http://www.accessdata.fda.gov/scripts/fcn/fcnavigation.cfm?rpt=eafuslisting>. February 28, 2017.
- Fei C, Olsen J. 2011. Prenatal exposure to perfluorinated chemicals and behavioral or coordination problems at age 7 years. *Environ Health Perspect* 119(4):573-578.
- Fei C, McLaughlin JK, Lipworth L, et al. 2009. Maternal levels of perfluorinated chemicals and subfecundity. *Hum Reprod* 24(5):1200-1205.
- Fei C, McLaughlin JK, Lipworth L, et al. 2008b. Prenatal exposure to perfluorooctanoate (PFOA) and perfluorooctanesulfonate (PFOS) and maternally reported developmental milestones in infancy. *Environ Health Perspect* 116(10):1391-1395.
- Fei C, McLaughlin JK, Tarone RE, et al. 2007. Perfluorinated chemicals and fetal growth: A study within the Danish National Birth Cohort. *Environ Health Perspect* 115:1677-1682.
- Fei C, McLaughlin JK, Tarone RE, et al. 2008a. Fetal growth indicators and perfluorinated chemicals: A study in the Danish National Birth Cohort. *Am J Epidemiol* 168(1):66-72.
- Fei C, McLaughlin JK, Lipworth L, et al. 2010. Prenatal exposure to PFOA and PFOS and risk of hospitalization for infectious diseases in early childhood. *Environ Res* 110(8):773-777. 10.1016/j.envres.2010.08.004.
- Fei C, Weinberg CR, Olsen J. 2012. Commentary: Perfluorinated chemicals and time to pregnancy: A link based on reverse causation? *Epidemiology* 23(2):264-266.
- Feng Y, Fang X, Shi Z, et al. 2010. Effects of PFNA exposure on expression of junction-associated molecules and secretory function in rat Sertoli cells. *Reprod Toxicol* 30(3):429-437. 10.1016/j.reprotox.2010.05.010.
- Feng Y, Shi Z, Fang X, et al. 2009. Perfluorononanoic acid induces apoptosis involving the Fas death receptor signaling pathway in rat testis. *Toxicol Lett* 190(2):224-230. 10.1016/j.toxlet.2009.07.020.
- Fenton SE, Reiner JL, Nakayama SF, et al. 2009. Analysis of PFOA in dosed CD-1 mice. Part 2. Disposition of PFOA in tissues and fluids from pregnant and lactating mice and their pups. *Reprod Toxicol* 27(3-4):365-372.
- Fernández Freire P, Pérez Martin JM, Herrero O, et al. 2008. *In vitro* assessment of the cytotoxic and mutagenic potential of perfluorooctanoic acid. *Toxicol in Vitro* 22:1228-1233.
- Filgo AJ, Quist EM, Hoenerhoff MJ, et al. 2015a. Perfluorooctanoic Acid (PFOA)-induced liver lesions in two strains of mice following developmental exposures: PPARalpha is not required. *Toxicol Pathol* 43(4):558-568. 10.1177/0192623314558463.
- Filgo AJ, Quist EM, Hoenerhoff MJ, et al. 2015b. Supplemental data to perfluorooctanoic acid (PFOA)-induced liver lesions in two strains of mice following developmental exposures: PPARalpha is not required. [Toxicol Pathol 43(4):558-568]. *Toxicol Pathol* 10.1177/0192623314558463.
- Fisher M, Arbuckle TE, Wade M, et al. 2013. Do perfluoroalkyl substances affect metabolic function and plasma lipids? Analysis of the 2007-2009, Canadian Health Measures Survey (CHMS) Cycle 1. *Environ Res* 121:95-103.
- Fisher M, Arbuckle TE, Liang CL, et al. 2016. Concentrations of persistent organic pollutants in maternal and cord blood from the maternal-infant research on environmental chemicals (MIREC) cohort study. *Environ Health* 15(1):59.
- Fitz-Simon N, Fletcher T, Luster MI, et al. 2013. Reductions in serum lipids with a 4-year decline in serum perfluorooctanoic acid and perfluorooctanesulfonic acid. *Epidemiology* 24(4):569-576.

8. REFERENCES

- Florentin A, Deblonde T, Diguio N, et al. 2011. Impacts of two perfluorinated compounds (PFOS and PFOA) on human hepatoma cells: Cytotoxicity but no genotoxicity? *Int J Hyg Environ Health* 214(6):493-499.
- Food Standards Agency. 2006. FSIS 11/06. Fluorinated chemicals: UK dietary intakes. Food Standards Agency. <http://www.food.gov.uk/multimedia/pdfs/fsis1106.pdf>. June 28, 2008.
- Foreman JE, Chang SC, Ehresman DJ, et al. 2009. Differential hepatic effects of perfluorobutylate mediated by mouse and human PPAR- α . *Toxicol Sci* 110(1):204-211. 10.1093/toxsci/kfp077.
- Forns J, Iszatt N, White RA, et al. 2015. Perfluoroalkyl substances measured in breast milk and child neuropsychological development in a Norwegian birth cohort study. *Environ Int* 83:176-182.
- Franko J, Meade BJ, Frasch HF, et al. 2012. Dermal penetration potential of perfluorooctanoic acid (PFOA) in human and mouse skin. *J Toxicol Environ Health A* 75(1):50-62.
- Frisbee SJ, Brooks AP, Jr., Maher A, et al. 2009. The C8 health project: Design, methods, and participants. *Environ Health Perspect* 117(12):1873-1882.
- Frisbee SJ, Shankar A, Knox SS, et al. 2010. Perfluorooctanoic acid, perfluorooctanesulfonate, and serum lipids in children and adolescents: Results from the C8 Health Project. *Arch Pediatr Adolesc Med* 164(9):860-869.
- Fromme H, Midasch O, Twardella D, et al. 2007a. Occurrence of perfluorinated substances in an adult German population in southern Bavaria. *Int Arch Occup Environ Health* 80:313-319.
- Fromme H, Mosch C, Morovitz M, et al. 2010. Pre- and postnatal exposure to perfluorinated compounds (PFCs). *Environ Sci Technol* 44(18):7123-7129.
- Fromme H, Schlummer M, Moller A, et al. 2007b. Exposure of an adult population to perfluorinated substances using duplicate diet portions and biomonitoring data. *Environ Sci Technol* 41:7928-7933.
- Fromme H, Tittlemier SA, Volkel W, et al. 2009. Perfluorinated compounds-exposure assessment for the general population in western countries. *Int J Hyg Environ Health* 212(3):239-270.
- Fu J, Gao Y, Wang T, et al. 2015. Elevated levels of perfluoroalkyl acids in family members of occupationally exposed workers: The importance of dust transfer. *Scientific reports* 5:9313. 10.1038/srep09313.
- Fu Y, Wang T, Fu Q, et al. 2014a. Associations between serum concentrations of perfluoroalkyl acids and serum lipid levels in a Chinese population. *Ecotoxicol Environ Saf* 106:246-252. 10.1016/j.ecoenv.2014.04.039.
- Fu Y, Wang T, Wang P, et al. 2014b. Effects of age, gender and region on serum concentrations of perfluorinated compounds in general population of Henan, China. *Chemosphere* 110:104-110. 10.1016/j.chemosphere.2014.02.020.
- +Fuentes S, Colomina MT, Rodriguez J, et al. 2006. Interactions in developmental toxicology: Concurrent exposure to perfluorooctane sulfonate (PFOS) and stress in pregnant mice. *Toxicol Lett* 164(1):81-89.
- Fuentes S, Colomina MT, Vicens P, et al. 2007a. Influence of maternal restraint stress on the long-lasting effects induced by prenatal exposure to perfluorooctane sulfonate (PFOS) in mice. *Toxicol Lett* 171:162-170.
- Fuentes S, Colomina MT, Vicens P, et al. 2007b. Concurrent exposure to perfluoroactane sulfonate and restraint stress during pregnancy in mice: Effects on postnatal development and behavior of the offspring. *Toxicol Sci* 98:589-598.
- +Fuentes S, Vicens P, Colomina MT, et al. 2007c. Behavioral effects in adult mice exposed to perfluorooctane sulfonate (PFOS). *Toxicology* 242:123-129.
- Fujii Y, Harada KH, Koizumi A. 2013. Occurrence of perfluorinated carboxylic acids (PFCAs) in personal care products and compounding agents. *Chemosphere* 93(3):538-544.
- Fujii Y, Niisoe T, Harada KH, et al. 2015a. Toxicokinetics of perfluoroalkyl carboxylic acids with different carbon chain lengths in mice and humans. *J Occup Health* 57(1):1-12. 10.1539/joh.14-0136-OA.

8. REFERENCES

- Fujii Y, Niisoe T, Harada KH, et al. 2015b. Supplemental materials: Toxicokinetics of perfluoroalkyl carboxylic acids with different carbon chain lengths in mice and humans. *J Occup Health* 57(1):1-12.
- Fujii Y, Yan J, Harada KH, et al. 2012. Levels and profiles of long-chain perfluorinated carboxylic acids in human breast milk and infant formulas in East Asia. *Chemosphere* 86(3):315-321.
- Furdui F, Stock N, Ellis DA, et al. 2007. Spatial distribution of perfluoroalkyl contaminants in lake trout from the Great Lakes. *Environ Sci Technol* 41:1554-1559.
- Gallo V, Leonardi G, Brayne C, et al. 2013. Serum perfluoroalkyl acids concentrations and memory impairment in a large cross-sectional study. *BMJ Open* 3(6):e002414.
- Gallo V, Leonardi G, Genser B, et al. 2012. Serum perfluorooctanoate (PFOA) and perfluorooctane sulfonate (PFOS) concentrations and liver function biomarkers in a population with elevated PFOA exposure. *Environ Health Perspect* 120(5):655-660.
- Gao B, He X, Liu W, et al. 2015. Distribution of perfluoroalkyl compounds in rats: Indication for using hair as bioindicator of exposure. *J Expo Sci Environ Epidemiol* 25(6):632-638.
- Gauthier SA, Mabury SA. 2005. Aqueous photolysis of 8:2 fluorotelomer alcohol. *Environ Toxicol Chem* 24(8):1837-1846.
- Geiger SD, Xiao J, Shankar A. 2014a. No association between perfluoroalkyl chemicals and hypertension in children. *Integrated blood pressure control* 7:1-7. 10.2147/ibpc.s47660.
- Geiger SD, Xiao J, Ducatman A, et al. 2014b. The association between PFOA, PFOS and serum lipid levels in adolescents. *Chemosphere* 98:78-83. 10.1016/j.chemosphere.2013.10.005.
- Geiger SD, Xiao J, Shankar A. 2013. Positive association between perfluoroalkyl chemicals and hyperuricemia in children. *Am J Epidemiol* 177(11):1255-1262.
- Gellrich V, Brunn H, Stahl T. 2013. Perfluoroalkyl and polyfluoroalkyl substances (PFASs) in mineral water and tap water. *J Environ Sci Health A Tox Hazard Subst Environ Eng* 48(2):129-135. 10.1080/10934529.2013.719431.
- Genius SJ, Beesoon S, Birkholz D. 2013. Biomonitoring and elimination of perfluorinated compounds and polychlorinated biphenyls through perspiration: Blood, urine, and sweat study. *ISRN toxicology* 2013:483832.
- George ME, Andersen ME. 1986. Toxic effects of nonadecafluoro-n-decanoic acid in rats. *Toxicol Appl Pharmacol* 85:169-180.
- Gewurtz SB, Bhavsar SP, Crozier PW, et al. 2009. Perfluoroalkyl contaminants in window film: Indoor/outdoor, urban/rural, and winter/summer contamination and assessment of carpet as a possible source. *Environ Sci Technol* 43(19):7317-7323.
- Gewurtz SB, Bhavsar SP, Petro S, et al. 2014. High levels of perfluoroalkyl acids in sport fish species downstream of a firefighting training facility at Hamilton International Airport, Ontario, Canada. *Environ Int* 67:1-11. 10.1016/j.envint.2014.02.005.
- Giesy JP, Kannan K. 2001. Global distribution of perfluorooctane sulfonate in wildlife. *Environ Sci Technol* 35(7):1339-1342.
- Gilliland FD, Mandel JS. 1993. Mortality among employees of a perfluorooctanoic acid production plant. *J Occup Med* 35(9):950-954.
- Gilliland FD, Mandel JS. 1996. Serum perfluorooctanoic acid and hepatic enzymes, lipoproteins, and cholesterol: A study of occupationally exposed men. *Am J Ind Med* 29(5):560-568.
- Gleason JA, Post GB, Fagliano JA. 2015. Associations of perfluorinated chemical serum concentrations and biomarkers of liver function and uric acid in the US population (NHANES), 2007-2010. *Environ Res* 136:8-14. 10.1016/j.envres.2014.10.004.
- Glynn A, Berger U, Bignert A, et al. 2012. Perfluorinated alkyl acids in blood serum from primiparous women in Sweden: Serial sampling during pregnancy and nursing, and temporal trends 1996-2010. *Environ Sci Technol* 46:9071-9079.
- Goecke CM, Jarnot BM, Reo NV. 1992. A comparative toxicological investigation of perfluorocarboxylic acids in rats by fluorine-19 NMR spectroscopy. *Chem Res Toxicol* 5(4):512-519.

8. REFERENCES

- Goecke-Flora CM, Reo NV. 1996. Influence of carbon chain length on the hepatic effects of perfluorinated fatty acids. A ¹⁹F- and ³¹P-NMR investigation. *Chem Res Toxicol* 9(4):689-695.
- +Gortner EG, Lamprecht EG, Case MT. 1982. Oral teratology study of T-3141CoC in rabbits. St. Paul, MN: Riker Laboratories, Inc.
- Gotoh Y, Kato Y, Stieger B, et al. 2002. Gender difference in the Oatp1-mediated tubular reabsorption of estradiol 17 β -D-glucuronide in rats. *Am J Physiol Endocrinol Metab* 282:E1245-E1254.
- Goudarzi H, Nakajima S, Ikeno T, et al. 2016. Prenatal exposure to perfluorinated chemicals and neurodevelopment in early infancy: The Hokkaido Study. *Sci Total Environ* 541:1002-1010. 10.1016/j.scitotenv.2015.10.017.
- Govarts E, Remy S, Bruckers L, et al. 2016. Combined effects of prenatal exposures to environmental chemicals on birth weight. *Int J Environ Res Public Health* 13(5) 10.3390/ijerph13050495.
- Grandjean P, Budtz-Jorgensen E. 2013. Immunotoxicity of perfluorinated alkylates: Calculation of benchmark doses based on serum concentrations in children. *Environ Health* 12(1):35.
- Grandjean P, Andersen EW, Budtz-Jorgensen E, et al. 2012. Serum vaccine antibody concentrations in children exposed to perfluorinated compounds. *J Am Med Assoc* 307(4):391-397.
- Grandjean P, Heilmann C, Weihe P, et al. 2017. Serum vaccine antibody concentrations in adolescents exposed to perfluorinated compounds. *Environ Health Perspect.* 125(7):077018. 10.1289/EHP275.
- Granum B, Haug LS, Namork E, et al. 2013. Pre-natal exposure to perfluoroalkyl substances may be associated with altered vaccine antibody levels and immune-related health outcomes in early childhood. *J Immunotoxicol* 10(4):373-379.
- +Grasty RC, Bjork JA, Wallace KB, et al. 2005. Effects of prenatal perfluorooctane sulfonate (PFOS) exposure on lung maturation in the perinatal rat. *Birth Defects Res B Dev Reprod Toxicol* 74:405-416.
- +Grasty RC, Wolf DC, Grey BE, et al. 2003. Prenatal window of susceptibility to perfluorooctane sulfonate-induced neonatal mortality in the Sprague-Dawley rat (corrigendum in *Birth Defects Res B* 77(1):86). *Birth Defects Res B* 68(6):465-471.
- Grice MM, Alexander BH, Hoffbeck R, et al. 2007. Self-reported medical conditions in perfluorooctanesulfonyl fluoride manufacturing workers. *J Occup Environ Med* 49(7):722-729.
- +Griffith FD, Long JE. 1980. Animal toxicity studies with ammonium perfluorooctanoate. *Am Ind Hyg Assoc J* 41(8):576-583.
- Gump BB, Wu Q, Dumas AK, et al. 2011. Perfluorochemical (PFC) exposure in children: Associations with impaired response inhibition. *Environ Sci Technol* 45(19):8151-8159.
- Guo R, Sim WJ, Lee ES, et al. 2010. Evaluation of the fate of perfluoroalkyl compounds in wastewater treatment plants. *Water Res* 44(11):3476-3486. 10.1016/j.watres.2010.03.028.
- +Guruge KS, Hikono H, Shimada N, et al. 2009. Effect of perfluorooctane sulfonate (PFOS) on influenza A virus-induced mortality in female B6C3F1 mice. *J Toxicol Sci* 34(6):687-691.
- Guruge KS, Yeung LW, Yamanaka N, et al. 2006. Gene expression profiles in rat liver treated with perfluorooctanoic acid (PFOA). *Toxicol Sci* 89(1):93-107.
- Gützkow KB, Haug LS, Thomsen C, et al. 2012. Placental transfer of perfluorinated compounds is selective. A Norwegian mother and child sub-cohort study. *Int J Hyg Environ Health* 215(2):216-219.
- +Hadrup N, Pedersen M, Skov K, et al. 2016. Perfluorononanoic acid in combination with 14 chemicals exerts low-dose mixture effects in rats. *Arch Toxicol* 90(3):661-675. 10.1007/s00204-015-1452-6.
- HAES. 2017. GEF-Reduction and phase-out of PFOS in priority sectors in China. Environmental & Social Management Framework. Hubei Academy of Environmental Sciences, Foreign Economic Cooperation Office, Ministry of Environmental Protection (FECO). <http://documents.worldbank.org/curated/en/2752514607008/Environmental-and-social-management-framework>. February 28, 2017.
- Hall AP, Elcombe CR, Foster JR, et al. 2012. Liver hypertrophy: A review of adaptive (adverse and non-adverse) changes- conclusions from the 3rd International ESTP Expert Workshop. *Toxicol Pathol* 40:971-994.

8. REFERENCES

- Halldorsson TI, Rytter D, Haug LS, et al. 2012. Prenatal exposure to perfluorooctanoate and risk of overweight at 20 years of age: A prospective cohort study. *Environ Health Perspect* 120(5):668-673.
- +Hallgren S, Fredriksson A, Viberg H. 2015. More signs of neurotoxicity of surfactants and flame retardants - neonatal PFOS and PBDE 99 cause transcriptional alterations in cholinergic genes in the mouse CNS. *Environ Toxicol Pharmacol* 40(2):409-416. 10.1016/j.etap.2015.06.014.
- Hamm MP, Cherry NM, Chan E, et al. 2010. Maternal exposure to perfluorinated acids and fetal growth. *J Expo Sci Environ Epidemiol* 20(7):589-597.
- Hamm MP, Martin JW, Chan E, et al. 2009. Maternal exposure to perfluorinated acids and fetal growth restriction. *Am J Epidemiol* 169(Suppl. 11):S43.
- Han X, Hinderliter PM, Snow TA, et al. 2004. Binding of perfluorooctanoic acid to rat liver-form and kidney-form α 2u-globulins. *Drug Chem Toxicol* 27(4):341-360.
- Han X, Kemper RA, Jepson GW. 2005. Subcellular distribution and protein binding of perfluorooctanoic acid in rat liver and kidney. *Drug Chem Toxicol* 28(2):197-209.
- Han X, Snow TA, Kemper RA, et al. 2003. Binding of perfluorooctanoic acid to rat and human plasma proteins. *Chem Res Toxicol* 16:775-781.
- Hanhijarvi H, Ophaug RH, Singer L. 1982. The sex-related difference in perfluorooctanoate excretion in the rat. *Proc Soc Exp Biol Med* 171:50-55.
- Hanhijarvi H, Ylinen M, Kojo A, et al. 1987. Elimination and toxicity of perfluorooctanoic acid during subchronic administration in the Wistar rat. *Pharmacol Toxicol* 61(1):66-68.
- Hansen KJ, Johnson HO, Eldridge JS, et al. 2002. Quantitative characterization of trace levels of PFOS and PFOA in the Tennessee River. *Environ Sci Technol* 36:1681-1685.
- Hanssen L, Dudarev AA, Huber S, et al. 2013. Partition of perfluoroalkyl substances (PFASs) in whole blood and plasma, assessed in maternal and umbilical cord samples from inhabitants of arctic Russia and Uzbekistan. *Sci Total Environ* 447:430-437.
- Hanssen L, Rollin H, Odland JO, et al. 2010. Perfluorinated compounds in maternal serum and cord blood from selected areas of South Africa: Results of a pilot study. *J Environ Monit* 12(6):1355-1361.
- Harada K, Inoue K, Morikawa A, et al. 2005a. Renal clearance of perfluorooctane sulfonate and perfluorooctanoate in humans and their species-specific excretion. *Environ Res* 99:253-261.
- Harada K, Nakanishi S, Saito N, et al. 2005b. Airborne perfluorooctanoate may be a substantial source contamination in Kyoto area, Japan. *Bull Environ Contam Toxicol* 74:64-69.
- Harada K, Nakanishi S, Sasaki K, et al. 2006. Particle size distribution and respiratory deposition estimates of airborne perfluorooctanoate and perfluorooctanesulfonate in Kyoto area, Japan. *Bull Environ Contam Toxicol* 76(2):306-310.
- Harada KH, Koizumi A. 2009. Environmental and biological monitoring of persistent fluorinated compounds in Japan and their toxicities. *Environ Health Prev Med* 14(1):7-19.
- Harada KH, Hashida S, Kaneko T, et al. 2007. Biliary excretion and cerebrospinal fluid partition of perfluorooctanoate and perfluorooctane sulfonate in humans. *Environ Toxicol Pharmacol* 24(2):134-139.
- Hardell E, Karrman A, van Bavel B, et al. 2014. Case-control study on perfluorinated alkyl acids (PFAAs) and the risk of prostate cancer. *Environ Int* 63:35-39.
- Hardisty JF, Willson GA, Brown WR, et al. 2010. Pathology Working Group review and evaluation of proliferative lesions of mammary gland tissues in female rats fed ammonium perfluorooctanoate (APFO) in the diet for 2 years. *Drug Chem Toxicol* 33(2):131-137.
- Harris LA, Barton HA. 2008. Comparing single and repeated dosimetry data for perfluorooctane sulfonate in rats. *Toxicol Lett* 181(3):148-156.
- +Harris MW, Birnbaum LS. 1989. Developmental toxicity of perfluorodecanoic acid in C57BL/6N mice. *Fundam Appl Toxicol* 12:442-448.
- +Harris MW, Uraih LC, Birnbaum LS. 1989. Acute toxicity of perfluorodecanoic acid in C57BL/6 mice differs from 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Fundam Appl Toxicol* 13:723-726.

8. REFERENCES

- +Haugom B, Spydevold O. 1992. The mechanism underlying the hypolipemic effect of perfluorooctanoic acid (PFOA), perfluorooctane sulphonic acid (PFOSA) and clofibrilic acid. *Biochim Biophys Acta* 1128(1):65-72.
- Heilmann C, Budtz-Jorgensen E, Nielsen F, et al. 2010. Serum concentrations of antibodies against vaccine toxoids in children exposed perinatally to immunotoxicants. *Environ Health Perspect* 118(10):1434-1438. 10.1289/ehp.1001975.
- Hekster FM, Laane RW, de Voogt P. 2003. Environmental and toxicity effects of perfluoroalkylated substances. *Rev Environ Contam Toxicol* 179:99-121.
- Henderson WM, Smith MA. 2007. Perfluorooctanoic acid and perfluorononanoic acid in fetal and neonatal mice following *in utero* exposure to 8-2 fluorotelomer alcohol. *Toxicol Sci* 95(2):452-461.
- Hinderliter PM, DeLorme MP, Kennedy GL. 2006a. Perfluorooctanoic acid: Relationship between repeated inhalation exposures and plasma PFOA concentration in the rat. *Toxicology* 222:80-85.
- Hinderliter PM, Han X, Kennedy GL, et al. 2006b. Age effect on perfluorooctanoate (PFOA) plasma concentration in post-weaning rats following oral gavage with ammonium perfluorooctanoate (APFO). *Toxicology* 225:195-203.
- Hinderliter PM, Mylchreest E, Gannon SA, et al. 2005. Perfluorooctanoate: Placental and lactational transport pharmacokinetics in rats. *Toxicology* 211:139-148.
- +Hines EP, White SS, Stanko JP, et al. 2009. Phenotypic dichotomy following developmental exposure to perfluorooctanoic acid (PFOA) in female CD-1 mice: Low doses induce elevated serum leptin and insulin, and overweight in mid-life. *Mol Cell Endocrinol* 304(1-2):97-105.
- +Hoberman AM, York RG. 2003. Oral (gavage) combined repeated dose toxicity study of T-7706 with the reproduction/developmental toxicity screening test. Argus Research.
- Hoffman K, Webster TF, Bartell SM, et al. 2011. Private drinking water wells as a source of exposure to perfluorooctanoic acid (PFOA) in communities surrounding a fluoropolymer production facility. *Environ Health Perspect* 119(1):92-97.
- Hoffman K, Webster TF, Weisskopf MG, et al. 2010. Exposure to polyfluoroalkyl chemicals and attention deficit/hyperactivity disorder in U.S. children 12-15 years of age. *Environ Health Perspect* 118(12):1762-1767.
- Hölzer J, Midasch O, Rauchfuss K, et al. 2008. Biomonitoring of perfluorinated compounds in children and adults exposed to perfluorooctanoate-contaminated drinking water. *Environ Health Perspect* 116(5):651-657.
- Houde M, Bujas TD, Small J, et al. 2006a. Biomagnification of perfluoroalkyl compounds in the bottlenose dolphin (*Tursiops truncatus*) food web. *Environ Sci Technol* 40:4138-4144.
- Houde M, Martin JW, Letcher RJ, et al. 2006b. Biological monitoring of polyfluoroalkyl substances: A Review. *Environ Sci Technol* 40(11):3463-3473.
- Houde M, Wells RS, Fair PA, et al. 2005. Polyfluoroalkyl compounds in free-ranging bottlenose dolphins (*Tursiops truncatus*) from the Gulf of Mexico and the Atlantic Ocean. *Environ Sci Technol* 39:6591-6598.
- Høyer BB, Ramlau-Hansen CH, Obel C, et al. 2015a. Pregnancy serum concentrations of perfluorinated alkyl substances and offspring behaviour and motor development at age 5-9 years--a prospective study. *Environ Health* 14:2. 10.1186/1476-069x-14-2.
- Høyer BB, Ramlau-Hansen CH, Vrijheid M, et al. 2015b. Anthropometry in 5- to 9-Year-Old Greenlandic and Ukrainian Children in Relation to Prenatal Exposure to Perfluorinated Alkyl Substances. *Environ Health Perspect* 123(8):841-846. 10.1289/ehp.1408881.
- Hsu V, de LTVM, Zhao P, et al. 2014. Towards quantitation of the effects of renal impairment and probenecid inhibition on kidney uptake and efflux transporters, using physiologically based pharmacokinetic modelling and simulations. *Clin Pharmacokinet* 53(3):283-293. 10.1007/s40262-013-0117-y.
- +Hu Q, Strynar MJ, DeWitt JC. 2010. Are developmentally exposed C57BL/6 mice insensitive to suppression of TDAR by PFOA? *J Immunotoxicol* 7(4):344-349.

8. REFERENCES

- Hu W, Jones PD, Upham BL, et al. 2002. Inhibition of gap junctional intercellular communication by perfluorinated compounds in rat liver and dolphin kidney epithelial cell lines *in vitro* and Sprague-Dawley rats *in vivo*. *Toxicol Sci* 68(2):429-426.
- Hu XC, Andrews DQ, Lindstrom M, et al. 2016. Detection of poly-and perfluoroalkyl substances (PFASs) in U.S. drinking water linked to industrial sites, military fire training areas and wastewater treatment plants. *Environ Sci Technol Lett* 3:344-350. DOI: 10.1021/acs.estlett.6b00260.
- Humblet O, Dias-Ramirez LG, Balmes JR, et al. 2014. Perfluoroalkyl chemicals and asthma among children 12-19 years of age: NHANES (1999-2008). *Environ Health Perspect* 122(10):1129-1133.
- Hundley SG, Sarrif AM, Kennedy GL. 2006. Absorption, distribution, and excretion of ammonium perfluorooctanoate (APFO) after oral administration to various species. *Drug Chem Toxicol* 29(2):137-145.
- Hurley MD, Andersen MPS, Wallington TJ, et al. 2004. Atmospheric chemistry of perfluorinated carboxylic acids: Reaction with OH radicals and atmospheric lifetimes. *J Phys Chem* 108:615-620.
- IARC. 2017. Agents classified by the IARC Monographs, Volumes 1–117. Lyon, France: International Agency for Research on Cancer.
http://monographs.iarc.fr/ENG/Classification/List_of_Classifications.pdf. February 28, 2017.
- ICRP. 1981. Report of the task group on reference man. ICRP Publication 28. International Commission on Radiological Protection. Oxford: Pergamon Press, 32-40.
- +Ikeda T, Aiba K, Fukuda K, et al. 1985. The induction of peroxisome proliferation in rat liver by perfluorinated fatty acids, metabolically inert derivatives of fatty acids. *J Biochem (Tokyo)*98:475-482.
- Innes KE, Ducatman AM, Luster MI, et al. 2011. Association of osteoarthritis with serum levels of the environmental contaminants perfluorooctanoate and perfluorooctane sulfonate in a large Appalachian population. *Am J Epidemiol* 174(4):440-450.
- Innes KE, Wimsatt JH, Frisbee S, et al. 2014. Inverse association of colorectal cancer prevalence to serum levels of perfluorooctane sulfonate (PFOS) and perfluorooctanoate (PFOA) in a large Appalachian population. *BMC Cancer*[electronic resource].
<http://www.bilomedcentral.com/1471/14/45>. December 10, 2011.
- Inoue K, Okada F, Ito R, et al. 2004. Perfluorooctane sulfonate (PFOS) and related perfluorinated compounds in human maternal and cord blood samples: Assessment of PFOS exposure in a susceptible population during pregnancy. *Environ Health Perspect* 112:1204-1207.
- IRIS. 2017. IRIS quick list. Integrated Risk Information System. Washington, DC: U.S. Environmental Protection Agency.
https://cfpub.epa.gov/ncea/iris_drafts/simple_list.cfm?list_type=alpha. February 28, 2017.
- Issemann I, Green S. 1990. Activation of a member of a steroid hormone receptor superfamily by peroxisome proliferators. *Nature* 347:645-650.
- Itoh S, Araki A, Mitsui T, et al. 2016. Association of perfluoroalkyl substances exposure *in utero* with reproductive hormone levels in cord blood in the Hokkaido Study on Environment and Children's Health. *Environ Int* 94:51-59. 10.1016/j.envint.2016.05.011.
- +Iwai H, Hoberman AM. 2014. Oral (gavage) combined developmental and perinatal/postnatal reproduction toxicity study of ammonium salt of perfluorinated hexanoic acid in mice. *Int J Toxicol* 33(3):219-237.
- +Iwai H, Yamashita K. 2006. A fourteen-day repeated dose oral toxicity study of APFO in rats. *Drug Chem Toxicol* 29:323-332.
- Jacquet N, Maire MA, Landkocz Y, et al. 2012. Carcinogenic potency of perfluorooctane sulfonate (PFOS) on Syrian hamster embryo (SHE) cells. *Arch Toxicol* 86(2):305-314.
- Jahnke A, Berger U, Ebinghaus R, et al. 2007a. Latitudinal gradient of airborne polyfluorinated alkyl substances in the marine atmosphere between Germany and South Africa (53° N-33° S). *Environ Sci Technol* 41(9):3055-3061.

8. REFERENCES

- Jahnke A, Huber S, Temme C, et al. 2007b. Development and application of a simplified sampling method for volatile polyfluorinated alkyl substances in indoor and environmental air. *J Chromatogr A* 1164:1-9.
- Jain RB. 2013. Association between thyroid profile and perfluoroalkyl acids: Data from NHNAES 2007-2008. *Environ Res* 126:51-59. 10.1016/j.envres.2013.08.006.
- Jain RB. 2015. Estimation of the total concentration of perfluoroalkyl acids (PFAA) in human serum: Data from NHANES 2005-2012. *Chemosphere* 134:387-394. 10.1016/j.chemosphere.2015.04.104.
- Jandacek RJ, Rider T, Keller ER, et al. 2010. The effect of olestra on the absorption, excretion and storage of 2,2',5,5' tetrachlorobiphenyl; 3,3',4,4' tetrachlorobiphenyl; and perfluorooctanoic acid. *Environ Int* 36(8):880-883.
- Jensen MS, Norgaard-Pedersen B, Toft G, et al. 2012. Phthalates and perfluorooctanesulfonic acid in human amniotic fluid: Temporal trends and timing of amniocentesis in pregnancy. *Environ Health Perspect* 120(6):897-903.
- Jensen TK, Andersen LB, Kyhl HB, et al. 2015. Association between perfluorinated compound exposure and miscarriage in Danish pregnant women. *PLoS ONE* 10(4):e0123496. 10.1371/journal.pone.0123496.
- Ji K, Kim S, Kho Y, et al. 2012. Serum concentrations of major perfluorinated compounds among the general population in Korea: Dietary sources and potential impact on thyroid hormones. *Environ Int* 45:78-85.
- Jiang Q, Lust RM, Dewitt JC. 2013. Perfluorooctanoic acid induced-developmental cardiotoxicity: Are peroxisome proliferator activated receptor α (PPAR α) and bone morphogenic protein 2 (BMP2) pathways involved? *J Toxicol Environ Health A* 76(11):635-650. 10.1080/15287394.2013.789415.
- Jiang Q, Lust RM, Strynar MJ, et al. 2012. Perfluorooctanoic acid induces developmental cardiotoxicity in chicken embryos and hatchlings. *Toxicology* 293(1-3):97-106. 10.1016/j.tox.2012.01.005.
- Jiang Q, Ma W, Wu J, et al. 2016. Perfluorooctanoic acid-induced toxicity in primary cultures of chicken embryo cardiomyocytes. *Environ Toxicol* 31(11):1580-1590. 10.1002/tox.22162. <http://dx.doi.org/10.1002/tox.22162>.
- Jin C, Sun Y, Islam A, et al. 2011. Perfluoroalkyl acids including perfluorooctane sulfonate and perfluorohexane sulfonate in firefighters. *J Occup Environ Med* 53(3):324-328. 10.1097/JOM.0b013e31820d1314.
- Jin YH, Liu W, Sato I, et al. 2009. PFOS and PFOA in environmental and tap water in China. *Chemosphere* 77(5):605-611.
- Joensen UN, Bossi R, Leffers H, et al. 2009. Do perfluoroalkyl compounds impair human semen quality? *Environ Health Perspect* 117(6):923-927.
- Joensen UN, Veyrand B, Antignac JP, et al. 2013. PFOS (perfluorooctanesulfonate) in serum is negatively associated with testosterone levels, but not with semen quality, in healthy men. *Hum Reprod* 28(3):599-608.
- Jogsten IE, Perello G, Llebaria X, et al. 2009. Exposure to perfluorinated compounds in Catalonia, Spain, through consumption of various raw and cooked foodstuffs, including packaged food. *Food Chem Toxicol* 47:1577-1583.
- Johansson JH, Berger U, Vestergren R, et al. 2014. Temporal trends (1999-2010) of perfluoroalkyl acids in commonly consumed food items. *Environ Pollut* 188:102-108. 10.1016/j.envpol.2014.01.026.
- Johansson N, Eriksson P, Viberg H. 2009. Neonatal exposure to PFOS and PFOA in mice results in changes in proteins which are important for neuronal growth and synaptogenesis in the developing brain. *Toxicol Sci* 108(2):412-418.
- +Johansson N, Fredriksson A, Eriksson P. 2008. Neonatal exposure to perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) causes neurobehavioural defects in adult mice. *Neurotoxicology* 29:160-169.
- Johnson JD. 1995a. Final report. Analytical study, single-dose dermal absorption/toxicity study of T6049 in rabbits. *In vivo* reference number: HWI#6329-130. 3M. SCD Division.

8. REFERENCES

- Johnson JD. 1995b. Final report. Analytical study, single-dose dermal absorption/toxicity study of T6053 in rabbits (lithium perfluorooctane sulfonate). *In vivo* study reference number: HWI#6329-137. 3M. SCD Division.
- Johnson JD, Ober RE. 1979. Absorption of FC-95-¹⁴C in rats after a single oral dose. 3M. Submitted to the U.S. Environmental Protection Agency's Administrative Record. AR226-0007.
- Johnson JD, Ober RE. 1980. Extent and route of excretion and tissue distribution of total carbon-14 in rats after a single intravenous dose of FC-95-¹⁴C. 3M. Submitted to the U.S. Environmental Protection Agency's Administrative Record. AR226-0006.
- Johnson JD, Ober RE. 1999a. Absorption of FC-143-¹⁴C in rats after a single oral dose. In: Exploratory 28-day oral toxicity study with telomer alcohol, telomer acrylate, PFHS, and PFOS (POS control) by daily gavage in the rat, w/CVR LTR DTD, 051500 (Sanitized). 3M. Submitted to the U.S. Environmental Protection Agency under TSCA Section FYI. OTS05001378S.
- Johnson JD, Ober RE. 1999b. Extent and route of excretion and tissue distribution of total carbon-14 in male and female rats after a single IV dose of FC-143-¹⁴C. In: Exploratory 28-day oral toxicity study with telomer alcohol, telomer acrylate, PFHS, and PFOS (POS control) by daily gavage in the rat, w/CVR letter dated, 051500 (Sanitized). 3M. Submitted to the U.S. Environmental Protection Agency under TSCA Section FYI. OTS05001378S.
- Johnson JD, Gibson SJ, Ober RE. 1984. Cholestyramine-enhanced fecal elimination of carbon-14 in rats after administration of ammonium [¹⁴C]perfluorooctanoate or potassium [¹⁴C]perfluorooctane-sulfonate. *Fundam Appl Toxicol* 4:972-976.
- Jones CM. 2016. 2010/1015 PFOA Stewardship Program. Docket ID number EPA-HQ-OPPT-2006-0621. <https://www.regulations.gov/document?D=EPA-HQ-OPPT-2006-0621-0115>. February 28, 2017.
- Jørgensen KT, Specht IO, Lenters V, et al. 2014a. Perfluoroalkyl substances and time to pregnancy in couples from Greenland, Poland and Ukraine. *Environ Health* 13:116. 10.1186/1476-069x-13-116.
- Jørgensen KT, Specht IO, Lenters V, et al. 2014b. Supplemental files to "Perfluoroalkyl substances and time to pregnancy in couples from Greenland, Poland and Ukraine" [*Environ Health* 13:116. 10.1186/1476-069x-13-116]. *Environ Health* 10.1186/1476-069x-13-116.
- Jurado-Sanchez B, Ballesteros E, Gallego M. 2014. Analytical method for biomonitoring of perfluoroalkyl acids in human urine. *Talanta* 128:141-146. 10.1016/j.talanta.2014.04.071.
- Kaiser MA, Larsen BS, Kao CPC, et al. 2005. Vapor pressures of perfluorooctanoic, -nonanoic, -decanoic, -undecanoic, and -dodecanoic acids. *J Chem & Eng Data* 50:1841-1843.
- Kang H, Choi K, Lee HS, et al. 2016. Elevated levels of short carbon-chain PFCAs in breast milk among Korean women: Current status and potential challenges. *Environ Res* 148:351-359.
- Kannan K, Choi JW, Iseki Net al. 2002a. Concentrations of perfluorinated acids in livers of birds from Japan and Korea. *Chemosphere* 49(3):225-231.
- Kannan K, Corsolini S, Falandysz J, et al. 2002b. Perfluorooctanesulfonate and related fluorinated hydrocarbons in marine mammals, fishes, and birds from coasts of the Baltic and the Mediterranean Seas. *Environ Sci Technol* 36(15):3210-3216.
- Kannan K, Franson JC, Bowerman WW, et al. 2001a. Perfluorooctane sulfonate in fish-eating water birds including bald eagles and albatrosses. *Environ Sci Technol* 35(15):3065-3070.
- Kannan K, Hansen KJ, Wade TL, et al. 2002c. Perfluorooctane sulfonate in oysters, *Crassostrea virginica*, from the Gulf of Mexico and the Chesapeake Bay, USA. *Arch Environ Contam Toxicol* 42(3):313-318.
- Kannan K, Koistinen J, Beckmen K, et al. 2001b. Accumulation of perfluorooctane sulfonate in marine mammals. *Environ Sci Technol* 35:1593-1598.
- Kannan K, Newsted J, Halbrook RS, et al. 2002d. Perfluorooctanesulfonate and related fluorinated hydrocarbons in mink and river otters from the United States. *Environ Sci Technol* 36:2566-2571.
- Kannan K, Perrotta E, Thomas NJ. 2006. Association between perfluorinated compounds and pathological conditions in southern sea otters. *Environ Sci Technol* 40:4943-4948.

8. REFERENCES

- Kannan K, Tao L, Sinclair E, et al. 2005. Perfluorinated compounds in aquatic organisms at various trophic levels in a Great Lakes food chain. *Arch Environ Contam Toxicol* 48:559-566.
- Karnes C, Winqvist A, Steenland K. 2014. Incidence of type II diabetes in a cohort with substantial exposure to perfluorooctanoic acid. *Environ Res* 128:78-83. 10.1016/j.envres.2013.11.003.
- Kärman A, Ericson I, van Bavel B, et al. 2007. Exposure of perfluorinated chemicals through lactation: Levels of matched human milk and serum and a temporal trend, 1996-2004, in Sweden. *Environ Health Perspect* 115:226-230.
- Kärman A, van Bavel B, Jarnberg U, et al. 2005. Development of a solid-phase extraction-HPLC/single quadrupole MS method for quantification of perfluorochemicals in whole blood. *Anal Chem* 77:864-870.
- Katakura M, Kudo N, Tsuda T, et al. 2007. Rat organic anion transporter 3 and organic anion transporting polypeptide 1 mediate perfluorooctanoic acid transport. *J Health Sci* 53:77-83.
- Kataria A, Trachtman H, Malaga-Dieguez L, et al. 2015. Association between perfluoroalkyl acids and kidney function in a cross-sectional study of adolescents. *Environ Health* 14:89. 10.1186/s12940-015-0077-9.
- Kato K, Calafat AM, Needham LL. 2009a. Polyfluoroalkyl chemicals in house dust. *Environ Res* 109(12):518-523.
- Kato K, Calafat AM, Wong LY, et al. 2009b. Polyfluoroalkyl compounds in pooled sera from children participating in the National Health and Nutrition Examination Survey 2001-2002. *Environ Sci Technol* 43(7):2641-2647.
- Kato K, Wong LY, Chen A, et al. 2014. Changes in serum concentrations of maternal poly- and perfluoroalkyl substances over the course of pregnancy and predictors of exposure in a multiethnic cohort of Cincinnati, Ohio pregnant women during 2003-2006. *Environ Sci Technol* 48(16):9600-9608.
- Kauck EA, Diesslin AR. 1951. Some properties of perfluorocarboxylic acids. *Ind Eng Chem* 43(10):2332-2334.
- Kawabata K, Matsuzaki H, Nukui S, et al. 2017. Perfluorododecanoic acid induces cognitive deficit in adult rats. *Toxicol Sci* 157(2):421-428. 10.1093/toxsci/kfx058.
- Kawamoto K, Oashi T, Oami K, et al. 2010. Perfluorooctanoic acid (PFOA) but not perfluorooctane sulfonate (PFOS) showed DNA damage in comet assay on *Paramecium caudatum*. *J Toxicol Sci* 35(6):835-841.
- +Kawamoto K, Sato I, Tsuda S, et al. 2011. Ultrasonic-induced tonic convulsion in rats after subchronic exposure to perfluorooctane sulfonate (PFOS). *J Toxicol Sci* 36(1):55-62.
- +Kawashima Y, Kobayashi H, Miura H, et al. 1995. Characterization of hepatic responses of rat to administration of perfluorooctanoic and perfluorododecanoic acids at low levels. *Toxicology* 99(3):169-178.
- +Keil DE, Mehlmann T, Butterworth L, et al. 2008. Gestational exposure to perfluorooctane sulfonate (PFOS) suppresses immune function in B6C3F1 mice. *Toxicol Sci* 103(1):77-85.
- Keller JM, Kannan K, Taniyasu S, et al. 2005. Perfluorinated compounds in the plasma of loggerhead and Kemp's ridley sea turtles from the southeastern coast of the United States. *Environ Sci Technol* 39:9101-9108.
- Kelly J, Solem L. 2009. Identification of a major source of perfluorooctane sulfonate (PFOS) at a wastewater treatment plant in Brainerd, Minnesota. *Reprod Toxicol* 27:417-428.
- Kelly BC, Ikonomou MG, Blair JD, et al. 2007. Food web-specific biomagnification of persistent organic pollutants. *Science* 317:236-238.
- Kemper RA. 2003. Perfluorooctanoic acid: Toxicokinetics in the rat. Association of Plastics Manufacturers of Europe. Submitted to the U.S. Environmental Protection Agency's Administrative Record. AR226-1499.
- Kemper RA, Nabb DL. 2005. *In vitro* studies in microsomes from rat and human liver, kidney, and intestine suggest that perfluorooctanoic acid is not a substrate for microsomal UDP-glucuronosyltransferases. *Drug Chem Toxicol* 28(3):281-287.

8. REFERENCES

- +Kennedy GL. 1985. Dermal toxicity of ammonium perfluorooctanoate. *Toxicol Appl Pharmacol* 81(2):348-355.
- +Kennedy GL. 1987. Increase in mouse liver weight following feeding of ammonium perfluorooctanoate and related fluorochemicals. *Toxicol Lett* 39(2-3):295-300.
- Kennedy GL, Butenhoff JL, Olsen GW, et al. 2004. The toxicology of perfluorooctanoate. *Crit Rev Toxicol* 34(4):351-384.
- +Kennedy GL, Hall GT, Brittelli MR, et al. 1986. Inhalation toxicity of ammonium perfluorooctanoate. *Food Chem Toxicol* 24(12):1325-1329.
- Kerstner-Wood C, Coward L, Gorman G. 2003. Protein binding of perfluorohexane sulfonate, perfluorooctane sulfonate and perfluorooctanoate to plasma (human, rat, and monkey), and various human-derived plasma protein fractions. Southern Research Institute. Submitted to the U.S. Environmental Protection Agency's Administrative Record. AR226-1354.
- Khalil N, Chen A, Lee M, et al. 2016. Association of perfluoroalkyl substances, bone mineral density, and osteoporosis in the U.S. Population in NHANES 2009-2010. *Environ Health Perspect* 124(1):81-87. 10.1289/ehp.1307909.
- Kielsen K, Shamin Z, Ryder LP, et al. 2016. Antibody response to booster vaccination with tetanus and diphtheria in adults exposed to perfluorinated alkylates. *J Immunotoxicol* 13(2):270-273.
- Kim S, Kannan K. 2007. Perfluorinated acids in air, rain, snow, surface runoff, and lakes: Relative importance of pathways to contamination of urban lakes. *Environ Sci Technol* 41:8328-8334.
- Kim DH, Kim UJ, Kim HY, et al. 2016a. Perfluoroalkyl substances in serum from South Korean infants with congenital hypothyroidism and healthy infants - Its relationship with thyroid hormones. *Environ Res* 147:399-404. 10.1016/j.envres.2016.02.037.
- Kim SJ, Heo SH, Lee DS, et al. 2016b. Gender differences in pharmacokinetics and tissue distribution of 3 perfluoroalkyl and polyfluoroalkyl substances in rats. *Food Chem Toxicol* 97:243-255.
- Kim SK, Lee KT, Kang CS, et al. 2011. Distribution of perfluorochemicals between sera and milk from the same mothers and implications for prenatal and postnatal exposures. *Environ Pollut* 159(1):169-174.
- +Kinney LA, Chromey NC, Kennedy Jr GL. 1989. Acute inhalation toxicity of ammonium perfluorononanoate. *Food Chem Toxicol* 21(1):46-68.
- Kishi R, Nakajima T, Goudarzi H, et al. 2015. The association of prenatal exposure to perfluorinated chemicals with maternal essential and long-chain polyunsaturated fatty acids during pregnancy and the birth weight of their offspring: The Hokkaido Study. *Environ Health Perspect* 123(10):1038-1045. 10.1289/ehp.1408834.
- Kissa E. 2001. Fluorinated surfactants and repellents. 2nd ed. Revised and expanded. New York, NY: Marcel Dekker, Inc., 1-101, 198-269, 349-379, 451-487.
- Kjeldsen LS, Bonfeld-Jørgensen EC. 2013. Perfluorinated compounds affect the function of sex hormone receptors. *Environ Sci Pollut Res Int* 20(11):8031-8044.
- Klaunig JE, Babich MA, Baetcke KP, et al. 2003. PPAR α agonist-induced rodent tumors: Modes of action and human relevance. *Crit Rev Toxicol* 33(6):655-780.
- Klaunig JE, Hocevar BA, Kamendulis LM. 2012. Mode of action analysis of perfluorooctanoic acid (PFOA) tumorigenicity and human relevance. *Reprod Toxicol* 33(4):410-418.
- +Klaunig JE, Shinohara M, Iwai H, et al. 2015. Evaluation of the chronic toxicity and carcinogenicity of perfluorohexanoic acid (PFHxA) in Sprague-Dawley rats. *Toxicol Pathol* 43(2):209-220. 10.1177/0192623314530532.
- Knox SS, Jackson T, Frisbee SJ, et al. 2011a. Perfluorocarbon exposure, gender and thyroid function in the C8 Health Project. *J Toxicol Sci* 36(4):403-410.
- Knox SS, Jackson T, Javins B, et al. 2011b. Implications of early menopause in women exposed to perfluorocarbons. *J Clin Endocrinol Metab* 96(6):1747-1753. I 10.1210/jc.2010-2401.
- Kobayashi Y, Hirokawa N, Ohshiro N, et al. 2002. Differential gene expression of organic anion transporters in male and female rats. *Biochem Biophys Res Commun* 290:482-487.

8. REFERENCES

- Konwick BJ, Tomy GT, Ismail N, et al. 2008. Concentrations and patterns of perfluoroalkyl acids in Georgia, USA surface waters near and distant to a major use source. *Environ Toxicol Chem* 27(10):2011-2018.
- +Koskela A, Finnila MA, Korkalainen M, et al. 2016. Effects of developmental exposure to perfluorooctanoic acid (PFOA) on long bone morphology and bone cell differentiation. *Toxicol Appl Pharmacol* 301:14-21. 10.1016/j.taap.2016.04.002.
- Kotthoff M, Muller J, Jurling H, et al. 2015. Perfluoroalkyl and polyfluoroalkyl substances in consumer products. *Environ Sci Pollut Res Int* 22(19):14546-14559. 10.1007/s11356-015-4202-7.
- Koustas E, Lam J, Sutton P, et al. 2014. The Navigation Guide - evidence-based medicine meets environmental health: Systematic review of nonhuman evidence for PFOA effects on fetal growth. *Environ Health Perspect* 122(10):1015-1027.
- Krishnan K, Andersen ME, Clewell HJ, et al. 1994. Physiologically based pharmacokinetic modeling of chemical mixtures. In: Yang RSH, ed. *Toxicology of chemical mixtures: Case studies, mechanisms, and novel approaches*. San Diego, CA: Academic Press, 399-437.
- Kristensen SL, Ramlau-Hansen CH, Ernst E, et al. 2013. Long-term effects of prenatal exposure to perfluoroalkyl substances on female reproduction. *Hum Reprod* 28(12):3337-3348. 10.1093/humrep/det382.
- Kroschwitz JI, Howe-Grant M. 1994. Perfluorooctanoic. *Kirk-Othmer encyclopedia of chemical toxicology*. 4th ed. Vol. 11. New York, NY: John Wiley & Sons, Inc., 551.
- Krusic PJ, Roe DC. 2004. Gas-phase NMR technique for studying the thermolysis of materials: Thermal decomposition of ammonium perfluorooctanoate. *Anal Chem* 76(13):3800-3803.
- Krusic PJ, Marchione AA, Roe DC. 2005. Gas-phase NMR studies of the thermolysis of perfluorooctanoic acid. *J Fluor Chem* 126:1510-1516.
- Kubwabo C, Stewart B, Zhu J, et al. 2005. Occurrence of perfluorosulfonates and other perfluorochemicals in dust from selected homes in the city of Ottawa, Canada. *J Environ Monit* 7:1074-1078.
- Kudo N, Kawashima Y. 1997. Fish oil-feeding prevents perfluorooctanoic acid-induced fatty liver in mice. *Toxicol Appl Pharmacol* 145(2):285-293.
- Kudo N, Kawashima Y. 2003. Induction of triglyceride accumulation in the liver of rats by perfluorinated fatty acids with different carbon chain lengths: Comparison with induction of peroxisomal β -oxidation. *Biol Pharm Bull* 26(1):47-51.
- Kudo N, Bandai N, Suzuki E, et al. 2000. Induction by perfluorinated fatty acids with different carbon chain length of peroxisomal β -oxidation in the liver of rats. *Chem Biol Interact* 124:119-132.
- Kudo N, Iwase Y, Okayachi H, et al. 2005. Induction of hepatic peroxisome proliferation by 8-2 telomer alcohol feeding in mice: Formation of perfluorooctanoic acid in the liver. *Toxicol Sci* 86(2):231-238.
- Kudo N, Katakura M, Sato Y, et al. 2002. Sex hormone-regulated renal transport of perfluorooctanoic acid. *Chem Biol Interact* 139:301-316.
- Kudo N, Mizuguchi H, Yamamoto A, et al. 1999. Alterations by perfluorooctanoic acid of glycerolipid metabolism in rat liver. *Chem Biol Interact* 118:69-83.
- Kudo N, Sakai A, Mitsumoto A, et al. 2007. Tissue distribution and hepatic subcellular distribution of perfluorooctanoic acid at low dose are different from those at high dose in rats. *Biol Pharm Bull* 30(8):1535-1540.
- Kudo N, Suzuki E, Katakura M, et al. 2001. Comparison of the elimination between perfluorinated fatty acids with different carbon chain length in rats. *Chem Biol Interact* 134:203-216.
- Kudo N, Suzuki-Nakajima E, Mitsumoto A, et al. 2006. Responses of the liver to perfluorinated fatty acids with different carbon chain length in male and female mice: In relation to induction of hepatomegaly, peroxisomal β -oxidation and microsomal 1-acylglycerophosphocholine acyltransferase. *Biol Pharm Bull* 29(9):1952-1957.

8. REFERENCES

- Kuklennyik Z, Reich JA, Tully JS, et al. 2004. Automated solid-phase extraction and measurement of perfluorinated organic acids and amides in human serum and milk. *Environ Sci Technol* 38(13):3698-3704.
- Kunleda H, Shinoda K. 1976. Krafft points, critical micelle concentrations, surface tension, and solubilizing power of aqueous solutions of fluorinated surfactants. *J Phys Chem* 80:2468-2470.
- Kvist L, Giwercman YL, Jonsson BA, et al. 2012. Serum levels of perfluorinated compounds and sperm Y:X chromosome ratio in two European populations and in Inuit from Greenland. *Reprod Toxicol* 34(4):644-650.
- Landsteiner A, Huset C, Johnson J, et al. 2014. Biomonitoring for perfluorochemicals in a Minnesota community with known drinking water contamination. *J Environ Health* 77(5):14-19.
- +Lau C, Thibodeaux JR, Hanson RG, et al. 2003. Exposure to perfluorooctane sulfonate during pregnancy in rat and mouse. II: Postnatal evaluation. *Toxicol Sci* 74(2):382-392.
- +Lau C, Thibodeaux JR, Hanson RG, et al. 2006. Effects of perfluorooctanoic acid exposure during pregnancy in the mouse. *Toxicol Sci* 90(2):510-518.
- Lee CK, Kang SG, Lee JT, et al. 2015a. Effects of perfluorooctane sulfuric acid on placental PRL-family hormone production and fetal growth retardation in mice. *Mol Cell Endocrinol* 401:165-172. 10.1016/j.mce.2014.10.026.
- Lee ES, Han S, Oh JE. 2016. Association between perfluorinated compound concentrations in cord serum and birth weight using multiple regression models. *Reprod Toxicol* 59:53-59. 10.1016/j.reprotox.2015.10.020.
- Lee YJ, Kim M-K, Bae J, et al. 2013. Concentrations of perfluoroalkyl compounds in maternal and umbilical cord sera and birth outcomes in Korea. *Chemosphere* 90(5):1603-1609.
- Lee YY, Wong CK, Oger C, et al. 2015b. Prenatal exposure to the contaminant perfluorooctane sulfonate elevates lipid peroxidation during mouse fetal development but not in the pregnant dam. *Free Radic Res* 49(8):1015-1025. 10.3109/10715762.2015.1027199.
- +Lefebvre DE, Curran I, Armstrong C, et al. 2008. Immunomodulatory effects of dietary potassium perfluorooctane sulfonate (PFOS) exposure in adult Sprague-Dawley rats. *J Toxicol Environ Health A* 71(23):1516-1525.
- Lemieux P, Strynar M, Tabor D, et al. 2007. Emissions of fluorinated compounds from the combustion of carpeting. In: International conference on incineration and thermalk treatment technologies. May 14-18, 2007. Phoenix, Arizona. U.S. Environmental Protection Agency. <http://www.epa.gov/nhsrcc/pubs/paperFluorCompounds101007.pdf>. December 7, 2009.
- Lenters V, Portengen L, Rignell-Hydbom A, et al. 2016a. Prenatal phthalate, perfluoroalkyl acid, and organochlorine exposures and term birth weight in three birth cohorts: Multi-pollutant models based on elastic net regression. *Environ Health Perspect* 124(3):365-372. 10.1289/ehp.1408933.
- Lenters V, Portengen L, Rignell-Hydbom A, et al. 2016b. Supplemental material to prenatal phthalate, perfluoroalkyl acid, and organochlorine exposures and term birth weight in three birth cohorts: Multi-pollutant models based on elastic net regression. [*Environ Health Perspect* 124(3):365-372]. 10.1289/ehp.1408933.
- Leonard RC. 2006. Ammonium perfluorooctanoate: Phase II. Retrospective cohort mortality analyses related to a serum biomarker of exposure in a polymer production plant. Wilmington, DE: E.I. du pont de Nemours and Company.
- Leonard RC, Kreckmann KH, Sakr CJ, et al. 2008. Retrospective cohort mortality study of workers in a polymer production plant including a reference population of regional workers. *Ann Epidemiol* 18:15-22.
- Lewis RC, Johns LE, Meeker JD. 2015. Serum biomarkers of exposure to perfluoroalkyl substances in relation to serum testosterone and measures of thyroid function among adults and adolescents from NHANES 2011-2012. *Int J Environ Res Public Health* 12(6):6098-6114.
- Li L, Zhai Z, Liu J, et al. 2015. Estimating industrial and domestic environmental releases of perfluorooctanoic acid and its salts in China from 2004 to 2012. *Chemosphere* 129:100-109. 10.1016/j.chemosphere.2014.11.049.

8. REFERENCES

- Li N, Hartley DP, Cherrington NJ, et al. 2002. Tissue expression, ontogeny, and inducibility of rat organic anion transporting polypeptide. *J Pharmacol Exp Ther* 301(2):551-560.
- +Li X, Ye L, Ge Y, et al. 2016. *In utero* perfluorooctane sulfonate exposure causes low body weights of fetal rats: A mechanism study. *Placenta* 39:125-133. 10.1016/j.placenta.2016.01.010.
- Li Y, Fletcher T, Mucs D, et al. 2018. Half-lives of PFOS, PFHxS and PFOA after end of exposure to contaminated drinking water. *Occup Environ Med* 75(1):46-51. 10.1136/oemed-2017-104651.
- Li Y, Ramdhan DH, Naito H, et al. 2011. Ammonium perfluorooctanoate may cause testosterone reduction by adversely affecting testis in relation to PPAR α . *Toxicol Lett* 205(3):265-272. <http://dx.doi.org/10.1016/j.toxlet.2011.06.015>.
- Lide DR. 2005. Pentadecafluorooctanoic acid, nonadecafluorodecanoic acid, and heptafluorobutanoic acid. In: *CRC handbook of chemistry and physics*. 86th ed. Boca Raton, FL: Taylor and Francis, 3-412, 3-372, 3-398.
- +Lieder PH, Chang SC, York RG, et al. 2009a. Toxicological evaluation of potassium perfluorobutanesulfonate in a 90-day oral gavage study with Sprague-Dawley rats. *Toxicology* 255:45-52.
- +Lieder PH, York RG, Hakes DC, et al. 2009b. A two-generation oral gavage reproduction study with potassium perfluorobutanesulfonate (K⁺PFBS) in Sprague-Dawley rats. *Toxicology* 259:33-45.
- Lien GW, Huang CC, Shiu JS, et al. 2016. Perfluoroalkyl substances in cord blood and attention deficit/hyperactivity disorder symptoms in seven-year-old children. *Chemosphere* 156:118-127. 10.1016/j.chemosphere.2016.04.102.
- Lien GW, Huang CC, Wu KY, et al. 2013. Neonatal-maternal factors and perfluoroalkyl substances in cord blood. *Chemosphere* 92(7):843-850.
- Liew Z, Ritz B, Bonfeld-Jorgensen EC, et al. 2014. Prenatal exposure to perfluoroalkyl substances and the risk of congenital cerebral palsy in children. *Am J Epidemiol* 180(6):574-581. 10.1093/aje/kwu179.
- Liew Z, Ritz B, von Ehrenstein OS, et al. 2015. Attention deficit/hyperactivity disorder and childhood autism in association with prenatal exposure to perfluoroalkyl substances: A nested case-control study in the Danish National Birth Cohort. *Environ Health Perspect* 123(4):367-373. 10.1289/ehp.1408412.
- Lim TC, Wang B, Huang J, et al. 2011. Emission inventory for PFOS in China: Review of past methodologies and suggestions. *Sci World J* 11:1963-1980.
- Lin CY, Chen PC, Lin YC, et al. 2009. Association among serum perfluoroalkyl chemicals, glucose homeostasis, and metabolic syndrome in adolescents and adults. *Diabetes Care* 32(4):702-707.
- Lin CY, Lin LY, Chiang CK, et al. 2010. Investigation of the associations between low-dose serum perfluorinated chemicals and liver enzymes in US adults. *Am J Gastroenterol* 105(6):1354-1363.
- Lin CY, Lin LY, Wen TW, et al. 2013a. Association between levels of serum perfluorooctane sulfate and carotid artery intima-media thickness in adolescents and young adults. *Int J Cardiol* 168(4):3309-3316. 10.1016/j.ijcard.2013.04.042.
- Lin CY, Lin LY, Wen TW, et al. 2013b. Supplemental material: Association between levels of serum perfluorooctane sulfate and carotid artery intima-media thickness in adolescents and young adults. *Int J Cardiol* 168:3309-3316.
- Lin LY, Wen LL, Su TC, et al. 2014. Negative association between serum perfluorooctane sulfate concentration and bone mineral density in US premenopausal women: NHANES, 2005-2008. *The Journal of clinical endocrinology and metabolism* 99(6):2173-2180. 10.1210/jc.2013-3409.
- Lind L, Zethelius B, Salihovic S, et al. 2014. Circulating levels of perfluoroalkyl substances and prevalent diabetes in the elderly. *Diabetologia* 57(3):473-479. 10.1007/s00125-013-3126-3.
- Lindstrom AB, Strynar MJ, Delinsky AD, et al. 2011. Application of WWTP biosolids and resulting perfluorinated compound contamination of surface and well water in Decatur, Alabama, USA. *Environ Sci Technol* 45:8015-8021.
- Liu J, Li J, Liu Y, et al. 2011. Comparison on gestation and lactation exposure of perfluorinated compounds for newborns. *Environ Int* 37(7):1206-1212.

8. REFERENCES

- Liu J, Lee LS, Nies LF, et al. 2007. Biotransformation of 8:2 fluorotelomer alcohol in soil and by soil bacteria isolates. *Environ Sci Technol* 41:8024-8030.
- Liu L, Liu W, Song J, et al. 2009. A comparative study on oxidative damage and distributions of perfluorooctane sulfonate (PFOS) in mice at different postnatal developmental stages. *J Toxicol Sci* 34(3):245-254.
- +Liu RCM, Hurtt ME, Cook JC, et al. 1996. Effect of the peroxisome proliferator, ammonium perfluorooctanoate (C8), on hepatic aromatase activity in adult male Crl:CD BR (CD) rats. *Toxicol Sci* 30(2):220-228.
- Liu W, Li X, Xu L, et al. 2010. Influence of gestation, regular bleeding and intermittent exposure on blood perfluorooctane sulfonate levels in mice: Potential factors inducing sex difference and affecting exposure evaluation. *J Toxicol Sci* 35(3):309-316.
- Liu X, Guo Z, Krebs KA, et al. 2014. Concentrations and trends of perfluorinated chemicals in potential indoor sources from 2007 through 2011 in the US. *Chemosphere* 98:51-57. 10.1016/j.chemosphere.2013.10.001.
- Llorca M, Farre M, Pico Y, et al. 2010. Infant exposure of perfluorinated compounds: Levels in breast milk and commercial baby food. *Environ Int* 36(6):584-592.
- Loccisano AE, Campbell JL, Jr., Andersen ME, et al. 2011. Evaluation and prediction of pharmacokinetics of PFOA and PFOS in the monkey and human using a PBPK model. *Regul Toxicol Pharmacol* 59(1):157-175.
- Loccisano AE, Campbell JL, Jr., Butenhoff JL, et al. 2012a. Comparison and evaluation of pharmacokinetics of PFOA and PFOS in the adult rat using a physiologically based pharmacokinetic model. *Reprod Toxicol* 33(4):452-467.
- Loccisano AE, Campbell JL, Jr., Butenhoff JL, et al. 2012b. Evaluation of placental and lactational pharmacokinetics of PFOA and PFOS in the pregnant, lactating, fetal and neonatal rat using a physiologically based pharmacokinetic model. *Reprod Toxicol* 33(4):468-490.
- Loccisano AE, Longnecker MP, Campbell JL, Jr., et al. 2013. Development of PBPK models for PFOA and PFOS for human pregnancy and lactation life stages. *J Toxicol Environ Health A* 76(1):25-57.
- Loewen M, Halldorson T, Wang F, et al. 2005. Fluorotelomer carboxylic acids and PFOS in rainwater from an urban center in Canada. *Environ Sci Technol* 39:2944-2951.
- Loganathan BG, Sajwan KS, Sinclair E, et al. 2007. Perfluoroalkyl sulfonates and perfluorocarboxylates in two wastewater treatment facilities in Kentucky and Georgia. *Water Res* 41(20):4611-4620. doi.org/10.1016/j.watres.2007.06.045.
- +Long Y, Wang Y, Ji G, et al. 2013. Neurotoxicity of perfluorooctane sulfonate to hippocampal cells in adult mice. *PLoS ONE* 8(1):e54176.
- Looker C, Luster MI, Calafat AM, et al. 2014. Influenza vaccine response in adults exposed to perfluorooctanoate and perfluorooctanesulfonate. *Toxicol Sci* 138(1):76-88.
- Loos R, Locoro G, Huber T, et al. 2008. Analysis of perfluorooctanoate (PFOA) and other perfluorinated compounds (PFCs) in the River Po watershed in N-Italy. *Chemosphere* 71:306-313.
- López-Doval S, Salgado R, Pereiro N, et al. 2014. Perfluorooctane sulfonate effects on the reproductive axis in adult male rats. *Environ Res* 134:158-168.
- Lopez-Espinosa MJ, Fletcher T, Armstrong B, et al. 2011. Association of perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) with age of puberty among children living near a chemical plant. *Environ Sci Technol* 45(19):8160-8166.
- Lopez-Espinosa MJ, Mondal D, Armstrong B, et al. 2012. Thyroid function and perfluoroalkyl acids in children living near a chemical plant. *Environ Health Perspect* 120(7):1036-1041. 10.1289/ehp.1104370.
- +Lopez-Espinosa MJ, Mondal D, Armstrong BG, et al. 2016. Perfluoroalkyl substances, sex hormones, and insulin-like growth factor-1 at 6-9 years of age: A Cross-sectional analysis within the C8 Health Project. *Environ Health Perspect* 124:1269-1275. 10.1289/ehp.1509869.

8. REFERENCES

- Lorber M, Egeghy PP. 2011. Simple intake and pharmacokinetic modeling to characterize exposure of Americans to perfluorooctanoic acid, PFOA. *Environ Sci Technol* 45(19):8006-8014. 10.1021/es103718h.
- Lou I, Wambaugh JF, Lau C, et al. 2009. Modeling single and repeated dose pharmacokinetics of PFOA in mice. *Toxicol Sci* 107(2):331-341.
- Loveless SE, Finlay C, Everds NE, et al. 2006. Comparative responses of rats and mice exposed to linear/branched, linear, or branched ammonium perfluorooctanoate (APFO). *Toxicology* 220:203-217.
- +Loveless SE, Hoban D, Sykes G, et al. 2008. Evaluation of the immune system in rats and mice administered linear ammonium perfluorooctanoate. *Toxicol Sci* 105(1):86-96.
- Lu R, Kanai N, Bao Y, et al. 1996. Regulation of renal oatp mRNA expression by testosterone. *Am J Physiol* 270:F332-F337.
- Lubojevic M, Herak-Kramberger CM, Hagos Y, et al. 2004. Rat renal cortical OAT1 and OAT3 exhibit gender differences determined by both androgen stimulation and estrogen inhibition. *Am J Physiol* 287:F124-F138.
- +Luebker DJ, Case MT, York RG, et al. 2005a. Two-generation reproduction and cross-foster studies of perfluorooctanesulfonate (PFOS) in rats. *Toxicology* 215(1-2):126-148.
- Luebker DJ, Hansen KJ, Bass NM, et al. 2002. Interactions of fluorochemicals with rat liver fatty acid-binding protein. *Toxicology* 176:175-185.
- +Luebker DJ, York RG, Hansen KJ, et al. 2005b. Neonatal mortality from *in utero* exposure to perfluorooctanesulfonate (PFOS) in Sprague-Dawley rats: Dose-response, and biochemical and pharmacokinetic parameters. *Toxicology* 215(1-2):149-169.
- Lundin JI, Alexander BH, Olsen GW, et al. 2009. Ammonium perfluorooctanoate production and occupational mortality. *Epidemiology* 20(6):921-928.
- Luo Z, Shi X, Hu Q, et al. 2012. Structural evidence of perfluorooctane sulfonate transport by human serum albumin. *Chem Res Toxicol* 25(5):990-992.
- Lv Z, Li G, Li Y, et al. 2013. Glucose and lipid homeostasis in adult rat is impaired by early-life exposure to perfluorooctane sulfonate. *Environ Toxicol* 28(9):532-542.
- +Lv QY, Wan B, Guo LH, et al. 2015. *In vivo* immunotoxicity of perfluorooctane sulfonate in BALB/c mice: Identification of T-cell receptor and calcium-mediated signaling pathway disruption through gene expression profiling of the spleen. *Chem Biol Interact* 240:84-93. 10.1016/j.cbi.2015.07.015.
- Lyngsø J, Ramlau-Hansen CH, Hoyer BB, et al. 2014. Menstrual cycle characteristics in fertile women from Greenland, Poland and Ukraine exposed to perfluorinated chemicals: A cross-sectional study. *Human reproduction (Oxford, England)* 29(2):359-367. 10.1093/humrep/det390.
- MacNeil J, Steenland NK, Shankar A, et al. 2009. A cross-sectional analysis of type II diabetes in a community with exposure to perfluorooctanoic acid (PFOA). *Environ Res* 109(8):997-1003.
- +Macon MB, Villanueva LR, Tatum-Gibbs K, et al. 2011. Prenatal perfluorooctanoic acid exposure in CD-1 mice: Low-dose developmental effects and internal dosimetry. *Toxicol Sci* 122(1):134-145.
- MacPherson IR, Bissett D, Petty RD, et al. 2011. A first-in-human phase I clinical trial of CXR1002 in patients (pts) with advanced cancer. *J Clin Oncol* 29(Suppl; abstr 3063).
- Maestri L, Negri S, Ferrari M, et al. 2006. Determination of perfluorooctanoic acid and perfluorooctanesulfonate in human tissues by liquid chromatography/single quadrupole mass spectrometry. *Rapid Commun Mass Spectrom* 20(18):2728-2734.
- Maher JM, Aleksunes LM, Dieter MZ, et al. 2008. Nrf2- and PPAR α -mediated regulation of hepatic Mrp transporters after exposure to perfluorooctanoic acid and perfluorodecanoic acid. *Toxicol Sci* 106(2):319-328. 10.1093/toxsci/kfn177.
- Maisonet M, Terrell ML, McGeehin MA, et al. 2012. Maternal concentrations of polyfluoroalkyl compounds during pregnancy and fetal and postnatal growth in British girls. *Environ Health Perspect* 120(10):1432-1437.

8. REFERENCES

- Maisonet M, Calafat AM, Marcus M, et al. 2015a. Prenatal exposure to perfluoroalkyl acids and serum testosterone concentrations at 15 years of age in female ALSPAC study participants. *Environ Health Perspect* 123(12):1325-1330. 10.1289/ehp.1408847.
- Maisonet M, Nayha S, Lawlor DA, et al. 2015b. Prenatal exposures to perfluoroalkyl acids and serum lipids at ages 7 and 15 in females. *Environ Int* 82:49-60. 10.1016/j.envint.2015.05.001.
- Mak YL, Taniyasu S, Yeung LW, et al. 2009. Perfluorinated compounds in tap water from China and several other countries. *Environ Sci Technol* 43(13):4824-4829.
- Maloney EK, Waxman DJ. 1999. *trans*-Activation of PPAR α and PPAR γ by structurally diverse environmental chemicals. *Toxicol Appl Pharmacol* 161:209-218.
- Mann PC, Frame SR. 2004. FC-143: Two year oral toxicity-oncogenicity study in rats. Peer review of ovaries. Newark, DE: E.I. du Pont de Nemours and Company. Du Pont Project ID 15261. U.S. EPA AR226.
- Manzano-Salgado CB, Casas M, Lopez-Espinosa MJ, et al. 2015. Transfer of perfluoroalkyl substances from mother to fetus in a Spanish birth cohort. *Environ Res* 142:471-478. 10.1016/j.envres.2015.07.020
- Martin JW, Ellis DA, Mabury SA. 2006. Atmospheric chemistry of perfluoroalkanesulfonamides: Kinetic and product studies of the OH radical and Cl atom initiated oxidation of N-ethyl perfluorobutanesulfonamide. *Environ Sci Technol* 40:864-872.
- Martin JW, Smithwick MM, Braune BM, et al. 2004a. Identification of long-chain perfluorinated acids in biota from the Canadian Arctic. *Environ Sci Technol* 38(2):373-380.
- Martin JW, Whittle DM, Muir DCG, et al. 2004b. Perfluoroalkyl contaminants in a food web from Lake Ontario. *Environ Sci Technol* 38:5379-5385.
- Martin MT, Brennan RJ, Hu W, et al. 2007. Toxicogenomic study of triazole fungicides and perfluoroalkyl acids in rat livers predicts toxicity and categorizes chemicals based on mechanisms of toxicity. *Toxicol Sci* 97:595-613.
- Mattsson K, Rignell-Hydbom A, Holmberg S, et al. 2015. Levels of perfluoroalkyl substances and risk of coronary heart disease: Findings from a population-based longitudinal study. *Environ Res* 142:148-154. 10.1016/j.envres.2015.06.033.
- MDH. 2007. Groundwater health risk limits. St. Paul, MN: Minnesota Department of Health. <http://www.health.state.mn.us/divs/eh/groundwater/hrltable.html>. July 1, 2008.
- MDH. 2009. East Metro perfluorochemical biomonitoring pilot project. Minnesota Department of Health, Minnesota Environment, Exposure and Health. <http://www.health.state.mn.us/divs/hpcd/tracking/biomonitoring/projects/pfcfinalrpt2009.pdf>. May 5, 2014.
- MDH. 2014. Perfluorochemicals in homes and gardens study. Minnesota Department of Health. <http://www.health.state.mn.us/divs/eh/hazardous/topics/pfcs/index.html>.
- MDH. 2017a. Human health-based water guidance table. Saint Paul, Minnesota: Minnesota Department of Health. <http://www.health.state.mn.us/divs/eh/risk/guidance/gw/table.html>. December 18, 2017.
- MDH. 2017b. Perfluorochemicals (PFCs) and health. Saint Paul, Minnesota: Minnesota Department of Health. <http://www.health.state.mn.us/divs/eh/hazardous/topics/pfcshealth.html>. December 18, 2017.
- MECDC. 2016. Maine CDC maximum exposure guidelines (MEGs) for drinking water. Augusta, ME: Maine Center for Disease Control and Prevention. <http://maineenvironmentallaboratory.com/newsite/wp-content/uploads/megtable2016.pdf>. December 18, 2017.
- Meesters RJ, Schröder HF. 2004. Perfluorooctane sulfonate- a quite mobile anionic anthropogenic surfactant, ubiquitously found in the environment. *Water Sci Technol* 50(5):235-242.
- Melzer D, Rice N, Depledge MH, et al. 2010. Association between serum perfluorooctanoic acid (PFOA) and thyroid disease in the U.S. National Health and Nutrition Examination Survey. *Environ Health Perspect* 118(5):686-692.

8. REFERENCES

- Michigan Department of Environmental Quality. 2016. Rule 57 water quality values. Lansing, MI: Michigan Department of Environmental Quality. http://www.michigan.gov/documents/deq/wrd-sw-as-rule57_372470_7.pdf. December 18, 2017.
- Midasch O, Drexler H, Hart N, et al. 2007. Transplacental exposure of neonates to perfluorooctanesulfonate and perfluorooctanoate: A pilot study. *Int Arch Occup Environ Health* 80:643-648.
- Min JY, Lee KJ, Park JB, et al. 2012. Perfluorooctanoic acid exposure is associated with elevated homocysteine and hypertension in US adults. *Occup Environ Med* 69(9):658-662.
- Minata M, Harada KH, Kärrman A, et al. 2010. Role of peroxisome proliferator-activated receptor- α in hepatobiliary injury induced by ammonium perfluorooctanoate in mouse liver. *Ind Health* 48:96-107.
- Mondal D, Lopez-Espinosa MJ, Armstrong B, et al. 2012. Relationships of perfluorooctanoate and perfluorooctane sulfonate serum concentrations between mother-child pairs in a population with perfluorooctanoate exposure from drinking water. *Environ Health Perspect* 120(5):752-757.
- Mondal D, Weldon RH, Armstrong BG, et al. 2014. Breastfeeding: A potential excretion route for mothers and implications for infant exposure to perfluoroalkyl acids. *Environ Health Perspect* 122(2):187-192.
- Monroy R, Morrison K, Teo K, et al. 2008. Serum levels of perfluoroalkyl compounds in human maternal and umbilical cord blood samples. *Environ Res* 108:56-62.
- Moody CA, Field JA. 1999. Determination of perfluorocarboxylates in groundwater impacted by fire-fighting activity. *Environ Sci Technol* 33(16):2800-2806.
- Moody CA, Hebert GN, Strauss SH, et al. 2003. Occurrence and persistence of perfluorooctanesulfonate and other perfluorinated surfactants in groundwater at a fire-training area at Wurtsmith Air Force Base, Michigan, USA. *J Environ Monit* 5:341-345.
- Mogensen UB, Grandjean P, Nielsen F, et al. 2015b. Breastfeeding as an exposure pathway for perfluorinated alkylates. *Environ Sci Technol* 49(17):10466-10473. 10.1021/acs.est.5b02237.
- Mogensen UB, Grandjean P, Heilmann C, et al. 2015a. Structural equation modeling of immunotoxicity associated with exposure to perfluorinated alkylates. *Environ Health* 14:47 10.1186/s12940-015-0032-9.
- Morello-Frosch R, Cushing LJ, Jesdale BM, et al. 2016. Environmental chemicals in an urban population of pregnant women and their newborns from San Francisco. *Environ Sci Technol* 50:12464-12472.
- Moriwaki H, Takata Y, Arakawa R. 2003. Concentrations of perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) in vacuum cleaner dust collected in Japanese homes. *J Environ Monit* 5:753-757.
- Mundt DJ, Mundt KA, Luippold RS, et al. 2007. Clinical epidemiological study of employees exposed to surfactant blend containing perfluorononanoic acid. *Occup Environ Med* 64:589-594.
- Murakami M, Imamura E, Shinohara H, et al. 2008. Occurrence and sources of perfluorinated surfactants in rivers in Japan. *Environ Sci Technol* 42(17):6566-6572.
- Nabb DL, Szostek B, Himmelstein MW, et al. 2007. *In vitro* metabolism of 8-2 fluorotelomer alcohol: Interspecies comparisons and metabolic pathway refinement. *Toxicol Sci* 100(2):333-344.
- Nakagawa H, Hirata T, Terada T, et al. 2008. Roles of organic anion transporters in the renal excretion of perfluorooctanoic acid. *Basic Clin Pharmacol Toxicol* 103(1):1-8.
- Nakagawa H, Terada T, Harada KH, et al. 2009. Human organic anion transporter hOAT4 is a transporter of perfluorooctanoic acid. *Basic Clin Pharmacol Toxicol* 105(2):136-138.
- Nakayama S, Strynar MJ, Helfant L, et al. 2007. Perfluorinated compounds in the Cape Fear drainage basin in North Carolina. *Environ Sci Technol* 41(15):5271-5276.
- Nakagawa T, Ramdhan D, Tanaka N, et al. 2012. Modulation of ammonium perfluorooctanoate-induced hepatic damage by genetically different PPAR α in mice. *Arch Toxicol* 86(1):63-74.

8. REFERENCES

- NAS/NRC. 1989. Report of the oversight committee. In: *Biologic markers in reproductive toxicology*. Washington, DC: National Academy of Sciences, National Research Council, National Academy Press, 15-35.
- NCDENR. 2012. Memorandum: NCSAB recommendation for the revision of the IMAC for perfluorooctanoic acid (PFOA). August 10, 2012. Raleigh, NC: North Carolina Department of Environment and Natural Resources Division of Air Quality. <https://ncdenr.s3.amazonaws.com/s3fs-public/Air%20Quality/toxics/risk/sab/LAA/20120808%20PFOA%20Final%20Risk%20Assessment%20signed.pdf>. December 18, 2017.
- NDEP. 2016. Basic comparison levels. Carson City, NE: Nevada Division of Environmental Protection. <https://ndep.nv.gov/uploads/documents/july-2017-ndep-bcls.pdf>. December 18, 2017.
- Needham LL, Grandjean P, Heinzow B, et al. 2011. Partition of environmental chemicals between maternal and fetal blood and tissues. *Environ Sci Technol* 45(3):1121-1126.
- Nelson JW, Hatch EE, Webster TF. 2010. Exposure to polyfluoroalkyl chemicals and cholesterol, body weight, and insulin resistance in the general U.S. population. *Environ Health Perspect* 118(2):197-202.
- +Ngo HT, Hetland RB, Sabaredzovic A, et al. 2014. *In utero* exposure to perfluorooctanoate (PFOA) or perfluorooctane sulfonate (PFOS) did not increase body weight or intestinal tumorigenesis in multiple intestinal neoplasia (Min/+) mice. *Environ Res* 132:251-263. 10.1016/j.envres.2014.03.033.
- Nilsson R, Beije B, Preat V, et al. 1991. On the mechanism of the hepatocarcinogenicity of peroxisome proliferations. *Chem Biol Interact* 78:235-250.
- NIOSH. 2016. Index of Chemical Abstracts Service Registry Numbers (CAS No.). NIOSH pocket guide to chemical hazards. Index of Chemical Abstracts Service Registry Numbers (CAS No.). Atlanta, GA: National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention. <https://www.cdc.gov/niosh/npg/npgdcas.html>. February 28, 2017.
- Noker PE, Gorman GS. 2003. A pharmacokinetic study of potassium perfluorooctanesulfonate in the Cynomolgus monkey. St. Paul, MN: 3M Corporation.
- Nolan LA, Nolan JM, Shofer FS, et al. 2009. The relationship between birth weight, gestational age and perfluorooctanoic acid (PFOA)-contaminated public drinking water. *Reprod Toxicol* 27:231-238.
- Nolan LA, Nolan JM, Shofer FS, et al. 2010. Congenital anomalies, labor/delivery complications, maternal risk factors and their relationship with perfluorooctanoic acid (PFOA)-contaminated public drinking water. *Reprod Toxicol* 29(2):147-155.
- North Carolina Department of Environmental Quality. 2013. Appendix 1: Interim maximum allowable concentrations (IMACs). Raleigh, NC: North Carolina Department of Environmental Quality. https://files.nc.gov/ncdeq/documents/files/IMAC%20table_5-22-13.pdf. December 19, 2017.
- NTP. 2016a. CASRN Index in MS Excel. Report on carcinogens, Fourteenth Edition. Research Triangle Park, NC: U.S. Department of Health and Human Services, Public Health Service, National Toxicology Program. <https://ntp.niehs.nih.gov/pubhealth/roc/index-1.html#P>. February 28, 2017.
- NTP. 2016b. NTP Monograph on immunotoxicity associated with exposure to perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS). Research Triangle Park, NC: U.S. Department of Health and Human Services, Public Health Service, National Toxicology Program. https://ntp.niehs.nih.gov/ntp/ohat/pfoa_pfos/pfoa_pfosmonograph_508.pdf. December 21, 2017.
- Oda Y, Nakayama S, Harada KH, et al. 2007. Negative results of *umu* genotoxicity test of fluorotelomer alcohols and perfluorinated alkyl acids. *Environ Health Prev Med* 12:217-219.
- Ode A, Kallen K, Gustafsson P, et al. 2014. Fetal exposure to perfluorinated compounds and attention deficit hyperactivity disorder in childhood. *PLoS ONE* 9(4):e95891. 10.1371/journal.pone.0095891.
- Ode A, Rylander L, Lindh CH, et al. 2013. Determinants of maternal and fetal exposure and temporal trends of perfluorinated compounds. *Environ Sci Pollut Res Int* 20(11):7970-7978.

8. REFERENCES

- OECD. 2002. Hazard assessment of perfluorooctane sulfonate (PFOS) and its salts. Organisation for Economic Co-operation and Development. ENV/JM/RD(2002)17/FINAL. <http://www.oecd.org/dataoecd/23/18/2382880.pdf>. July 02, 2007.
- OECD. 2006a. Results of the 2006 survey on production and use of PFOS, PFAS, PFOA, PFCA, their related substances and products/mixtures containing these substances. Organisation for Economic Co-operation and Development.
- OECD. 2006b. SIDS initial assessment report after SIAM 22. Ammonium perfluorooctanoate and perfluorooctanoic acid. Organisation for Economic Co-operation and Development. http://www.oecd.org/document/63/0,3343,en_2649_34379_1897983_1_1_1_1,00.html. May 18, 2009.
- OECD. 2007. Report of an OECD workshop on perfluorocarboxylic acids (PFCAs) and precursors. Organisation for Economic Co-operation and Development. [http://www.olis.oecd.org/olis/2007doc.nsf/LinkTo/NT00002AB6/\\$FILE/JT03229256.PDF](http://www.olis.oecd.org/olis/2007doc.nsf/LinkTo/NT00002AB6/$FILE/JT03229256.PDF). April 02, 2008.
- Ohmori K, Kudo N, Katayama K, et al. 2003. Comparison of the toxicokinetics between perfluorocarboxylic acids with different carbon chain length. *Toxicology* 184:135-140.
- Okada E, Sasaki S, Saijo Y, et al. 2012. Prenatal exposure to perfluorinated chemicals and relationship with allergies and infectious diseases in infants. *Environ Res* 112:118-125.
- Okada E, Sasaki S, Kashino I, et al. 2014. Prenatal exposure to perfluoroalkyl acids and allergic diseases in early childhood. *Environ Int* 65:127-134. 10.1016/j.envint.2014.01.007.
- Olsen GW. 2015. PFAS biomonitoring in higher exposed populations, Chapter 4. In: Dewitt JC, ed. *Toxicological effects on perfluoroalkyl and polyfouroalkyl substances*. London: Humana Press, 77-125.
- Olsen GW, Zobel LR. 2007. Assessment of lipid, hepatic, and thyroid parameters with serum perfluorooctanoate (PFOA) concentrations in fluorochemical production workers. *Int Arch Occup Environ Health* 81:231-246.
- Olsen GW, Burlew MM, Marshall JC, et al. 2004a. Analysis of episodes of care in a perfluorooctanesulfonyl fluoride production facility. *J Occup Environ Hyg* 46(8):837-846.
- Olsen GW, Burris JM, Burlew MM, et al. 2003a. Epidemiologic assessment of worker serum perfluorooctanesulfonate (PFOS) and perfluorooctanoate (PFOA) concentrations and medical surveillance examinations. *J Occup Environ Med* 45(3):260-270.
- Olsen GW, Burris JM, Burlew MM, et al. 2000. Plasma cholecystokinin and hepatic enzymes, cholesterol and lipoproteins in ammonium perfluorooctanoate production workers. *Drug Chem Toxicol* 23(4):603-620.
- Olsen GW, Burris JM, Ehresman DJ, et al. 2007a. Half-life of serum elimination of perfluorooctanesulfonate, perfluorohexanesulfonate, and perfluorooctanoate in retired fluorochemical production workers. *Environ Health Perspect* 115:1298-1305.
- Olsen GW, Burris JM, Mandel JH, et al. 1998a. An epidemiologic investigation of clinical chemistries, hematology and hormones in relation to serum levels of perfluorooctane sulfonate in male fluorochemical production employees. St. Paul, MN: 3M Company. AR226-0030.
- Olsen GW, Burris JM, Mandel JH, et al. 1999. Serum perfluorooctane sulfonate and hepatic and lipid clinical chemistry tests in fluorochemical production employees. *J Occup Environ Med* 41(9):799-806.
- Olsen GW, Butenhoff JL, Zobel LR. 2009. Perfluoroalkyl chemicals and human fetal development: An epidemiologic review with clinical and toxicological perspectives. *Reprod Toxicol* 27(3-4):212-230.
- Olsen GW, Church TR, Hansen KJ, et al. 2004b. Quantitative evaluation of perfluorooctanesulfonate (PFOS) and other fluorochemicals in the serum of children. *J Child Health* 2(1):53-76.
- Olsen GW, Church TR, Larson EB, et al. 2004c. Serum concentrations of perfluorooctanesulfonate and other fluorochemicals in an elderly population from Seattle, Washington. *Chemosphere* 54:1599-1611.

8. REFERENCES

- Olsen GW, Church TR, Miller JP, et al. 2003b. Perfluorooctanesulfonate and other fluorochemicals in the serum of American Red Cross adult blood donors. *Environ Health Perspect* 111:1892-1901.
- Olsen GW, Ehresman DJ, Buehrer BD, et al. 2012. Longitudinal assessment of lipid and hepatic clinical parameters in workers involved with the demolition of perfluoroalkyl manufacturing facilities. *J Occup Environ Med* 54(8):974-983.
- Olsen GW, Gilliland FD, Burlew MM, et al. 1998b. An epidemiologic investigation of reproductive hormones in men with occupational exposure to perfluorooctanoic acid. *J Occup Environ Med* 40(7):614-622.
- Olsen GW, Hansen KJ, Stevenson LA, et al. 2003c. Human donor liver and serum concentrations of perfluorooctanesulfonate and other perfluorochemicals. *Environ Sci Technol* 37:888-891.
- Olsen GW, Huang HY, Helzlsouer KJ, et al. 2005. Historical comparison of perfluorooctanesulfonate, perfluorooctanoate, and other fluorochemicals in human blood. *Environ Health Perspect* 113(5):539-545.
- Olsen GW, Mair DC, Church TR, et al. 2008. Decline in perfluorooctanesulfonate and other polyfluoroalkyl chemicals in American Red Cross adult blood donors, 2000-2006. *Environ Sci Technol* 42(13):4989-4995.
- Olsen GW, Mair DC, Lange CC, et al. 2017a. Per- and polyfluoroalkyl substances (PFAS) in American Red Cross adult blood donors, 2000-2015. *Environ Res* 157:87-95. 10.1016/j.envres.2017.05.013.
- Olsen GW, Mair DC, Lange CC, et al. 2017b. Supplemental file. Per-and polyfluoroalkyl substances (PFAS) in American Red Cross adult blood donors, 2000-2015 [Environ Res 157:87-95]. *Environ Res* 10.1016/j.envres.2017.05.013.
- Olsen GW, Mair DC, Reagan WK, et al. 2007b. Preliminary evidence of a decline in perfluorooctanesulfonate (PFOS) and perfluorooctanoate (PFOA) concentrations in American Red Cross blood donors. *Chemosphere* 68(1):105-111.
- +Onishchenko N, Fischer C, Wan Ibrahim WN, et al. 2011. Prenatal exposure to PFOS or PFOA alters motor function in mice in a sex-related manner. *Neurotox Res* 19(3):452-461.
- Orata F, Quinete N, Werres F, et al. 2009. Determination of perfluorooctanoic acid and perfluorooctane sulfonate in Lake Victoria Gulf water. *Bull Environ Contam Toxicol* 82:218-222.
- OSHA. 2013. Subpart Z - Toxic and hazardous substances. Air contaminants. Occupational Safety and Health Standards. Code of Federal Regulations 29 CFR 1910.1000. <http://www.gpo.gov/fdsys/pkg/CFR-2014-title29-vol6/pdf/CFR-2014-title29-vol6-sec1910-1000.pdf>. March 4, 2015.
- OSHA. 2014a. Appendix A to Part 1926.55-1970 American Conference of Governmental Industrial Hygienists' threshold limit values of airborne contaminants. Occupational Safety and Health Standards. Code of Federal Regulations 29 CFR 1926.55 <http://www.gpo.gov/fdsys/pkg/CFR-2014-title29-vol8/pdf/CFR-2014-title29-vol8-sec1926-55.pdf>. March 4, 2015.
- OSHA. 2014b. Subpart Z - Toxic and hazardous substances. Air contaminants. Table Z - Shipyards. Occupational Safety and Health Standards. Code of Federal Regulations 29 CFR 1915.1000. <http://www.gpo.gov/fdsys/pkg/CFR-2013-title29-vol7/pdf/CFR-2013-title29-vol7-sec1915-1000.pdf>. March 4, 2015.
- Osuna CE, Grandjean P, Weihe P, et al. 2014. Autoantibodies associated with prenatal and childhood exposure to environmental chemicals in Faroese children. *Toxicol Sci* 142(1):158-166. 10.1093/toxsci/kfu163.
- +Pastoor TP, Lee KP, Perri MA, et al. 1987. Biochemical and morphological studies of ammonium perfluorooctanoate-induced hepatomegaly and peroxisome proliferation. *Exp Mol Pathol* 47(1):98-109.
- Paustenbach DJ, Panko JM, Scott PK, et al. 2007. A methodology for estimating human exposure to perfluorooctanoic acid (PFOA): A retrospective exposure assessment of a community (1951-2003). *J Toxicol Environ Health A* 70(1):28-57.
- +Peden-Adams MM, Keller JM, Eudaly JG, et al. 2008. Suppression of humoral immunity in mice following exposure to perfluorooctane sulfonate. *Toxicol Sci* 104(1):144-154.

8. REFERENCES

- +Pereiro N, Moyano R, Blanco A, et al. 2014. Regulation of corticosterone secretion is modified by PFOS exposure at different levels of the hypothalamic-pituitary-adrenal axis in adult male rats. *Toxicol Lett* 230(2):252-262. 10.1016/j.toxlet.2014.01.003.
- Perez F, Nadal M, Navarro-Ortega A, et al. 2013. Accumulation of perfluoroalkyl substances in human tissues. *Environ Int* 59:354-362. 10.1016/j.envint.2013.06.004.
- +Perkins RG, Butenhoff JL, Kennedy GL, et al. 2004. 13-Week dietary toxicity study of ammonium perfluorooctanoate (APFO) in male rats. *Drug Chem Toxicol* 27(4):361-378.
- +Permadi H, Lundgren B, Andersson K, et al. 1992. Effects of perfluoro fatty acids on xenobiotic-metabolizing enzymes, enzymes which detoxify reactive forms of oxygen and lipid peroxidation in mouse liver. *Biochem Pharmacol* 44(6):1183-1191.
- +Permadi H, Lundgren B, Andersson K, et al. 1993. Effects of perfluoro fatty acids on peroxisome proliferation and mitochondrial size in mouse liver: Dose and time factors and effect of chain length. *Xenobiotica* 23(7):761-770.
- Peters JM, Gonzalez FJ. 2011. Why toxic equivalency factors are not suitable for perfluoroalkyl chemicals. American Chemical Society. *Chem Res Toxicol* 24(10):1601-1609. 10.1021/tx200316x.
- Pinney SM, Biro FM, Windham GC, et al. 2014. Serum biomarkers of polyfluoroalkyl compound exposure in young girls in Greater Cincinnati and the San Francisco Bay Area, USA. *Environ Pollut* 184:327-334. 10.1016/j.envpol.2013.09.008.
- Plastics Europe. 2012. Guide for the safe handling of fluoropolymer resins, November 2012. Plastics Europe, Association of Plastics Manufacturers.
- Porpora MG, Lucchini R, Abballe A, et al. 2013. Placental transfer of persistent organic pollutants: A preliminary study on mother-newborn pairs. *Int J Environ Res Public Health* 10(2):699-711.
- Post GB, Louis JB, Cooper KR, et al. 2009. Occurrence and potential significance of perfluorooctanoic acid (PFOA) detected in New Jersey public drinking water systems. *Environ Sci Technol* 43(12):4547-4554.
- Post GB, Louis JB, Lippincott RL, et al. 2013. Occurrence of perfluorinated compounds in raw water from New Jersey public drinking water systems. *Environ Sci Technol* 47(23):13266-13275. 10.1021/es402884x.
- Power MC, Webster TF, Baccarelli AA, et al. 2013. Cross-sectional association between polyfluoroalkyl chemicals and cognitive limitation in the National Health and Nutrition Examination Survey. *Neuroepidemiology* 40(2):125-132.
- Powley CR, George SW, Russell MH, et al. 2008. Polyfluorinated chemicals in a spatially and temporally integrated food web in the Western Arctic. *Chemosphere* 70:664-672.
- Powley CR, Michalczyk MJ, Kaiser MA, et al. 2005. Determination of perfluorooctanoic acid (PFOA) extractable from the surface of commercial cookware under simulated cooking conditions by LC/MS/MS. *Analyst* 130(9):1299-1302.
- Predieri B, Iughetti L, Guerranti C, et al. 2015. High levels of perfluorooctane sulfonate in children at the onset of diabetes. *Int J Endocrinol* 2015:234358. 10.1155/2015/234358.
- Prevedouros K, Cousins I T, Buck RC, et al. 2006. Sources, fate and transport of perfluorocarboxylates. *Environ Sci Technol* 40(1):32-44.
- Qazi MR, Abedi MR, Nelson BD, et al. 2010a. Dietary exposure to perfluorooctanoate or perfluorooctane sulfonate induces hypertrophy in centrilobular hepatocytes and alters the hepatic immune status in mice. *Int Immunopharmacol* 10(11):1420-1427.
- +Qazi MR, Nelson BD, Depierre JW, et al. 2010b. 28-Day dietary exposure of mice to a low total dose (7 mg/kg) of perfluorooctanesulfonate (PFOS) alters neither the cellular compositions of the thymus and spleen nor humoral immune responses: Does the route of administration play a pivotal role in PFOS-induced immunotoxicity? *Toxicology* 267(1-3):132-139. 10.1016/j.tox.2009.10.035.

8. REFERENCES

- Qazi MR, Bogdanska J, Butenhoff JL, et al. 2009a. High-dose, short-term exposure of mice to perfluorooctanesulfonate (PFOS) or perfluorooctanoate (PFOA) affects the number of circulating neutrophils differently, but enhances the inflammatory responses of macrophages to lipopolysaccharide (LPS) in a similar fashion. *Toxicology* 262(3):207-214.
- Qazi MR, Nelson BD, DePierre JW, et al. 2012. High-dose dietary exposure of mice to perfluorooctanoate or perfluorooctane sulfonate exerts toxic effects on myeloid and B-lymphoid cells in the bone marrow and these effects are partially dependent on reduced food consumption. *Food Chem Toxicol* 50(9):2955-2963.
- Qazi MR, Xia Z, Bogdanska J, et al. 2009b. The atrophy and changes in the cellular compositions of the thymus and spleen observed in mice subjected to short-term exposure to perfluorooctanesulfonate are high-dose phenomena mediated in part by peroxisome proliferator-activated receptor-alpha (PPAR α). *Toxicology* 260(1-3):68-76.
- Qin XD, Qian Z, Vaughn MG, et al. 2016. Positive associations of serum perfluoroalkyl substances with uric acid and hyperuricemia in children from Taiwan. *Environ Pollut* 212:519-524. 10.1016/j.envpol.2016.02.050.
- Quaak I, de Cock M, de Boer M, et al. 2016. Prenatal exposure to perfluoroalkyl substances and behavioral development in children. *Int J Environ Res Public Health* 13(5). 10.3390/ijerph13050511.
- Quinete N, Wu Q, Zhang T, et al. 2009. Specific profiles of perfluorinated compounds in surface and drinking waters and accumulation in mussels, fish, and dolphins from southeastern Brazil. *Chemosphere* 77(6):863-869. 10.1016/j.chemosphere.2009.07.079.
- Quinones O, Snyder SA. 2009. Occurrence of perfluoroalkyl carboxylates and sulfonates in drinking water utilities and related waters from the United States. *Environ Sci Technol* 43(24):9089-9095.
- Quist EM, Filgo AJ, Cummings CA, et al. 2015a. Hepatic mitochondrial alteration in CD-1 mice associated with prenatal exposures to low doses of perfluorooctanoic acid (PFOA). *Toxicol Pathol* 43(4):546-557. 10.1177/0192623314551841.
- Quist EM, Filgo AJ, Cummings CA, et al. 2015b. Supplemental data: Hepatic mitochondrial alteration in CD-1 mice associated with prenatal exposures to low doses of perfluorooctanoic acid (PFOA). (*Toxicol Pathol* 43(4):546-557). *Toxicol Pathol* 43:546-557.
- Raleigh KK, Alexander BH, Olsen GW, et al. 2014. Mortality and cancer incidence in ammonium perfluorooctanoate production workers. *Occup Environ Med* 71(7):500-506. 10.1136/oemed-2014-102109.
- Rankin K, Lee H, Tseng PJ, et al. 2014. Investigating the biodegradability of a fluorotelomer-based acrylate polymer in a soil-plant microcosm by indirect and direct analysis. *Environ Sci Technol* 48(21):12783-12790.
- Raymer JH, Michael LC, Studabaker WB, et al. 2012. Concentrations of perfluorooctane sulfonate (PFOS) and perfluorooctanoate (PFOA) and their associations with human semen quality measurements. *Reprod Toxicol* 33(4):419-427.
- +Rebholz SL, Jones T, Herrick RL, et al. 2016. Hypercholesterolemia with consumption of PFOA-laced Western diets is dependent on strain and sex of mice. *Toxicology reports* 3:46-54. 10.1016/j.toxrep.2015.11.004.
- Reiner JL, Nakayama SF, Delinsky AD, et al. 2009. Analysis of PFOA in dosed CD1 mice. Part 1. Methods development for the analysis of tissues and fluids from pregnant and lactating mice and their pups. *Reprod Toxicol* 27(3-4):360-364. 10.1016/j.reprotox.2008.10.006.
- Ren H, Vallanat B, Nelson DM, et al. 2009. Evidence for the involvement of xenobiotic-responsive nuclear receptors in transcriptional effects upon perfluoroalkyl acid exposure in diverse species. *Reprod Toxicol* 27(3-4):266-277. 10.1016/j.reprotox.2008.12.011.
- RePORTER. 2017. Perfluoroalkyls. National Institutes of Health, Research Portfolio Online Reporting Tools. <http://projectreporter.nih.gov/reporter.cfm>. February 28, 2017.

8. REFERENCES

- Ribes D, Fuentes S, Torrente M, et al. 2010. Combined effects of perfluorooctane sulfonate (PFOS) and maternal restraint stress on hypothalamus adrenal axis (HPA) function in the offspring of mice. *Toxicol Appl Pharmacol* 243(1):13-18.
- Robledo CA, Yeung E, Mendola P, et al. 2015a. Preconception maternal and paternal exposure to persistent organic pollutants and birth size: The LIFE study. *Environ Health Perspect* 123(1):88-94. 10.1289/ehp.1308016.
- Robledo CA, Yeung E, Mendola P, et al. 2015b. Supplemental material to preconception maternal and paternal exposure to persistent organic pollutants and birth size: The LIFE study. [*Environ Health Perspect* 123(1):88-94]. *Environ Health Perspect* 10.1289/ehp.1308016.
- Rockwell CE, Turley AE, Cheng X, et al. 2013. Acute immunotoxic effects of perfluorononanoic acid (PFNA) in C57BL/6 Mice. *Clin Exp Pharmacol Suppl* 4. 10.4172/2161-1459.S4-002. <http://www.ncbi.nlm.nih.gov/pubmed/25568816>.
- Rockwell CE, Turley AE, Cheng X, et al. 2017. Persistent alterations in immune cell populations and function from a single dose of perfluorononanoic acid (PFNA) in C57B1/6 mice. *Food Chem Toxicol* 100:24-33.
- Rodriguez CE, Setzer RW, Barton HA. 2009. Pharmacokinetic modeling of perfluorooctanoic acid during gestation and lactation in the mouse. *Reprod Toxicol* 27(3-4):373-386.
- +Rogers JM, Ellis-Hutchings RG, Grey BE, et al. 2014. Elevated blood pressure in offspring of rats exposed to diverse chemicals during pregnancy. *Toxicol Sci* 137(2):436-446. 10.1093/toxsci/kft248.
- Romano ME, Xu Y, Calafat AM, et al. 2016. Maternal serum perfluoroalkyl substances during pregnancy and duration of breastfeeding. *Environ Res* 10.1016/j.envres.2016.04.034.
- Rosen MB, Abbott BD, Wolf DC, et al. 2008a. Gene profiling in the livers of wild-type and PPAR α -null mice exposed to perfluorooctanoic acid. *Toxicol Pathol* 36(4):592-607.
- Rosen MB, Das KP, Rooney J, et al. 2017. PPAR α -independent transcriptional targets of perfluoroalkyl acids revealed by transcript profiling. *Toxicology* [In press].
- Rosen MB, Lee JS, Ren H, et al. 2008b. Toxicogenomic dissection of the perfluorooctanoic acid transcript profile in mouse liver: Evidence for the involvement of nuclear receptors PPAR α and CAR. *Toxicol Sci* 103(1):46-56.
- Rosen MB, Schmid JR, Corton JC, et al. 2010. Gene expression profiling in wild-type and pparalpha-null mice exposed to perfluorooctane sulfonate reveals PPAR α -independent effects. *PPAR Res* 10.1155/2010/794739.
- +Rosen MB, Schmid JE, Das KP, et al. 2009. Gene expression profiling in the liver and lung of perfluorooctane sulfonate-exposed mouse fetuses: Comparison to changes induced by exposure to perfluorooctanoic acid. *Reprod Toxicol* 27:278-288.
- Rosen MB, Thibodeaux JR, Wood CR, et al. 2007. Gene expression profiling in the lung and liver of PFOA-exposed mouse fetuses. *Toxicology* 239:15-33.
- Rotander A, Toms LM, Aylward L, et al. 2015. Elevated levels of PFOS and PFHxS in firefighters exposed to aqueous film forming foam (AFFF). *Environ Int* 82:28-34. 10.1016/j.envint.2015.05.005.
- RTECS. 2008. Perfluoroalkyls. Hamilton, Ontario: Registry of Toxic Effects on Chemical Substances. Canadian Centre for Occupational Health and Safety. Symyx Software, Inc. May 29, 2008.
- Rumsby PC, McLaughlin CL, Hall T. 2009. Perfluorooctane sulphonate and perfluorooctanoic acid in drinking and environmental waters. *Philos Trans A Math Phys Eng Sci* 367(1904):4119-4136. 10.1098/rsta.2009.0109.
- Ryu MH, Jha A, Ojo OO, et al. 2014. Chronic exposure to perfluorinated compounds: Impact on airway hyperresponsiveness and inflammation. *Am J Physiol Lung Cell Mol Physiol* 307(10):L765-L774.
- Sakr CJ, Kreckmann KH, Green JW, et al. 2007b. Cross-sectional study of lipids and liver enzymes related to a serum biomarker of exposure (ammonium perfluorooctanoate or APFO) as part of a general health survey in a cohort of occupationally exposed workers. *J Occup Environ Med* 49:1086-1096.

8. REFERENCES

- Sakr CJ, Leonard RC, Kreckmann KH, et al. 2007a. Longitudinal study of serum lipids and liver enzymes in workers with occupational exposure to ammonium perfluorooctanoate. *J Occup Environ Med* 49:872-879.
- Sakr CJ, Symons JM, Kreckmann KH, et al. 2009. Ischaemic heart disease mortality study among workers with occupational exposure to ammonium perfluorooctanoate. *Occup Environ Med* 66:699-703.
- +Salgado R, Pereiro N, Lopez-Doval S, et al. 2015. Initial study on the possible mechanisms involved in the effects of high doses of perfluorooctane sulfonate (PFOS) on prolactin secretion. *Food Chem Toxicol* 83:10-16. 10.1016/j.fct.2015.05.013.
- Salvalaglio M, Muscionico I, Cavallotti C. 2010. Determination of energies and sites of binding of PFOA and PFOS to human serum albumin. *J Phys Chem B* 114(46):14860-14874.
- Sato I, Kawamoto K, Nishikawa Y, et al. 2009. Neurotoxicity of perfluorooctane sulfonate (PFOS) in rats and mice after single oral exposure. *J Toxicol Sci* 34(5):569-574.
- Savitz DA, Stein CR, Bartell SM, et al. 2012a. Perfluorooctanoic acid exposure and pregnancy outcome in a highly exposed community. *Epidemiology* 23(3):386-392.
- Savitz DA, Stein CR, Elston B, et al. 2012b. Relationship of perfluorooctanoic acid exposure to pregnancy outcome based on birth records in the Mid-Ohio Valley. *Environ Health Perspect* 120(8):1201-1207.
- Savu PM. 1994a. Fluorinated higher carboxylic acids. In: Kirk-Othmer encyclopedia of chemical technology. John Wiley & Sons, Inc., 1-7.
<http://mrw.interscience.wiley.com/emrw/9780471238966/kirk/article/fluosavu.a01/current/pdf>. April 01, 2008.
- Savu P. 1994b. Fluorine-containing polymers, perfluoroalkanesulfonic acids. In: Kirk-Othmer encyclopedia of chemical technology. John Wiley & Sons, Inc., 1-7.
<http://mrw.interscience.wiley.com/emrw/9780471238966/kirk/article/perfsavu.a01.current/pdf>. April 01, 2008.
- Schaider LA, Balan SA, Blum A, et al. 2017. Fluorinated compounds in U.S. fast food packaging. *Environ Sci Tech Lett* 4(3):105-111. 10.1021/acs.estlett.6b00435.
- Schechter A, Colacino J, Haffner D, et al. 2010. Perfluorinated compounds, polychlorinated biphenyls, and organochlorine pesticide contamination in composite food samples from Dallas, Texas, USA. *Environ Health Perspect* 118(6):796-802.
- Schultz MM, Barofsky DF, Field JA. 2003. Fluorinated alkyl surfactants. *Environ Eng Sci* 20(5):487-501.
- Schultz MM, Barofsky DF, Field JA. 2006a. Quantitative determination of fluorinated alkyl substances by large-volume-injection liquid chromatography tandem mass spectrometry. Characterization of municipal wastewaters. *Environ Sci Technol* 40:289-295.
- Schultz MM, Higgins CP, Huset CA, et al. 2006b. Fluorochemical mass flows in a municipal wastewater treatment facility. *Environ Sci Technol* 40(23):7350-7367.
- +Seacat AM, Luebker DJ. 2000. Toxicokinetic study of perfluorooctane sulfonamide (PFOS; T-7132.2) in rats. 3M Strategic Toxicology Laboratory. Submitted to the U.S. Environmental Protection Agency's Administrative Record. AR226-1030A011.
- +Seacat AM, Thomford PJ, Hansen KJ, et al. 2002. Subchronic toxicity studies on perfluorooctanesulfonate potassium salt in Cynomolgus monkeys. *Toxicol Sci* 68(1):249-264.
- +Seacat AM, Thomford PJ, Hansen KJ, et al. 2003. Sub-chronic dietary toxicity of potassium perfluorooctanesulfonate in rats. (Erratum in: *Toxicology* 2003 192(2-3):263-264). *Toxicology* 183(1-3):117-133.
- Seals R, Bartell SM, Steenland K. 2011. Accumulation and clearance of perfluorooctanoic acid (PFOA) in current and former residents of an exposed community. *Environ Health Perspect* 119(1):119-124.
- Sepulvado JG, Blaine AC, Hundal LS, et al. 2011. Occurrence and fate of perfluorochemicals in soil following the land application of municipal biosolids. *Environ Sci Technol* 45(19):8106-8112. 10.1021/es103903d.

8. REFERENCES

- Shankar A, Xiao J, Ducatman A. 2011a. Perfluoroalkyl chemicals and chronic kidney disease in US adults. *Am J Epidemiol* 174(8):893-900.
- Shankar A, Xiao J, Ducatman A. 2011b. Perfluoroalkyl chemicals and elevated serum uric acid in US adults. *Clin Epidemiol* 3:251-258.
- Shankar A, Xiao J, Ducatman A. 2012. Perfluorooctanoic acid and cardiovascular disease in US adults. *Arch Intern Med* 172(18):1397-1403.
- Shapiro GD, Dodds L, Arbuckle TE, et al. 2016. Exposure to organophosphorus and organochlorine pesticides, perfluoroalkyl substances, and polychlorinated biphenyls in pregnancy and the association with impaired glucose tolerance and gestational diabetes mellitus: The MIREC Study. *Environ Res* 147:71-81. 10.1016/j.envres.2016.01.040.
- +Shi Z, Zhang H, Ding L, et al. 2009. The effect of perfluorododecanoic acid on endocrine status, sex hormones and expression of steroidogenic genes in pubertal female rats. *Reprod Toxicol* 27(3-4):352-359.
- +Shi Z, Zhang H, Liu Y, et al. 2007. Alterations in gene expression and testosterone synthesis in the testes of male rats exposed to perfluorododecanoic acid. *Toxicol Sci* 98(1):206-215.
- Shin HM, Vieira VM, Ryan PB, et al. 2011. Environmental fate and transport modeling for perfluorooctanoic acid emitted from the Washington Works Facility in West Virginia. *Environ Sci Technol* 45(4):1435-1442.
- Shiple JM, Hurst CH, Tanaka SS, et al. 2004. *trans*-Activation of PPAR(beta) and induction of PPAR(beta) target genes by perfluorooctane-based chemicals. *Toxicol Sci* 80(1):151-160.
- Shoeib M, Harner T, Ikononou M, et al. 2004. Indoor and outdoor air concentrations and phase partitioning of perfluoroalkyl sulfonamides and polybrominated diphenyl ethers. *Environ Sci Technol* 38:1313-1320.
- Shoeib M, Harner T, Vlahos P. 2006. Perfluorinated chemicals in the arctic atmosphere. *Environ Sci Technol* 40:7577-7583.
- Shrestha S, Bloom MS, Yucel R, et al. 2015. Perfluoroalkyl substances and thyroid function in older adults. *Environ Int* 75:206-214. 10.1016/j.envint.2014.11.018.
- Siegemund G, Schwertfeger W, Feiring A, et al. 2005. Fluorine compounds, organic. *Ullmann's Encyclopedia of Industrial Chemistry*. Wiley-VCH Verlag GmbH & Co. http://mrw.interscience.wiley.com/emrw/9783527306732/ueic/article/a11_349/current/abstract. April 01, 2008.
- Simcik MF. 2005. Global transport and fate of perfluorochemicals. *J Environ Monit* 7:759-763.
- Simcik MF, Dorweiler KJ. 2005. Ratio of perfluorochemical concentrations as a tracer of atmospheric deposition to surface waters. *Environ Sci Technol* 39:8678-8683.
- Simpson C, Winquist A, Lally C, et al. 2013. Relation between perfluorooctanoic acid exposure and strokes in a large cohort living near a chemical plant. *Environ Res* 127:22-28. 10.1016/j.envres.2013.10.002.
- Sinclair E, Kannan K. 2006. Mass loading and fate of perfluoroalkyl surfactants in wastewater treatment plants. *Environ Sci Technol* 40(5):1408-1414.
- Sinclair E, Kim SK, Akinleye HB, et al. 2007. Quantitation of gas-phase perfluoroalkyl surfactants and fluorotelomer alcohols released from nonstick cookware and microwave popcorn bags. *Environ Sci Technol* 41:1180-1185.
- Sinclair E, Mayack DT, Roblee K, et al. 2006. Occurrence of perfluoroalkyl surfactants in water, fish, and birds from New York State. *Arch Environ Contam Toxicol* 50:398-401.
- Sinclair E, Taniyasu S, Yamashita N, et al. 2004. Perfluorooctanoic acid and perfluorooctane sulfonate in Michigan and New York waters. *Organohalogen Compounds* 66:4069-4073.
- Skuladottir M, Ramel A, Rytter D, et al. 2015. Examining confounding by diet in the association between perfluoroalkyl acids and serum cholesterol in pregnancy. *Environ Res* 143(Pt A):33-38. 10.1016/j.envres.2015.09.001.

8. REFERENCES

- Small MJ. 2009. Final report of the peer consultation panel conducting the review for the scientific peer consultation process for a site environmental assessment program as part of the Dupont-EPA memorandum of understanding and Phase II Workplan. Pittsburgh, PA: Carnegie Mellon University, Civil and Environmental Engineering and Engineering and Public Policy.
- Smit LA, Lenters V, Hoyer BB, et al. 2015. Prenatal exposure to environmental chemical contaminants and asthma and eczema in school-age children. *Allergy* 70(6):653-660. 10.1111/all.12605.
- Smithwick M, Mabury SA, Solomon KR, et al. 2005a. Circumpolar study of perfluoroalkyl contaminants in polar bears (*Ursus maritimus*). *Environ Sci Technol* 39(15):5517-5523.
- Smithwick M, Muir DC, Mabury SA, et al. 2005b. Perfluoroalkyl contaminants in liver tissue from East Greenland polar bears (*Ursus maritimus*). *Environ Toxicol Chem* 24(4):981-986.
- Smithwick M, Norstrom RJ, Mabury SA, et al. 2006. Temporal trends of perfluoroalkyl contaminants in polar bears (*Ursus maritimus*) from two locations in the North American arctic, 1972-2002. *Environ Sci Technol* 40:1139-1143.
- So MK, Taniyasu S, Lam PKS, et al. 2006a. Alkaline digestion and solid phase extraction method for perfluorinated compounds in mussels and oysters from South China and Japan. *Arch Environ Contam Toxicol* 50:240-248.
- So MK, Yamashita N, Taniyasu S, et al. 2006b. Health risks in infants associated with exposure to perfluorinated compounds in human breast milk from Zhoushan, China. *Environ Sci Technol* 40:2924-2929.
- +Sobolewski M, Conrad K, Allen JL, et al. 2014. Sex-specific enhanced behavioral toxicity induced by maternal exposure to a mixture of low dose endocrine-disrupting chemicals. *Neurotoxicology* 45:121-130. 10.1016/j.neuro.2014.09.008.
- +Son H, Kim S, Shin HI, et al. 2008. Perfluorooctanoic acid-induced hepatic toxicity following 21-day oral exposure in mice. *Arch Toxicol* 82:239-246.
- +Son HY, Lee S, Tak EN, et al. 2009. Perfluorooctanoic acid alters T lymphocyte phenotypes and cytokine expression in mice. *Environ Toxicol* 24(6):580-588.
- SPARC. 2008. Macroscopic pka. Sparc Performs Automated Reasoning in Chemistry. <http://sparc.chem.ugs.edu/sparc/display/ShowMacro.cfm>. May 08, 2008.
- Specht IO, Hougaard KS, Spano D, et al. 2012. Sperm DNA integrity in relation to exposure to environmental perfluoroalkyl substances. A study of spouses of pregnant women in three geographical regions. *Reprod Toxicol* 33:577-583.
- Splithoff HM, Tao L, Shaver SM, et al. 2008. Use of newborn screening program blood spots for exposure assessment: Declining levels of perfluorinated compounds in New York State infants. *Environ Sci Technol* 42(14):5361-5367.
- Staels B, Dallongeville J, Auwerx J, et al. 1998. Mechanism of action of fibrates on lipid and lipoprotein metabolism. *Circulation* 98:2088-2093.
- +Staples RE, Burgess BA, Kerns WD. 1984. The embryo-fetal toxicity and teratogenic potential of ammonium perfluorooctanoate (APFO) in the rat. *Fundam Appl Toxicol* 4:429-440.
- Starkov AA, Wallace KB. 2002. Structural determinants of fluorochemical-induced mitochondrial dysfunction. *Toxicol Sci* 66(2):244-252.
- Starling AP, Engel SM, Richardson DB, et al. 2014b. Perfluoroalkyl substances during pregnancy and validated preeclampsia among nulliparous women in the Norwegian Mother and Child Cohort Study. *Am J Epidemiol* 179(7):824-833. 10.1093/aje/kwt432.
- Starling AP, Engel SM, Whitworth KW, et al. 2014a. Perfluoroalkyl substances and lipid concentrations in plasma during pregnancy among women in the Norwegian Mother and Child Cohort Study. *Environ Int* 62:104-112. 10.1016/j.envint.2013.10.004.
- Stasinakis AS, Petalas AV, Mamais D, et al. 2008. Application of the OECD 301F respirometric test for the biodegradability assessment of various potential endocrine disrupting chemicals. *Bioresour Technol* 99:3458-3467.
- Steenland K, Woskie S. 2012. Cohort mortality study of workers exposed to perfluorooctanoic acid. *Am J Epidemiol* 176(10):909-917.

8. REFERENCES

- Steenland K, Fletcher T, Savitz DA. 2010a. Epidemiologic evidence on the health effects of perfluorooctanoic acid (PFOA). *Environ Health Perspect* 118(8):1100-1108.
- Steenland K, Jin C, MacNeil J, et al. 2009a. Predictors of PFOA levels in a community surrounding a chemical plant. *Environ Health Perspect* 117(7):1083-1088.
- Steenland K, Tinker S, Frisbee S, et al. 2009b. Association of perfluorooctanoic acid and perfluorooctane sulfonate with serum lipids among adults living near a chemical plant. *Am J Epidemiol* 170(10):1268-1278.
- Steenland K, Tinker S, Shankar A, et al. 2010b. Association of perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) with uric acid among adults with elevated community exposure to PFOA. *Environ Health Perspect* 118(2):229-233.
- Steenland K, Zhao L, Winquist A, et al. 2013. Ulcerative colitis and perfluorooctanoic acid (PFOA) in a highly exposed population of community residents and workers in the Mid-Ohio Valley. *Environ Health Perspect* 121(8):900-905.
- Steenland K, Zhao L, Winquist A. 2015. A cohort incidence study of workers exposed to perfluorooctanoic acid (PFOA). *Occup Environ Med* 72(5):373-380. 10.1136/oemed-2014-102364.
- Stein CR, Savitz DA. 2011. Serum perfluorinated compound concentration and attention deficit/hyperactivity disorder in children 5-18 years of age. *Environ Health Perspect* 119(10):1466-1471.
- Stein CR, McGovern KJ, Pajak AM, et al. 2016a. Perfluoroalkyl and polyfluoroalkyl substances and indicators of immune function in children aged 12-19 y: National Health and Nutrition Examination Survey. *Pediatr Res* 79(2):348-357. 10.1038/pr.2015.213.
- Stein CR, Ge Y, Wolff MS, et al. 2016b. Perfluoroalkyl substance serum concentrations and immune response to FluMist vaccination among healthy adults. *Environ Res* 149:171-178. 10.1016/j.envres.2016.05.020.
- Stein CR, Savitz DA, Bellinger DC. 2013. Perfluorooctanoate and neuropsychological outcomes in children. *Epidemiology* 24(4):590-599.
- Stein CR, Savitz DA, Bellinger DC. 2014a. Perfluorooctanoate exposure in a highly exposed community and parent and teacher reports of behaviour in 6-12-year-old children. *Paediatr Perinat Epidemiol* 28(2):146-156. 10.1111/ppe.12097.
- Stein CR, Savitz DA, Bellinger DC. 2014b. Supporting information to perfluorooctanoate exposure in a highly exposed community and parent and teacher reports of behaviour in 6-12-year-old children. *Paediatr Perinat Epidemiol* 10.1111/ppe.12097.
- Stein CR, Savitz DA, Elston B, et al. 2014c. Perfluorooctanoate exposure and major birth defects. *Reprod Toxicol* 47:15-20. 10.1016/j.reprotox.2014.04.006.
- Stein CR, Savitz DA, Dougan M. 2009. Serum levels of perfluorooctanoic acid and perfluorooctane sulfonate and pregnancy outcome. *Am J Epidemiol* 170(7):837-846.
- Stock NL, Lau FK, Ellis DA, et al. 2004. Polyfluorinated telomer alcohols and sulfonamides in the North American troposphere. *Environ Sci Technol* 38:991-996.
- Strøm M, Hansen S, Olsen SF, et al. 2014. Persistent organic pollutants measured in maternal serum and offspring neurodevelopmental outcomes--a prospective study with long-term follow-up. *Environ Int* 68:41-48. 10.1016/j.envint.2014.03.002.
- Strynar MJ, Lindstrom AB. 2008. Perfluorinated compounds in house dust from Ohio and North Carolina, USA. *Environ Sci Technol* 42:3751-3756.
- Strynar MJ, Lindstrom AB, Nakayama SF, et al. 2012. Pilot scale application of a method for the analysis of perfluorinated compounds in surface soils. *Chemosphere* 86:252-257.
- Su TC, Kuo CC, Hwang JJ, et al. 2016. Serum perfluorinated chemicals, glucose homeostasis and the risk of diabetes in working-aged Taiwanese adults. *Environ Int* 88:15-22. 10.1016/j.envint.2015.11.016.
- Suh CH, Cho NK, Lee CK, et al. 2011. Perfluorooctanoic acid-induced inhibition of placental prolactin-family hormone and fetal growth retardation in mice. *Mol Cell Endocrinol* 337(1-2):7-15.

8. REFERENCES

- Sundström M, Chang SC, Noker PE, et al. 2012. Comparative pharmacokinetics of perfluorohexanesulfonate (PFHxS) in rats, mice, and monkeys. *Reprod Toxicol* 33(4):441-451.
- Sweeney LM, Tyler TR, Kirman CR, et al. 2001. Proposed occupational exposure limits for select ethylene glycol ethers using PBPK models and Monte Carlo simulations. *Toxicol Sci* 62(1):124-139.
- Takacs ML, Abbott BD. 2007. Activation of mouse and human peroxisome proliferator-activated receptors (α, β, γ) by perfluorooctanoic acid and perfluorooctane sulfonate. *Toxicol Sci* 95(1):108-117.
- Takagi A, Sai K, Umemura T, et al. 1991. Short-term exposure to the peroxisome proliferators, perfluorooctanoic acid and perfluorodecanoic acid, causes significant increase of 8-hydroxydeoxyguanosine in liver DNA of rats. *Cancer Lett* 57(1):55-60.
- +Takahashi M, Ishida S, Hirata-Koizumi M, et al. 2014. Repeated dose and reproductive/developmental toxicity of perfluoroundecanoic acid in rats. *J Toxicol Sci* 39(1):97-108.
- +Tan X, Xie G, Sun X, et al. 2013. High fat diet feeding exaggerates perfluorooctanoic acid-induced liver injury in mice via modulating multiple metabolic pathways. *PLoS ONE* 8(4):e61409.
- Tan Y, Clewell HJ, Andersen ME. 2008. Time dependencies in perfluorooctylacids disposition in rat and monkeys: A kinetic analysis. *Toxicol Lett* 177:38-47.
- Tatum-Gibbs K, Wambaugh JF, Das KP, et al. 2011. Comparative pharmacokinetics of perfluorononanoic acid in rat and mouse. *Toxicology* 281(1-3):48-55. 10.1016/j.tox.2011.01.003.
- Tao L, Kannan K, Aldous KM, et al. 2008a. Biomonitoring of perfluorochemicals in plasma of New York State personnel responding to the World Trade Center disaster. *Environ Sci Technol* 42(9):3472-3478.
- Tao L, Kannan K, Wong CM, et al. 2008b. Perfluorinated compounds in human milk from Massachusetts, U.S.A. *Environ Sci Technol* 42(8):3096-3101.
- Tarazona JV, Rodriguez C, Alonso E, et al. 2016. Toxicokinetics of perfluorooctane sulfonate in rabbits under environmentally realistic exposure conditions and comparative assessment between mammals and birds. *Toxicol Lett* 241:200-206. 10.1016/j.toxlet.2015.11.002.
- Tardiff RG, Carson ML, Sweeney LM, et al. 2009. Derivation of a drinking water equivalent level (DWEL) related to the maximum contaminant level goal for perfluorooctanoic acid (PFOA), a persistent water soluble compound. *Food Chem Toxicol* 47(10):2557-2589.
- Taylor KW, Hoffman K, Thayer KA, et al. 2014. Polyfluoroalkyl chemicals and menopause among women 20-65 years of age (NHANES). *Environ Health Perspect* 122(2):145-150. 10.1289/ehp.1306707.
- +Thibodeaux JR, Hanson RG, Rogers JM, et al. 2003. Exposure to perfluorooctane sulfonate during pregnancy in rat and mouse. I: Maternal and prenatal evaluations. *Toxicol Sci* 74(2):369-381.
- +Thomford PJ. 2001. 4-Week capsule toxicity study with ammonium perfluorooctanoate (APFO) in Cynomolgus monkeys. APME Ad-Hoc APFO toxicology working group.
- +Thomford PJ. 2002a. 4-week capsule toxicity study with perfluorooctane sulfonic acid potassium salt (PFOS; T-6295) in Cynomolgus monkeys. St. Paul, MN: 3M.
- +Thomford PJ. 2002b. 104-Week dietary chronic toxicity and carcinogenicity study with perfluorooctane sulfonic acid potassium salt (PFOS; T-6295) in rats. St. Paul, MN: 3M.
- Thompson J, Lorber M, Toms LM, et al. 2010. Use of simple pharmacokinetic modeling to characterize exposure of Australians to perfluorooctanoic acid and perfluorooctane sulfonic acid. *Environ Int* 36(4):390-397. 10.1016/j.envint.2010.02.008.
- Thomsen C, Haug LS, Stigum H, et al. 2010. Changes in concentrations of perfluorinated compounds, polybrominated diphenyl ethers, and polychlorinated biphenyls in Norwegian breast-milk during twelve months of lactation. *Environ Sci Technol* 44(24):9550-9556.
- Timmermann CA, Rossing LI, Grontved A, et al. 2014. Adiposity and glycemic control in children exposed to perfluorinated compounds. *J Clin Endocrinol Metab* 99(4):E608-614. 10.1210/jc.2013-3460.

8. REFERENCES

- Tittlemier S, Ryan JJ, Van Oostdam J. 2004. Presence of anionic perfluorinated organic compounds in serum collected from northern Canadian populations. *Organohalogen Compounds* 66:3959-3964.
- Tittlemier SA, Pepper K, Seymour C, et al. 2007. Dietary exposure of Canadians to perfluorinated carboxylates and perfluorooctane sulfonate via consumption of meat, fish, fast foods, and food items prepared in their packaging. *J Agric Food Chem* 55:3203-3210.
- Toft G, Jonsson BA, Bonde JP, et al. 2016. Perfluorooctane sulfonate concentrations in amniotic fluid, biomarkers of fetal Leydig Cell Function, and cryptorchidism and hypospadias in Danish boys (1980-1996). *Environ Health Perspect* 124(1):151-156. 10.1289/ehp.1409288.
- Toft G, Jonsson BA, Lindh CH, et al. 2012. Exposure to perfluorinated compounds and human semen quality in Arctic and European populations. *Hum Reprod* 27(8):2532-2540.
- Toms LL, Calafat AM, Kato K, et al. 2009. Polyfluoroalkyl chemicals in pooled blood serum from infants, children, and adults in Australia. *Environ Sci Technol* 43(11):4194-4199.
- Tomy GT, Budakowski W, Halldorson T, et al. 2004. Fluorinated organic compounds in an eastern arctic marine food web. *Environ Sci Technol* 38:6475-6481.
- Trudel D, Horowitz L, Wormuth M, et al. 2008. Estimating consumer exposure to PFOS and PFOA. *Risk Anal* 28(2):251-269.
- Tsai MS, Lin CY, Lin CC, et al. 2015. Association between perfluoroalkyl substances and reproductive hormones in adolescents and young adults. *Int J Hyg Environ Health* 218(5):437-443. 10.1016/j.ijheh.2015.03.008.
- +Tucker DK, Macon MB, Strynar MJ, et al. 2015. The mammary gland is a sensitive pubertal target in CD-1 and C57Bl/6 mice following perinatal perfluorooctanoic acid (PFOA) exposure. *Reprod Toxicol* 54:26-36. 10.1016/j.reprotox.2014.12.002.
- Uhl SA, James-Todd T, Bell ML. 2013. Association of osteoarthritis with perfluorooctanoate and perfluorooctane sulfonate in NHANES 2003-2008. *Environ Health Perspect* 121(4):447-452.
- Upham BL, Deocampo ND, Wurl B, et al. 1998. Inhibition of gap junctional intercellular communication by perfluorinated fatty acids is dependent on the chain length of the fluorinated tail. *Int J Cancer* 78:491-495.
- Upham BL, Park JS, Babica P, et al. 2009. Structure-activity-dependent regulation of cell communication by perfluorinated fatty acids using *in vivo* and *in vitro* model systems. *Environ Health Perspect* 117(4):545-551. 10.1289/ehp.11728.
- URS. 2012. MOU Phase III - future work plan data assessment DuPont Washington Works, Washington, West Virginia, PFOA site-related environmental assessment program (OPPT-2004-0113 PFOA). In: Docket EPA-HQ-2004-0113-0517. Supporting documents: Letter to Dr. Maria Doa, Director, Chemical Control Division, USEPA, from Andrew S. Hartten, Principal Remediation Project Manager, DuPont Corporate Remediation Group. URS Corporation. <https://www.regulations.gov/document?D=EPA-HQ-OPPT-2004-0113-0516> February 28, 2017.
- Vagi SJ, Azziz-Baumgartner E, Sjodin A, et al. 2014. Exploring the potential association between brominated diphenyl ethers, polychlorinated biphenyls, organochlorine pesticides, perfluorinated compounds, phthalates, and bisphenol A in polycystic ovary syndrome: A case-control study. *BMC Endoc Disord* 14:86. 10.1186/1472-6823-14-86.
- Vanden Heuvel JP, Davis JW, Sommers R, et al. 1992a. Renal excretion of perfluorooctanoic acid in male rats: Inhibitory effect of testosterone. *J Biochem Toxicol* 7(1):31-36.
- Vanden Heuvel JP, Kuslikis BI, Peterson RE. 1992b. Covalent binding of perfluorinated fatty acids to proteins in the plasma, liver and testes of rats. *Chem Biol Interact* 82:318-328.
- Vanden Heuvel JP, Kuslikis BI, Shrago E, et al. 1991a. Inhibition of long-chain acyl-CoA synthetase by the peroxisome proliferator perfluorodecanoic acid in rat hepatocytes. *Biochem Pharmacol* 42(2):295-302.
- Vanden Heuvel JP, Kuslikis BI, Van Rafelghem MJ, et al. 1991b. Disposition of perfluorodecanoic acid in male and female rats. *Toxicol Appl Pharmacol* 107:450-459.
- Vanden Heuvel JP, Kuslikis BI, Van Rafelghem MJ, et al. 1991c. Tissue distribution, metabolism, and elimination of perfluorooctanoic acid in male and female rats. *J Biochem Toxicol* 6(2):83-92.

8. REFERENCES

- Vanden Heuvel JP, Thompson JT, Frame SR, et al. 2006. Differential activation of nuclear receptors by perfluorinated fatty acid analogs and natural fatty acids: A comparison of human, mouse, and rat peroxisome proliferator-activated receptor- α , - β , and - γ , liver x receptor- β , and retinoid x receptor- α . *Toxicol Sci* 92(2):476-489.
- +van Otterdijk FM. 2007a. Repeated dose 28-day oral toxicity study with MTDID-8391 by daily gavage in the rat, followed by a 21-day recovery period. 3M.
- van Otterdijk FM. 2007b. Repeated dose 90-day oral toxicity study with MTDID 8391 by daily gavage in the rat followed by a 3-week recovery period. 3M.
- Vélez MP, Arbuckle TE, Fraser WD. 2015. Maternal exposure to perfluorinated chemicals and reduced fecundity: The MIREC study. *Hum Reprod* 30(3):701-709. 10.1093/humrep/deu350.
- Vermont Department of Health. 2017. Drinking water guidance. Burlington, VT: Vermont Department of Health.
http://www.healthvermont.gov/sites/default/files/documents/pdf/ENV_DW_Guidance.pdf.
December 19, 2017.
- Verner MA, Loccisano AE, Morken NH, et al. 2015. Associations of perfluoroalkyl substances (PFAS) with lower birth weight: An evaluation of potential confounding by glomerular filtration rate using a physiologically based pharmacokinetic model (PBPK). *Environ Health Perspect* 123(12):1317-1324.
- Verner MA, Longnecker MP. 2015. Comment on "Enhanced elimination of perfluorooctanesulfonic acid by menstruating women: Evidence from population-based pharmacokinetic modeling." *Environ Sci Technol* 49(9):5836-5837. 10.1021/acs.est.5b00187.
- Verner MA, Ngueta G, Jensen ET, et al. 2016. A simple pharmacokinetic model of prenatal and postnatal exposure to perfluoroalkyl substances (PFASs). *Environ Sci Technol* 50(2):978-986.
- Verreault J, Berger U, Gabrielsen GW. 2007. Trends of perfluorinated alkyl substances in herring gull eggs from two coastal colonies in northern Norway: 1983-2003. *Environ Sci Technol* 41:6671-6677.
- Verreault J, Houde M, Gabrielsen GW, et al. 2005. Perfluorinated alkyl substances in plasma, liver, brain, and eggs of glaucous gulls (*Larus hyperboreus*) from the Norwegian Arctic. *Environ Sci Technol* 39:7439-7445.
- Vested A, Ramlau-Hansen CH, Olsen SF, et al. 2013. Associations of *in utero* exposure to perfluorinated alkyl acids with human semen quality and reproductive hormones in adult men. *Environ Health Perspect* 121(4):453-458.
- Vestergaard S, Nielsen F, Andersson AM, et al. 2012. Association between perfluorinated compounds and time to pregnancy in a prospective cohort of Danish couples attempting to conceive. *Hum Reprod* 27(3):873-880.
- Vestergren R, Cousins IT. 2009. Tracking the pathways of human exposure to perfluorocarboxylates. *Environ Sci Technol* 43(15):5565-5575.
- Vestergren R, Cousins IT, Trudel D, et al. 2008. Estimating the contribution of precursor compounds in consumer exposure to PFOS and PFOA. *Chemosphere* 73(10):1617-1624.
- Vesterholm Jensen D, Christensen J, Virtanen HE, et al. 2014. No association between exposure to perfluorinated compounds and congenital cryptorchidism: A nested case-control study among 215 boys from Denmark and Finland. *Reproduction* 147(4):411-417.
- +Vetvicka V, Vetvickova J. 2013. Reversal of perfluorooctanesulfonate-induced immunotoxicity by a glucan-resveratrol-vitamin C combination. *Oriental Pharmacy and Experimental Medicine* 13(1):77-84.
- +Viberg H, Lee I, Eriksson P. 2013. Adult dose-dependent behavioral and cognitive disturbances after a single neonatal PFHxS dose. *Toxicology* 304:185-191.
- Vieira VM, Hoffman K, Shin M, et al. 2013. Perfluorooctanoic acid exposure and cancer outcomes in a contaminated community: A geographic analysis. *Environ Health Perspect* 121(3):318-323.

8. REFERENCES

- Völkel W, Genzel-Boroviczeny O, Demmelmair H, et al. 2008. Perfluorooctane sulphonate (PFOS) and perfluorooctanoic acid (PFOA) in human breast milk: Results of a pilot study. *Int J Hyg Environ Health* 211:440-446.
- von Ehrenstein OS, Fenton SE, Kato K, et al. 2009. Polyfluoroalkyl chemicals in the serum and milk of breastfeeding women. *Reprod Toxicol* 27(3-4):239-245.
- Vuong AM, Yolton K, Webster GM, et al. 2016. Prenatal polybrominated diphenyl ether and perfluoroalkyl substance exposures and executive function in school-age children. *Environ Res* 147:556-564. 10.1016/j.envres.2016.01.008.
- Wallace K, Kissling G, Melnick R, et al. 2013. Structure-activity relationships for perfluoroalkane-induced *in vitro* interference with rat liver mitochondrial respiration. *Toxicol Lett* 222(3):257-264.
- Wallington TJ, Hurley MD, Xia J, et al. 2006. Formation of C₇F₁₅COOH (PFOA) and other perfluorocarboxylic acids during the atmospheric oxidation of 8:2 fluorotelomer alcohol. *Environ Sci Technol* 40:924-930.
- Walters M, Bjork J, Wallace K. 2009. Perfluorooctanoic acid stimulated mitochondrial biogenesis and gene transcription in rats. *Toxicology* 264(1):10-15.
- Wambaugh JF, Barton HA, Setzer RW. 2008. Comparing models for perfluorooctanoic acid pharmacokinetics using Bayesian analysis. *J Pharmacokinet Pharmacodyn* 35(6):683-712. 10.1007/s10928-008-9108-2.
- Wambaugh JF, Setzer RW, Pitruzzello AM, et al. 2013. Dosimetric anchoring of *in vivo* and *in vitro* studies for perfluorooctanoate and perfluorooctanesulfonate. *Toxicol Sci* 136(2):308-327. 10.1093/toxsci/kft204.
- Wan HT, Mruk DD, Wong CK, et al. 2014a. Perfluorooctanesulfonate (PFOS) perturbs male rat Sertoli cell blood-testis barrier function by affecting F-actin organization via p-FAK-Tyr(407): An *in vitro* study. *Endocrinology* 155(1):249-262. 10.1210/en.2013-1657.
- +Wan HT, Zhao YG, Wong MH, et al. 2011. Testicular signaling is the potential target of perfluorooctanesulfonate-mediated subfertility in male mice. *Biol Reprod* 84(5):1016-1023.
- +Wan HT, Zhao YG, Leung PY, et al. 2014b. Perinatal exposure to perfluorooctane sulfonate affects glucose metabolism in adult offspring. *PLoS ONE* 9(1):e87137. 10.1371/journal.pone.0087137.
- Wang JJ, Hsieh W-S, Chen C-Y, et al. 2011. The effect of prenatal perfluorinated chemicals exposures on pediatric atopy. *Environ Res* 111(6):785-791.
- Wang J, Zhang Y, Zhang W, et al. 2012. Association of perfluorooctanoic acid with HDL cholesterol and circulating miR-26b and miR-199-3p in workers of a fluorochemical plant and nearby residents. *Environ Sci Technol* 46(17):9274-9281.
- Wang J, Yan S, Zhang W, et al. 2015a. Integrated proteomic and miRNA transcriptional analysis reveals the hepatotoxicity mechanism of PFNA exposure in mice. *J Proteome Res* 14(1):330-341. 10.1021/pr500641b.
- Wang N, Szostek B, Buck RC, et al. 2005a. Fluorotelomer alcohol biodegradation—direct evidence that perfluorinated carbon chains breakdown. *Environ Sci Technol* 39:7516-7528.
- Wang N, Szostek B, Folsom PW, et al. 2005b. Aerobic biotransformation of 14c-labeled 8-2 telomer B alcohol by activated sludge from a domestic sewage treatment plant. *Environ Sci Technol* 39:531-538.
- Wang Y, Adgent M, Su PH, et al. 2016. Prenatal exposure to perfluorocarboxylic acids (PFCAs) and fetal and postnatal growth in the Taiwan maternal and infant cohort study. *Environ Health Perspect* 10.1289/ehp.1509998.
- Wang Y, Liu W, Zhang Q, et al. 2015c. Effects of developmental perfluorooctane sulfonate exposure on spatial learning and memory ability of rats and mechanism associated with synaptic plasticity. *Food Chem Toxicol* 76:70-76. 10.1016/j.fct.2014.12.008.
- Wang Y, Rogan WJ, Chen PC, et al. 2014. Association between maternal serum perfluoroalkyl substances during pregnancy and maternal and cord thyroid hormones: Taiwan maternal and infant cohort study. *Environ Health Perspect* 122(5):529-534. 10.1289/ehp.1306925.

8. REFERENCES

- Wang Y, Rogan WJ, Chen HY, et al. 2015b. Prenatal exposure to perfluoroalkyl substances and children's IQ: The Taiwan maternal and infant cohort study. *Int J Hyg Environ Health* 218(7):639-644. 10.1016/j.ijheh.2015.07.002.
- Wang Y, Starling AP, Haug LS, et al. 2013a. Association between perfluoroalkyl substances and thyroid stimulating hormone among pregnant women: A cross-sectional study. *Environ Health* 12(1):76. 10.1186/1476-069x-12-76.
- Wang Y, Yeung LWY, Taniyasu S, et al. 2008. Perfluorooctane sulfonate and other fluorochemicals in waterbird eggs from south China. *Environ Sci Technol* 42(21):8146-8151.
- Wang Z, Cousins IT, Scheringer M, et al. 2013b. Fluorinated alternatives to long-chain perfluoroalkyl carboxylic acids (PFCAs), perfluoroalkane, sulfonic acids (PFSAs) and their potential precursors. *Environ Int* 60:242-248.
- Wania F. 2007. A global mass balance analysis of the source of perfluorocarboxylic acids in the Arctic Ocean. *Environ Sci Technol* 41:4529-4535.
- Washburn ST, Bingman TS, Braitwaite SK, et al. 2005. Exposure assessment and risk characterization for perfluorooctanoate in selected consumer articles. *Environ Sci Technol* 39:3904-3910.
- Washington JW, Ellington J, Jenkins TM, et al. 2009. Degradability of an acrylate-linked, fluorotelomer polymer in soil. *Environ Sci Technol* 43(17):6617-6623.
- Washington JW, Jenkins TM. 2015. Abiotic hydrolysis of fluorotelomer-based polymers as a source of perfluorocarboxylates at the global scale. *Environ Sci Technol* 49(24):14129-14135. 10.1021/acs.est.5b03686.
- Washington JW, Jenkins TM, Rankin K, et al. 2015. Decades-scale degradation of commercial, side-chain, fluorotelomer-based polymers in soils and water. *Environ Sci Technol* 49(2):915-823.
- Washino N, Saijo Y, Sasaki S, et al. 2009. Correlations between prenatal exposure to perfluorinated chemicals and reduced fetal growth. *Environ Health Perspect* 117:660-667.
- Watkins DJ, Josson J, Elston B, et al. 2013. Exposure to perfluoroalkyl acids and markers of kidney function among children and adolescents living near a chemical plant. *Environ Health Perspect* 121(5):625-630.
- Weaver YM, Ehresman DJ, Butenhoff JL, et al. 2010. Roles of rat renal organic anion transporters in transporting perfluorinated carboxylates with different chain lengths. *Toxicol Sci* 113(2):305-314.
- Webster GM, Rauch SA, Marie NS, et al. 2016. Cross-sectional associations of serum perfluoroalkyl acids and thyroid hormones in U.S. adults: Variation according to TPOAb and iodine status (NHANES 2007-2008). *Environ Health Perspect* 124(7):935-942. 10.1289/ehp.1409589.
- Wei S, Chen LQ, Taniyasu S, et al. 2007a. Distribution of perfluorinated compounds in surface seawaters between Asia and Antarctica. *Mar Pollut Bull* 54:1813-1838.
- Wei Y, Dai J, Liu M, et al. 2007b. Estrogen-like properties of perfluorooctanoic acid as revealed by expressing hepatic estrogen-responsive genes in rare minnows (*Gobiocypris rarus*). *Environ Toxicol Chem* 26(11):2440-2447.
- Wen LL, Lin LY, Su TC, et al. 2013. Association between serum perfluorinated chemicals and thyroid function in U.S. adults: The national health and nutrition examination survey 2007-2010. *J Clin Endocrinol Metab* 98(9):E1456-1464. 10.1210/jc.2013-1282.
- +White SS, Calafat AM, Kuklenyik Z, et al. 2007. Gestational PFOA exposure of mice is associated with altered mammary gland development in dams and female offspring. *Toxicol Sci* 96(1):133-144.
- +White SS, Kato K, Jia LT, et al. 2009. Effects of perfluorooctanoic acid on mouse mammary gland development and differentiation resulting from cross-foster and restricted gestational exposures. *Reprod Toxicol* 27(3-4):289-298.
- +White SS, Stanko JP, Kato K, et al. 2011. Gestational and chronic low-dose PFOA exposures and mammary gland growth and differentiation in three generations of CD-1 mice. *Environ Health Perspect* 119(8):1070-1076.
- Whitworth KW, Haug LS, Baird DD, et al. 2012a. Perfluorinated compounds in relation to birth weight in the Norwegian Mother and Child Cohort Study. *Am J Epidemiol* 175(12):1209-1216.

8. REFERENCES

- Whitworth KW, Haug LS, Baird DD, et al. 2012b. Perfluorinated compounds and subfecundity in pregnant women. *Epidemiology* 23(2):257-263.
- WHO. 2010. Guidelines for indoor air quality: Selected pollutants. Geneva, Switzerland: World Health Organization. http://www.euro.who.int/__data/assets/pdf_file/0009/128169/e94535.pdf. January 08, 2014.
- WHO. 2017. Guidelines for drinking-water quality. Geneva, Switzerland: World Health Organization. <http://apps.who.int/iris/bitstream/10665/254637/1/9789241549950-eng.pdf?ua=1>. February 28, 2017.
- Wilhelm M, Kraft M, Rauchfuss K, et al. 2008. Assessment and management of the first German case of a contamination with perfluorinated compounds (PFC) in the Region Sauerland, North Rhine-Westphalia. *J Toxicol Environ Health A* 71:725-733.
- Wilhelm M, Holzer J, Dobler L, et al. 2009. Preliminary observations on perfluorinated compounds in plasma samples (1977-2004) of young German adults from an area with perfluorooctanoate-contaminated drinking water. *Int J Hyg Environ Health* 212(2):142-145.
- Winquist A, Steenland K. 2014a. Modeled PFOA exposure and coronary artery disease, hypertension, and high cholesterol in community and worker cohorts. *Environ Health Perspect* 122(12):1299-1305. 10.1289/ehp.1307943.
- Winquist A, Steenland K. 2014b. Perfluorooctanoic acid exposure and thyroid disease in community and worker cohorts. *Epidemiology* 25(2):255-264. 10.1097/ede.0000000000000040.
- +Wolf CJ, Fenton SE, Schmid JE, et al. 2007. Developmental toxicity of perfluorooctanoic acid in the CD-1 mouse after cross-foster and restricted gestational exposures. *Toxicol Sci* 95(2):462-473.
- Wolf CJ, Rider CV, Lau C, et al. 2014. Evaluating the additivity of perfluoroalkyl acids in binary combinations on peroxisome proliferator-activated receptor- α activation. *Toxicology* 316:43-54. 10.1016/j.tox.2013.12.002.
- Wolf CJ, Schmid JE, Lau C, et al. 2012. Activation of mouse and human peroxisome proliferator-activated receptor- α (PPAR α) by perfluoroalkyl acids (PFAAs): Further investigation of C4-C12 compounds. *Reprod Toxicol* 33:546-551.
- Wolf CJ, Takacs ML, Schmid JE, et al. 2008a. Activation of mouse and human peroxisome proliferator-activated receptor α by perfluoroalkyl acids of different functional groups and chain lengths. *Toxicol Sci* 106(1):162-171.
- +Wolf CJ, Zehr RD, Schmid JE, et al. 2010. Developmental effects of perfluorononanoic Acid in the mouse are dependent on peroxisome proliferator-activated receptor- α . *PPAR Res* 2010 10.1155/2010/282896.
- Wolf DC, Moore T, Abbott BD, et al. 2008b. Comparative hepatic effects of perfluorooctanoic acid and WY 14,643 in PPAR- α knockout and wild-type mice. *Toxicol Pathol* 36(4):632-639. 10.1177/0192623308318216.
- Wong F, MacLeod M, Mueller JF, et al. 2014. Enhanced elimination of perfluorooctane sulfonic acid by menstruating women: Evidence from population-based pharmacokinetic modeling. *Environ Sci Technol* 48(15):8807-8814.
- Wong F, MacLeod M, Mueller JF, et al. 2015. Response to comment on "Enhanced elimination of perfluorooctane sulfonic acid by menstruating women: Evidence from population-based pharmacokinetic modeling." *Environ Sci Technol* 49(9):5838-5839.
- Worley RR, Fisher J. 2015a. Application of physiologically-based pharmacokinetic modeling to explore the role of kidney transporters in renal reabsorption of perfluorooctanoic acid in the rat. *Toxicol Appl Pharmacol* 289(3):428-441. 10.1016/j.taap.2015.10.017.
- Worley RR, Fisher J. 2015b. Supplementary material: Application of physiologically-based pharmacokinetic modeling to explore the role of kidney transporters in renal reabsorption of perfluorooctanoic acid in the rat. *Toxicol Appl Pharmacol* 289(3):428-441.
- Worley RR, Moore SM, Tierney BC, et al. 2017a. Per- and polyfluoroalkyl substances in human serum and urine samples from a residentially exposed community. *Environ Int* 106:135-143. 10.1016/j.envint.2017.06.007.

8. REFERENCES

- Worley RR, Yang X, Fisher J. 2017b. Physiologically based pharmacokinetic modeling of human exposure to perfluorooctanoic acid suggests historical non drinking-water exposures are important for predicting current serum concentrations. *Toxicol Appl Pharmacol* 330:9-21. 10.1016/j.taap.2017.07.001.
- Woskie SR, Gore R, Steenland K. 2012. Retrospective exposure assessment of perfluorooctanoic acid serum concentrations at a fluoropolymer manufacturing plant. *Ann Occup Hyg* 56(9):1025-1037. 10.1093/annhyg/mes023.
- Wu LL, Gao HW, Gao NY, et al. 2009. Interaction of perfluorooctanoic acid with human serum albumin. *BMC Struct Biol* 9:31.
- Wu XM, Bennett DH, Calafat AM, et al. 2015. Serum concentrations of perfluorinated compounds (PFC) among selected populations of children and adults in California. *Environ Res* 136:264-273. 10.1016/j.envres.2014.09.026.
- +Xia W, Wan Y, Li YY, et al. 2011. PFOS prenatal exposure induce mitochondrial injury and gene expression change in hearts of weaned SD rats. *Toxicology* 282(1-2):23-29.
- Xiao F, Simcik MF, Halbach TR, et al. 2015. Perfluorooctane sulfonate (PFOS) and perfluorooctanoate (PFOA) in soils and groundwater of a U.S. metropolitan area: Migration and implications for human exposure. *Water Res* 72:64-74.
- +Xie Y, Yang Q, Nelson BD, et al. 2003. The relationship between liver peroxisome proliferation and adipose tissue atrophy induced by peroxisome proliferator exposure and withdrawal in mice. *Biochem Pharmacol* 66(5):749-756.
- +Xing J, Wang G, Zhao J, et al. 2016. Toxicity assessment of perfluorooctane sulfonate using acute and subchronic male C57BL/6J mouse models. *Environ Pollut* 210:388-396. 10.1016/j.envpol.2015.12.008.
- Xu J, Shimpi P, Armstrong L, et al. 2016. PFOS induces adipogenesis and glucose uptake in association with activation of Nrf2 signaling pathway. *Toxicol Appl Pharmacol* 290:21-30.
- +Yahia D, El-Nasser MA, Abedel-Latif M, et al. 2010. Effects of perfluorooctanoic acid (PFOA) exposure to pregnant mice on reproduction. *J Toxicol Sci* 35(4):527-533.
- +Yahia D, Tsukuba C, Yoshida M, et al. 2008. Neonatal death of mice treated with perfluorooctane sulfonate. *J Toxicol Sci* 33(2):219-226.
- Yamada A, Maeda K, Kamiyama E, et al. 2007. Multiple human isoforms of drug transporters contribute to the hepatic and renal transport of olmesartan, a selective antagonist of the angiotensin II AT1-receptor. *Drug Metab Dispos* 35(12):2166-2176. 10.1124/dmd.107.017459.
- Yamada T, Taylor PH, Buck RC, et al. 2005. Thermal degradation of fluorotelomer treated articles and related materials. *Chemosphere* 61:974-984.
- Yamaguchi M, Arisawa K, Uemura H, et al. 2013. Consumption of seafood, serum liver enzymes, and blood levels of PFOS and PFOA in the Japanese population. *J Occup Health* 55(3):184-194.
- Yamashita N, Kannan K, Taniyasu S, et al. 2005. A global survey of perfluorinated acids in oceans. *Mar Pollut Bull* 51:658-668.
- Yamashita N, Taniyasu S, Petrick G, et al. 2008. Perfluorinated acids as novel chemical tracers of global circulation of ocean waters. *Chemosphere* 70:1247-1255.
- Yang CH, Glover KP, Han X. 2009. Organic anion transporting polypeptide (Oatp) 1a1-mediated perfluorooctanoate transport and evidence for a renal reabsorption mechanism of Oatp1a1 in renal elimination of perfluorocarboxylates in rats. *Toxicol Lett* 190(2):163-171.
- Yang CH, Glover KP, Han X. 2010. Characterization of cellular uptake of perfluorooctanoate via organic anion-transporting polypeptide 1A2, organic anion transporter 4, and urate transporter 1 for their potential roles in mediating human renal reabsorption of perfluorocarboxylates. *Toxicol Sci* 117(2):294-302.
- Yang L, Li J, Lai J, et al. 2016a. Placental transfer of perfluoroalkyl substances and associations with thyroid hormones: Beijing prenatal exposure study. *Sci Rep* 6:21699. 10.1038/srep21699.

8. REFERENCES

- Yang L, Wang Z, Shi Y, et al. 2016b. Human placental transfer of perfluoroalkyl acid precursors: Levels and profiles in paired maternal and cord serum. *Chemosphere* 144:1631-1638. 10.1016/j.chemosphere.2015.10.063.
- +Yang Q, Abedi-Valugerdi M, Xie Y, et al. 2002a. Potent suppression of the adaptive immune response in mice upon dietary exposure to the potent peroxisome proliferator, perfluorooctanoic acid. *Int Immunopharmacol* 2(2-3):389-397.
- +Yang Q, Xie Y, Alexson SE, et al. 2002b. Involvement of the peroxisome proliferator-activated receptor alpha in the immunomodulation caused by peroxisome proliferators in mice. *Biochem Pharmacol* 63(10):1893-1900.
- +Yang Q, Xie Y, Depierre JW. 2000. Effects of peroxisome proliferators on the thymus and spleen of mice. *Clin Exp Immunol* 122(2):219-226.
- +Yang Q, Xie Y, Eriksson AM, et al. 2001. Further evidence for the involvement of inhibition of cell proliferation and development in thymic and splenic atrophy induced by the peroxisome proliferator perfluorooctanoic acid in mice. *Biochem Pharmacol* 62(8):1133-1140.
- Yao PL, Ehresman DJ, Rae JM, et al. 2014. Comparative *in vivo* and *in vitro* analysis of possible estrogenic effects of perfluorooctanoic acid. *Toxicology* 326:62-73. 10.1016/j.tox.2014.10.008.
- Yao X, Zhong L. 2005. Genotoxic risk and oxidative DNA damage in HepG2 cells exposed to perfluorooctanoic acid. *Mutat Res* 587:38-44.
- Yarwood G, Kembal-Cook S, Keinath M, et al. 2007. High-resolution atmospheric modeling of fluorotelomer alcohols and perfluorocarboxylic acids in the North American troposphere. *Environ Sci Technol* 41:5756-5762.
- Ye X, Kato K, Wong LY, et al. 2018a. Per- and polyfluoroalkyl substances in sera from children 3 to 11 years of age participating in the National Health and Nutrition Examination Survey 2013-2014. *Int J Hyg Environ Health* 221(1):9-16. 10.1016/j.ijheh.2017.09.011.
- Ye X, Kato K, Wong LY, et al. 2018b. Supporting information to "Per- and polyfluoroalkyl substances in sera from children 3 to 11 years of age participating in the National Health and Nutrition Examination Survey 2013-2014" [*Int J Hyg Environ Health* 221(1):9-16. 10.1016/j.ijheh.2017.09.011]. *Int J Hyg Environ Health* <https://www.sciencedirect.com/science/article/pii/S1438463917305886#sec0045>. December 19, 2017.
- Ye X, Strynar MJ, Nakayama SF, et al. 2008. Perfluorinated compounds in whole fish homogenates from the Ohio, Missouri, and Upper Mississippi Rivers, USA. *Environ Pollut* 156(3):1227-1232. 10.1016/j.envpol.2008.03.014.
- Yeung LW, Robinson SJ, Koschorreck J, et al. 2013. Part II. A temporal study of PFOS and its precursors in human plasma from two German cities in 1982-2009. *Environ Sci Technol* 47(8):3875-3882. 10.1021/es4004153.
- Ylinen M, Auriola S. 1990. Tissue distribution and elimination of perfluorodecanoic acid in the rat after single intraperitoneal administration. *Pharmacol Toxicol* 66:45-48.
- Ylinen M, Kojo A, Hanhijarvi H, et al. 1990. Disposition of perfluorooctanoic acid in the rat after single and subchronic administration. *Bull Environ Contam Toxicol* 44:46-53.
- Yoo H, Washington JW, Jenkins TM, et al. 2011. Quantitative determination of perfluorochemicals and fluorotelomer alcohols in plants from biosolid-amended fields using LC/MS/MS and GC/MS. *Environ Sci Technol* 45.
- Young CJ, Furdui VI, Franklin J, et al. 2007. Perfluorinated acids in Arctic snow: New evidence for atmospheric formation. *Environ Sci Technol* 41:3455-3461.
- Yu J, Hu J, Tanaka S, et al. 2009c. Perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) in sewage treatment plants. *Water Res* 43(9):2399-2408.
- +Yu WG, Liu W, Jin YH. 2009a. Effects of perfluorooctane sulfonate on rat thyroid hormone biosynthesis and metabolism. *Environ Toxicol Chem* 28(5):990-996.

8. REFERENCES

- Yu WG, Liu W, Jin YH, et al. 2009b. Prenatal and postnatal impact of perfluorooctane sulfonate (PFOS) on rat development: A cross-foster study on chemical burden and thyroid hormone system. *Environ Sci Technol* 43(21):8416-8422.
- Yuan G, Peng H, Huang C, et al. 2016. Ubiquitous occurrence of fluorotelomer alcohols in eco-friendly paper-made food-contact materials and their implication for human exposure. *Environ Sci Technol* 50:942-950.
- Zeng H-c, Zhang L, Li Y-y, et al. 2011. Inflammation-like glial response in rat brain induced by prenatal PFOS exposure. *Neurotoxicology* 32(1):130-139.
- Zeng XW, Qian Z, Emo B. 2015. The association between perfluoroalkyl chemicals and serum lipid levels in children. *Sci Total Environ* 512-513:364-370
- Zhang C, Sundaram R, Maisog J, et al. 2015a. A prospective study of prepregnancy serum concentrations of perfluorochemicals and the risk of gestational diabetes. *Fertil Steril* 103(1):184-189.
- Zhang H, Shi Z, Liu Y, et al. 2008. Lipid homeostasis and oxidative stress in the liver of male rats exposed to perfluorododecanoic acid. *Toxicol Appl Pharmacol* 227:16-25.
- Zhang L, Ren X-M, Wan B, et al. 2014. Structure-dependent binding and activation of perfluorinated compounds on human peroxisome proliferator-activated receptor γ . *Toxicol Appl Pharmacol* 279(3):275-283.
- Zhang T, Sun H, Lin Y, et al. 2011. Perfluorinated compounds in human blood, water, edible freshwater fish, and seafood in China: Daily intake and regional differences in human exposures. *J Agric Food Chem* 59:11168-11176.
- Zhang T, Sun H, Qin X, et al. 2015b. PFOS and PFOA in paired urine and blood from general adults and pregnant women: Assessment of urinary elimination. *Environ Sci Pollut Res Int* 22(7):5572-5579. 10.1007/s11356-014-3725-7.
- Zhang X, Chen L, Fei XC, et al. 2009. Binding of PFOS to serum albumin and DNA: Insight into the molecular toxicity of perfluorochemicals. *BMC Mol Biol* 10:16.
- Zhang X, Lohmann R, Dassuncao C, et al. 2016. Source attribution of poly-and perfluoroalkyl substances (PFASs) in surface waters from Rhode Island and New York metropolitan area. *Environ Sci Technol Lett* 3:316-321. 10.1021/acs.estlett.6b00255.
- Zhang Y, Beesoon S, Zhu L, et al. 2013. Biomonitoring of perfluoroalkyl acids in human urine and estimates of biological half-life. *Environ Sci Technol* 47(18):10619-10627. 10.1021/es401905e.
- Zhao G, Wang J, Wang X, et al. 2011. Mutagenicity of PFOA in mammalian cells: Role of mitochondria-dependent reactive oxygen species. *Environ Sci Technol* 45(4):1638-1644.
- Zhao H, Qu B, Guan Y, et al. 2016. Influence of salinity and temperature on uptake of perfluorinated carboxylic acids (PFCAs) by hydroponically grown wheat (*Triticum aestivum L.*). *Springer Plus* 5:541.
- +Zheng L, Dong GH, Jin YH, et al. 2009. Immunotoxic changes associated with a 7-day oral exposure to perfluorooctanesulfonate (PFOS) in adult male C57BL/6 mice. *Arch Toxicol* 83(7):679-689.
- Zhu Y, Qin XD, Zeng XW, et al. 2016. Associations of serum perfluoroalkyl acid levels with T-helper cell-specific cytokines in children: By gender and asthma status. *Sci Total Environ* 559:166-173. 10.1016/j.scitotenv.2016.03.187.