

9. REFERENCES

- *Aaseth J, Frey H, Glattre E. 1990. Selenium concentrations in the human thyroid gland. *Biol Trace Elem Res* 24(2):147-152.
- Abdel-Azeem EA. 1996. Selenium cytotoxicity in root meristems of vicia faba l. *Al-Azhar Bull Sci* 7(1):401-409.
- *Abdelrahman MM, Kincaid RL. 1995. Effect of selenium supplementation of cows on maternal transfer of selenium to fetal and newborn calves. *J Dairy Sci* 78:625-630.
- Abo-Elkhier ZA, El-Shafy EA. 2000. Chromosomal alterations in mitotic division induced by selenium pollutants. *Egypt J Biotechnol* 7:1-11.
- ACGIH. 1994. Documentation of the threshold limit values and biological exposure indices. American Conference of Governmental Industrial Hygienists, Cincinnati, OH.
- *ACGIH. 2000. 2000 TLVs and BEIs. Threshold limit values and biological exposure indices. American Conference of Governmental Industrial Hygienists, Cincinnati, OH.
- *Adams WJ. 1976. The toxicity and residue dynamics of selenium in fish and aquatic invertebrates. Dissertation submitted to Michigan State University, Department of Fisheries and Wildlife.
- Adeloju SB, Bond AM, Briggs MH. 1984. Critical evaluation of some wet digestion methods for the stripping voltammetric determination of selenium in biological materials. *Anal Chem* 56:2397-2401.
- *Adinolfi M. 1985. The development of the human blood-CSF-brain barrier. *Dev Med Child Neurol* 27:532-537.
- *Adkins RL, Walsh N, Edmunds M, et al. 1995. Inductively coupled plasma atomic emission spectrometric analysis of low levels of selenium in natural waters. *Analyst* 120:1433-1436.
- *Adlercreutz H. 1995. Phytoestrogens: Epidemiology and a possible role in cancer protection. *Environ Health Perspect Suppl* 103(7):103-112.
- *Agency for Toxic Substances and Disease Registry. 1989. Decision guide for identifying substance-specific data needs related to toxicological profiles; Notice. Agency for Toxic Substances and Disease Registry. *Federal Register* 54(174):37618-37634.
- *Agency for Toxic Substances and Disease Registry. 1990. Biomarkers of organ damage or dysfunction for the renal, hepatobiliary, and immune systems. Atlanta, GA: Subcommittee on Biomarkers of Organ Damage and Dysfunction, Agency for Toxic Substances and Disease Registry.
- Aggarwal SK, Kinter M, Herold DA. 1992. Determination of selenium in urine by isotope dilution gas chromatography-mass spectrometry using 4-nitro-o-phenylenediamine, 3,5-dibromo-o-phenylenediamine, and 4-trifluoromethyl-o-phenylenediamine as derivatizing reagents. *Anal Biochem* 202(2):367-374.

* Cited in text

9. REFERENCES

- *Alabdula'aly AI, Khan MA. 2000. Chemistry of rain water in Riyadh, Saudi Arabia. *Arch Environ Contam Toxicol* 39:66-73.
- Al-Awadi FM, Srikumar TS. 2001. Determination of selenium concentration and its chemical forms in the milk of Kuwaiti and non-Kuwaiti lactating mothers. *J Trace Elem Exp Med* 14(1):57-67.
- Albrecht F. 1998. Selenium, building nutritional defenses. *Nat Pharm* 2:22-23.
- *Al-Bayati MA, Raabe OG, Teague SV. 1992. Effect of inhaled dimethylselenide in Fisher 344 male rat. *J Toxicol Environ Health* 37(4):549-557.
- *Alfthan G. 1985. Can externally deposited selenium be removed from hair? [Letter]. *Clin Chem* 31:500.
- Alfthan G, Penttila A. 1988. Effect of fat on human liver selenium concentration. *Biol Trace Elem Res* 18:137-143.
- Alfthan G, Aro A, Arvilommi H, et al. 1991. Selenium metabolism and platelet glutathione peroxidase activity in healthy Finnish men: Effects of selenium yeast, selenite, and selenate. *Am J Clin Nutr* 53(1):120-125.
- Alfthan G, Bogye G, Aro A, et al. 1992. The human selenium status in Hungary. *J Trace Elem Electrolytes Health Dis* 6(4):233-238.
- *Al-Kunani AS, Knight R, Haswell SJ, et al. 2001. The selenium status of women with a history of recurrent miscarriage. *Br J Obstet Gynaecol* 108(10):1094-1097.
- *Allaway WH, Cary EE. 1964. Determination of submicrogram amounts of selenium in biological materials. *Anal Chem* 36:1359-1362.
- *Allaway WH, Kubota J, Losee F, et al. 1968. Selenium, molybdenum, and vanadium in human blood. *Arch Environ Health* 16:342-348.
- Allen GT, Balckford SH, Tabot VM, et al. 2001. Metals, boron, and selenium in Neosho Madtom habitats in the Neosho River in Kansas, U.S.A. *Environ Monit Assess* 66(1):1-21.
- Al-Saleh I, Al-Doush I, Ibrahim M, et al. 1998. Serum selenium levels in Saudi new-borns. *Int J Environ Health Res* 8:269-275.
- *Altman PL, Dittmer DS. 1974. In: *Biological handbooks: Biology data book*. Vol. III. 2nd ed. Bethesda, MD: Federation of American Societies for Experimental Biology, 1987-2008, 2041.
- Alvarez GH, Capar SG. 1991. Continuous hydride generation-atomic absorption method for the determination of selenium and arsenic in foods. *Analytical Letters* 24(9):1695-1710.
- Ames M, Gullu G, Olmez I. 1998. Atmospheric mercury in the vapor phase, and in fine and coarse particulate matter at Perch River, New York. *Atmos Environ* 32(5):865-872.
- *Amor AJ, Pringle P. 1945. A review of selenium as an industrial hazard. *Bulletin of Hygiene* 20(5):239-241.

9. REFERENCES

- *Andersen ME, Krishnan K. 1994. Relating *in vitro* to *in vivo* exposures with physiologically based tissue dosimetry and tissue response models. In: Salem H, ed. Animal test alternatives: Refinement, reduction, replacement. New York, NY: Marcel Dekker, Inc., 9-25.
- *Andersen ME, Clewell HJ III, Gargas ML, et al. 1987. Physiologically based pharmacokinetics and the risk assessment process for methylene chloride. Toxicol Appl Pharmacol 87:185-205.
- Anderson RS, Trune DR, Shearer TR. 1988. Histologic changes in selenite cortical cataract. Invest Ophthalmol Vis Sci 29(9):1418-1427.
- *Andren AW, Klein DH. 1975. Selenium in coal-fired steam plant emissions. Environ Sci Technol 9:856-858.
- Anema SM, Walker SW, Howie AF, et al. 1999. Thioredoxin reductase is the major selenoprotein expressed in human umbilical-vein endothelial cells and is regulated by protein kinase C. Biochem J 342:111-117.
- Anjaria KB, Madhvanath U. 1988. Genotoxicity of selenite in diploid yeast. Mutat Res 204(4):605-614.
- *AOAC. 1984. Official methods of analysis of the Association of Official Analytical Chemists. Methods 3.101, 3.102-3.107, 25.154, and 25.158. Arlington, VA: Association of Official Analytical Chemists.
- Aono T, Nakaguchi Y, Hiraki K, et al. 1990. Determination of seleno-amino acid in natural water samples. Geochem J 24(4):255-261.
- *Archimbaud Y, Grillon G, Poncy JL, et al. 1992. ⁷⁵Se transfer via placenta and milk, distribution and retention in fetal, young and adult rat. Rad Protect Dos 41(2-4):147-151.
- *Arteel GE, Sies H. 2001. The biochemistry of selenium and glutathion system. Environ Toxicol Pharmacol 10:153-158.
- Arthur JR. 2000. The glutathione peroxidases. Cell Mol Life Sci 57(13/14):1825-1835.
- *Arthur JR, Beckett GJ. 1989. Selenium deficiency and thyroid hormone metabolism. In: Wendel A, ed. Selenium in biology and medicine. New York, NY: Springer-Verlag.
- *Arthur JR, Beckett GF. 1994a. Roles of selenium in Type I iodothyronine 5'-deiodinase and in thyroid hormone and iodine metabolism. In: Burk RF, ed. Selenium in biology and human health. New York, NY: Springer-Verlag, 94-115.
- *Arthur JR, Beckett GJ. 1994b. Symposium 2. Newer aspects of micronutrients in at risk groups. New metabolic roles for Selenium. Proc Nutr Soc 53:615-624.
- Arthur JR, Beckett GJ. 1999. Thyroid function. Br Med Bull 55(3):658-668.
- *Arthur MA, Rubin G, Woodbury PB, et al. 1992. Uptake and accumulation of selenium by terrestrial plants growing on a coal fly ash landfill: Part 2. Forage and root crops. Environ Toxicol Chem 11(9):1289-1299.

9. REFERENCES

- *Arvilommi H, Poikonen K, Jokinen I, et al. 1983. Selenium and immune functions in humans. *Infect Immun* 41(1):185-189.
- Atsuya I, Itoh K, Ariu K. 1991. Preconcentration by coprecipitation of lead and selenium with nickel-pyrrolidine dithiocarbamate complex and their simultaneous determination by internal standard atomic absorption spectrometry with the solid sampling technique. *Pure Appl Chem* 63(9):1221-1226.
- Awadeh FT, Kincaid RL, Johnson KA. 1998. Effect of level and source of dietary selenium on concentrations of thyroid hormones and immunoglobulins in beef cows and calves. *J Anim Sci* 76:1204-1215.
- *Azaizeh HA, Gowthaman S, Terry N. 1997. Microbial selenium volatilization in rhizosphere and bulk soils from a constructed wetland. *J Environ Qual* 26:666-672.
- *Azin F, Raie RM, Mahmoudi MM. 1998. Correlation between the levels of certain carcinogenic and anticarcinogenic trace elements and esophageal cancer in Northern Iran. *Ecotoxicol Environ Saf* 39:179-184.
- *Baglan RJ, Brill AB, Schubert A, et al. 1974. Utility of placenta tissue as an indicator of trace element exposure to adult and fetus. *Environ Res* 8:64-70.
- *Baird RB, Pourian BS, Gabrielian SM. 1972. Determination of trace amounts of selenium in wastewaters by carbon rod atomization. *Anal Chem* 44:1887-1889.
- *Baker DC, James LF, Hartley WJ, et al. 1989. Toxicosis in pigs fed selenium-accumulating *Astragalus* plant species or sodium selenate. *Am J Vet Res* 50(8):1396-1399.
- *Balansky RM. 1991. Comutagenic and coclastogenic effects of selenium *in vitro* and *in vivo*. *Mutat Res* 263(4):231-236.
- Banerjee CK, Sani BP. 1982. Selenium binding proteins in rat tissues. *Biochem Biophys Res Commun* 109:210-216.
- Banholzer E, Heinritzi K. 1998. Selenium toxicosis in fattening pigs. *J Anim Physiol Anim Nutr* 80:158-162.
- *Bansal MP, Cook RG, Danielson KG, et al. 1989. A 14-kilodalton selenium-binding protein in mouse liver is fatty acid-binding protein. *J Biol Chem* 264(23):13780-13784.
- *Bansal MP, Mukhopadhyay T, Scott J, et al. 1990. DNA sequencing of a mouse liver protein that binds selenium: implications for selenium's mechanism of action in cancer prevention. *Carcinogenesis* 11(11):2071-2073.
- *Bañuelos GS, Mayland HF. 2000. Absorption and distribution of selenium in animals consuming canola grown for selenium phytoremediation. *Ecotoxicol Environ Saf* 46:322-328.
- *Banuelos GS, Meek DW. 1990. Accumulation of selenium in plants grown on selenium-treated soil. *J Environ Qual* 19(4):772-777.

9. REFERENCES

- Barbosa NBV, Rocha JBT, Zeni G, et al. 1998. Effect of organic forms of selenium on δ -aminolevulinic acid dehydratase from liver, kidney, and brain of adult rats. *Toxicol Appl Pharmacol* 149:243-253.
- *Barceloux DG. 1999. Selenium. *Clin Toxicol* 37(2):145-172.
- Barceloux DG. 2001. Selenium. *J Toxicol Clin Toxicol* 37:1-39.
- Barlow SM, Sullivan FM, eds. 1982. Reproductive hazards of industrial chemicals. An evaluation of animal and human data. London, UK: Academic Press, 483-500.
- *Barnes DG, Dourson M. 1988. Reference dose (RfD): Description and use in health risk assessments. *Regul Toxicol Pharmacol* 8:471-486.
- *Barrington JW, Lindsay P, James D, et al. 1996. Selenium deficiency and miscarriage: A possible link? *Br J Obstet Gynaecol* 103:130-132.
- *Barrington JW, Taylor M, Bowen-Simpkins P. 1997. Selenium and recurrent miscarriage. *J Obstet Gynaecol* 17(2):199-200.
- Basket CK, Spata VL, Mason MM, et al. 2001. Long-term selenium status in humans. *J Radioanal Nucl Chem* 249(2):429-435.
- Bastug M, Ayhan S, Turan B. 1998. The effect of altered selenium and vitamin E nutritional status on learning and memory of third-generation rats. *Biol Trace Elem Res* 64:151-160.
- *Baum MK, Shor-Posner G, Lai S, et al. 1997. High risk of HIV-related mortality associated with selenium deficiency. *J Acquir Immune Defic Syndr Hum Retrovirol* 15(5):370-374.
- Bauman AT, Barofsky DF, Butler JA, et al. 2000. Evidence of a biomarker for selenium toxicity [Abstract]. *FASEB J* 14(1):513.
- *Bayliss PA, Buchanan BE, Hancock RGV, et al. 1985. Tissue selenium accretion in premature and full-term human infants and children. *Biol Trace Elem Res* 7:55-61.
- *Beale AM, Fasulo DA, Craigmill AL. 1990. Effects of oral and parenteral selenium supplements on residues in meat, milk and eggs. *Rev Environ Contam Toxicol* 115:125-150.
- Beath OA, Draize JH, Gilberg CS. 1934. Plants poisonous to livestock. *Wyoming Agr Expt Sta Bull No* 200:1-84.
- *Beath OA, Hagner AF, Gilbert CS. 1946. Some rocks of high selenium content. *Wyoming Geological Survey Bulletin No.* 36:1-23.
- *Beck MA, Shi Q, Morris VC, et al. 1995. Rapid genomic evolution of a non-virulent coxsackievirus B3 in selenium deficient mice in selection of identical isolates. *Nat Med* 1:433-436.
- *Beems RB. 1986. Dietary selenium and benzo[a]pyrene-induced respiratory tract tumours in hamsters. *Carcinogenesis* 7:485-489.

9. REFERENCES

- Beguín Y, Bours V, Delbrouck JM, et al. 1989. Relationship of serum selenium levels to tumor activity in acute non-lymphocytic leukemia. *Carcinogenesis* 10(11):2089-2091.
- *Behne D, Kyriakopoulos A. 1993. Effects of dietary selenium on the tissue concentrations of type I iodothyronine 5'-deiodinase and other selenoproteins. *Am J Clin Nutr* 57(Suppl.):310S-312S.
- *Behne D, Kyriakopoulos A, Scheid S, et al. 1991. Effects of chemical form and dosage on the incorporation of selenium into tissue proteins in rats. *J Nutr* 121(6):806-814.
- *Behne S, Kyriakopoulos A, Gessner H, et al. 1992. Type I iodothyronine deiodinase activity after high selenium intake, and relations between selenium and iodine metabolism in rats. *J Nutr* 122:1542-1546.
- Beilstein MA, Whanger PD. 1983. Distribution of selenium and glutathione peroxidase in blood fractions from humans, rhesus and squirrel monkeys, rats and sheep. *J Nutr* 113:2138-2146.
- Beilstein MA, Whanger PD. 1986a. Chemical forms of selenium in rat tissues after administration of selenite for selenomethionine. *J Nutr* 116:1711-1719.
- Beilstein MA, Whanger PD. 1986b. Deposition of dietary organic and inorganic selenium in rat erythrocyte proteins. *J Nutr* 116:1701-1710.
- *Beilstein MA, Whanger PD. 1992. Selenium metabolism and glutathione peroxidase activity in cultured human lymphocytes. *Biol Trace Elem Res* 35:105-118.
- *Bell RR, Nonavinakere VK, Soliman MRI. 2000. Intratracheal exposure of the guinea pig lung to cadmium and/or selenium: A histological evaluation. *Toxicol Lett* 114:101-109.
- *Bell RR, Soliman MMRI, Nonavinakere VK, et al. 1997. Selenium and cadmium induced pulmonary functional impairment and cytotoxicity. *Toxicol Lett* 90:107-114.
- Bellisola G, Brätter P, Cinque G, et al. 1998. The TSH-dependent variation of the essential elements iodine, selenium, and zinc within human thyroid tissues. *J Trace Elem Med Biol* 12:177-182.
- *Bem EM. 1981. Determination of selenium in the environment and in biological material. *Environ Health Perspect* 37:183-200.
- *Bender J, Gould JP, Vatcharapijarn Y, et al. 1991. Uptake, transformation and fixation of selenium (VI) by a mixed selenium-tolerant ecosystem. *Water Air Soil Pollut* 59(3-4):359-368.
- *Ben-Porath M, Kaplan E. 1969. The distribution and concentration of ⁷⁵-Se-selenomethionine in man. *J Nucl Med* 10:709-710.
- Benton D, Cook R. 1991. The impact of selenium supplementation on mood. *Biol Psychiatry* 29:1092-1098.
- Berg V, Ugland KI, Hareide NR, et al. 2000. Mercury, cadmium, lead, and selenium in fish from a Norwegian fjord and off the coast, the importance of sampling locality. *J Environ Monitor* 2(4):375-377.
- *Berger GS. 1994. Epidemiology of endometriosis. In: Berger GS, ed. *Endometriosis: Advanced management and surgical techniques*. New York, NY: Springer-Verlag.

9. REFERENCES

- Berggren M, Gallegos A, Gasdaska J, et al. 1997. Cellular thioredoxin reductase activity is regulated by selenium. *Anticancer Res* 17:3377-3380.
- *Bergman K, Cekan E, Slanina P, et al. 1990. Effects of dietary sodium selenite supplementation on salicylate-induced embryo- and fetotoxicity in the rat. *Toxicology* 61(2):135-146.
- *Bermejo Barrera PB, Lorenzo Alonso MJL, Bermejo Barrera AB, et al. 2000. Selenium determination in mother and child's hair by electrothermal atomic absorption spectrometry. *Forensic Sci Int* 107:149-156.
- Berry M, Bove F. 1997. Birth weight reduction associated with residence near a hazardous waste landfill. *Environ Health Perspect* 105(8):856-861.
- *Berry MJ, Banu L, Chen Y, et al. 1991. Recognition of UGA as a selenocysteine codon in Type I deiodinase requires sequences in the 3' untranslated region. *Nature* 353:273-276.
- *Besser JM, Canfield TJ, La Point TW. 1993. Bioaccumulation of organic and inorganic selenium in a laboratory food chain. *Environ Toxicol Chem* 12(1):57-72.
- *Besser JM, Giesy JP, Brown RW, et al. 1996. Selenium bioaccumulation and hazards in a fish community affected by coal fly ash effluent. *Ecotoxicol Environ Saf* 35:7-15.
- *Besser JM, Huckins JN, Little EE, et al. 1989. Distribution and bioaccumulation of selenium in aquatic microcosms. *Environ Pollut* 62(1):1-12.
- Biggar JW, Jayaweera GR. 1993. Measurement of selenium volatilization in the field. *Soil Science* 155(1):31-36.
- Bilski JJ, Alva AK. 1995. Transport of heavy metals and cations in a fly ash amended soil. *Bull Environ Contam Toxicol* 55:502-509.
- *Bioulac-Sage P, Dubuisson L, Bedin C, et al. 1992. Nodular regenerative hyperplasia in the rat induced by a selenium-enriched diet: Study of a model. *Hepatology* 16(2):418-425.
- *Birt DF, Julius AD, Runice CE. 1986. Tolerance of low and high dietary selenium throughout the life span of Syrian hamsters. *Ann Nutr Metab* 30:233-240.
- Birt DF, Julius AD, Runice CE, et al. 1988. Enhancement of BOP-induced pancreatic carcinogenesis in selenium-fed Syrian golden hamsters under specific dietary conditions. *Nutr Cancer* 11:21-34.
- *Birt DF, Lawson TA, Julius AD, et al. 1982. Inhibition by dietary selenium of colon cancer induced in the rat by bis(2-oxopropyl) nitrosamine. *Cancer Res* 42:4455-4459.
- Bischoff K, Pichner J, Brasselton WE, et al. 2002. Mercury and selenium concentrations in livers and eggs of common loons (*Gavia immer*) from Minnesota. *Arch Environ Contam Toxicol* 42(1):71-76.
- *Biswas S. 1997. Clastogenic effects of an inorganic selenium salt in human peripheral lymphocytes *in vitro*. *Cell Chromosome Res* 20(2):67-72.

9. REFERENCES

- *Biswas S, Talukder G, Sharma A. 1997. Selenium salts and chromosome damage. *Mutat Res* 390:201-205.
- *Biswas S, Talukder G, Sharma A. 1999a. Comparison of clastogenic effects of inorganic selenium salts in mice *in vivo* as related to concentrations and duration of exposure. *Biotechnology Techniques* 12:361-368.
- *Biswas S, Talukder G, Sharma A. 1999b. Prevention of cytotoxic effects of arsenic by short-term dietary supplementation with selenium in mice *in vivo*. *Mutat Res* 441:155-160.
- *Biswas S, Talukder G, Sharma A. 2000. Chromosome damage induced by selenium salts in human peripheral lymphocytes. *Toxicol in Vitro* 14:405-408.
- Blakley B. 1987. Alterations in urethan-induced adenoma formation in mice exposed to selenium and nickel. *J Appl Toxicol* 7:387-390.
- *Bleau G, Lemarbre J, Faucher G, et al. 1984. Semen selenium and human fertility. *Fertil Steril* 42:890-894.
- *Blincoe C. 1960. Whole-body turnover of selenium in the rat. *Nature* 186:398.
- Blodgett DJ, Bevill RF. 1987a. Acute selenium toxicosis in sheep. *Vet Hum Toxicol* 29:233-236.
- *Blodgett DJ, Bevill RF. 1987b. Pharmacokinetics of selenium administered parenterally at toxic doses in sheep. *Am J Vet Res* 48:530-534.
- *Blot WJ, Li J-Y, Taylor PR, et al. 1993. Nutrition intervention trials in Linxian, China. Supplementation with specific vitamin/mineral combinations, cancer incidence and disease-specific mortality in the general population. *J Natl Cancer Inst* 85(18):1483-1491.
- *Blotcky M, Jetton M, and Sullivan JF. 1979. Organ content of selenium, zinc, magnesium, calcium and copper in alcoholic cirrhotic patients and controls. In: D. Hemphill ed. *Proc. Trace Substances in Environmental Health*. Columbia, MO: University of Missouri.
- *BNA. 2001. Washington, D.C. Environment and Safety Library on the Web States and Territories. Bureau of National Affairs, Inc. <http://www.esweb.bna.com>. February 23, 2001.
- Bonomini M, Forster S, De Risio F, et al. 1995. Effects of selenium supplementation on immune parameters in chronic uraemic patients on haemodialysis. *Nephrol Dial Transplant* 10:1654-1661.
- *Bopp BA, Sonders RC, Kesterson JW. 1982. Metabolic fate of selected selenium compounds in laboratory animals and man. *Drug Metab Rev* 13:271-318.
- Borella P, Bargellini A, Medici CI. 1996. Chemical form of selenium greatly affects metal uptake and responses by cultured human lymphocytes. *Biol Trace Elem Res* 51:43-54.
- Bortoli A, Dell'Andrea E, Gerotto M, et al. 1991. The analytical techniques for total mercury (Hg), methyl mercury (MeHg), and selenium (Se) determination in a fisherman and fishing families group of north Adriatic coast. *Acta Chimica Hungarica* 128(4-5):573-580.

9. REFERENCES

- Bowen WH. 1972. The effect of selenium and vanadium on caries activity in monkeys (*M. irus*). *J Ir Dent Assoc* 18:83-89.
- *Boylan LM, Cogan D, Huffmam N, et al. 1990. Behavioral characteristics in open field testing of mice fed selenium-deficient and selenium-supplemented diets. *J Trace Elem Exp Med* 3:157-165.
- *Bratakos MS, Kanaki HC, Vasiliou-Waite A, et al. 1990. The nutritional selenium status of healthy Greeks [published erratum appears in *Sci Total Environ* 1990 June 95:297]. *Sci Total Environ* 91:161-176.
- *Brätter P, Negretti De Brätter VE. 1996. Influence of high dietary selenium intake on the thyroid hormone level in human serum. *J Trace Elem Med Biol* 10:163-166.
- *Brätter P, Negretti De Brätter VE, Jaffé WG, et al. 1991a. Selenium status of children living in seleniferous areas of Venezuela. *J Trace Elem Electrolytes Health Dis* 5:269-270.
- Brätter P, Negretti De Brätter VE, Recknagel S, et al. 1997. Maternal selenium status influences the concentration and binding pattern of zinc in human milk. *J Trace Elem Med Biol* 11:203-209.
- *Brätter P, Negretti De Brätter VE, Rösick U, et al. 1991b. Selenium in the nutrition of infants: Influence of the maternal selenium status. In: Chandra RK, ed. *Trace elements in nutrition of children-II*. New York, NY: Raven Press, 79-90.
- Brawley OW, Parnes H. 2000. Prostate cancer prevention trials in the USA. *Eur J Cancer* 36:1312-1315.
- *Brigelius-Flohe R. 1999. Tissue-specific functions of individual glutathione peroxidases. *Free Radic Biol Med* 27(9/10):951-965.
- Broghamer WLJ, McConnell KP, Grimaldi M, et al. 1978. Serum selenium and reticuloendothelial tumors. *Cancer* 41:1462-1466.
- Brown MM, Watskinson JH. 1977. An automated fluorimetric method for the determination of nanogram quantities of selenium. *Anal Chim Acta* 89:29.
- Bruce A. 1990. Recommended dietary allowances: The Nordic experience. *Eur J Clin Nutr* 44(Suppl)2:27-29.
- Brumbaugh WG, Walther MJ. 1989. Determination of arsenic and selenium in whole fish by continuous-flow hydride generation atomic absorption spectrophotometry. *J Assoc Off Anal Chem* 72(3):484-486.
- Buchan RF. 1947. Industrial selenosis. *Occup Med* 3:439-456.
- Buchholz BA, Landsberger S. 1995. Leaching dynamics studies of municipal solid waste incinerator ash. *J Air Waste Manage Assoc* 45:579-590.
- Buckley WT, Budac JJ, Godfrey DV, et al. 1992. Determination of selenium by inductively coupled plasma mass spectrometry utilizing a new hydride generation sample introduction system. *Anal Chem* 64(7):724-729.

9. REFERENCES

- *Budavari S, O'Neil MJ, Smith A, et al., eds. 1996. The Merck index: An encyclopedia of chemicals, drugs, and biologicals. 12th ed. Whitehouse Station, NJ: Merck & Co., Inc.
- Burger J, Gaines KF, Boring CS, et al. 2001. Mercury and selenium in fish from the Savannah River: species, trophic level, and locational difference. *Environ Res* 87(2):108-118.
- Burger J, Gochfeld M. 1999. Heavy metals in Franklin's gull tissues: Age and tissue differences. *Environ Toxicol Chem* 18(4):673-678.
- Burger J, Cooper K, Gochfeld M. 1992. Exposure assessment for heavy metal ingestion from a sport fish in Puerto Rico: Estimating risk for local fishermen. *J Toxicol Environ Health* 36(4):355-365.
- Burger J, Woolfenden GE, Gochfeld M. 1999. Metal concentrations in the eggs of endangered Florida scrub-jays from central Florida. *Arch Environ Contam Toxicol* 37:385-388.
- *Burguera JL, Burguera M, Galignani M, et al. 1990. A comparative study of methods for determining selenium in biological materials. *Acta Cient Venez* 41(1):5-10.
- *Burk RF. 1974. *In vivo* ⁷⁵Se binding to human plasma proteins after administration of ⁷⁵SeO₃₋₂. *Biochim Biophys Acta* 372:255-265.
- Burk RF. 1989. Recent developments in trace element metabolism and function: Newer roles of selenium in nutrition. *J Nutr* 119(7):1051-1054.
- Burk RF. 1991. Molecular biology of selenium with implications for its metabolism. *FASEB J* 5(9):2274-2279.
- Burk RF. 1993. Clinical effects of selenium deficiency. *Prog Clin Biol Res* 380:181-190.
- *Burk RF, Hill KE. 2000. Characteristics and function of selenoprotein P. *Trace Elements in Man and Animals*. New York, NY: Plenum Press, 837-842.
- *Burk RF, Brown DG, Seely RJ, et al. 1972. Influence of dietary and injected selenium on whole-body retention, route of excretion, and tissue retention of (⁷⁵SeO₃)-2 in the rat. *J Nutr* 102:1049-1055.
- *Burk RT, Hill K, Motley AK. 2001. Plasma selenium in specific and non specific forms. *Biofactors* 14:107-114.
- Burke KE. 1992. L-selenomethionine on pigmentation and skin damage. *Cosmetics & Toiletries* 107 (Jul):51-52, 54-58, 60-61.
- *Burke KE, Burford RG, Combs Jr. GF, et al. 1992a. The effect of topical L-selenomethionine on minimal erythema dose of ultraviolet irradiation in humans. *Photodermatol Photoimmunol Photomed* 9(2):52-57.
- *Burke KE, Combs Jr. GF, Gross EG, et al. 1992b. The effects of topical and oral L-selenomethionine on pigmentation and skin cancer induced by ultraviolet irradiation. *Nutr Cancer* 17(2):123-137.
- Butler JA, Beilstein MA, Whanger PD. 1989. Influence of dietary methionine on the metabolism of selenomethionine in rats. *J Nutr* 119:1001-1009.

9. REFERENCES

- *Butler JA, Whanger PD, Kaneps AJ, et al. 1990. Metabolism of selenite and selenomethionine in the rhesus monkey. *J Nutr* 120(7):751-759.
- *Byard JL. 1969. Trimethyl selenide. A urinary metabolite of selenite. *Arch Biochem Biophys* 130:556-560.
- *Cahill TM, Anderson DW, Elbert RA, et al. 1998. Elemental profiles in feather samples from a mercury-contaminated lake in central California. *Arch Environ Contam Toxicol* 35:75-81.
- Calomme M, Vanderpas J, Francois B, et al. 1995. Effects of selenium supplementation on thyroid hormone metabolism in phenylketonuria subjects on a phenylalanine restricted diet. *Biol Trace Elem Res* 47:349-353.
- Campbell MB, Kanert GA. 1992. High-pressure microwave digestion for the determination of arsenic, antimony, selenium and mercury in oily wastes. *Analyst* 117(2):121-124.
- Cann SA, van Netten JP, van Netten C. 2000. Hypothesis: Iodine, selenium and the development of breast cancer. *Cancer Causes Control* 11:121-127.
- *Cantor AH, Langerin ML, Noguchi T, et al. 1975. Efficacy of selenium in selenium compounds and feedstuffs for prevention of pancreatic fibrosis in chicks. *J Nutr* 105:106-111.
- Cao ZH, Wang XC, Yao DH, et al. 2001. Selenium geochemistry of paddy-soils in Yangtze River Delta. *Env Int* 26(5-6):335-339.
- Capar SG, Cunningham WC. 2000. Element and radionuclide concentrations in food: FDA total diet study 1991-1996. *J AOAC Int* 83(1):157-177.
- *Capon CJ. 1981. Mercury and selenium content and chemical form in vegetable crops grown on sludge amended soil. *Arch Environ Contam Toxicol* 10:673-690.
- Capon CJ. 1991. Sewage sludge as a source of environmental selenium. *Sci Total Environ* 100(SpecNo):177-205.
- Caravaggi C, Clark FL, Jackson ARB. 1970a. Acute selenium toxicity in lambs following intramuscular injection of sodium selenite. *Res Vet Sci* 11:146-149.
- Caravaggi C, Clark FL, Jackson ARB. 1970b. Experimental acute toxicity of orally administered sodium selenite in lambs. *Res Vet Sci* 11:501-502.
- Cardellicchio N, Decataldo A, Di La Misino A. 2002. Accumulation and tissue distribution of mercury and selenium in striped dolphins (*Stenella coeruleoalba*) from the Mediterranean Sea (Southern Italy). *Environ Pollut* 116(2):265-271.
- Carlo PL, Owens LP, Hanna Jr. GP, et al. 1992. The removal of selenium from water by slow sand filtration. *Proceedings of the Sixteenth Biennial Conference of the International Association of Water Pollution Research and Control. Water Sci Technol* 26(1-11):2137-2140.
- *Carter RF. 1966. Acute selenium poisoning. *Med J Aust* 1:525-528.

9. REFERENCES

- *Casey CE, Guthrie BE, McKenzie JM. 1983. Dunedin, New Zealand, personal communication. (As cited in Iyengar 1987).
- *Cavalieri RR, Scott KG, Sairenji E. 1966. Selenite (^{75}Se) as a tumor-localizing agent in man. *J Nucl Med* 7:197-208.
- CELDS. 1993. Corps of Engineers Construction Engineering Research Laboratory and University of Illinois, Department of Urban and Regional Planning. Computer-aided environmental legislative data systems [Database].
- Cenac A, Simonoff M, Moretto P, et al. 1992. A low plasma selenium is a risk factor for peripartum cardiomyopathy. A comparative study in Sahelian Africa. *Int J Cardiol* 36(1):57-59.
- Cenedella RJ. 1989. Cell cycle specific effects of selenium on the lens epithelium studied *in vivo* by the direct chemical approach. *Curr Eye Res* 8(4):429-433.
- *Černá M, Spěváčková V, Čejchanová M, et al. 1997. Population-based biomonitoring in the Czech Republic-the system and selected results. *Sci Total Environ* 204:263-270.
- Chakraborty S, Ghosh R, Chatterjee M. 1995. Relation between human selenium levels and epidemiology of cancer in different districts of West Bengal, India [Abstract]. *Anticancer Res* 15(5A):1651-1652.
- Chan CC, Sadana RS. 1992. Determination of arsenic and selenium in environmental samples by flow-injection hydride generation atomic absorption spectrometry. *Anal Chim Acta* 270(1):231-238.
- *Chang LW. 1983. Protective effects of selenium against methylmercury neurotoxicity: A morphological and biochemical study. *Exp Pathol* 23:143-156.
- Chang PWG, Tsui SKW, Liew C, et al. 1997. Isolation, characterization, and chromosomal mapping of a novel cDNA clone encoding human selenium binding protein. *J Cell Biochem* 64:217-224.
- Chapman PM. 1999. Invited debate/commentary: Selenium - A potential time bomb or just another contaminant? *Hum Ecol Risk Assess* 5(6):1123-1138.
- Chatt A, Holzbecher J, Katz SA. 1990. Metabolic deposition of selenium and cadmium into the hair and other tissues of the guinea pig. *Biol Trace Elem Res* 26-27:513-519.
- *Chaudiere J, Courtin O, Leclaire J. 1992. Glutathione oxidase activity of selenocystamine: A mechanistic study. *Arch Biochem Biophys* 296(1):328-336.
- *Chau YK, Riley JP. 1965. The determination of selenium in sea water, silicates and marine organisms. *Anal Chim Acta* 33:36-49.
- *Chau YK, Wong PTS, Silverberg BA, et al. 1976. Methylation of selenium in the aquatic environment. *Science* 192:1130-1131.
- *ChemIDplus. 2003. Division of Specialized Information Services, NLM. <http://chem.sis.nlm.nih.gov/chemidplus/cmplxqry.html>.

9. REFERENCES

Chen CL, Whanger PD. 1993. Effect of vitamin B12 status on selenium methylation and toxicity in rats: *In vivo* and *in vitro* studies. *Toxicol Appl Pharmacol* 118(1):65-72.

*Chen C, Hedstrom O, Whanger PD. 1993. Effect of vitamin B₁₂ on performance and tissue selenium content in rats fed sub-toxic levels of selenite. *Toxicology* 85:101-115.

*Chen M, Ma LQ, Harris WG. 1999. Baseline concentrations of 15 trace elements in Florida surface soils. *J Environ Qual* 28:1173-1181.

*Chen RW, Whanger PD, Weswig PH. 1975. Selenium-induced redistribution of cadmium binding to tissue proteins: A possible mechanism of protection against cadmium toxicity. *Bioinorg Chem* 4:125-133.

*Chen SY, Collipp PJ, Boasi LH, et al. 1982. Fluorometry of selenium in human hair, urine, and blood. A single-tube process for submicrogram determination of selenium. *Ann Nutr Metab* 26:186-190.

*Chen X, Mikhail SS, Ding YW, et al. 2000. Effects of vitamin E and selenium supplementation on esophageal adenocarcinogenesis in a surgical model with rats. *Carcinogenesis* 21(8):1531-1536.

*Chen XS, Yang GQ, Chen JS, et al. 1980. Studies on the relations of selenium and Keshan disease. *Biol Trace Elem Res* 2:91-107.

Cheng W-H, Ho Y-S, Valentine BA, et al. 1998. Cellular glutathione peroxidase is the mediator of body selenium to protect against paraquat lethality in transgenic mice. *J Nutr* 128:1070-1076.

*Chhabra SK, Rao AR. 1994. Translactational exposure of F₁ mouse pups to selenium. *Food Chem Toxicol* 32(6):527-531.

*Chiachun T, Hong C, Haifun R. 1991. The effects of selenium on gestation, fertility, and offspring in mice. *Biol Trace Elem Res* 30(3):227-231.

Chidambaram N, Baradarajan A. 1996. Influence of selenium on glutathione and some associated enzymes in rats with mammary tumor induced by 7,12-Dimethylbenz(a)anthracene. *Mol Cell Biochem* 156:101-107.

Chmielnicka J, Hajdukiewica Z, Komstra-Szumaska E, et al. 1978. Whole-body retention of mercury and selenium and histopathological and morphological studies of kidneys and liver of rats exposed repeatedly to mercuric chloride and sodium selenite. *Arch Toxicol* 40:189-199.

Chou C, Holler J, De Rosa CT. 1998. Minimal risk levels (MRLs) for hazardous substances. *J Clean Technol Environ Toxicol Occup Med* 7(1):1-24.

Chowdhury AR. 1996. A short review on chemically induced injury to the testicular tissue. *Indian J Physiol Allied Sci* 50(3):136-144.

*Chowdhury AR, Venkatakrishna-Bhatt H. 1983. Effect of selenium dioxide on the testes of rat. *Indian J Physiol Pharmacol* 27:237-240.

*Choy WN, Henika PR, Willhite CC, et al. 1993. Incorporation of a micronucleus study into a developmental toxicology and pharmacokinetic study of L-selenomethionine in nonhuman primates. *Environ Mol Mutagen* 21(1):73-80.

9. REFERENCES

- *Choy WN, Willhite CC, Cukierski MJ, et al. 1989. Primate micronucleus study of L-selenomethionine. *Environ Mol Mutagen* 14(2):123-125.
- Ciappellano S, Testolin G, Allegrini M, et al. 1990. Availability of selenium in dough and biscuit in comparison to wheat meal. *Ann Nutr Metab* 34(6):343-349.
- Ciappellano S, Testolin G, Porrini M. 1989. Effects of durum wheat dietary selenium on glutathione peroxidase activity and Se content in long-term-fed rats. *Ann Nutr Metab* 33(1):22-30.
- Cikrt M, Mravcova A, Malatova I, et al. 1988. Distribution and excretion of ⁷⁴As and ⁷⁵Se in rats after their simultaneous administration: The effect of arsenic, selenium and combined pretreatment. *J Hyg Epidemiol Microbiol Immunol* 32(1):17-29.
- *Civil IES, McDonald MJA. 1978. Acute selenium poisoning: Case report. *N Z Med J* 87:354-356.
- Clark DR. 1987. Selenium accumulation in mammals exposed to contaminated California irrigation drainwater. *Sci Total Environ* 66:147-168.
- Clark LC. 1985. The epidemiology of selenium and cancer. *Federation Proceedings* 44:2584-2589.
- Clark LC, Jacobs ET. 1998. Environmental selenium and cancer: Risk or protection? *Cancer Epidemiol Biomarkers Prev* 7:847-848.
- *Clark LC, Combs GF, Turnbull BW, et al. 1996a. Effects of selenium supplementation for cancer prevention in patients with carcinoma of the skin. *JAMA* 276(24):1957-1963.
- *Clark LC, Dalkin B, Krongrad A, et al. 1999. Decreased incidence of prostate cancer with selenium supplementation: Results of a double-blind cancer prevention trial. *J Am Nutraceut Assoc* 2(1):14-18.
- *Clark LC, Graham GF, Crounse RG, et al. 1984. Plasma selenium and skin neoplasms: A case-control study. *Nutr Cancer* 6:12-21.
- *Clark RF, Strukle E, Williams SR, et al. 1996b. Selenium poisoning from a nutritional supplement. *JAMA* 275(14):1087-1088.
- Clarkson PM. 1991. Minerals: Exercise performance and supplementation in athletes. *J Sports Sci* 9(SpecNo):91-116.
- Clausen J. 1991. Uptake and distribution in rat brain of organic and inorganic selenium. *Biol Trace Elem Res* 28(1):39-45.
- Clausen J, Nielsen SA. 1988. Comparison of whole blood selenium values and erythrocyte glutathione peroxidase activities of normal individuals on supplementation with selenate, selenite, L-selenomethionine, and high selenium yeast. *Biol Trace Elem Res* 15:125-138.
- *Clausen J, Nielsen SA, Kristensen M. 1989. Biochemical and clinical effects of an antioxidative supplementation of geriatric patients. A double blind study. *Biol Trace Elem Res* 20(1-2):135-151.
- *Clewell HJ III, Andersen ME. 1985. Risk assessment extrapolations and physiological modeling. *Toxicol Ind Health* 1(4):111-131.

9. REFERENCES

- *Clinton M Jr. 1947. Selenium fume exposure. *J Indust Hyg Toxicol* 29:225-226.
- *Clinton OE. 1977. Determination of selenium in blood and plant material by hydride generation and atomic absorption spectroscopy. *Analyst* 102:187-192.
- *Coates RJ, Weiss NS, Daling JR, et al. 1988. Serum levels of selenium and retinol and the subsequent risk of cancer. *Am J Epidemiol* 128:515-523.
- Cohen HJ, Avissar N. 1993. Molecular and biochemical aspects of selenium metabolism and deficiency. *Prog Clin Biol Res* 380:191-202.
- Colditz GA. 1996. Selenium and cancer prevention: Promising results indicate further trials required. *JAMA* 276(24):1984-1985.
- *Coleman RA, Delevaux M. 1957. Occurrence of selenium in sulfides from some sedimentary rocks of western United States. *Econ Geol* 52:499-527.
- Combs GF. 1988. Selenium in foods. *Adv Food Res* 32:85-113.
- Combs GF. 1993. Essentiality and toxicity of selenium with respect to recommended daily allowances and reference doses. *Scand J Work Environ Health* 19(suppl 1):119-121.
- Combs GF. 1997. Dietary selenium allowances and new threshold intakes with respect to toxicity. *Biomed Environ Sci* 10:356-358.
- Combs GF. 1999. Chemopreventive mechanisms of selenium. *Med Klin* 94(Suppl. 3):18-24.
- Combs GF. 2001. Impact of selenium and cancer-prevention findings on the nutrition-health paradigm. *Nutr Cancer* 40(1):6-11.
- Combs GF, Gray WP. 1998. Chemopreventive agents: Selenium. *Pharmacol Ther* 79(3):179-192.
- Combs GF, Clark LC, Turnbull BW. 1998. Evidence of cancer prevention by selenium in a randomized, placebo-controlled, clinical trial. In: Collery P, Brätter PN de B V, Negretti de Brätter V, et al., eds. *Metal ions in biology and medicine*. Paris, France: John Libbey Eurotext, 566-571.
- *Combs JGF, Combs SB. 1987. Selenium effect on drug and foreign compound toxicity. *Pharmacol Ther* 33:303-315.
- *Contempre B, Deneff JF, Dumont JE, et al. 1993. Selenium deficiency aggravates the necrotizing effects of a high iodide dose in iodine deficient rats. *Endocrinology* 132(4):1866-1868.
- *Contempré B, Duale NL, Dumont JE, et al. 1992. Effect of selenium supplementation on thyroid hormone metabolism in an iodine and selenium deficient population. *Clin Endocrinol* 36:579-583.
- *Contempré B, Dumont JE, Deneff J-F. 1995. Effects of selenium deficiency on thyroid necrosis, fibrosis and proliferation: A possible role in myxoedematous cretinism. *Euro J Epidemiol* 133:99-109.

9. REFERENCES

- *Contempré B, Dumont JE, Ngo B, et al. 1991a. Effect of selenium supplementation in hypothyroid subjects of an iodine and selenium deficient area: The possible danger of indiscriminate supplementation of iodine-deficient subjects with selenium. *J Clin Endocrinol Metab* 73(1):213-215.
- *Contempré B, Vanderpas J, Dumont JE. 1991b. At the cutting edge. Cretinism, thyroid hormones and selenium. *Mol Cell Endocrinol* 81(1-3):C193-195.
- Coquery M, Carvalho FP, Azemard S, et al. 1999. The IAEA worldwide intercomparison exercises (1990-1997): Determination of trace elements in marine sediments and biological samples. *Sci Total Environ* 237-238(0):501-508.
- *Corden FL, Alexiou NG, Martin DF. 1989. Blood selenium in select mid-income Florida employees. *J Environ Sci Health A24(5):535-542.*
- Corrigan FM, Besson JA, Ward NI. 1991. Red cell caesium, lithium and selenium in abstinent alcoholics. *Alcohol* 26(3):309-314.
- *Cortez E. 1984. Santiago, Chile, personal communication. (As cited in Iyengar 1987).
- Corvilain B, Contempre B, Longombe AO, et al. 1993. Selenium and the thyroid: How the relationship was established. *Am J Clin Nutr* 57(2 Suppl):244S-248S.
- Costello A. 2001. A randomized, controlled chemopreventative trial of selenium in familial prostate cancer: Rationale, recruitment, and design. *Urology* 57:182-184.
- Crespo AM, Neve J, Pinto RE. 1993. Plasma and liver selenium levels in the rat during supplementation with 0.5, 2, 6, and 15 ppm selenium in drinking water. *Biol Trace Elem Res* 38:139-146.
- *CRISP. 1995. Computer Retrieval of Information on Science Projects. Subfile of Toxline Database, National Library of Medicine, National Institutes of Health, Bethesda, MD.
- *CRISP. 1999. Computer Retrieval of Information on Science Projects. Subfile of Toxline Database Bethesda, MD: National Library of Medicine, National Institutes of Health.
- *CRISP. 2001. Computer Retrieval of Information on Science Projects. Subfile of Toxline Database Bethesda, MD: National Library of Medicine, National Institutes of Health.
- *CRISP. 2002. Computer Retrieval of Information on Science Projects. Subfile of Toxline Database Bethesda, MD: National Library of Medicine, National Institutes of Health.
- *CRIS/USDA. 1995. Current Research Information System. Washington DC: U.S. Department of Agriculture.
- *CRIS/USDA. 1999. Current Research Information System. Washington DC: U.S. Department of Agriculture.
- *CRIS/USDA. 2001. Current Research Information System. Washington DC: U.S. Department of Agriculture.
- *CRIS/USDA. 2002. Current Research Information System. Washington DC: U.S. Department of Agriculture.

9. REFERENCES

- *CRWQCB. 1988. Water and sediment quality in evaporation basins used for the disposal of agricultural subsurface drainage water in the San Joaquin Valley, California. Sacramento, CA: California Regional Water Quality Control Board.
- *Cukierski MJ, Willhite CC, Lasley BL, et al. 1989. 30-Day oral toxicity study of L-selenomethionine in female long-tailed macaques (*Macaca fascicularis*). *Fundam Appl Toxicol* 13(1):26-39.
- *Cummins LM, Kimura ET. 1971. Safety evaluation of selenium sulfide antidandruff shampoos. *Toxicol Appl Pharmacol* 20:89-96.
- *Cutter GA. 1982. Selenium in reducing waters. *Science* 217:829-831.
- *Cutter GA. 1989. The estuarine behavior of selenium in San Francisco Bay. *Estuarine, Coastal Shelf Sci* 28(1):13-34.
- *Daher R, Van Lente F. 1992. Characterization of selenocysteine lyase in human tissues and its relationship to tissue selenium concentrations. *J Trace Elem Electrolytes Health and Dis* 6:189-194.
- *Dams R, Robbins JA, Rhan KA, et al. 1970. Nondestructive neutron activation analysis of air pollution particulates. *Anal Chem* 42:861-867.
- *Damyanova A. 1983. Sofia, Bulgaria, personal communication. (As cited in Iyengar 1987).
- Daniels LA. 1996. Selenium metabolism and bioavailability. *Biol Trace Elem Res* 54:185-199.
- Danielsson BR, Danielson M, Khayat A, et al. 1990. Comparative embryotoxicity of selenite and selenate: Uptake in murine embryonal and fetal tissues and effects on blastocysts and embryonic cells *in vitro*. *Toxicology* 63(2):123-136.
- Darlow BA, Inder TE, Graham PJ, et al. 1995. The relationship of selenium status to respiratory outcome in the very low birth weight infant. *Pediatrics* 96:314-319.
- Das PM, Sadana JR, Gupta RK, et al. 1989a. Experimental selenium toxicity in guinea pigs: Biochemical studies. *Ann Nutr Metab* 33(1):57-63.
- *Das PM, Sadana JR, Gupta RK, et al. 1989b. Experimental selenium toxicity in guinea pigs: Haematological studies. *Ann Nutr Metab* 33(6):347-353.
- Datnow MM. 1928. An experimental investigation concerning toxic abortion produced by chemical agents. *J Obstet Gynaecol Br Emp* 35:693-724.
- *Davidson-York D, Galey FD, Blanchard P, et al. 1999. Selenium elimination in pigs after an outbreak of selenium toxicosis. *J Vet Diagn Invest* 11:352-357.
- Davis CD, Feng Y, Hein DW, et al. 1999. The chemical form of selenium influences 3,2'-Dimethyl-4-aminobiphenyl-DNA adduct formation in rat colon. *J Nutr* 129:63-69.
- *Dawson SW, Mercer BW. 1986. Hazardous waste management. New York, NY: John Wiley and Sons, 55.

9. REFERENCES

- Deagen JT, Beilstein MA, Whanger PD. 1990. Chemical forms of selenium in selenium containing proteins from human plasma. *J Inorg Biochem* 41(4):261-268.
- Deagan JT, Butler JA, Beilstein MA, et al. 1987. Effects of dietary selenite, selenocystine and selenomethionine on selenocysteine lyase and glutathione peroxidase activities and on selenium levels in rat tissues. *J Nutr* 117:91-98.
- Deagen JT, Butler JA, Zachara BA, et al. 1993. Determination of the distribution of selenium between glutathione peroxidase, selenoprotein P, and albumin in plasma. *Anal Biochem* 208(1):176-181.
- *Deguchi Y. 1985. Relationships between blood selenium concentrations and grasping power, blood pressure, hematocrit, and hemoglobin concentrations in Japanese rural residents. *Japanese Journal of Hygiene* 39:924-929.
- Del Debbio JA. 1991. Sorption of strontium, selenium, and mercury in soil. *Radiochimica Acta* 52-53(pt1):181-186.
- Del Debbio JA, Thomas TR. 1991. Determination of technetium and selenium transport properties in laboratory soil columns. *Mater Res Soc Symp Proc VOL 127. ISS Sci Basis Nucl Waste Manage* 12:957-964.
- *Delange F, Lecomte P. 2000. Iodine supplementation. Benefits outweigh risks. *Drug Saf* 22(2):89-95.
- de Oliveira E, McLaren JW, Berman SS. 1983. Simultaneous determination of arsenic, antimony, and selenium in marine samples by inductively coupled plasma atomic emission spectrometry. *Anal Chem* 55:2047-2050.
- Deshchekina MF, Demin VF, Kliuchnikov SO, et al. 1989. Contents of bioelements in blood of newborn infants with a history of chronic intrauterine hypoxia. *Pediatrics* (10):19-24.
- Devamanoharan PS, Henein M, Morris S, et al. 1991. Prevention of selenite cataract by vitamin C. *Exp Eye Res* 52(5):563-568.
- Deverel SJ, Fio JL. 1991. Groundwater flow and solute movement to drain laterals, western San Joaquin Valley, California. *Water Resources Research* 27(9):2233-2246.
- Deverel SJ, Millard SP. 1988. Distribution and mobility of selenium and other trace elements in shallow groundwater of the western San Joaquin Valley, California. *Environ Sci Technol* 22:697-702.
- Deverel SJ, Fio JL, Dubrovsky NM. 1994. Distribution and mobility of selenium in groundwater in the western San Joaquin Valley of California. In: Frankenberger WT, Benson S, eds. *Selenium Environment*. New York, NY: Dekker, 157-183.
- DeYoung DJ, Bantle JA, Fort DJ. 1991. Assessment of the developmental toxicity of ascorbic acid, sodium selenate, coumarin, serotonin, and 13-*cis* retinoic acid using FETAX. *Drug Chem Toxicol* 14(1-2):127-141.
- *DHHS. 1997. National Health and Nutrition Examination Survey (NHANES), III 1988-1994. CD-ROM Series 11, No. 1. (July 1997). U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention (CDC).

9. REFERENCES

- *DHHS. 2002. Dietary intake of macronutrients, micronutrients, and other dietary constituents: United States, 1988-94. Data from the National Health Examination Survey, the National Health and Nutrition Examination Surveys, and the Hispanic Health and Nutrition Examination Survey. Haysville, Maryland: Department of Health and Human Services.
- Dhur A, Galan P, Hercberg S. 1990. Relationship between selenium, immunity and resistance against infection. *Comp Biochem Physiol [C]* 96(2):271-280.
- Diamond AM, Dale P, Murray JL, et al. 1996. The inhibition of radiation-induced mutagenesis by the combined effects of selenium and the aminothiols WR-1065. *Mutat Res* 356:146-154.
- Dias MF, Sousa E, Cabrita S, et al. 2000. Chemoprevention of DMBA-induced mammary tumors in rats by a combined regimen of alpha-tocopherol, selenium, and ascorbic acid. *Breast J* 6(1):14-19.
- Dietz R, Riget F, Born EW. 2000. An assessment of selenium to mercury in Greenland marine animals. *Sci Total Environ* 245:15-24.
- Di Ilio C, Del Bocceo G, Casaccia R, et al. 1987. Selenium level and glutathione-dependent enzyme activities in normal and neoplastic human lung tissues. *Carcinogenesis* 8:281-284.
- *Dickson RC, Tomlinson RH. 1967. Selenium in blood and human tissues. *Clinica Chimica Acta* 16:311-321.
- *Dilworth GL, Bandurski RS. 1977. Activation of selenate by adenosine 5'-triphosphate sulphurylase from *Saccharomyces cerevisiae*. *Biochem J* 163:521-529.
- *Dimes L, Rendig VV, Besgu G, et al. 1988. Selenium uptake by subclover, ryegrass, and some *Astragalus* spp. In: Tanji KK, Valoppi L, Woodring RC, eds. Selenium contents in animal and human food crops grown in California. CA: Cooperative Extension University of California, Division of Agriculture and Natural Resources. Publication 3330, 19-24.
- *Dini G, Franconi F, Martini F. 1981. Mitochondrial alterations induced by selenium in guinea pig myocardium. *Exp Mol Pathol* 34:226-235.
- *Dinkel CA, Minyard JA, Ray DE. 1963. Effects of season of breeding on reproductive and weaning performance of beef cattle grazing on seleniferous range. *J Anim Sci* 22:1043-1045.
- Diplock AT. 1993. Indexes of selenium status in human populations. *Am J Clin Nutr* 57(2 Suppl):256S-258S.
- *Diplock AT, Green J, Bunyan J, et al. 1967. Vitamin E and stress. 3. The metabolism of D-alpha-tocopherol in the rat under dietary stress with silver. *Br J Nutr* 21:115-125.
- *DOE. 1987. A cathodic stripping technique for the determination of trace levels of arsenic and selenium in waste, organic, and environmental samples. Report to U.S. Department of Energy by Martin Marietta Energy Systems, Inc., Oak Ridge, TN. DOE K/PS-5078. DE88-002257.
- DOE. 1993. Selenium in Oklahoma ground water and soil. Quarterly report No. 6 to the U.S. Department of Energy. DOE/PC/89782--T6. DE92-018300.

9. REFERENCES

- DOE. 1996. Mercury-selenium interactions in the environment. Upton, NY: U.S. Department of Energy, Office of Fossil Energy. NTIS DE 96 006 148.
- *Donaldson WE, McGowan C. 1989. Lead toxicity in chickens. Interaction with toxic dietary levels of selenium. *Biol Trace Elem Res* 20(1-2):127-133.
- *Doran JW. 1982. Microorganisms and the biological cycling of selenium. *Adv Microbiol Ecol* 6:1-32.
- *Doran, JW, Alexander M. 1976. Microbial formation of volatile selenium compounds in soil. *Soil Science Society of America Journal* 40:687-690.
- Downs TJ, Cifuentes-García E, Suffet IM. 1999. Risk screening for exposure to groundwater pollution in a wastewater irrigation district of the Mexico City region. *Environ Health Perspect* 107(7):553-561.
- *Draize JH, Beath OA. 1935. Observations on the pathology of blind staggers and alkali disease. *J Am Vet Med Assoc* 86:753-763.
- *Dreher GB, Finkelman RB. 1992. Selenium mobilization in a surface coal mine, Powder River Basin, Wyoming, USA. *Environ Geol Water Sci* 19(3):155-169.
- Duckart EC, Waldron LJ, Donner HE. 1992. Selenium uptake and volatilization from plants growing in soil. *Soil Science* 153(2):94-99.
- Ducros V, Favier A. 1992. Gas chromatographic-mass spectrometric method for the determination of selenium in biological samples. *J Chromatogr B: Biomed Appl* 583(1):35-44.
- *Ducros V, Laporte F, Belin N, et al. 2000. Selenium determination in human plasma lipoprotein fractions by mass spectrometry analysis. *J Inorg Biochem* 81:105-109.
- *Dudley HC. 1938. Toxicology of selenium. V. Toxic and vesicant properties of selenium oxychloride. *Public Health Rep* 53:94-98.
- *Dudley HC, Miller JW. 1937. Toxicology of selenium. IV. Effects of exposure to hydrogen selenide. *Public Health Rep* 52:1217-1231.
- *Dudley HC, Miller JW. 1941. Toxicology of selenium. VI. Effects of subacute exposure to hydrogen selenide. *Journal of Industrial Hygiene and Toxicology* 23:470-477.
- *Duffield AJ, Thomson CD, Hill KE, et al. 1999. An estimation of selenium requirements for New Zealanders. *Am J Clin Nutr* 70:896-903.
- *Duffield-Lillico et al. 2002. Baseline characteristics and the effect of selenium supplementation on cancer incidence in a randomized clinical trial: a summary report of the Nutritional Prevention of Cancer Trial. *Cancer Epidemiol Biomarkers Prev* 11(7):630-639.
- *Dulka JJ, Risby TH. 1976. Ultratrace metals in some environmental and biological systems. *Anal Chem* 48:640A-653A.
- Dutkiewicz VA, Husain L. 1988. Spatial pattern on non-urban selenium concentrations in the northeastern USA and its pollution source implications. *Atmos Environ* 22(10):2223-2228.

9. REFERENCES

- *Dworkin BM, Rosenthal WS, Wormser GP, et al. 1986. Selenium deficiency in the acquired immunodeficiency syndrome. *JPEN* 10:405-407.
- Dybing E, Sanner T, Roelfzema H, et al. 1997. T25: A simplified carcinogenic potency index: Description of the system and study of correlations between carcinogenic potency and species/site specificity and mutagenicity. *Pharmacol Toxicol* 80:272-279.
- Dyer SD, White-Hull CE, Shephard BK. 2000. Assessments of chemical mixtures via toxicity reference values overpredict hazard to Ohio fish communities. *Environ Sci Technol* 34:2518-2524.
- Early JL, Schnell RC. 1982. Effect of glutathione depletion on selenium lethality and hepatic drug metabolism in male rats. *Toxicol Lett* 11:253-257.
- Early II JL, Nonavinakere VK, Weaver A. 1992. Effect of cadmium and/or selenium on liver mitochondria and rough endoplasmic reticulum in the rat. *Toxicol Lett* 62(1):73-83.
- Eckhert CD, Lockwood MK, Shen B. 1993. Influence of selenium on the microvasculature of the retina. *Microvasc Res* 45(1):74-82.
- *Eder K, Kralik A, Kirchgebner M. 1995. [Influence of deficient to subtoxic selenium intake on metabolism of thyroid hormones]. *Z Ernahrungswiss* 34:277-283. (German)
- *Edwards WC, Blackburn TA. 1986. Selenium determination by Zeeman atomic absorption spectrophotometry. *Vet Hum Toxicol* 28:12-13.
- *Eisenmann CJ, Miller RK. 1994. The placental transfer and toxicity of selenite relative to cadmium in the human term perfused placenta. *Placenta* 15:883-985.
- Eisenmann CJ, Miller RK. 1995. The effect of selenium compounds (selenite, selenate, ebselen) on the production of thromboxane and prostacyclin by the human term placenta *in vitro*. *Toxicol Appl Pharmacol* 135:18-24.
- Ejima A, Watanabe C, Koyama H, et al. 1996. Determination of selenium in the human brain by graphite furnace atomic absorption spectrometry. *Biol Trace Elem Res* 54:9-21.
- *El-Bayoumy K. 1991. The role of selenium in cancer prevention. In: DeVita J, Hellman S, Rosenberg SA, eds. *Cancer Prevention*. Philadelphia, PA: J.B. Lippincott Company, 1-15.
- *El-Bayoumy K. 1997. Organoselenium compounds: A novel class of cancer chemopreventive agents. *Drugs Future* 22(5):539-545.
- *El-Bayoumy K. 2001. The protective role of selenium on genetic damage and on cancer. *Mutat Res* 475:123-139.
- *El-Bayoumy K, Upadhyaya P, Chae Y-H, et al. 1995. Chemoprevention of cancer by organoselenium compounds. *J Cell Biochem Suppl* 22:92-100.
- El-Bayoumy K, Upadhyaya P, Sohn O-S, et al. 1998. Synthesis and excretion profile of 1,4-[¹⁴C]phenylenebis(methylene)selenocyanate in the rat. *Carcinogenesis* 19(9):1603-1607.

9. REFERENCES

- *Ellingsen DG, Nordhagen HP, Thomassen Y. 1995. Urinary selenium excretion in workers with low exposure to mercury vapour. *J Appl Toxicol* 15(1):33-36.
- Ellingsen DG, Thomassen Y, Aaseth J, et al. 1997. Cadmium and selenium in blood and urine related to smoking habits and previous exposure to mercury vapour. *J Appl Toxicol* 17(5):337-343.
- *Ellis L, Piccano MF, Smith AM, et al. 1990. The impact of gestational length on human milk selenium concentration and glutathione peroxidase activity. *Pediatr Res* 27:32-35.
- *El-Zarkouny SA, Ayoub MA, Ishak MHG, et al. 1999. Effect of carbosulfan pesticide and selenium on some semen characteristics and serum testosterone in male rabbits. *Int J Environ Health Res* 9:117-124.
- Emsley CL, Gao S, Li Y, et al. 2000. Trace element levels in drinking water and cognitive function among elderly Chinese. *Am J Epidemiol* 151(9):913-920.
- EPA. 1972. National inventory of sources and emissions. Boron, copper, selenium, and zinc. Section IV. Selenium. U.S. Environmental Protection Agency, Office of Air Programs. NTIS PB 219679.
- *EPA. 1974. Development of predictions of future pollution problems. Washington, DC: U.S. Environmental Protection Agency. EPA600/5-74-005.
- EPA. 1975. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 141.
- *EPA. 1979a. Methods for chemical analysis of water and wastes. 1978. Methods 270.2 and 270.3 for selenium. Cincinnati, OH: U.S. Environmental Protection Agency, Environmental Monitoring and Support Laboratory. EPA 600/4-79-020.
- EPA. 1979b. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 125.
- *EPA. 1979c. Water-related environmental fate of 129 priority pollutants. Washington, DC: U.S. Environmental Protection Agency, Office of Water Planning and Standards. EPA 440/4-29-029.
- *EPA. 1980a. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 261.33(e).
- *EPA. 1980b. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 261.33(f).
- EPA. 1980c. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 261 Appendix VIII.
- EPA. 1980d. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 261.24.
- EPA. 1980e. Ambient water quality criteria for selenium. Washington, DC: U.S. Environmental Protection Agency, Office of Water Regulations and Standards, Criteria and Standards Division. EPA 400/5-80-070.
- EPA. 1980f. U.S. Environmental Protection Agency. Federal Register 45:79347-79357.
- EPA. 1980g. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 125.

9. REFERENCES

- EPA. 1982. Compilation of and commentary on existing methodologies and guidelines relating to "Risk assessments for complex mixtures." Cincinnati, OH: U.S. Environmental Protection Agency, Environmental Criteria and Assessment Office. Document number SRC TR-82-544., VIII-7.
- *EPA. 1983. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 122.28.
- *EPA. 1984a. Health effects assessment for selenium. Cincinnati, OH: U.S. Environmental Protection Agency, Environmental Criteria and Assessment Office. EPA 540/1-86-058.
- *EPA. 1984b. Contract Laboratory Program Statement of Work. Inorganic analysis, multi-media, multi-concentration. U.S. Environmental Protection Agency, Contract Laboratory Program. SOW No. 784.
- *EPA 1984c. Occurrence of selenium in drinking water, food, and air. McLean, VA: U.S. Environmental Protection Agency, Office of Drinking Water.
- EPA. 1985a. Drinking water criteria document for selenium (Final draft). Cleveland, OH: U.S. Environmental Protection Agency, Office of Drinking Water. NTIS Publication No. PB86-118098.
- EPA. 1985b. U.S. Environmental Protection Agency. Federal Register 50:46936-47025.
- *EPA. 1985c. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 302.4.
- EPA. 1985d. Speciation of selenium in groundwater. Cincinnati, OH: Environmental Protection Agency, Office of Research and Development. EPA 600/S2-84-190.
- EPA. 1986a. Health effects assessment for selenium (and compounds). Cincinnati, OH: U.S. Environmental Protection Agency, Office of Health and Environmental Assessment, Environmental Criteria and Assessment Office. EPA/540/1-86-058.
- EPA. 1986b. Verified reference doses (RfDs) of the U.S. EPA. ADI Work Group of the Risk Assessment Forum. U.S. Environmental Protection Agency. ECAO-CIN-475.
- *EPA. 1986c. Test methods for evaluating solid waste. Volume 1A. Laboratory manual physical/chemical methods. Washington, DC: U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. SW-846 3rd Edition.
- EPA. 1986d. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 403.
- EPA. 1986e. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 302.4.
- EPA. 1986f. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 710.
- EPA. 1987a. U.S. Environmental Protection Agency. Federal Register 52:21152-21208.
- EPA. 1987b. U.S. Environmental Protection Agency. Federal Register 52:8156.
- EPA. 1987c. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 355, Appendix A.

9. REFERENCES

- EPA. 1987d. Reference dose (RfD): Description and use in health risk assessments. Volume I, Appendix A: Integrated risk information system supportive documentation. Washington, DC: U.S. Environmental Protection Agency, Office of Health and Environmental Assessment. EPA/600/8-86/032a.
- EPA. 1990a. Drinking water criteria document of selenium. Criteria and Standards Division, Office of Drinking Water (WH-550) U.S. Environmental Protection Agency. Washington, DC. PB 91-142828, TR-1242-65.
- *EPA. 1990b. Interim methods for development of inhalation reference concentrations. Washington, DC: U.S. Environmental Protection Agency, Office of Health and Environmental Assessment, Office of Research and Development, Environmental Criteria and Assessment Office. EPA 600/8-90/066A.
- EPA. 1991a. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 141.
- EPA. 1991b. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 261, Appendix VIII.
- EPA. 1991c. Standards for the management of specific hazardous wastes and specific types of hazardous waste management facilities. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 266, Appendix IX.
- EPA. 1991d. Toxic chemical release reporting: community right-to-know. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 372.
- EPA. 1991e. Ambient water quality criteria. Washington, DC: U.S. Environmental Protection Agency, Office of Science and Technology, Health and Ecological Criteria Division, Ecological Risk Assessment Branch, Human Risk Assessment Branch.
- EPA. 1992a. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 117.
- EPA. 1992b. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 141.
- EPA. 1992c. Hazardous materials table, special provisions, hazardous materials communications, emergency response information, and training requirements. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 172.
- *EPA. 1993. Drinking Water Regulations and Health Advisories. U.S. Environmental Protection Agency, Office of Water, 9. May 1993.
- EPA. 1995a. U.S. Environmental Protection Agency. Washington, DC: Drinking water regulations and health advisories, Office of Water.
- EPA. 1995b. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 122.28.
- EPA. 1995c. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 125.
- EPA. 1995d. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 116.4.
- EPA. 1995e. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 117.3.

9. REFERENCES

- EPA. 1995f. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 302.4.
- EPA. 1995g. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 355 (Appendix A).
- EPA. 1995h. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 261.33.
- EPA. 1995i. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 261 (Appendix VII).
- EPA. 1995j. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 261.24.
- *EPA. 1997a. Method 7741A: Selenium (Atomic absorption, gaseous hydride). In: Status tables for SW-846, third edition. U.S. Environmental Protection Agency.
- *EPA. 1997b. Method 7742: Selenium (Atomic absorption, borohydride reduction). In: Status tables for SW-846, third edition. U.S. Environmental Protection Agency.
- *EPA. 1997c. Special report on environmental endocrine disruption: An effects assessment and analysis. Washington, DC: U.S. Environmental Protection Agency, Risk Assessment Forum. EPA/630/R-96/012.
- *EPA. 2000. Drinking water standards and health advisories. U.S. Environmental Protection Agency, Office of Water. EPA 822-B-00-001.
- *EPA. 2001a. Concentration limits. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 264.94. <http://esweb.bna.com>. February 22, 2001.
- *EPA. 2001b. Designation of hazardous substances. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 116.4. <http://esweb.bna.com>. February 22, 2001.
- *EPA. 2001c. Determination of reportable quantities. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 117.3. <http://esweb.bna.com>. February 22, 2001.
- *EPA. 2001d. Establishment of numeric criteria for priority toxic pollutants for the state of California. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 131.38. <http://esweb.bna.com>. February 22, 2001.
- *EPA. 2001e. Ground-water monitoring list. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 264, Appendix IX. <http://esweb.bna.com>. February 22, 2001.
- *EPA. 2001f. Hazardous constituents. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 261, Appendix VIII. <http://esweb.bna.com>. February 22, 2001.
- *EPA. 2001g. Listed constituents. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 192, Appendix I. <http://esweb.bna.com>. February 22, 2001.
- *EPA. 2001h. Maximum concentration of constituents for ground-water protection. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 131.36, (Table 1). <http://esweb.bna.com>. February 22, 2001.

9. REFERENCES

- *EPA. 2001i. Maximum contaminant level goals for inorganic contaminants. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 141.51. <http://esweb.bna.com>. February 22, 2001.
- *EPA.. 2001j. Maximum contaminant levels for inorganic contaminants. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 141.62. <http://esweb.bna.com>. February 22, 2001.
- *EPA. 2001k. Pollutant limits. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 503.13. <http://esweb.bna.com>. February 22, 2001.
- *EPA. 2001l. Selenious acid. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 266, Appendix IV. <http://esweb.bna.com>. February 23, 2001.
- *EPA. 2001m. Selenium and compounds: Hazard summary. U.S. Environmental Protection Agency. <http://www.epa.gov/ttn/uatw/hlthef/selenium.html>. February 22, 2001.
- *EPA. 2001n. Sequential CAS registry number list of CERCLA hazardous substances. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 302.4, Appendix A. <http://esweb.bna.com>. February 22, 2001.
- *EPA. 2001o. Specific toxic chemical listings. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 372.65. <http://esweb.bna.com>. February 22, 2001.
- *EPA. 2001p. The list of extremely hazardous substances and their threshold planning quantities. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 355, Appendix B. <http://esweb.bna.com>. February 22, 2001.
- *EPA. 2001q. Waste specific prohibitions - California list wastes. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 148.12. <http://esweb.bna.com>. February 23, 2001.
- Erbas D, Soncul H, Türkozkcan N, et al. 1995. Effect of selenium on ischemic and reperfusion injury in isolated guinea pig lungs. *Gen Pharmacol* 26(8):1669-1672.
- Esterbauer H, Zollner H, Schaur RJ. 1989. Aldehydes formed by lipid peroxidation. Membrane lipid oxidation. Boca Raton, FL: CRC Press, 239-268.
- *Evans CS, Asher CJ, Johnson CM. 1968. Isolation of dimethyl diselenide and other volatile selenium compounds from *Astragalus racemosus* (Pursh.). *Aust J Biol Sci* 21:13-20.
- *Ewan RC, Pope AL, Baumann CA. 1967. Elimination of fixed selenium by the rat. *J Nutr* 91:547-554.
- *Eybl V, Koutenska M, Koutensky J, et al. 1992. Selenium-silver interaction in mice. *Arch Toxicol Suppl* 15:160-163.
- Fairey R, Taberski K, Lamerdin S, et al. 1997. Organochlorines and other environmental contaminants in muscle tissues of sportfish collected from San Francisco Bay. *Mar Pollut Bull* 34(12):1058-1071.
- Fan AM, Book SA, Neutra RR, et al. 1988. Selenium and human health implications in California's San Joaquin Valley. *J Toxicol Environ Health* 23(4):539-559.

9. REFERENCES

- Fant ML, Nyman M, Helle E, et al. 2000. Mercury, cadmium, lead and selenium in ringed seals. *Environ Pollut* 111(3):493-501.
- Fardy JJ, McOrist GD, Farrar YJ. 1989. The determination of selenium status in the Australian diet using neutron activation analysis. *Journal of Radioanalytical and Nuclear Chemistry* 133(2):397-405.
- *FDA. 1982a. FDA compliance program report of findings. FY 79 total diet studies--adult (7305.002). Washington, DC: U.S. Department of Health and Human Services, U.S. Food and Drug Administration. PB83-112722.
- FDA. 1982b. FDA compliance program report of findings. FY 79 total diet studies--infants and toddlers (7305.002). Washington, DC: U.S. Department of Health and Human Services, Food and Drug Administration. PB82-260213.
- *FDA. 1993. Food and Drugs. Washington, DC: U.S. Food and Drug Administration. 21 CFR 103-35.
- *FDA. 2000. Total diet study statistics on element results. Washington, DC: U.S. Food and Drug Administration.
- *FDA. 2001a. Food additives permitted in feed and drinking water of animals. U.S. Department of Health and Human Services, U.S. Food and Drug Administration. Code of Federal Regulations. 21 CFR 573.920. <http://www4.law.cornell.edu/cfr/21p165.htm>. March 19, 2001.
- *FDA. 2001b. Requirements for specific standardized beverages. U.S. Department of Health and Human Services, U.S. Food and Drug Administration. Code of Federal Regulations. 21 CFR 165.110. <http://www4.law.cornell.edu/cfr/21p165.htm>. March 19, 2001.
- FEDRIP. 1994. Federal Research in Progress [Database]. Dialog Information Retrieval System, CA.
- FEDRIP. 2001. Federal Research in Progress [Database]. Dialog Information Retrieval System, CA.
- *FEDRIP. 2002. Federal Research in Progress [Database]. Dialog Information Retrieval System, CA.
- *Ferm VH, Hanlon DP, Willhite CC, et al. 1990. Embryotoxicity and dose response relationships of selenium in hamsters. *Reprod Toxicol* 4(3):183-190.
- *Fernandez FJ, Giddings R. 1982. Elimination of spectral interference using Zeeman effect background correction. *Atomic Spectroscopy* 3:61-65.
- *Finley JW. 1998. The absorption and tissue distribution of selenium from high-selenium broccoli are different from selenium from sodium selenite, sodium selenate, and selenomethionine as determined in selenium-deficient rats. *J Agric Food Chem* 46:3702-3707.
- *Finley JW, Davis CD, Feng Y. 2000. Selenium from high selenium broccoli protects rats from colon cancer. *J Nutr* 130:2384-2389.
- Fio JL, Deverel SJ. 1991. Groundwater flow and solute movement to drain laterals, western San Joaquin Valley, California. 2. Quantitative hydrologic assessment. *Water Resources Research* 27(9):2247-2257.

9. REFERENCES

- *Fiorino JA, Jones JW, Capar SG. 1976. Sequential determination of arsenic, selenium, antimony and tellurium in foods via rapid hydride evolution and atomic absorption spectrometry. *Anal Chem* 48:120-125.
- *Fishbein L. 1983. Environmental selenium and its significance. *Fundam Appl Toxicol* 3:411-419.
- Fishbein L. 1986. Perspectives on selenium anticarcinogenicity. *Toxicol Environ Chem* 12:1-30.
- *Fitzhugh OG, Nelson AA, Bliss C. 1944. The chronic oral toxicity of selenium. *J Pharmacol Exp Ther* 80:289-299.
- *Flohe L, Wingender E, Brigelius-Flohe R. 1997. Regulation of glutathione peroxidases. In: Forman HJ, Cadenas E, eds. *Oxidative stress and signal transduction*. New York, NY: Chapman & Hall, 415-440.
- *Flora SJS, Behari JR, Asquin M, et al. 1982. Time depending protective effect of selenium against cadmium-induced nephrotoxicity and hepatotoxicity. *Chem Biol Interact* 42:345-351.
- Flynn A. 1992. Minerals and trace elements in milk. *Adv Food Nutr Res* 36:209-252.
- Foiles PG, Fujiki H, Suganuma M, et al. 1995. Inhibition of PKC and PKA by chemopreventive organoselenium compounds. *Int J Oncol* 7:685-690.
- Foster HD. 1993. The iodine-selenium connection: Its possible roles in intelligence, cretinism, sudden infant death syndrome, breast cancer and multiple sclerosis. *Med Hypotheses* 40(1):61-65.
- Foster HD. 1997. Landscapes of longevity: The calcium-selenium-mercury connection in cancer and heart disease. *Med Hypotheses* 48:355-360.
- Foster LH, Sumar S. 1997. Selenium in health and disease: A review. *Crit Rev Food Sci Nutr* 37(3):211-228.
- Franke KW, Potter VR. 1936. The effect of selenium containing foodstuffs on growth and reproduction of rats at various ages. *J Nutr* 12:205-214.
- *Franke KW, Tully WE. 1935. A new toxicant occurring naturally in certain samples of food stuffs. *Poult Sci* 14:273-279.
- *Franke K, Moxon AL, Poley WE, et al. 1936. Monstrosities produced by injection of selenium salt into hen's eggs. *Anat Rec* 65:15-22.
- Frenkel GD, Falvey D, MacVicar C. 1991. Products of the reaction of selenite with intracellular sulfhydryl compounds. *Biol Trace Elem Res* 30(1):9-18.
- *Frost DV. 1972. The two faces of selenium - Can selenophobia be cured? *CRC Crit Rev Toxicol* 1:467-514.
- Frost RR, Griffin RA. 1977. Effect of pH on adsorption of arsenic and selenium from landfill leachate by clay minerals. *Soil Science Society of America Journal* 41:53-57.

9. REFERENCES

- FSTRAC. 1990. Summary of state and federal drinking water standards and guidelines. Washington, DC: Chemical Communication Subcommittee Federal-State Toxicology and Regulatory Alliance Committee. U.S. Environmental Protection Agency.
- Fujii R, Deverel SJ, Hatfield DB. 1988. Distribution of selenium in soils of agricultural fields, western San Joaquin Valley California USA. *Soil Science Society of America Journal* 52(5):1274-1283.
- *Funk MA, Hamlin L, Picciano MF, et al. 1990. Milk selenium of rural African women: Influence of maternal nutrition, parity, and length of lactation. *Am J Clin Nutr* 51(2):220-224.
- *Furchner JE, London JE, Wilson JS. 1975. Comparative metabolism of radionuclides in mammals. IX. Retention of ⁷⁵Se in the mouse, rat, monkey and dog. *Health Phys* 29:641-648.
- Fürnsinn C, Englisch R, Ebner K, et al. 1996. Insulin-like vs. non-insulin-like stimulation of glucose metabolism by vanadium, tungsten, and selenium compounds in rat muscle. *Life Sci* 59(23):1989-2000.
- Furr AK, Parkinson TF, Bache CA, et al. 1980. Multielement absorption by crops grown on soils amended with municipal sludge ashes. *J Agric Food Chem* 28:660-662.
- Furuta N, Shinofuji T. 1996. Determination of different oxidation states of arsenic and selenium by inductively coupled plasma-atomic emission spectrometry with ion chromatography. *Fresenius J Anal Chem* 355(5-6):457-460.
- Gabrielsen BO, Opstvedt J. 1980. Availability of selenium in fish meal in comparison with soybean meal, corn gluten meal and selenomethionine relative to selenium in sodium selenite for restoring glutathione peroxidase activity in selenium-depleted chicks. *J Nutr* 110:1096-110.
- Gailer J, George GN, Pickering IJ, et al. 2000a. A metabolic link between arsenite and selenite: The seleno-bis(S-glutathionyl) arsinium ion. *J Am Chem Soc* 122:4637-4639.
- *Gailer J, George GN, Pickering IJ, et al. 2000b. Structural basis of the antagonism between inorganic mercury and selenium in mammals. *Chem Res Toxicol* 13:1135-1142.
- *Gairola C, Chow CK. 1982. Dietary selenium, hepatic arylhydrocarbon hydroxylase and mutagenic activation of benzo[a]pyrene, 2-aminoanthracene and 2-aminofluorene. *Toxicol Lett* 11:281-287.
- *Galgan V, Frank A. 1995. Survey of bioavailable selenium in Sweden with the moose (*Alces alces* L.) as monitoring animal. *Sci Total Environ* 172:37-45.
- Gallegos A, Berggren M, Gasdaska JR, et al. 1997. Mechanisms of the regulation of thioredoxin reductase activity in cancer cells by the chemopreventive agent selenium. *Cancer Res* 57:4965-4970.
- Galloway SM. 1996. The micronucleus test and NTP rodent carcinogens: Not so many false negatives. *Mutat Res* 352:185-188.
- *Ganther HE. 1971. Reduction of the selenotrisulfide derivative of glutathione to a persulfide analog by glutathione reductase. *Biochemistry* 10:4089-4098.
- *Ganther HE. 1979. Metabolism of hydrogen selenide and methylated selenides. *Adv Nutr Res* 2:107-128.

9. REFERENCES

- Ganther HE. 1980. Interactions of vitamin E and selenium with mercury and silver. *Ann NY Acad Sci* 355:212-225.
- *Ganther HE. 1999. Selenium metabolism, selenoproteins and mechanisms of cancer prevention: Complexities with thioredoxin reductase. *Carcinogenesis* 20(9):1657-1666.
- Ganther HE, Baumann CA. 1962. Selenium metabolism. I. Effects of diet, arsenic and cadmium. *J Nutr* 77:210-216.
- *Ganther HE, Lawrence JR. 1997. Chemical transformations of selenium in living organisms: Improved forms of selenium for cancer prevention. *Tetrahedron* 53(36):12299-12310.
- *Ganther HE, Levander OA, Baumann CA. 1966. Dietary control of selenium volatilization in the rat. *J Nutr* 88:55-60.
- *Ganther HS, Goudie C, Sunde ML, et al. 1972. Selenium: Relation to decreased toxicity of methylmercury added to diets containing tuna. *Science* 175:1122-1124.
- Gao N, Hopke PK, Reid NW. 1996. Possible sources for some trace elements found in airborne particles and precipitation in Dorset, Ontario. *J Air Waste Manage Assoc* 46:1035-1047.
- Gao S, Tanji KK. 1995. Model for biomethylation and volatilization of selenium from agricultural evaporation ponds. *J Environ Qual* 24:191-197.
- Gao X, Zhang J, Zhang L. 2000. [Acute toxicity and bioavailability of nano red elemental selenium]. *29(1):57-58. (Chinese).*
- Garberg P, Thullberg M. 1996. Decreased glutathione peroxidase activity in mice in response to nafenopin is caused by changes in selenium metabolism. *Chem Biol Interact* 99:165-177.
- *Garland M, Willett WC, Manson JE, et al. 1993. Antioxidant micronutrients and breast cancer. *J Am Coll Nutr* 12(4):400-411.
- *Gasiewicz TA, Smith JC. 1978. The metabolism of selenite by intact rat erythrocytes *in vitro*. *Chem Biol Interact* 21:299-313.
- *Gasmi A, Garnier R, Galliot-Guilley M, et al. 1997. Acute selenium poisoning. *Vet Hum Toxicol* 39(5):304-308.
- *Gathwala G, Yadav OP. 2002. Selenium in neonate. *Indian J Pediatr* 69:443-446.
- *Gebre-Medhin M, Ewald U, Tuverno T. 1988. Serum selenium is related to low density lipoproteins in healthy children but not in children with diabetes. *Upsala Journal of Medical Sciences* 93:57-62.
- *Geering HR, Cary EE, Jones LHP, et al. 1968. Solubility and redox criteria for the possible forms of selenium in soils. *Soil Science Society of America Proceedings* 32:35-40.
- *Gerhardsson L, Brune D, Nordberg G, et al. 1986. Selenium and other trace elements in lung tissue in smelter workers relationship to the occurrence of lung cancer. *Acta Pharmacol Toxicol* 59 (Suppl7):256-259.

9. REFERENCES

- Germani MS, Zoller WH. 1988. Vapor-phase concentrations of arsenic selenium bromine iodine and mercury in the stack of a coal-fired power plant. *Environ Sci Technol* 22(9):1079-1085.
- *Gerritse RG, Vriesema R, Dalenberg JW, et al. 1982. Effect of sewage sludge on trace element mobility in soils. *J Environ Qual* 11:359-364.
- Gervais JA, Rosenberg DK, Fry DM, et al. 2000. Burrowing owls and agricultural pesticides: Evaluation of residues and risks for three populations in California, USA. *Environ Toxicol Chem* 19(2):337-343.
- Ghosh R, Chakraborty S, Chatterjee M. 1995. Epidemiology of cancer in relation to environmental selenium status in different districts of West Bengal, India [Abstract]. *Anticancer Res* 15(5A):1654.
- *Gillum RF. 1996. Hyperpigmentation associated with selenium sulfide lotion. *J Natl Med Assoc* 88(9):551.
- Giovannucci E. 1998. Selenium and risk of prostate cancer. *Lancet* 352:755-756.
- *Giwerzman A, Carlsen E, Keiding N, et al. 1993. Evidence for increasing incidence of abnormalities of the human testis: A review. *Environ Health Perspect Suppl* 101(2):65-71.
- *Gladyshev VN, Kryukov GV. 2001. Evolution of selenocysteine-containing proteins: Significance of identification and functional characterization of selenoproteins. *Biofactors* 14:87-92.
- *Glenn MW, Jensen R, Griner LA. 1964a. Sodium selenate toxicosis: Pathology and pathogenesis of sodium selenate toxicosis in sheep. *Am J Vet Res* 25:1486-1494.
- *Glenn MW, Jensen R, Griner LA. 1964b. Sodium selenate toxicosis: The effects of extended oral administration of sodium selenate on mortality, clinical signs, fertility, and early embryonic development in sheep. *Am J Vet Res* 25:1479-1485.
- Glenn MW, Jensen R, Griner LA. 1964c. Sodium selenate toxicosis: The distribution of selenium within the body after prolonged feeding of toxic quantities of sodium selenate to sheep. *Am J Vet Res* 25:1495-1499.
- Glinska S, Gabara B. 1999. Comparative analysis of selenium effects on *Allium sativum* and *Pisum sativum* roots. *Acta Physiol Plant* 21(Suppl. 3):20.
- *Glooschenko WA, Arafat N. 1988. Atmospheric deposition of arsenic and selenium across Canada using *Sphagnum* moss as a biomonitor. *Sci Total Environ* 73(3):269-275.
- *Glover JR. 1967. Selenium in human urine: A tentative maximum allowable concentration for industrial and rural populations. *Ann Occup Hyg* 10:3-10.
- *Glover JR. 1970. Selenium and its industrial toxicology. *Indust Med* 39(1):50-53.
- *Glover J, Levander O, Parizek J, et al. 1979. Selenium. In: Friberg L, Norberg GF, Vouk VB, eds. *Handbook on the toxicology of metals*. Amsterdam: Elsevier/North Holland Biomedical Press, 555-557.
- Göçmen C, Kumcu EK, Seçilmis A, et al. 2000. Restorative effects of zinc and selenium on nitrenergic relaxations impaired by cadmium in the mouse corpus cavernosum. *Toxicol Lett* 111:229-234.

9. REFERENCES

- *Goehring RB, Palmer IS, Olson OE, et al. 1984. Toxic effects of selenium growing swine fed corn-soybean meal diets. *J Anim Sci* 59:733-737.
- Goehring TB, Johnson DD, Libal GW, et al. 1983. Toxicity of added selenite and the effects of its excess on performance and blood composition of growing swine fed a corn-soybean meal diet. *J Anim Sci* 57:246-247.
- Goldfrank LR, Flomenbaum NE, Lewin NA, et al., eds. 1994. Goldfrank's toxicologic emergencies. 6th ed. Stamford, CT: Appleton and Lange, 1342-1343.
- Golstein J, Corvilain B, Lamy F, et al. 1988. Effects of a selenium deficient diet on thyroid function of normal and perchlorate treated rats. *Acta Endocrinol (Copenh)* 118(4):495-502.
- Gomez-Ariza JL, Sanchez-Rodas D, Morales E, et al. 1999. Inorganic and organic selenium speciation with coupled HPLC-MW-HG-AFS. *Appl Organomet Chem* 13(10):738-787.
- Gonzalez MJ, Rodriguez JR. 1988. Inhibition of sarcoma tumorigenesis in Balb/C mice by supplemented selenium. *Nutrition Reports International* 37(1):41-46.
- *Goodman MA, Jonas E, Kaddimir JJ. 1990. The internist's compendium of drug therapy. Hoboken, NJ: Core Publishing Division Excerpta Medica, 17.
- Goodwin-Jones R. 1997. Controlling the male to female offspring ratio in ruminants using selenium. United Kingdom Patent. GB 23123845 A. Issued 12 Nov 1997.
- Gopalakrishna R, Chen Z-H, Gundimeda U. 1997a. Selenocompounds induce a redox modulation of protein kinase C in the cell, compartmentally independent from cytosolic glutathione: Its role in inhibition of tumor promotion. *Arch Biochem Biophys* 348(1):37-48.
- Gopalakrishna R, Gundimeda U, Chen Z-H. 1997b. Cancer-preventive selenocompounds induce a specific redox modification of cysteine-rich regions in Ca²⁺-dependent isoenzymes of protein kinase C. *Arch Biochem Biophys* 348(1):25-36.
- Gordon GE, Zoller H, Gladney ES. 1973. Abnormally enriched trace elements in the atmosphere. In: Hemphill DD, ed. Trace substances in environmental health. Vol. 7. Columbia, MO: University of Missouri, 167-174.
- *Gortner RA, Lewis HB. 1939. The retention and excretion of selenium after the administration of sodium selenite to white rats. *J Pharmacol Exp Ther* 67:358-364.
- *Gosselin RE, Smith RP, Hodge HC. 1984. Clinical toxicology of commercial products. 5th ed. Baltimore, MD: Williams and Wilkins, MDII-64, II-129.
- *Goyens P, Golstein J, Nsombola B, et al. 1987. Selenium deficiency as a possible factor in the pathogenesis of myxoedematous endemic cretinism. *Acta Endocrinol* 114:497-502
- Goyer RA. 1997. Toxic and essential metal interactions. *Annu Rev Nutr* 17:37-50.
- Graham RV, Blaylock BG, Hoffman FO, et al. 1992. Comparison of selenomethionine and selenite cycling in freshwater experimental ponds. *Water Air Soil Pollut* 62(1-2):25-42.

9. REFERENCES

- Grandjean P, Weihe P, Joergensen PJ, et al. 1992. Impact of maternal seafood diet on fetal exposure to mercury, selenium, and lead. *Arch Environ Health* 47(3):185-195.
- Greenman E, Phillipich MJ, Meyer CJ, et al. 1988. The effect of selenium on phagocytosis in humans. *Anticancer Res* 8(4):825-828.
- Gregus Z, Klaassen CD. 1986. Disposition of metals in rats: A comparative study of fecal, urinary, and biliary excretion and tissue distribution of eighteen metals. *Toxicol Appl Pharmacol* 85:24-38.
- Gregus Z, Perjési P, Gyurasics A. 1998. Enhancement of selenium excretion in bile by sulfobromophthalein: Elucidation of the mechanism. *Biochem Pharmacol* 56:1391-1402.
- Griffin AC, Jacobs MM. 1977. Effects of selenium on azo dye hepatocarcinogenesis. *Cancer Letters* 3:177-181.
- *Griffiths NM, Stewart RDH, Robinson MF. 1976. The metabolism of [⁷⁵Se]selenomethionine in four women. *Br J Nutr* 35:373-382.
- Gromadzinska J, Wasowicz W, Krasomski G, et al. 1998. Selenium levels, thiobarbituric acid-reactive substance concentrations and glutathione peroxidase activity in the blood of women with gestosis and imminent premature labour. *Analyst* 123:35-40.
- *Gromadzinska J, Wasowicz W, Sklodowska M, et al. 1996. The influence of atmospheric chromium on selenium content and glutathione peroxidase activity in blood of tannery workers. *Environ Health Perspect* 104(12):1312-1316.
- *Grønbæk H, Thorlacius-Ussing O. 1989. Selenium in the central nervous system of the rat after exposure to 75-Se-L-Selenomethionine. In: Wendel A, ed. *Selenium in biology and medicine*. New York, NY: Springer-Verlag.
- *Grønbæk H, Thorlacius-Ussing O. 1990. Selenium complexes in the anterior pituitary of rats exposed to L-selenomethionine. *Virchows Arch B Cell Pathol* 59(5):291-296.
- *Grønbæk Thorlacius-Ussing O. 1992. Selenium in the central nervous system of rats exposed to 75-Se L-selenomethionine and sodium selenite. *Biol Trace Elem Res* 35(2):119-127.
- *Grønbæk H, Frystyk J, Ørskov H, et al. 1995. Effect of sodium selenite on growth, insulin-like growth factor-binding proteins and insulin-like growth factor-I in rats. *J Endocrinol* 145:105-112.
- *Gruenwald P. 1958. Malformation caused by necrosis in the embryo illustrated by the effects of selenium compounds on chick embryo. *Am J Pathol* 34:77-95.
- Gu J, Su T, Chen Y, et al. 1999. Expression of biotransformation enzymes in human fetal nasal mucosa. *Toxicologist* 48(1-S):403.
- Guidi GC, Bellisola G, Bonadonna G, et al. 1990. Selenium supplementation increases renal glomerular filtration rate. *J Trace Elem Electrolytes Health Dis* 4(3):157-161.

9. REFERENCES

Guilmette RA, Muggenburg BA. 1988. Reducing the radiation dose from inhaled americium-241 using continuously administered DTPA therapy. *Int J Radiat Biol* 53(2):261-271.

Guimarães MJ, Peterson D, Vicari A, et al. 1996. Identification of a novel *selD* homolog from Eukaryotes, Bacteria, and Archaea: Is there an autoregulatory mechanism in selenocysteine metabolism? *Proc Natl Acad Sci U S A* 93:15086-15091.

Gutenmann WH, Bache CA, Youngs WD, et al. 1976. Selenium in fly ash. *Science* 191:966-967.

*Guvenc M, Guvenc H, Karatas F et al. 2002. Low levels of selenium in miscarriage. *J Trace Elem Exp Med* 15:97-101.

*Guzelian PS, Henry CJ, Olin SS, eds. 1992. Similarities and differences between children and adults: Implications for risk assessment. Washington, DC: International Life Sciences Institute Press.

Hac E, Krechniak J, Szyszko M, et al. 2001. Selenium in human renal cortex, liver, and hair in Poland. *Toxicol Lett* 123:70.

Hac E, Krechniak J, Szyszko M. 2002. Selenium levels in human plasma and hair in northern Poland. *Biol Trace Elem Res* 85(3):277-285.

*Hadjimarkos DM. 1963. Selenium content of human milk: Possible effect on dental caries. *J Pediatr* 63:273-275.

*Hadjimarkos DM. 1969a. Selenium toxicity: Effect of fluoride. *Experientia* 25:485-486.

*Hadjimarkos DM. 1969b. Selenium: A caries enhancing trace element. *Caries Res* 3:14-22.

Hadjimarkos DM, Bonhorst CW. 1961. The selenium content of eggs, milk, and water in relation to dental caries. *J Pediatr* 59:256-259.

*Hadjimarkos DM, Bonhorst CW, Mattice JJ. 1959. The selenium concentration in placental tissue and fetal cord blood. *J Pediatr* 54:296-298.

*Haga P, Lunde G. 1978. Selenium and vitamin E in cord blood from preterm and full term infants. *Acat Paediatr Scand* 67:135-139.

*Hagmar L, Persson-Moschos M, Åkesson B, et al. 1998. Plasma levels of selenium, selenoprotein P and glutathione peroxidase and their correlations to fish intake and serum levels of thyrotropin and thyroid hormones: A study on Latvian fish consumers. *Eur J Clin Nutr* 52:796-800.

Hahn MH, Kuennen RW, Caruso JA, et al. 1981. Determination of trace amounts of selenium in corn, lettuce, potatoes, soybeans, and wheat by hydride generation/condensation and flame atomic absorption spectrometry. *J Agric Food Chem* 29:792-796.

*Hall RH, Laskin S, Frank P, et al. 1951. Preliminary observations on toxicity of elemental selenium. *AMA Arch Ind Hyg Assoc* 4:458-464.

Halverson AW. 1974. Growth and reproduction with rats fed selenite-Se. *Proc S Dakota Acad Sci* 53:167-177.

9. REFERENCES

- *Halverson AW, Monty KJ. 1960. An effect of dietary sulfate on selenium poisoning in the rat. *J Nutr* 70:100-102.
- *Halverson AW, Ding-Tsay D, Triebwasser KC, et al. 1970. Development of hemolytic anemia in rats fed selenite. *Toxicol Appl Pharmacol* 17:151-159.
- *Halverson AW, Guss PL, Olson OE. 1962. Effect of sulfur salts on selenium poisoning in the rat. *J Nutr* 77:459-464.
- *Halverson AW, Palmer IS, Guss PL. 1966. Toxicity of selenium to post-weanling rats. *Toxicol Appl Pharmacol* 9:477-484.
- Hamada R, Arimura K, Osame M. 1997. Maternal-fetal mercury transport and fetal methylmercury poisoning. In: Sigel A, Sigel H, eds. *Metal ions in biological systems: Mercury and its effects on environment and biology*. New York, NY: Marcel Dekker, Inc., 406-420.
- *Hamilton A, Hardy HL. 1949. *Selenium in industrial toxicology*. New York, NY: Hoeber, Inc., 188-192.
- Han C, Li Y, Li L, et al. 1996. [Influence of selenium and lead on sperm abnormalities in mice]. *Yanbian Yixueyuan Xuebao* 19(4):208-209. (Chinese).
- Handel ML, Watts CK, DeFazio a, et al. 1995. Inhibition of AP-1 binding and transcription by gold and selenium involving conserved cysteine residues in Jun and Fos. *Proc Natl Acad Sci U S A* 92:4497-4501.
- Handelman GJ, Kosted P, Short S, et al. 1989. Determination of selenium in human blood by high-performance liquid chromatography with fluorescence detection. *Anal Chem* 61(20):2244-2249.
- *Hansen JC. 1988. Has selenium a beneficial role in human exposure to inorganic mercury? *Med Hypotheses* 25(1):45-53.
- *Hansen JC, Deguchi Y. 1996. Selenium and fertility in animals and man – a review. *Acta Vet Scan* 37(1):19-30.
- Hansen JC, Kristensen P. 1979. The kinetics of ⁷⁵Se-selenium in relation to dose and mode of administration in mice. *J Nutr* 109:1223-1233.
- Hansson L, Pettersson J, Eriksson L, et al. 1989. Atomic absorption spectrometric determination of selenium in human blood components. *Clin Chem* 35(4):537-540.
- Hansson L, Pettersson J, Olin A. 1989. Determination of selenium in fish flesh by hydride generation atomic absorption spectrometry. *Analyst* 114(4):527-528.
- Haraldsson C, Pollak M, Oehman P. 1992. Simultaneous determination of antimony, arsenic and selenium in natural waters by means of hydride generation coupled to plasma source mass spectrometry. *J Anal Atomic Spectr* 7(8):1183-1186.
- *Hardell L, Danell M, Angqvist CA, et al. 1993. Levels of selenium in plasma and glutathione peroxidase in erythrocytes and the risk of breast cancer. A case control study. *Biol Trace Elem Res* 36(2):99-108.

9. REFERENCES

- *Harr JR. 1978. Biological effects of selenium. In: Oehme FW, ed. Toxicity of heavy metals in the environment, Part I. New York, NY: Marcel Dekker, 393-426.
- *Harr JR, Muth OH. 1972. Selenium poisoning in domestic animals and its relationship to man. Clin Toxicol 5:175-186.
- *Harr JR, Bone JF, Tinsley IJ, et al. 1967. Selenium toxicity in rats. II. Histopathology. In: Muth OH, Oldfield JE, Weswig PH, eds. Selenium Biomed Proc 1st Int Symp, Oregon State Univ, 1966. Westport, CT: AVI Publishing Co, 153-178.
- *Harrison I, Littlejohn D, Fell GS. 1996. Distribution of selenium in human blood plasma and serum. Analyst 121:189-194.
- *Harrison LH, Colvin BM, Stuart BP, et al. 1983. Paralysis in swine due to focal symmetrical poliomalacia: Possible selenium toxicosis. Vet Pathol 20:265-273.
- Harrison PR, Lanfear J, Wu L, et al. 1997. Chemopreventive and growth inhibitory effects of selenium. Biomed Environ Sci 10:235-245.
- *Harrison PR, Rahn KA, Dams R, et al. 1971. Area wide trace metal concentrations measured by multielement neutron activation analysis - one day study in north-west Indiana. J Air Pollut Control Assoc 21:563-570.
- *Hasegawa T, Mihara M, Okuno T. 1995. Chemical form of selenium-containing metabolite in small intestine and liver of mice following orally administered selenocystine. Arch Toxicol 69:312-317.
- Hasegawa T, Mihara M, Nakamuro K, et al. 1996a. Mechanisms of selenium methylation and toxicity in mice treated with selenocystine. Arch Toxicol 71:31-38.
- *Hasegawa T, Okuno T, Nakamuro K, et al. 1996b. Identification and metabolism of selenocysteine-glutathione selenenyl sulfide (CySeSG) in small intestine of mice orally exposed to selenocystine. Arch Toxicol 71:39-44.
- Hasegawa T, Okuno T, Sayato Y, et al. 1996c. [Mechanisms of liver toxicity in mice repeated oral administration of selenocystine]. Biomed Res Trace Elements 7(3):211-212. (Japanese).
- *Hasegawa T, Taniguchi S, Mihara M, et al. 1994. Toxicity and chemical form of selenium in the liver of mice orally administered selenocystine for 90 days. Arch Toxicol 68:91-95.
- *Hashimoto Y, Winchester JW. 1967. Selenium in the atmosphere. Environ Sci Technol 1:338-340.
- *Hashimoto Y, Hwang JT, Yanagisawa S. 1970. Possible source of atmospheric pollution of selenium. Environ Sci Technol 4:157-158.
- Hasunuma R, Ogawa T, Fujise Y, et al. 1993. Analysis of selenium metabolites in urine samples of minke whale (*Balaenoptera acutorostrata*) using ion exchange chromatography. Comp Biochem Physiol [C] 104(1):87-89.
- *Hasunuma R, Ogawa T, Kawanishi Y. 1982. Fluorometric determination of selenium in nanogram amounts in biological materials using 2,3-diaminonaphthalene. Anal Biochem 126:242-245.

9. REFERENCES

- Hasunuma R, Ogawa T, Kawanishi Y. 1993. Analysis of selenium metabolites in human urine using ion exchange chromatography. *Bull Environ Contam Toxicol* 50(1):19-23.
- Hasunuma R, Tsuda M, Ogawa T, et al. 1993. Selenium metabolite levels in human urine after dosing selenium in different chemical forms. *Bull Environ Contam Toxicol* 51:756-763.
- Hasunuma R, Tsuda M, Ogawa T, et al. 1990. Urinary selenium levels in Japanese males and females. *Bull Environ Contam Toxicol* 44(4):501-507.
- *WC, Hornbostel L. 1996. Effects of dietary selenium on mood in healthy men living in a metabolic research unit. *Biol Psychiatry* 39:121-128.
- *Hawkes WC, Keim NL. 1995. The effect of selenium (Se) on triiodothyronine (T₃) and weight changes in healthy men in a metabolic research unit. *FASEB J* 9(5):A160.
- *Hawkes WC, Turek P. 2001. Effect of dietary selenium on sperm motility in healthy men. *J Androl* 22(5):764-772.
- *Hawkes WC, Kelley DS, Taylor PC. 2001. The effects of dietary selenium on the immune system in healthy men. *Biol Trace Elem Res* 81:189-213.
- *Hawkes WC, Willhite CC, Craig KA, et al. 1992. Effects of excess selenomethionine on selenium status indicators in pregnant long-tailed macaques (*Macaca fascicularis*). *Biol Trace Elem Res* 35(3):281-297.
- *Hawkes WC, Willhite CC, Omaye ST, et al. 1994. Selenium kinetics, placenta transfer, and neonatal exposure in cynomolgus macaques (*Macaca fascicularis*). *Teratology* 50:148-159.
- HazDat. 1996. Agency for Toxic Substances and Disease Registry (ATSDR), Atlanta, GA.
- HazDat. 2001. Agency for Toxic Substances and Disease Registry (ATSDR), Atlanta, GA.
- *HazDat. 2003. Agency for Toxic Substances and Disease Registry (ATSDR), Atlanta, GA.
- *Heese HD, Lawrence MA, Dempster WS, et al. 1988. Reference concentrations of serum selenium and manganese in healthy nulliparas. *S Afr Med J* 73(3):163-165.
- *Heinrich MJ, Kelsey FE. 1955. Studies on selenium metabolism: The distribution of selenium in the tissues of the mouse. *J Pharmacol Exp Ther* 114:28-32.
- *Heiny JS, Tate CM. 1997. Concentration, distribution, and comparison of selected trace elements in bed sediment and fish tissue in the South Platte River Basin, USA, 1992-1993. *Arch Environ Contam Toxicol* 32:246-259.
- Hélie P, Sauvageau RA. 1998. Chronic selenium toxicosis in growing-finishing pigs in southwestern Québec. *Can Vet J* 39:591-592.
- *Helzlsouer K, Jacobs R, Morris S. 1985. Acute selenium poisoning in the United States. *Federation Proceedings* 44:1670.

9. REFERENCES

- *Hendler SS. 1990. The doctor's vitamin and mineral encyclopedia. New York, NY: Simon & Shuster, 183-193.
- *Henschler D, Kershner U. 1969. Short report on the absorption and toxicity of selenium sulfide. *Arch Toxicol* 24:341-344. (German).
- Herigstad RR, Whitehair CK, Olson OE. 1973. Inorganic and organic selenium toxicosis in young swine: Comparison of pathologic changes with those in swine with vitamin E-selenium deficiency. *Am J Vet Res* 34:1227-1238.
- *Heydorn K, Griepink B. 1990. Selection of reference methods for the determination of selenium in biological materials. *F J Anal Chem* 338(3):287-292.
- *Higashi A, Tamari H, Kuroki Y. 1983. Longitudinal changes in selenium content of breast milk. *Acta Pediatr Scand* 72:433-436.
- Hightower KR, McCready JP. 1991. Effect of selenite on epithelium of cultured rabbit lens. *Invest Ophthalmol Vis Sci* 32(2):406-409.
- Hill J, Allison F, Halpin C. 1985. An episode of acute selenium toxicity in a commercial piggery. *Aust Vet J* 62:207-209.
- *Hill KE, Burk RF. 1989. Glutathione metabolism as affected by selenium deficiency. In: Wendel A, ed. *Selenium in biology and medicine*. Springer-Verlag, 97-100.
- *Hirooka T, Galambos JT. 1966a. Selenium metabolism. III. Serum proteins, lipoproteins and liver injury. *Biochim Biophys Acta* 130:321-328.
- *Hirooka T, Galambos JT. 1966b. Selenium metabolism. I. Respiratory excretion. *Biochim Biophys Acta* 130:313-320.
- Ho MH, Dillon HK. 1986. Biological monitoring. *Environ Sci Technol* 20:124-127.
- Hocman G. 1988. Chemoprevention of cancer: selenium. *Int J Biochem* 20(2):123-132.
- Hodson PV. 1990. Indicators of ecosystem health at the species level and example of selenium effects on fish. *Environmental Monitor Assessment* 15(3):241-254.
- *Hoel DG, Davis DL, Miller AB, et al. 1992. Trends in cancer mortality in 15 industrialized countries, 1969-1986. *J Natl Cancer Inst* 84(5):313-320.
- *Hoening M, Van Hoeyweghen P. 1986. Determination of selenium and arsenic in animal tissues with platform furnace atomic absorption spectrometry and deuterium background correction. *Int J Environ Anal Chem* 24:193-202.
- *Hofbauer LC, Spitzweg C, Magerstädt RA, et al. 1997. Selenium-induced thyroid dysfunction. *Postgrad Med J* 73(856):103-104.
- Hoffman DJ, Heinz GH, Krynitsky AJ. 1989. Hepatic glutathione metabolism and lipid peroxidation in response to excess dietary selenomethionine and selenite in mallard ducklings. *J Toxicol Environ Health* 27(2):263-271.

9. REFERENCES

- Hoffman DJ, Sanderson CJ, LeCaptain LJ, et al. 1991. Interactive effects of boron, selenium, and dietary protein on survival, growth, and physiology in mallard ducklings. *Arch Environ Contam Toxicol* 20(2):288-294.
- Hoffman DJ, Sanderson CJ, LeCaptain LJ, et al. 1992. Interactive effects of arsenate, selenium, and dietary protein on survival, growth, and physiology in mallard ducklings. *Arch Environ Contam Toxicol* 22(1):55-62.
- *Hoffman JE, King MG. 1997. Selenium and selenium compounds. In: Kroschwitz JI, Howe-Grant MH, ed. *Encyclopedia of chemical technology*. New York, NY: John Wiley & Sons, 686-719.
- Hoffmann P, Dedik AN, Deutsch F, et al. 1997. Solubility of single chemical compounds from an atmosphere aerosol in pure water. *Atmos Environ* 31(17):2777-2785.
- Hogan GR, Pendleton RE. 1996. Comparative split dose effects of selenate and selenomethionine on erythropoiesis of mice. *Bull Environ Contam Toxicol* 56:622-629.
- *Hojo Y. 1981a. Subject groups high and low in urinary selenium levels: Workers exposed to heavy metals and patients with cancer and epilepsy. *Bull Environ Contam Toxicol* 26:466-471.
- *Hojo Y. 1981b. Evaluation of the expression of urinary selenium levels as ng Se/mg creatinine and the use of single-void urine as a sample for urinary selenium determination. *Bull Environ Contam Toxicol* 27:213-220.
- *Hojo Y. 1982. Single-void urine selenium level expressed in terms of creatinine content as an effective and convenient indicator of human selenium status. *Bull Environ Contam Toxicol* 29:37-42.
- *Hojo Y. 1987. Selenium and glutathione peroxidase in human saliva and other human body fluids. *Sci Total Environ* 65:85-94.
- *Holmberg RE, Ferm VH. 1969. Interrelationships of selenium, cadmium, and arsenic in mammalian teratogenesis. *Arch Environ Health* 18:873-877.
- *Holmgren A, Kumar S. 1989. Reactions of the thioredoxin system with selenium. In: Wendel A, ed. *Selenium in biology and medicine*. New York, NY: Springer-Verlag, 47-51.
- *Holness DL, Taraschuk IG, Nethercott JR. 1989. Health status of copper refinery workers with specific reference to selenium exposure. *Arch Environ Health* 44(5):291-297.
- Holsbeek L, Joiris CR, Debacker V, et al. 1999. Heavy metals, organochlorines and polycyclic aromatic hydrocarbons in sperm whales stranded in the southern North Sea during the 1994/1995 winter. *Mar Pollut Bull* 38(4):304-313.
- Hopkins WA, Mendonca MT, Rowe CL, et al. 1998. Elevated trace element concentrations in southern toads, *Bufo terrestris*, exposed to coal combustion waste. *Arch Environ Contam Toxicol* 35:325-329.
- *Hopper SA, Greig A, McMurray CH. 1985. Selenium poisoning in lambs. *Vet Rec* 116:569-571.

9. REFERENCES

- *Horne AJ. 1991. Selenium detoxification in wetlands by permanent flooding: I. Effects on a macroalga, an epiphytic herbivore, and an invertebrate predator in the long-term mesocosm experimental at Kesterson Reservoir, California. *Water Air Soil Pollut* 57-58:43-52.
- Hornstein VO, Czöndör J, Rang H. 1998. [Selenium intoxication in postweaning piglets]. *Tieraewztliche Umschau* 53:547-554. (German).
- Hossner LR, Woodard HJ, Bush J. 1992. Growth and selenium uptake of range plants propagated in uranium mine soils. *J Plant Nutr* 15(12):2743-2761.
- *Hotz CS, Fitzpatrick DW, Trick KD, et al. 1997. Dietary iodine and selenium interact to affect thyroid hormone metabolism of rats. *J Nutr* 127:1214-1218.
- House WA, Welch RM. 1989. Bioavailability of and interactions between zinc and selenium in rats fed wheat grain intrinsically labeled with ⁶⁵Zn and ⁷⁵Se. *J Nutr* 119(6):916-921.
- *Howe M. 1979. Selenium in the blood of South Dakotans. *Arch Environ Health* 34:444-448.
- HSDB. 1995. Hazardous Substances Data Bank. National Library of Medicine, Bethesda, MD.
- *HSDB. 2001. Hazardous Substances Data Bank. National Library of Medicine, Bethesda, MD. March 2, 2001.
- *Hsieh HS, Ganther HE. 1975. Acid-volatile selenium formation catalyzed by glutathione reductase. *Biochemistry* 14:1632-1636.
- Hu Q, Chen L, Xu J, et al. 2002. Determination of selenium concentration in rice and the effect of foliar application of Se-enriched fertiliser or sodium selenite on the selenium content of rice. *J Sci Food Agric* 82(8):869-872.
- Huang LL, Hess JL, Bunce GE. 1990. DNA damage, repair, and replication in selenite-induced cataract in rat lens. *Curr Eye Res* 9(11):1041-1050.
- Huang LL, Zhang CY, Hess JL, et al. 1992. Biochemical changes and cataract formation in lenses from rats receiving multiple, low doses of sodium selenite. *Exp Eye Res* 55(5):671-678.
- *Huang W, Akesson B, Svensson BG. 1995. Selenoprotein P and glutathione peroxidase (*EC* 1.11.1.9) in plasma as indices of selenium status in relation to the intake of fish. *Br J Nutr* 73:455-461.
- *Hunter DJ, Manson JE, Colditz GA, et al. 1993. A prospective study of the intake of vitamins C, E, and A and the risk of breast cancer. *N Engl J Med* 329(4):234-240.
- *Hunter DJ, Morris JS, Chute CG, et al. 1990a. Predictors of selenium concentration in human toenails. *Am J Epidemiol* 132(1):114-122.
- *Hunter DJ, Morris JS, Stampfer MJ, et al. 1990b. A prospective study of selenium status and breast cancer risk [see comments]. *JAMA* 264(9):1128-1131.
- Hunter ES. 1998. Selenite prevents the dysmorphology and early phase cell cycle changes produced by arsenite in mouse embryos in culture [Abstract]. *Teratology* 57(4/5):215-216.

9. REFERENCES

- *IARC. 1975a. IARC monographs on the evaluation of carcinogenic risk of chemicals to man: Some aziridines, N-, S-, & O-mustards and selenium. Vol. 9. Lyon, France: World Health Organization, International Agency for Research on Cancer.
- IARC. 1975b. IARC monographs on the evaluation of the carcinogenic risk of chemicals to humans: Selenium. World Health Organization, International Agency for Research on Cancer. *Eval Carcinog Risk Chem Hum* 9:245-260.
- *IARC. 1987. IARC monographs on the evaluation of the carcinogenic risk of chemicals to humans: Summary table. Lyon, France: World Health Organization, International Agency for Research on Cancer *Supp* 7:71.
- *IARC. 1994. IARC monographs on the evaluation of carcinogenic risk of chemicals to humans: Lists of IARC evaluations. Lyon, France: World Health Organization, International Agency for Research on Cancer.
- *IARC. 2001. Selenium and selenium compounds: Summary of data reported and evaluation. Lyon, France: World Health Organization, International Agency for Research on Cancer. <http://193.51.164.11/htdocs/Monographs/Vol09/Selenium.html>. February 22, 2001.
- *Imahori A, Fukushima J, Shiobara S, et al. 1979. Multielement neutron activation analysis of human scalp hair: a local population survey in the Tokyo metropolitan area. *J Radioanal Chem* 52(1):167-180.
- *Imbach A, Sternberg J. 1967. Metabolic studies with seleniated compounds. I. Kinetic studies with $^{75}\text{SeO}_3$ in rats. *Int J Appl Radiat Isot* 18:545-556.
- *Innes JRM, Ulland BM, Valerio MG, et al. 1969. Bioassay of pesticides and industrial chemicals for tumorigenicity in Mice: A preliminary note. *J Natl Cancer Inst* 42:1101-1114.
- *Ip C. 1981. Prophylaxis of mammary neoplasia by selenium supplementation in the initiation and promotion phases of chemical carcinogenesis. *Cancer Res* 41:4386-4390.
- *Ip C. 1983. Selenium-mediated inhibition of mammary carcinogenesis. *Biol Trace Elem Res* 5:317-330.
- Ip C. 1986. Interaction of vitamin C and selenium supplementation in the modification of mammary carcinogenesis in rats. *J Natl Cancer Inst* 77:299-303.
- Ip C, Ganther H. 1992. Biological activities of trimethylselenium as influenced by arsenite. *J Inorg Biochem* 46(3):215-222.
- *Ip C, Hayes C. 1989. Tissue selenium levels in selenium-supplemented rats and their relevance in mammary cancer protection. *Carcinogenesis* 10(5):921-925.
- *Ip C, Lisk DJ. 1995. Efficacy of cancer prevention by high-selenium garlic is primarily dependent on the action of selenium. *Carcinogenesis* 16(11):2649-2652.
- *Ip C, Lisk DJ. 1996. The attributes of selenium-enriched garlic in cancer prevention. In: American Institute for Cancer Research, eds. *Dietary phytochemicals in cancer prevention and treatment*. New York, NY: Plenum Press, 179-187.

9. REFERENCES

- *Ip C, Birringer M, Block E, et al. 2000a. Chemical speciation influences comparative activity of selenium-enriched garlic and yeast in mammary cancer prevention. *J Agric Food Chem* 48:2062-2070.
- Ip C, Hayes C, Budnick RM, et al. 1991. Chemical form of selenium, critical metabolites, and cancer prevention. *Cancer Res* 51(2):595-600.
- *Ip C, Lisk DJ, Ganther H, et al. 1997. Triphenylselenonium and diphenylselenide in cancer chemoprevention: Comparative studies of anticarcinogenic efficacy, tissue selenium levels and excretion profile. *Anticancer Res* 17:3195-3200.
- *Ip C, Lisk DJ, Ganther HE. 1998. Activities of structurally-related lipophilic selenium compounds as cancer chemopreventive agents. *Anticancer Res* 18:4019-4026.
- Ip C, Lisk DJ, Thompson HJ. 1996. Selenium-enriched garlic inhibits the early stage but not the late stage of mammary carcinogenesis. *Carcinogenesis* 17(9):1979-1982.
- *Ip C, Thompson HJ, Zhu Z, et al. 2000b. *In vitro* and *in vivo* studies of methylseleninic acid: Evidence that a monomethylated selenium metabolite is critical for cancer chemoprevention. *Cancer Res* 60:2882-2886.
- *IRIS. 1996. Integrated Risk Information System. Washington, DC: U.S. Environmental Protection Agency.
- *IRIS. 2001. Integrated Risk Information System. Washington, DC: U.S. Environmental Protection Agency. February 22, 2001.
- *IRIS. 2003. Integrated Risk Information System. Washington, DC: U.S. Environmental Protection Agency.
- Ishikawa M, Sasaki M, Koiwai K, et al. 1992. Inhibition of hepatic mixed-function oxidase enzymes in mice by acute and chronic treatment with selenium. *J Pharmacobiodyn* 15(8):377-385.
- *ITII. 1976. Toxic and hazardous industrial chemicals safety manual. Tokyo, Japan: The International Technical Information Institute, 460-461.
- *Itoh S, Shimada H. 1996. Micronucleus induction by chromium and selenium, and suppression by metallothionein inducer. *Mutat Res* 367:233-236.
- Iwai N, Watanabe C, Suzuki T, et al. 1988. Metallothionein induction by sodium selenite at two different ambient temperatures in mice. *Arch Toxicol* 62(6):447-451.
- *Iyengar GV. 1987. Reference values for the concentrations of As, Cd, Co, Cr, Cu, Fe, I, Hg, Mn, Mo, Ni, Pb, Se, and Zn in selected human tissues and body fluids. *Biol Trace Elem Res* 12:263-295.
- *Jaakkola K, Tummavuori J, Pirinen A, et al. 1983. Selenium levels in whole blood of Finnish volunteers before and during organic and inorganic selenium supplementation. *Scand J Clin Lab Invest* 1983:473-476.
- *Jacobs MM. 1983. Selenium inhibition of 1,2-Dimethylhydrazine-induced colon carcinogenesis. *Cancer Res* 43:1646-1649.

9. REFERENCES

- *Jacobs M, Forst C. 1981a. Toxicological effects of sodium selenite in Sprague-Dawley rats. *J Toxicol Environ Health* 8:575-585.
- Jacobs MM, Forst C. 1981b. Toxicological effects of sodium selenite in Swiss Mice. *J Toxicol Environ Health* 8:587-598.
- *Jacobs MM, Griffin AC. 1979. Effects of selenium on chemical carcinogenesis, comparative effects of antioxidants. *Biol Trace Elem Res* 1:1-13.
- *Jacobs MM, Forst CF, Beams FA. 1981. Biochemical and clinical effects of selenium on dimethylhydrazine-induced colon cancer in rats. *Cancer Res* 41:4458-4465.
- *Jacobs MM, Jansson B, Griffin AC. 1977a. Inhibitory effects of selenium on 1,2-dimethylhydrazine and methylazoxymethanol acetate induction of colon tumors. *Cancer Lett* 2:133-138.
- Jacobs MM, Matney TS, Griffin AC. 1977b. Inhibitory effects of selenium on the mutagenicity of 2-acetyl aminofluorene (AAF) and AAF derivatives. *Cancer Lett* 2:319-322.
- Jacobsson SO. 1966. Uptake of Se⁷⁵ in tissues of sheep after administration of a single dose of Se⁷⁵-sodium selenite, Se⁷⁵-selenomethionine, or Se⁷⁵-selenocystine. *Acta Vet Scand* 7:303-320.
- *Jaffe WG, Mondragon MC. 1969. Adaptation of rats to selenium intake. *J Nutr* 97:431-436.
- *Jaffe WG, Mondragon C. 1975. Effects of ingestion of organic selenium in adapted and non-adapted rats. *Br J Nutr* 33:387-397.
- *Jaffe WG, Ruphael MD, Mondragon MC, et al. 1972. [Clinical and biochemical study in children from a seleniferous zone.] *Arch Latinoam Nutr* 22:579-611. (Spanish).
- Jamall IS, Haldar D, Wadewitz AG. 1987. Effects of dietary selenium on lipid peroxidation, mitochondrial function and protein profiles in the heart of the myopathic Syrian golden hamster (BIO 14.6). *Biochem Biophys Res Commun* 144:815-820.
- *Jamall IS, Naik M, Sprowls JJ, et al. 1989. A comparison of the effects of dietary cadmium on heart and kidney antioxidant enzymes: Evidence for the greater vulnerability of the heart to cadmium toxicity. *J Appl Toxicol* 9(5):339-345.
- *Jamba L, Nehru B, Bansal MP. 1997. Redox modulation of selenium binding proteins by cadmium exposures in mice. *Mol Cell Biochem* 177:169-175.
- James LF, Hartley WJ, Van Kampen KR. 1981. Syndromes of Astragalus poisoning in livestock. *J Am Vet Med Assoc* 178:146-150.
- James LF, Molyneux RJ, Panter KE. 1990. The potential for the toxic principles of Astragalus and related plants to appear in meat and milk. *Vet Hum Toxicol* 32Suppl:104-109.
- *James LF, Van Kampen KV, Hartley WJ. 1983. Astragalus bisulcatus - A cause of selenium or locoweed poisoning? *Vet Hum Toxicol* 25:86-89.
- *Jandial V, Handerson P, MacGillivray I. 1976. Placental transfer of radioactive selenomethionine in late pregnancy. *Eur J Obstet Gynecol Reprod Biol* 6:295-300.

9. REFERENCES

- Janghorbani M, Christensen MJ, Nahapetian A, et al. 1982. Selenium metabolism in health adults: Quantitative aspects using the stable isotope $^{74}\text{SeO}_3(2-)$. *Am J Clin Nutr* 35:647-654.
- Janghorbani M, Lynch NE, Mooers CS, et al. 1990a. Comparison of the magnitude of the selenite-exchangeable metabolic pool and whole body endogenous selenium in adult rats. *J Nutr* 120(2):190-199.
- Janghorbani M, Rockway S, Mooers CS, et al. 1990b. Effect of chronic selenite supplementation on selenium excretion and organ accumulation in rats. *J Nutr* 120(3):274-279.
- Janghorbani M, Martin RF, Kasper LJ, et al. 1990c. The selenite-exchangeable metabolic pool in humans: A new concept for the assessment of selenium status. *Am J Clin Nutr* 51(4):670-677.
- Janke BH. 1989. Acute selenium toxicosis in a dog. *J Am Vet Med Assoc* 195(8):1114-1115.
- Jansson B, Jacobs MM, Griffin AC. 1978. Gastrointestinal cancer: Epidemiology and experimental studies. *Adv Exp Med Biol* 91:305-321.
- Jastrzebski Z, Czyzewska-Szafran H, Fijatek Z, et al. 1995. Toxicity studies of a new selenium compound, Selol, in rats. *Drugs Exp Clin Res* 21(6):217-220.
- Jastrzebski Z, Czyzewska-Szafran H, Remiszewska M, et al. 1997. Pharmacokinetics of Selol, a new agent containing selenium, in rats. *Drugs Exp Clin Res* 23(1):7-11.
- *Jensen R, Closson W, Rothenberg R. 1984. Selenium intoxication - New York. *JAMA* 251:1938.
- *Jereb M, Falk R, Jereb B, et al. 1975. Radiation dose to the human body from intravenously administered ^{75}Se -sodium selenite. *J Nucl Med* 16:846-850.
- Ji Q, Chen Y. 1996. *Vicia faba* root tip micronucleus test on the mutagenicity of water-soluble contents of cigarette smoke. *Mutat Res* 359:1-6.
- *Jiang C, Jiang W, Ip C, et al. 1999. Selenium-induced inhibition of angiogenesis in mammary cancer at chemopreventive levels of intake. *Mol Carcinog* 26:213-225.
- *Jiang S, Robberect H, Vanden Berghe D. 1983. Elimination of selenium compounds by mice through formation of different volatile selenides. *Experientia* 39:293-294.
- *Johanson CE. 1980. Permeability and vascularity of the developing brain: Cerebellum vs cerebral cortex. *Brain Res* 190:3-16.
- Johansson E, Plantin L-O, Galgan V, et al. 1989. Comparison of human response to low doses of inorganic and organic selenium. In: Wendel A, ed. *Selenium in biology and medicine*. New York, NY: Springer-Verlag, 258-262.
- *John W, Kaifer JW, Rahm K, et al. 1973. Trace element concentrations in aerosols from the San Francisco Bay area. *Atmos Environ* 7:107-118.
- *Johnson H. 1970. Determination of selenium in solid waste. *Environ Sci Technol* 4:850-853.

9. REFERENCES

- *Johnson RA, Baker SS, Fallon JT, et al. 1981. An occidental case of carcinogenicity and selenium deficiency. *N Engl J Med* 304:1210-1212.
- *Johnson VJ, Tsunoda M, Sharma RP. 2000. Increased production of proinflammatory cytokines by murine macrophages following oral exposure to sodium selenite but not to seleno-L-methionine. *Arch Environ Contam Toxicol* 39:243-250.
- Jones GB, Godwin KO. 1962. Distribution of radioactive selenium in mice. *Nature* 196:1294-1296.
- *Jones MM, Xu C, Ladd PA. 1997. Selenite suppression of cadmium-induced testicular apoptosis. *Toxicology* 116:169-175.
- *Kabatas-Pendias A, Pendias H. 1984. Trace elements in soils and plants. Boca Raton, FL: CRC Press, p.135-136.
- Kaeck M, Lu J, Strange R, et al. 1997. Differential induction of growth arrest inducible genes by selenium compounds. *Biochem Pharmacol* 53:921-926.
- *Kalivas J. 1993. Lack of serum selenium rise after overnight application of selenium sulfide. *Arch Dermatol* 129:646-648.
- Kallistratos G, Evangelou A, Seferiadis K, et al. 1985. Selenium and haemodialysis: Serum selenium levels in healthy persons, non-cancer and cancer patients with chronic renal failure. *Nephron* 41:217-222.
- Kallistratos GI, Fasske EE, Karkabounas S, et al. 1988. Prolongation of the survival time of tumor bearing Wistar rats through a simultaneous oral administration of vitamins C + E and selenium with glutathione. In: Tryfiates GP, Prasad KN, eds. Nutrition, growth, and cancer. Proceedings of the First International Symposium on Nutrition, Growth, and Cancer, Athens, Greece, April 26-30, 1987. New York, NY: Alan R Liss, 377-389.
- *Kamstra LD, Bonhorst CW. 1953. Effect of arsenic on the expiration of volatile selenium compounds by rats. *Proc S D Acad Sci* 32:72-74.
- *Kaneko M, Natsuhori M, Ito N. 1999. Tissue concentration-time profile of selenium after sodium selenite administration to rats. *Int J PIXE* 9(3 & 4):315-323.
- *Kanematsu N, Hara M, Kada T. 1980. Reassay and mutagenicity studies on metal compounds. *Mutat Res* 77:109-116.
- Kardos J, Zimmer K, Coni E, et al. 1989. Determination of selenium in foods by inductively-coupled plasma atomic emission spectrometry and hydride generation. *Ann Ist Super Sanita* 25(3):505-509.
- Karlson U, Frankenberger WT, Jr. 1990. Volatilization of selenium from agricultural evaporation pond sediments. *Sci Total Environ* 92:41-54.
- Kasseroller R. 1998. Sodium selenite as prophylaxis against erysipelas in secondary lymphedema. *Anticancer Res* 18:2227-2230.
- Kato T, Read R, Rozga J, et al. 1992. Evidence for intestinal release of absorbed selenium in a form with high hepatic extraction. *Am J Physiol* 262(5Pt1):G854-858.

9. REFERENCES

- Kauf E, Dawczynski H, Jahreis G, et al. 1994. Sodium selenite therapy and thyroid-hormone status in cystic fibrosis and congenital hypothyroidism. *Biol Trace Elem Res* 40:247-253.
- *Kaur R, Parshad VR. 1994. Effects of dietary selenium on differentiation, morphology and functions of spermatozoa of the house rat, *Rattus rattus* L. *Mutat Res* 309:29-35.
- *Kautiainen A, Tornqvist M, Olsson U. 2000. Effects of selenium deficiency on the formation and detoxification of endogenous electrophiles in rats. *J Nutr Biochem* 11:425-430.
- *KDRG. 1979a. Observations on the effect of sodium selenite in the prevention of Keshan disease. Keshan Disease Research Group of the Chinese Academy of Medical Sciences. *Chin Med J [Engl]* 92:471-476.
- *KDRG. 1979b. Epidemiological studies on the etiological relationship of selenium and Keshan disease. Keshan Disease Research Group of the Chinese Academy of Medical Sciences. *Chin Med J [Engl]* 92:477-482.
- *Khalil AM. 1989. The induction of chromosome aberrations in human purified peripheral blood lymphocytes following *in vitro* exposure to selenium. *Mutat Res* 224(4):503-506.
- *Khalil AM. 1994. Genotoxicity of two pharmacologically important selenium compounds (selenocystine and selenopuridine) in cultured human blood lymphocytes. *Toxicol Environ Chem* 41:147-154.
- *Khan MY, Gilani SH. 1980. Selenium poisoning and embryogenesis: Light and electron microscopic studies of the heart. *Environ Res* 23:98-109.
- Kilburn KH, Warshaw RH. 1995. Neurotoxic effects from residential exposure to chemicals from and oil reprocessing facility and superfund site. *Neurotoxicol Teratol* 17(2):89-102.
- Kilness AW, Hochberg FH. 1977. Amyotrophic lateral sclerosis in a high selenium environment. *JAMA* 237:2843-2844.
- Kim BS, Margolin BH. 1999. Prediction of rodent carcinogenicity utilizing a battery of *in vitro* and *in vivo* genotoxicity tests. *Environ Mol Mutagen* 34:297-304.
- Kim HY, Picciano MF, Wallig MA, et al. 1991. The role of selenium nutrition in the development of neonatal rat lung. *Pediatr Res* 29(5):440-445.
- Kim IY, Stadtman TC. 1997. Inhibition of NF- κ B DNA binding and nitric oxide induction in human T cells and lung adenocarcinoma cells by selenite treatment. *Proc Natl Acad Sci USA* 94:12904-12907.
- Kinder DS, Colestock CN, Razniak SL, et al. 1988. Time-dependent distribution of sodium selenite in the female ICR mouse. *Bull Environ Contam Toxicol* 40(3):425-432.
- *Kinnigkeit G. 1962. [Investigation of workers exposed to selenium, in a factory producing rectifiers [Abstract]]. *Bull Hyg (London)* 37:1029-1030. (German).
- *Kiremidjian-Schumacher L, Roy M, Wishe HI, et al. 1992. Regulation of cellular immune responses by selenium. *Biol Trace Elem Res* 33:23-35.

9. REFERENCES

- *Kiremidjian-Schumacher L, Roy M, Wishe HI, et al. 1994. Supplementation with selenium and human immune cell functions. II. Effect of cytotoxic lymphocytes and natural killer cells. *Biol Trace Elem Res* 41:115-127.
- Kitahara J, Seko Y, Imura N. 1993. Possible involvement of active oxygen species in selenite toxicity in isolated rat hepatocytes. *Arch Toxicol* 67(7):497-501.
- Kivela SL, Maenpaa P, Nissinen A, et al. 1989. Vitamin A, vitamin E and selenium status in an aged Finnish male population. *Int J Vitam Nutr Res* 59(4):373-380.
- *Klaassen CD, Amdur MO, Doull JE, eds. 1986. Casarett and Doull's toxicology, the basic science of poisons. 3rd ed. New York, NY: Macmillan Publishing Company.
- *Knekt P, Heliovaara M, Rissanen A, et al. 1992. Serum antioxidant vitamins and risk of cataract. *Br Med J* 305(6866):1392-1394.
- Kobayashi R, Ohno H, Jindo T, et al. 1997a. Fifty-two-week oral repeated dose toxicity study in rats with ebselen. *Yakuri to Chiryō* 25(Suppl.):41-58.
- Kobayashi R, Ohno H, Tsuchihya T, et al. 1997b. Fifty-two-week oral repeated dose toxicity study in miniature pigs with ebselen. *Yakuri to Chiryō* 25(Suppl.):59-70.
- *Kobayashi Y, Ogra Y, Ishiwata K, et al. 2002. Selenosugars are key and urinary metabolites for selenium excretion within the required to low-toxic range. *Proc Natl Acad Sci U S A* 99(25):15932-15936.
- *Koh TS, Benson TH. 1983. Critical re-appraisal of fluorometric method for determination of selenium in biological materials. *J Assoc Off Anal Chem* 66:918-926.
- *Köhrle J. 1994. Thyroid hormone deiodination in target tissues - a regulatory role for the trace element selenium? *Exp Clin Endocrinol* 102:63-89.
- *Koirtyohann SR, Morris JS. 1986. General review of analytical methods. Some metals: As, Be, Cd, Cr, Ni, Pb, Se, Zn. Vol. 8. *IARC Sci Publ* 71:159-190.
- Kok FJ, Hofman A. 1989. Selenium status and cardiovascular disease: Dutch epidemiologica data. In: Wendel A, ed. *Selenium in biology and medicine*. New York, NY: Springer-Verlag, 214-218.
- Kok FJ, DeBruijn AM, Hofman A, et al. 1987a. Selenium status and chronic disease mortality: Dutch epidemiological findings. *Int J Epidemiol* 16:329-332.
- Kok FJ, DeBruijn AM, Hofman A, et al. 1987b. Is serum selenium a risk factor for cancer in men only? *Am J Epidemiol* 125:12-16.
- Kok FJ, DeBruijn AM, Hofman A, et al. 1987c. Serum selenium vitamin antioxidants, and cardiovascular mortality: A 9-year follow-up study in the Netherlands. *Am J Clin Nutr* 45:462-468.
- Koller LD, Exon JH. 1986. The two faces of selenium--deficiency and toxicity--are similar in animals and man. *Can J Vet Res* 50:297-306.

9. REFERENCES

- *Koller LD, Exon JH, Talcott PA, et al. 1986. Immune responses in rats supplemented with selenium. *Clin Exp Immunol* 63:570-576.
- *Kolodziejczyk L, Put A, Grzela P. 2000. Liver morphology and histochemistry in rats resulting from ingestion of sodium selenite and sodium fluoride. *Fluoride* 33(1):6-16.
- *Komori M, Nishio K, Kitada M, et al. 1990. Fetus-specific expression of a form of cytochrome P-450 in human livers. *Biochemistry* 29:4430-4433.
- Komsta-Szumaska E, Reuhl KR, Miller DR. 1983. The effect of methylmercury on the distribution and excretion of selenium by the guinea pig. *Arch Toxicol* 54:303-310.
- *Koppel C, Baudisch H, Beyer K-H, et al. 1986. Fatal poisoning with selenium dioxide. *Clin Toxicol* 24:21-35.
- *Korpela H, Lovenia R, Yrjanheikki, et al. 1984. Selenium concentration in maternal and umbilical cord blood, placenta, and amniotic membranes. *Intl J Vitam Nutr Res* 54:257-261.
- Korte NE, Skopp J, Fuller WH, et al. 1976. Trace element movement in soils: Influence of soil physical and chemical properties. *Soil Science* 122:350-359.
- Kosta L, Byrne AR, Zelenko V. 1975. Correlation between selenium and mercury in man following exposure to inorganic mercury. *Nature* 254:238-239.
- *Kramer GF, Ames BN. 1988. Mechanisms of mutagenicity and toxicity of sodium selenite (Na_2SeO_3) in *Salmonella typhimurium*. *Mutat Res* 201(1):169-180.
- Kraus T, Quidenus G, Schaller KH. 2000. Normal values for arsenic and selenium concentrations in human lung tissue. *Arch Environ Contam Toxicol* 38:384-389.
- *Kretz-Remy C, Arrigo A-P. 2001. Selenium: A key element that controls NF- κ B activation and IkB α half life. *Biofactors* 14:117-125.
- Krishnaja AP, Rege MS. 1982. Induction of chromosomal aberrations in fish *Boleophthalmus dussumieri* after exposure *in vivo* to mitomycin C and heavy metals mercury, selenium, and chromium. *Mutat Res* 102:71-82.
- Krishnamurti CR, Ramberg CF, Jr, Shariff MA. 1989. Kinetic modeling of selenium metabolism in nonpregnant ewes. *J Nutr* 119(8):1146-1155.
- *Krishnan K, Andersen ME. 1994. Physiologically based pharmacokinetic modeling in toxicology. In: Hayes AW, ed. *Principles and methods of toxicology*. 3rd ed. New York, NY: Raven Press, Ltd., 149-188.
- *Krishnan K, Andersen ME, Clewell HJ III, 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.
- *Krynitsky AJ. 1987. Preparation of biological tissue for determination of arsenic and selenium. *Anal Chem* 59:1884-1886.

9. REFERENCES

- Kubota J, Allaway WH, Carter DL, et al. 1967. Selenium in crops in the United States in relation to selenium responsive diseases of animals. *J Agric Food Chem* 15:448-453.
- *Kubota J, Cary EE, Gissel-Nielsen G. 1975. Selenium in rainwater of the United States and Denmark. *Trace Subst Environ Health* 9:123-130.
- *Kuikka J, Nordman E. 1978. Measurement of ⁷⁵Se-sodium selenite in the human body. *Int J Nucl Med Biol* 5:30-34.
- *Kumar KSD, Kumar Shiva Prakash A, Swamy K, et al. 2002. Role of red blood cell selenium in recurrent pregnancy loss. *J Obstet Gynaecol* 22:181-183.
- *Kumpulainen J. 1983. Helsinki, Finland, personal communication. (As cited in Iyengar 1987).
- Kumpulainen J, Saarela KE. 1992. Determination of selenium in staple foods and total diets by electrothermal atomic absorption spectrometry without solvent extraction. *J Anal Atomic Spectr* 7(2):165-170.
- *Kumpusalo E, Karinpaa A, Jauhiainen M, et al. 1990. Multivitamin supplementation of adult omnivores and lactovegetarians: Circulating levels of vitamin A, D and E, lipids, apolipoproteins and selenium. *Int J Vitam Nutr Res* 60(1):58-66.
- Kyle R, Allen WM. 1990. Accidental selenium poisoning of a flock of sheep. *Vet Rec* 126(24):601.
- L'Abbe MR, Fischer PW, Chavez ER. 1989. Changes in selenium and antioxidant status during DMBA-induced mammary carcinogenesis in rats. *J Nutr* 119(5):766-771.
- Lacetera N, Bernabucci U, Ronchi B, et al. 1996. Effects of selenium and vitamin E administration during a late stage of pregnancy on colostrum and milk production in dairy cows, and on passive immunity and growth of their offspring. *Am J Vet Res* 57(12):1776-1780.
- Ladenstein R, Wendel A. 1983. The refined structure of the selenoenzyme glutathione peroxidase at 0.2-nm resolution. *Eur J Biochem* 133:51-69.
- Lafroth G, Ames BN. 1978. Mutagenicity of inorganic compounds in *Salmonella typhimurium*: Arsenic, chromium, and selenium. *Mutat Res* 53:65-66.
- Lakin HW. 1972. Selenium accumulation in soils and its absorption by plants and animals. *Geological Society of America Bulletin* 83:181-190.
- *Lakin HW, Davidson DF. 1967. The relation of the geochemistry of selenium to its occurrence in soils. In: Muth OH, ed. *Symposium: Selenium in biomedicine*. First International Symposium, Oregon State University. Westport, CT: AVI Publishing Co, 27-56.
- *Lalonde L, Jean Y, Roberts D, et al. 1982. Fluorometry of selenium in serum or urine. *Clin Chem* 28:172-174.

9. REFERENCES

- Lam RHF, Brown JP, Fan AM. 1994. Chemicals in California drinking water: Source of contamination, risk assessment, and drinking water standards. In: Wang RGM, ed. Water contamination and health: Integration of exposure assessment, toxicology, and risk assessment. New York, NY: Marcel Dekker, Inc., 15-44.
- Lamleung SY, Cheng VK, Lam YW. 1991. Application of a microwave oven for drying and nitric acid extraction of mercury and selenium from fish tissue. *Analyst* 116(9):957-959.
- Lane HW, Strength R, Johnson J, et al. 1991. Effect of chemical form of selenium on tissue glutathione peroxidase activity in developing rats. *J Nutr* 121(1):80-86.
- Lange JH. 1991. Reanalysis of epidemiological data for selenium anti-cancer activity. *Toxicol Ind Health* 7(4):319-325.
- Langenauer M, Kraehenbuehl U. 1991. Determination of selenium in food and minerals by neutron activation analysis. *Chimia* 45(1/2):8-10.
- Larner AJ. 1996. Alzheimer's disease, Kuf's disease, tellurium and selenium. *Med Hypotheses* 47:73-75.
- *Larsen NA, Pakkenberg H, Damsgaard E, et al. 1979. Topographical distribution of arsenic, manganese, and selenium in the normal human brain. *J Neurol Sci* 42:407-416.
- *Larsen PR, Davies TF, Hay ID. 1998. The thyroid gland. In: Wilson JD, Foster DW, Kronenberg HM, et al., eds. *Williams textbook of endocrinology*. Philadelphia, PA: W.B. Saunders Company, 390-515.
- Laszczyca P, Kawka-Serwecinska E, Dolezych B, et al. 1996. [The effects of cadmium poisoning and selenite gavage on amino acid metabolism in rats]. *Bromatol Chem Toksykol* 29(1):41-45. (Polish).
- *Lathrop KA, Johnston RE, Blau M, et al. 1972. Radiation dose to humans from ⁷⁵Se-L-selenomethionine. *J Nucl Med* 13:7-17.
- Lavi N, Alfassi ZB. 1990. Determination of trace amounts of cadmium, cobalt, chromium, iron, molybdenum, nickel, selenium, titanium, vanadium and zinc in blood and milk by neutron activation analysis. *Analyst* 115(6):817-822.
- Lavi N, Mantel M, Alfassi ZB. 1988. Determination of selenium in biological materials by neutron activation analysis. *Analyst* 113(12):1855-1859.
- LeBoeuf R, Laishes B, Hoekstra W. 1985. Effects of dietary selenium concentration on the development of enzyme-altered liver foci and hepatocellular carcinoma by diethylnitrosamine. *Cancer Res* 45:5489-5495.
- *Lee DS, Garland JA, Fox AA. 1994. Atmospheric concentrations of trace elements in urban areas of the United Kingdom. *Atmos Environ* 28(16):2691-2713.
- Lee M, Chan KK-S, Sairenji E, et al. 1979. Effect of sodium selenite on methylmercury-induced cleft palate in the mouse. *Environ Res* 19:39-48.
- *Lee M, Dong A, Yano J. 1969. Metabolism of ⁷⁵Se-selenite by human whole blood *in vitro*. *Can J Biochem* 47:791-797.

9. REFERENCES

- *Lee RE Jr, Duffield FV. 1979. Sources of environmentally important metals in the atmosphere. *Adv Chem Ser* 172:146-171.
- *Leeder JS, Kearns GL. 1997. Pharmacogenetics in pediatrics: Implications for practice. *Pediatr Clin North Am* 44(1):55-77.
- *Lemley AD. 1982. Response of juvenile centrachids to sublethal concentrations of waterborne selenium. I. Uptake, tissue distribution, and retention. *Aquatic Toxicology* 2:235-252.
- *Lemly AD. 1985. Toxicology of selenium in a freshwater reservoir: Implications for environmental hazard evaluation and safety. *Ecotoxicol Environ Safety* 10:314-338.
- Lemly AD. 1996. Evaluation of the hazard quotient method for risk assessment of selenium. *Ecotoxicol Environ Saf* 35:156-162.
- *Lemly AD. 1997. Ecosystem recovery following selenium contamination in a freshwater reservoir. *Ecotoxicol Environ Saf* 36:275-281.
- *Leung H-W. 1993. Physiologically-based pharmacokinetic modelling. In: Ballentine B, Marro T, Turner P, eds. *General and applied toxicology*. Vol. 1. New York, NY: Stockton Press, 153-164.
- *Levander OA. 1972. Metabolic interrelationships and adaptations in selenium toxicity. *Ann NY Acad Sci* 192:181-192.
- Levander OA. 1976. Selenium in foods. *Proceedings of the Symposium on Selenium-Tellurium in the Environment*. Pittsburgh, PA: Industrial Health Foundation, Inc., 26-53.
- *Levander OA. 1977. Metabolic interrelationships between arsenic and selenium. *Environ Health Perspect* 19:159-164.
- *Levander OA. 1982. Selenium: Biochemical actions, interactions, and some human health implications. In: *Clinical, biochemical, and nutritional aspects of trace elements*. New York, NY: Alan R. Liss, Inc., 345-368.
- *Levander OA. 1986. Selenium. In: Mertz W, ed. *Trace elements in human and animal nutrition*. Orlando, FL: Academic Press, Inc., 209-279.
- *Levander OA. 1987. A global view of human selenium nutrition. *Annu Rev Nutr* 7:227-250.
- Levander OA. 1989. Progress in establishing human nutritional requirements and dietary recommendations for selenium. In: Wendel A, ed. *Selenium in biology and medicine*. New York, NY: Springer-Verlag, 205-209.
- Levander OA. 1989. Upper limit of selenium in infant formulas. *J Nutr* 119: 1869-1873.
- Levander OA. 1991. Scientific rationale for the 1989 recommended dietary allowance for selenium. *J Am Diet Assoc* 91(12):1572-1576.
- *Levander OA, Baumann CA. 1966a. Selenium metabolism. V. Studies on the distribution of selenium in rats given arsenic. *Toxicol Appl Pharmacol* 9:98-105.

9. REFERENCES

- *Levander OA, Baumann CA. 1966b. Selenium metabolism. VI. Effect of arsenic on the excretion of selenium. *Toxicol Appl Pharmacol* 9:106-115.
- *Levander OA, Morris VC. 1970. Interactions of methionine, vitamin E, and antioxidants in selenium toxicity in the rat. *J Nutr* 100:1111-1118.
- Levander OA, Morris VC. 1984. Dietary selenium levels needed to maintain balance in North American adults consuming self-selected diets. *Am J Clin Nutr* 39:809-815.
- *Levander OA, Morris VC. 1985. What can balance studies tell us about human dietary selenium requirements? In: Mills CF, Bremner I, Chesters JK, eds. Trace elements in man and animals - TEMA - 5. Proceedings of the fifth international symposium on trace elements in man and animals. Commonwealth Agricultural Bureaux, 498-502.
- Levander OA, Whanger PD. 1996. Deliberations and evaluations of the approaches, endpoints and paradigms for selenium and iodine dietary recommendations. *J Nutr* 126(Suppl.):2427-2434.
- Levander OA, Bell JD, Morris VC, et al. 1991. Changes in urinary metabolite profiles in selenium intoxicated rats as revealed by proton nuclear magnetic resonance PNMR. *Am J Clin Nutr* 51(3):517.
- *Levander OA, Moser PB, Morris VC. 1987. Dietary selenium intake and selenium concentrations of plasma, erythrocytes, and breast milk in pregnant and postpartum lactating and nonlactating women. *Am J Clin Nutr* 46:694-698.
- Lewis LN. 1989. Preface. In: Tanji KK, Valoppi L, Woodring RC, eds. Selenium contents in animal and human food crops grown in California. CA: Cooperative Extension University of California, Division of Agriculture and Natural Resources. Publication 3330.
- *Lewis BG, Johnson CM, Broyer TC. 1971. Cleavage of Se-methylselenomethionine selenonium salt by cabbage leaf enzyme fraction. *Biochim Biophys Acta* 237:603-605.
- *Lewis SA. 1988. Determination of selenium in biological matrices. *Methods Enzymol* 158:391-402.
- *Lewis SA, Hardison NW, Veillon C. 1986. Comparison of isotope dilution mass spectrometry and graphite furnace atomic absorption spectrometry with Zeeman background correction for determination of plasma selenium. *Anal Chem* 58:1272-1273.
- *Li F, Rossipal E, Irgolic KJ. 1999. Determination of selenium in human milk by hydride cold-trapping atomic absorption spectrometry and calculation of daily selenium intake. *J Agric Food Chem* 47:3265-3268.
- *Li H, Shi-mei Z. 1994. Selenium supplementation in the prevention of pregnancy induced hypertension. *Chi Med J* 107(11):870-871.
- Li Y, Sun M, Wu D, et al. 1996. [Effects of single and combined action of selenium and arsenic on rat yolk-sac structure and function: An *in vitro* study]. *Wei Sheng Xen Chiu* 25(1):15-19. (Chinese).
- Li Y, Sun M, Wu D. 1997. [Effects of combined teratogenic action of selenium and arsenic on rat whole culture *in vitro*]. *Wei Sheng Xen Chiu* 16(2):32-34. (Chinese).

9. REFERENCES

- *Li Y, Sun W, Wu D, et al. 1999. [The toxicity of combination of selenium, fluoride and arsenic on rat embryos]. *Wei Sheng Xen Chiu* 28(2):74-75. (Chinese).
- *Lide DR. 1993. *CRC Handbook of chemistry and physics*. 74th ed. Boca Raton, FL: CRC Press Incorporated, 4-36.
- *Lide DR. 2000. *CRC handbook of chemistry and physics*. 81st ed. New York, NY: CRC Press, 4-27.
- *Lievens P, Versieck J, Cornelis R, et al. 1977. The distribution of trace elements in normal human liver determined by semi-automated radiochemical neutron activation analysis. *J Radioanal Chem* 37:483-496.
- *Lim JM, Hansel W. 1999. Exogenous substances affecting development of *in vitro*-derived bovine embryos before and after embryonic genome activation. *Theriogenology* 53(5):1081-1091.
- Lin WS, Scrimshaw C, Kapoor M. 1984. Selenium suppresses the metabolism of benzo[a]pyrene by rat-liver extracts, and exerts a dual effect on its mutagenicity. *Xenobiotica* 14:893-902.
- *Lindh U, Danersund A, Lindvall A. 1996. Selenium protection against toxicity from cadmium and mercury studied at the cellular level. *Cell Mol Biol* 42(1):39-48.
- Lisk DJ, Bache CA, Essick LA, et al. 1988. Absorption and excretion of selenium and barium in humans from consumption of brazil nuts. *Nutrition Reports International* 38(1):183-192.
- Litov RE, Combs GF, Jr. 1991. Selenium in pediatric nutrition. *Pediatrics* 87:339-351.
- Liu JZ, Milner JA. 1992. Age, dietary selenium and quantity of 7,12-dimethylbenz(a)anthracene influence the *in vivo* occurrence of rat mammary DNA adducts. *J Nutr* 122(7):1361-1368.
- Liu JZ, Gilbert K, Parker HM, et al. 1991. Inhibition of 7,12-dimethylbenz(a)anthracene-induced mammary tumors and DNA adducts by dietary selenite. *Cancer Res* 51(17):4613-4617.
- *Livingston AL. 1978. Forage plant estrogens. *J Toxicol Environ Health* 4:301-324.
- Llorente I, Gomez M, Camara C. 1997. Improvement of selenium determination in water by inductively coupled plasma mass spectrometry through use of organic compounds as matrix modifiers. *Spectrochimica Acta Part B* 52:1825-1838.
- *Lo LW, Koropatnick J, Stick HF. 1978. The mutagenicity and cytotoxicity of selenite, 'activated' selenite, and selenate for normal and DNA repair-deficient human fibroblasts. *Mutat Res* 49:305-312.
- Lo MT, Sandi E. 1980. Selenium: Occurrence in foods and its toxicological significance--a review. *J Environ Pathol Toxicol* 4(1):193-218.
- *Lobinski R, Edmonds JS, Suzuki KT, et al. 2000. Species-selective determination of selenium compounds in biological materials. *Pure Appl Chem* 72(3):447-461.
- *Lockitch G. 1989. Selenium: Clinical significance and analytical concepts. *Crit Rev Clin Lab Sci* 27(6):483-541.
- *Lofroth G, Ames BN. 1978. Mutagenicity of inorganic compounds in *Salmonella typhimurium*: Arsenic, chromium, and selenium. *Mutat Res* 53:65-66.

9. REFERENCES

- *Lombeck I, Menzel H, Frosch D. 1987. Acute selenium poisoning of a 2-year-old child. *Eur J Pediatr* 146(3):308-312.
- Long RH, Benson SM, Tokunaga TK, et al. 1990. Selenium immobilization in a pond sediment at Kesterson Reservoir. *J Environ Qual* 19(2):302-311.
- *Longnecker MP, Stampfer MJ, Morris JS, et al. 1993. A 1-y trial of the effect of high-selenium bread on selenium concentrations in blood and toenails. *Am J Clin Nutr* 57:408-413.
- *Longnecker MP, Taylor PR, Levander OA, et al. 1991. Selenium in diet, blood, and toenails in relation to human health in a seleniferous area. *Am J Clin Nutr* 53(5):1288-1294.
- Lopez-Molinero A, Gimenez R, Otal P, et al. 2002. New sensitive determination of selenium by bromide volatilization inductively coupled plasma atomic emission spectrometry. *J Anal Atom Spectrom* 17(4):352-357.
- *Lowe TP, May TW, Brumbaugh WG, et al. 1985. National contaminant biomonitoring program: Concentrations of seven elements in freshwater fish, 1978-1981. *Arch Environ Contam Toxicol* 14:363-388.
- Lowenthal DH, Rahn KA. 1989. Spatial patterns of non-urban selenium concentrations in the northeastern U.S. and its pollution source implications. *Comments. Atmos Environ* 23(7):1613-1614.
- Lowry KR, Baker DH. 1989. Amelioration of selenium toxicity by arsenicals and cysteine. *J Anim Sci* 67(4):959-965.
- Lu FC. 1998. Recent advances in studies on selenium: An overview of a symposium held in China. *Regul Toxicol Pharmacol* 27:204-206.
- Lu J, Jiang C, Kaeck M, et al. 1995a. Cellular and metabolic effects of triphenylselenonium chloride in a mammary cell culture model. *Carcinogenesis* 16(3):513-517.
- *Lu J, Jiang C, Kaeck M, et al. 1995b. Dissociation of the genotoxic and growth inhibitory effects of selenium. *Biochem Pharmacol* 50(2):213-219.
- *Luoma PV, Nayha S, Pyy L, et al. 1992. Blood mercury and serum selenium concentrations in reindeer herders in the arctic area of northern Finland. *Arch Toxicol Suppl* 15:172-175.
- *Ma J, Stampfer MJ, Morris JS, et al. 1995. Toenail selenium level and lung cancer among men and women in a high seleniferous region of the USA [Abstract]. *Am J Epidemiol* 141(10):S68.
- *Maag DD, Orsborn JS, Clopton JR. 1960. The effect of sodium selenite on cattle. *Am J Vet Res* 21:1049-1053.
- MacDonald DW, Christian RG, Strausz KI, et al. 1981. Acute selenium toxicity in neonatal calves. *Can Vet J* 22:279-281.
- Machat J, Kanicky V, Otruba V. 2002. Determination of selenium in blood serum by inductively coupled plasma atomic emission spectrometry with pneumatic nebulization. *Anal Bioanal Chem* 372(4):576-581.

9. REFERENCES

- *Mack RB. 1990. The fat lady enters stage left. Acute selenium poisoning. *N C Med J* 51(12):636-638.
- *Macpherson AK, Sampson B, Diplock AT. 1988. Comparison of methods for the determination of selenium in biological fluids. *Analyst* 113(2):281-283.
- Magos L. 1991. Overview on the protection given by selenium against mercurials. *Prov Rochester Int Conf Environ Toxic 2 Adv Mercury Toxicol.*, 289-298.
- *Magos L, Webb M. 1980. The interactions of selenium with cadmium and mercury. *CRC Crit Rev Toxicol* (Nov) 1980:1-42.
- *Magos L, Clarkson TW, Sparrow S, et al. 1987. Comparison of the protection given by selenite, selenomethionine and biological selenium against the neurotoxicity of mercury. *Arch Toxicol* 60:422-426.
- *Mahan DC, Kim YY. 1996. Effect of inorganic or organic selenium at two dietary levels on reproductive performance and tissue selenium concentrations in first-parity gilts and their progeny. *J Anim Sci* 74:2711-2718.
- *Mahan DC, Magee PL. 1991. Efficacy of dietary sodium selenite and calcium selenite provided in the diet at approved, marginally toxic, and toxic levels to growing swine. *J Anim Sci* 69(12):4722-4725.
- *Maier KJ, Foe C, Ogle RS, et al. 1988. The dynamics of selenium in aquatic ecosystems. In: Hemphill DD, ed. *Trace substances in environmental health. XXI Proceedings.* Columbia, MO: University of Missouri, 361-408.
- Maier KJ, Nelson CR, Bailey FC, et al. 1998. Accumulation of selenium by the aquatic biota of a watershed treated with seleniferous fertilizer. *Bull Environ Contam Toxicol* 60:409-416.
- Maier KJ, Ogle RS, Maier KR, et al. 1989. Determination of the toxicity, water quality interactions and biomagnification of selenium in aquatic food chains. U.S. Geological Survey Report. ISS USGS/G-1495. 128 NTIS/PB90-132648.
- Maquat LE. 2001. Evidence that selenium deficiency results in the cytoplasmic decay of GPx1 mRNA dependent on pre-mRNA splicing proteins bound to the mRNA exon-exon junction. *Biofactors* 14:37-52.
- *Mannan S, Picciano MF. 1987. Influence of maternal selenium status on human milk selenium concentration and glutathione peroxidase activity. *Am J Clin Nutr* 46:95-100.
- Marano G, Spagnolo A, Morisi G, et al. 1991. Changes of serum selenium and serum cholesterol in children during sexual maturation. *J Trace Elem Electrolytes Health Dis* 5(1):59-61.
- Marin-Guzman J, Mahan DC, Pate JL. 2000. Effect of dietary selenium and vitamin E on spermatogenic development in boars. *J Anim Sci* 78:1537-1543.
- Marin-Guzman J, Mahan DC, Whitmoyer R. 2000. Effect of dietary selenium and vitamin E on the ultrastructure and ATP concentration of boar spermatozoa, and the efficacy of added sodium selenite in extended semen on sperm motility. *J Anim Sci* 78:1544-1550.
- Marsh DO, Turner MD, Smith JC, et al. 1995. Fetal methylmercury study in a Peruvian fish-eating population. *Neurotoxicology* 16(4):717-726.

9. REFERENCES

Marshall MV, Arnott MS, Jacobs MM, et al. 1979. Selenium effects on the carcinogenicity and metabolism of 2-acetyl aminofluorene. *Cancer Letters* 7:331-338.

*Martin BJ, Lyon TD, Fell GS. 1991. Comparison of inorganic elements from autopsy tissue of young and elderly subjects. *J Trace Elem Electrolytes Health Dis* 5(3):203-211.

Martin RF, Janghorbani M, Young VR. 1988. Kinetics of a single administration of ⁷⁴Se-selenite by oral and intravenous routes in adult humans. *JPEN J Parenter Enteral Nutr* 12(4):351-355.

*Martin RF, Janghorbani M, Young VR. 1989a. Experimental selenium restriction in healthy adult humans: Changes in selenium metabolism studied with stable-isotope methodology. *Am J Clin Nutr* 49(5):854-861.

*Martin RF, Young VR, Blumberg J, et al. 1989b. Ascorbic acid-selenite interactions in humans studied with an oral dose of ⁷⁴SeO₃(2-). *Am J Clin Nutr* 49(5):862-869.

Maryland HF. 1994. Selenium in plant and animal nutrition. In: Frankenburger WT, Benson S, eds. *Selenium in the Environment*. New York, NY: Marcel Dekker Inc., 29-45.

*Mas A, Sarkar B. 1989. Role of glutathione in selenite binding by human plasma. *Biol Trace Elem Res* 20(1-2):95-104.

Mas A, Jiang JY, Sarkar B. 1988. Selenite metabolism in rat and human blood. *Biol Trace Elem Res* 15:97-110.

*Mason KE, Young JO. 1967. Effectiveness of selenium and zinc in protecting against cadmium-induced injury of the rat testis. In: O.H. Muth, ed. *Symposium: Selenium in biomedicine*. Westport, CT: AVI Publishing Co., Inc., 383-394.

Massacheleyn PH, Delaune RD, Patrick JW. 1991. Selenium speciation in aqueous solutions using a hydride generation atomic absorption spectrophotometry technique. *Spectr Lett* 24:307-322.

Masumoto H, Nakaoka M, Tsutsumi S, et al. 1997. [Pharmacokinetics of ebselen in rats: Absorption, distribution and excretion after administration of ⁷⁵Se-labelled compound]. *Yakubutsu Dotai* 12(6):619-629. (Japanese).

Matoba R, Kimura H, Uchima E, et al. 1986. An autopsy case of acute selenium (selenious acid) poisoning and selenium levels in human tissues. *Forensic Sci Int* 31:87-92.

Matsumura H, Takahata R, Hayaishi O. 1991. Inhibition of sleep in rats by inorganic selenium compounds, inhibitors of prostaglandins D synthase. *Proc Natl Acad Sci USA* 88(20):9046-9050.

Maxuitenko YY, Libby AH, Joyner HH, et al. 1998. Identification of dithiolethiones with better chemopreventive properties than oltipraz. *Carcinogenesis* 19(9):1609-1615.

May SW. 1999. Selenium-based drug design: Rationale and therapeutic potential. *Exp Opin Invest Drugs* 8(7):1017-1030.

May SW, Pollock SH. 1998. Selenium-based antihypertensives: Rationale and potential. *Drugs* 56(6):959-964.

9. REFERENCES

- May SW, Wang L, Gill-Woznichak MM, et al. 1997. An orally active selenium-based antihypertensive agent with restricted CNS permeability. *J Pharmacol Exp Ther* 283(2):470-477.
- *May TW, McKinney GL. 1981. Cadmium, lead, mercury, arsenic, and selenium concentrations in freshwater fish, 1976-1977 National Pesticide Monitoring Program. *Pestic Monit J* 15:14-38.
- Mayer D, Haubenwallner S, Kosmus W, et al. 1992. Modified electrical heating system for hydride generation atomic absorption spectrometry and elaboration of a digestion method for the determination of arsenic and selenium in biological materials. *Anal Chim Acta* 268(2):315-321.
- *Mayr U, Butsch A, Schneider S. 1992. Validation of two *in vitro* test systems for estrogenic activities with zearalenone, phytoestrogens and cereal extracts. *Toxicology* 74:135-149.
- *McCarthy TP, Brodie B, Milner JA, et al. 1981. Improved method for selenium determination in biological samples by gas chromatography. *J Chromatogr* 225:9-16.
- *McConnell KP, Broghamer WL, Jr., Blotcky AJ, et al. 1975. Selenium levels in human blood and tissues in health and disease. *J Nutr* 105:1026-1031.
- *McConnell KP, Roth DM. 1966. Respiratory excretion of selenium. *Proc Soc Exp Biol Med* 123:919-921.
- McConnell KP, Jager RM, Bland KI, et al. 1980. The relationship of dietary selenium and breast cancer. *J Surg Oncol* 15:67-70.
- McGahan MC, Grimes AM. 1991. Selenium concentration in ocular tissues and fluids. *Ophthalmic Res* 23(1):45-50.
- McLaughlin K, Dadgar D, Smyth MR, et al. 1990. Determination of selenium in blood plasma and serum by flow injection hydride generation atomic absorption spectrometry. *Analyst* 115(3):275-278.
- McMaster D, Bell N, Anderson P, et al. 1990. Automated measurement of two indicators of human selenium status, and applicability to population studies. *Clin Chem* 36(2):211-216.
- *McNeill JH, Delgatty HL, Battell ML. 1991. Insulinlike effects of sodium selenate in streptozocin-induced diabetic rats. *Diabetes* 40(12):1675-1678.
- Meador JP, Ernest D, Hohn AA, et al. 1999. Comparison of elements in bottlenose dolphins stranded on the beaches of Texas and Florida in the Gulf of Mexico over a one-year period. *Arch Environ Contam Toxicol* 36:87-98.
- Medina D. 1986. Mechanisms of selenium inhibition of tumorigenesis. *Adv Exp Med Biol* 206:465-472.
- *Medina D, Shepherd F. 1981. Selenium-mediated inhibition of 7,12-dimethylbenz[a]anthracene-induced mouse mammary tumorigenesis. *Carcinogenesis* 2:451-455.
- *Medinsky MA, Cuddihy RG, Griffith WC, et al. 1981a. A simulation model describing the metabolism of inhaled and ingested selenium compounds. *Toxicol Appl Pharmacol* 59:54-63.

9. REFERENCES

- *Medinsky MA, Cuddihy RG, McClellan RO. 1981b. Systemic absorption of selenious acid and elemental selenium aerosols in rats. *J Toxicol Environ Health* 8:917-928.
- Medinsky MA, Cuddihy RG, Hill JO, et al. 1981c. Toxicity of selenium compounds to alveolar macrophages. *Toxicol Lett* 8:298-293.
- *Meltzer HM, Norheim G, Bibow K, et al. 1990. The form of selenium determines the response to supplementation in a selenium replete population. *Eur J Clin Nutr* 44(6):435-446.
- *Meltzer HM, Norheim G, Loken EB, et al. 1992. Supplementation with wheat selenium induces a dose-dependent response in serum and urine of a Se-replete population. *Br J Nutr* 67(2):287-294.
- *Menkes M, Comstock G, Vuilleumier J, et al. 1986. Serum beta-carotene, vitamins A and E, selenium, and the risk of lung cancer. *N Engl J Med* 315:1250-1254.
- Menter DG, Sabichi AL, Lippman SM. 2000. Selenium effects on prostate cell growth. *Cancer Epidemiol Biomarkers Prev* 9:1171-1182.
- Merrick BA, Johnson KL, Kester KA, et al. 1983. Species and sex differences in selenium inhibition of hepatic drug metabolism in rodents. *Drug Chem Toxicol* 6:329-340.
- Methenitou G, Maravelias C, Koutsogeorgopoulou L, et al. 1996. Immunomodulative effects of aflatoxins and selenium on human peripheral blood lymphocytes. *Vet Hum Toxicol* 38(4):274-277.
- Meydani M, Maccauley JB, Blumberg JB. 1986. Influence of dietary vitamin E, selenium and age on regional distribution. *Lipids* 21:786-791.
- *Meyer F, Vereault R. 1987. Erythrocyte selenium and breast cancer risk. *Am J Epidemiol* 125:376-383.
- *Michalke B, Schramel P. 1998. Selenium speciation in human milk with special respect to quality control. *Biol Trace Elem Res* 59:45-56.
- Michelot D, Poirier F, Melendez-Howell LM. 1999. Metal content profiles in mushrooms collected in primary forests of Latin America. *Arch Environ Contam Toxicol* 36:256-263.
- Michelson AM. 1998. Selenium glutathione peroxidase: Some aspects in man. *J Environ Pathol Toxicol Oncol* 17(3&4):233-239.
- *Michot TC, Custer TW, Nault AJ, et al. 1994. Environmental contaminants in redheads wintering in coastal Louisiana and Texas. *Arch Environ Contam Toxicol* 26:425-434.
- *Middleton JM. 1947. Selenium burn of the eye. Review of a case with review of the literature. *Arch Ophthalmol* 38:806-811.
- *Mihailovic M, Matic G, Lindberg P, et al. 1992. Accidental selenium poisoning of growing pigs. *Biol Trace Elem Res* 33:63-69.
- *Miller WT, Williams KT. 1940. Minimum lethal dose of selenium as sodium selenite for horses, mules, cattle and swine. *Journal of Agricultural Research* 60:163-173.

9. REFERENCES

- Milner JA. 1995. Selenium: Do we dare neglect it? In: Bronner F, ed. Nutrition and health: Topics and controversies. New York, NY: CRC Press, 200-227.
- *Minoia C, Sabbioni E, Apostoli P, et al. 1990. Trace element reference values in tissue from inhabitants of the European community I. A study of 46 elements in urine, blood, and serum of Italian subjects. *Sci Total Environ* 95:89-105.
- Mirsalis JC, Tyson CK, Steinmetz KL, et al. 1989. Measurement of unscheduled DNA synthesis and S-phase synthesis in rodent hepatocytes following *in vivo* treatment: Testing of 24 compounds. *Environ Mol Mutagen* 14(3):155-164.
- *Mofenson HC, Caraccio TR. 1998. Toxicity of household products. In: Viccellio P, ed. Emergency toxicology. 2nd ed. Philadelphia, PA: Lippincott-Raven, 519.
- *Mohammed HO, White ME, Guard CL, et al. 1991. A case control study of the association between blood selenium and cystic ovaries in lactating dairy cattle. *J Dairy Sci* 74(7):2180-2185.
- *Molokhia A, Portnoy B, Dyer A. 1979. Neutron activation analysis of trace elements in skin. *Br J Dermatol* 101:567-572.
- Money DFL. 1970. Vitamin E and selenium deficiencies and their possible etiological role in the sudden death in infants syndrome. *N Z Med J* 71:32-34.
- Moore FR, Samoy J, Montieth D, et al. 1996a. Selective acute toxicity and DNA strand breakage of selenium sulfide to rat liver [Abstract]. *Environ Mol Mutagen* 27(Suppl. 27):49.
- Moore FR, Urda GA, Krishna G, et al. 1995. Genotoxicity evaluation of selenium sulfide in rats. *Environ Mol Mutagen* 25(Suppl. 25):36.
- *Moore FR, Urda GA, Krishna G, et al. 1996b. Genotoxicity evaluation of selenium sulfide *in vivo* and *in vivo/in vitro* micronucleus and chromosome aberration assays. *Mutat Res* 367:33-41.
- Mora MA. 1996. Organochlorines and trace elements in four colonial waterbird species nesting in the lower Laguna Madre, Texas. *Arch Environ Contam Toxicol* 31:533-537.
- Mora MA, Wainwright SE. 1998. DDE, mercury, and selenium in biota, sediments, and water of the Rio Grande-Rio Bravo Basin, 1965-1995. *Rev Environ Contam Toxicol* 158:1-52.
- Moreno MA, Marin C, Vinagre F, et al. 1999. Trace element levels in whole blood samples from residents of the city Badajoz, Spain. *Sci Total Environ* 229:209-215.
- Morgan DL, Shines CJ, Jeter SP, et al. 1995. Acute pulmonary toxicity of copper gallium diselenide, copper indium diselenide, and cadmium telluride intratracheally instilled into rats. *Environ Res* 71:16-24.
- Morgan DL, Shines CJ, Jeter SP, et al. 1997. Comparative pulmonary absorption, distribution, and toxicity of copper gallium diselenide, copper indium diselenide, and cadmium telluride in Sprague-Dawley rats. *Toxicol Appl Pharmacol* 147:399-410.
- *Morisi G, Patriarca M, Marano G, et al. 1989. Age and sex specific reference serum selenium levels estimated for the Italian population. *Ann Ist Super Sanita* 25(3):393-403.

9. REFERENCES

- Morris JG. 1988. The bioavailability of selenium in animal foods. In: Tanji KK, Valoppi L, Woodring RC, eds. Selenium contents in animal and human food crops grown in California. Cooperative Extension University of California, Division of Agriculture and Natural Resources. Publication 3330, 89-96.
- *Morris VC, Levander OA. 1970. Selenium content of foods. *J Nutr* 100:1383.
- Morrow DA. 1968. Acute selenite toxicosis in lambs. *J Am Vet Med Assoc* 152:1625-1629.
- *Morselli PL, Franco-Morselli R, Bossi L. 1980. Clinical pharmacokinetics in newborns and infants: Age-related differences and therapeutic implications. *Clin Pharmacokin* 5:485-527.
- *Moser-Veillon PB, Mangels AR, Patterson KY, et al. 1992. Utilization of two different chemical forms of selenium during lactation using stable isotope tracers: An example of speciation in nutrition. *Analyst* 117(3):559-562.
- Moxon AL. 1938. The effect of arsenic on the toxicity of seleniferous grains. *Science* 88:81.
- *Moxon AL, DuBois KP. 1939. The influence of arsenic and certain other elements on the toxicity of seleniferous grains. *J Nutr* 18:447-457.
- Moxon AL, Rhian M. 1943. Selenium poisoning. *Physiol Rev* 23:305-337.
- Moxon AL, Olson OE, Searight WV. 1939. Selenium in rocks, soils, and plants. South Dakota Agricultural Experimental Station Technical Bulletin No. 2:94.
- *Moxon AL, Paynter CR, Halverson AW. 1945. Effect of route of administration on detoxication of selenium by arsenic. *J Pharmacol Exp Ther* 84:115-119.
- *Moyad MA. 2002. Selenium and vitamin E supplements for prostate cancer: Evidence or embellishment? *Urology* 59:9-19.
- Mozier NM, McConnell KP, Hoffman JL. 1988. S-Adenosyl-L-methionine: thioether S-methyltransferase, a new enzyme in sulfur and selenium metabolism. *J Biol Chem* 263:4527-4531.
- *Muñoz Olivas R, Donard OFX, Cámara C, et al. 1994. Analytical techniques applied to the speciation of selenium in environmental matrices. *Analytic Chimica Acta* 286:357-370.
- Muntau AC, Streiter M, Kappler M, et al. 2002. Age-related reference values for serum selenium concentrations in infants and children. *Clin Chem* 48(3):555-560.
- *Muramatsu Y, Parr RM. 1988. Concentrations of some trace elements in hair, liver and kidney from autopsy subjects: relationship between hair and internal organs. *Sci Total Environ* 76:29-40.
- Mussalo-Rauhamaa H, Vuori E, Lehto JJ. 1993. Increase in serum levels in Finnish children and young adults during 1980-1986: A correlation between the serum levels and the estimated intake. *Eur J Clin Nutr* 47:711-717.
- Mutanen M, Aspila P, Mykkanen HM. 1986. Bioavailability to rats of selenium in milk of cows fed sodium selenite or selenited barley. *Ann Nutr Metab* 30:183-188.

9. REFERENCES

- Mutanen M, Koivistoinen P, Morris VC, et al. 1987. Relative nutritional availability to rats of selenium in Finnish spring wheat (*Triticum aestivum* L.) fertilized or sprayed with sodium selenate and in an American winter bread wheat naturally high in Se. *Br J Nutr* 57:319-329.
- Mutanen M, Viita L, Mykkanen HM. 1989. Selenium supplementation does not alter platelet activation in subjects with normal selenium status. *Int J Vitam Nutr Res* 59(3):309-313.
- Muth OH, Oldfield JE, Remmert LF, et al. 1958. Effects of selenium and vitamin E on white muscle disease. *Science* 128:1090.
- Muth OH, Oldfield JE, Schubert JR, et al. 1959. White muscle disease (myopathy) in lambs and calves. VI. Effects of selenium and vitamin E on lambs. *Am J Vet Res* 20:231-234.
- *Nadig RJ. 1994. Cadmium and other metals and metalloids. In: Goldfrank LR, Weisman RS, Flomenbaum N, et al. Eds. *Goldfrank's toxicological emergencies*. 6th ed. Norwalk, CT: Apleton and Lange, 1342-1343.
- Naganuma A, Imura N. 1981. Properties of mercury and selenium in a high molecular weight substance in rabbit tissues formed by simultaneous administration. *Pharmacol Biochem Behav* 15:449-454.
- *Naganuma A, Tanaka T, Kyoko M, et al. 1983. The interaction of selenium with various metals *in vitro* and *in vivo*. *Toxicology* 29:77-86.
- Nakamuro K, Jyotatsu Y, Okuno T, et al. 1996. [Behavior of methylated metabolites of selenium in rats orally administered with various dose levels of sodium selenite]. *Jpn J Toxicol Environ Health (Eisei Kagaku)* 42(4):340-347. (Japanese).
- Nakamuro K, Nakanishi K, Okuno T, et al. 1997. [Comparison of methylated selenium metabolites in rats after oral administration of various selenium compounds]. *Jpn J Toxicol Environ Health (Eisei Kagaku)* 43(3):182-189. (Japanese).
- *Nakamuro K, Okuno T, Hasegawa T. 2000. Metabolism of selenoamino acids and contribution of selenium methylation to their toxicity. *J Health Sci* 46(6):418-421.
- *Nakamuro K, Sayato Y, Ose Y. 1977. Studies on selenium-related compounds. VI. Biosynthesis of dimethylselenide in rat liver after oral administration of sodium selenate. *Toxicol Appl Pharmacol* 39:521-529.
- *Nakamuro K, Yoshikawa Y, Sayato Y, et al. 1976. Studies on selenium-related compounds. V. Cytogenetic effect and reactivity with DNA. *Mutat Res* 40:177-184.
- *Narasaski H. 1985. Determination of arsenic and selenium in fat materials and petroleum products by oxygen bomb combustion and automated atomic absorption spectrometry with hydride generation. *Anal Chem* 57:2481-2486.
- *NAS. 1976a. Selenium. *Comm Med Biol Effects Environ Pollut Subcomm - Selenium*. Washington, DC: National Academy of Sciences.
- *NAS. 1976b. Drinking water and health. Washington, DC: National Academy of Sciences.
- NAS. 1977. Drinking water and health. Washington, DC: National Academy of Sciences, 344-368.

9. REFERENCES

- NAS. 1980a. Recommended dietary allowances. 9th Rev. Natl. Res. Council. Washington, DC: Food and Nutrition Board, National Academy of Science, 162-164.
- *NAS. 1980b. Drinking water and health. Washington, DC: National Academy of Sciences, 326-344.
- NAS. 1983. Nutrient requirements of laboratory animals. 15th ed. Washington, DC: National Academy of Sciences.
- *NAS. 2000. Selenium. In: Dietary reference intakes for vitamin C, vitamin E, selenium, and carotenoids. Washington, DC: National Academy of Sciences, National Academy Press, 284-324.
- *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.
- NATICH. 1992. Report of Federal, State and Local Air Toxics Activities. Research Triangle Park, NC: National Air Toxics Information Clearinghouse, U.S. Environmental Protection Agency.
- Navarro M, López H, Pérez V, et al. 1996. Serum selenium levels during normal pregnancy in healthy Spanish women. *Sci Total Environ* 186:237-242.
- Navarro-Alarcón M, López-Martínez MC. 2000. Essentiality of selenium in the human body: Relationship with different diseases. *Sci Total Environ* 249:347-371.
- Navarro-Alarcón M, López-G de la Serrana H, Pérez-Valero V, et al. 1999. Serum and urine selenium concentrations as indicators of body status in patients with diabetes mellitus. *Sci Total Environ* 228:79-85.
- *NCDNR. 1986. North Carolina water quality standards documentation: The freshwater chemistry and toxicity of selenium with an emphasis on its effects in North Carolina. North Carolina Department of Natural Resources and Community Development Division of Environmental Management, Water Quality Section. Water Quality Technical Reports. Report No. 86-02.
- *NCI. 1968. Evaluation of carcinogenic, teratogenic, and mutagenic activities of selected pesticides and industrial chemicals. Volume I. Carcinogenic study. Bethesda, Maryland: National Cancer Institute. PB 233 159.
- Neal RH, Sposito G. 1991. Selenium mobility in irrigated soil columns as affected by organic carbon amendment. *J Environ Qual* 20:808-814.
- Nebbia C, Gremmels JF, Soffiatti MG. 1990. Pathogenesis of sodium selenite and dimethylselenide acute toxicosis in swine: Tissue and blood biochemical changes. *Res Commun Chem Pathol Pharmacol* 67(1):117-130.
- Nebbia C, Soffiatti MG, Zittlau E, et al. 1991. Pathogenesis of sodium selenite and dimethylselenide acute toxicosis in pigs: Cardiovascular changes. *Res Vet Sci* 50(3):269-272.
- Negretti de Bratter VE, Bratter P, Tomiak A. 1990. An automated microtechnique for selenium determination in human body fluids by flow injection hydride atomic absorption spectrometry (FI-HAAS). *J Trace Elem Electrolytes Health Dis* 4(1):41-48.

9. REFERENCES

- *Nehru LB, Bansal MP. 1996. Effect of selenium supplementation on the glutathione redox system in the kidney of mice after chronic cadmium exposures. *J Appl Toxicol* 17(1):81-84.
- *Nelp WB, Blumberg F. 1965. A comparison of the selenate and sulfate ions in man and dog. *J Nucl Med* 6:822-830.
- *Nelson AA, Fitzhugh OG, Calvery HO. 1943. Liver tumors following cirrhosis caused by selenium in rats. *Cancer Res* 3:230-236.
- *Neumann PB, Coffindaffer TW, Cothran PE, et al. 1996. Clinical investigation comparing 1% selenium sulfide and 2% ketoconazole shampoos for dandruff control. *Cosmet Dermatol* 9(12):20-26.
- Nève J. 1996. Selenium as a risk factor for cardiovascular diseases. *J Cardiovasc Risk* 3:42-47.
- Nève J. 2000. New approaches to assess selenium status and requirement. *Nutr Rev* 58(12):363-369.
- *Nève J, Vertongen F, Capel P. 1988. Selenium supplementation in healthy Belgian adults: Response in platelet glutathione peroxidase activity and other blood indices. *Am J Clin Nutr* 48:139-143.
- Nève J, Vertongen F, Thonnart N, et al. 1986. Selenium supplementation during parenteral and enteral nutrition, short- and long-term effects of two derivatives. *Acta Pharmacol Toxicol (Copenh)* 59:142-145.
- Newton MF, Lilly IJ. 1984. The clastogenicity of chromium and selenium compounds to rat tissues. *Heredity (Edinburgh)* 53:564-565.
- *Newton MF, Lilly LL. 1986. Tissue-specific clastogenic effects of chromium and selenium salts *in vivo*. *Mutat Res* 169:61-69.
- Nielson JB, Anderson O. 1991. A comparison of the effects of sodium selenite and seleno-L-methionine on disposition of orally administered mercuric chloride. *J Trace Elem Electrolytes Health Dis* 5(4):245-250.
- *Nielsen J, Andersen O. 1995. A comparison of the lactational and transplacental deposition of mercury in offspring from methylmercury-exposed mice. Effect of seleno-L-methionine. *Toxicol Lett* 76:165-171.
- *NIOSH. 1983. National occupational exposure survey (NOES). Cincinnati, OH: National Occupational Safety and Health.
- *NIOSH. 1989. National occupational exposure survey. Cincinnati, OH: National Occupational Safety and Health.
- NIOSH. 1992a. NIOSH/OSHA Pocket Guide To Chemical Hazards. National Institute for Occupational Safety and Health, Department of Health and Human Services, 206.
- NIOSH. 1992b. Recommendations for occupational safety and health. National Institute for Occupational Safety and Health, Department of Health and Human Services.
- *NIOSH. 1994a. NIOSH manual of analytical methods. Method 7300. Cincinnati, OH: National Institute for Occupational Safety and Health, Department of Health and Human Services, Division of Physical Sciences and Engineering.

9. REFERENCES

- NIOSH. 1994b. Documentation for immediately dangerous to life or health concentrations (IDLHS). Cincinnati, OH: National Institute for Occupational Safety and Health. PB94195047.
- *NIOSH. 2001. International chemical safety cards. National Institute for Occupational Safety and Health. <http://www.cdc.gov/niosh/nioshsrch.html>. February 22, 2001.
- Nishikido N, Suzuki T. 1985. Effects of gestational stage and injection route on the corporeal distribution and placental transfer of selenium in pregnant mice. *Ind Health* 23:95-106.
- *Nishikido N, Furuyashiki K, Naganuma A, et al. 1987. Maternal selenium deficiency enhances the fetolethal toxicity of methyl mercury. *Toxicol Appl Pharmacol* 88:322-328.
- NLFCA. 1995. National Listing of Fish Consumption Advisories. U.S. EPA database.
- Noack-Fuller G, DeBeer C, Seibert H. 1993. Cadmium, lead, selenium, and zinc in semen of occupationally unexposed men. *Andrologia* 25(1):7-12.
- *Nobunaga T, Satoh H, Suzuki T. 1979. Effects of sodium selenite on methylmercury embryotoxicity and teratogenicity in mice. *Toxicol Appl Pharmacol* 47:79-88.
- *Noda M, Takano T, Sakurai H. 1979. Mutagenic activity of selenium compounds. *Mutat Res* 66:175-179.
- NOES. 1984. National occupational exposure survey (1980-1983). Cincinnati, OH: National Institute for Occupational Safety and Health, Department of Health and Human Services.
- *NOHS. 1976. National occupational hazard survey (1970). Cincinnati, OH: National Institute for Occupational Safety and Health, Department of Health and Human Services.
- Nomura A, Heilbrun LK, Morris JS, et al. 1987. Serum selenium and the risk of cancer, by specific sites: Case-control analysis of prospective data. *J Natl Cancer Inst* 79:103-108.
- *Nonavinakere VK, Proctor AS, Bell RR, et al. 1999. An acute intratracheal selenium study: Immediate effects on respiration in guinea pigs. *Toxicol Lett* 104:231-237.
- Norheim C, Steinnes E. 1975. Determination of protein-bound trace elements in biological materials by gel filtration and neutron activation analysis. *Anal Chem* 47:1688.
- *Norheim G, Haugen A. 1986. Precise determination of selenium in tissue using automated wet digestion and an automated hydride generator - Atomic absorption spectroscopy system. *Acta Pharmacol Toxicol* 59 (Suppl 7):606-609.
- *Norppa H, Westermarck T, Knuutila S. 1980a. Chromosomal effects of sodium selenite *in vivo*. III. Aberrations and sister chromatid exchanges in Chinese hamster bone marrow. *Hereditas* 91:101-105.
- Norppa H, Westermarck T, Oksanen A, et al. 1980b. Chromosomal effects of sodium selenite *in vivo*. *Hereditas* 93:97-99.
- NRC. 1983. Selenium in nutrition. Revised edition. Washington, DC: Subcommittee on Selenium, Committee on Animal Nutrition, Board of Agriculture, National Research Council.

9. REFERENCES

- *NRC. 1989. Recommended dietary allowances. 10th ed. Washington, DC: Subcommittee on the Tenth Edition of the RDAs Food and Nutrition Board, Commission on Life Sciences, National Research Council. National Academy Press 6:217-224.
- *NTP. 1980a. Bioassay of selenium sulfide (dermal study) for possible carcinogenicity. Bethesda, MD: National Toxicology Program, National Cancer Institute, National Institutes of Health. NCI Technical Report Series No. 197. NTP No. 80-18.
- *NTP. 1980b. Bioassay of selsun for possible carcinogenicity. Bethesda, MD: National Toxicology Program, National Cancer Institute, National Institutes of Health. NCI Technical Report Series No. 199. NTP No. 80-19.
- *NTP. 1980c. Bioassay of selenium sulfide (gavage) for possible carcinogenicity. Bethesda, MD: National Toxicology Program, National Cancer Institute, National Institutes of Health. NCI Technical Report Series No. 194. NTP No. 80-17.
- *NTP. 1994. NTP technical report on toxicity studies of sodium selenate and sodium selenite administered in drinking water to F344/N rats and B6C3F₁ mice. Bethesda, MD: National Toxicology Program, Toxicity Report Series Number 38. NIH Publication 94-3387.
- *NTP. 1996. Sodium selenate: Short term reproductive and developmental toxicity study when administered to Sprague-Dawley rats in the drinking water. Research Triangle Park, NC: National Toxicology Program, Department of Health and Human Services. NTIS PB 96 190 616.
- Nyberg-Swenson BE. 1999. The selenium link: The missing link in our understanding of biochemical trigger reactions? *Med Hypotheses* 52(2):125-131.
- Nylander M, Weiner J. 1991. Mercury and selenium concentrations and their interrelations in organs from dental staff and the general population. *Br J Ind Med* 48(11):729-734.
- *Obermeyer BD, Palmer IS, Olson OE, et al. 1971. Toxicity of trimethylselenonium chloride in the rat with and without arsenite. *Toxicol Appl Pharmacol* 20:135-146.
- Oehm GJ, Crisp PT, Ellis J. 1991. The recovery of selenious acid aerosols on glass fiber filters. *J Air Waste Manage Assoc* 41(2):190-194.
- *Ohi G, Nishigaki HS, Tamura Y, et al. 1980. The protective potency of marine animal meat against the neurotoxicity of methylmercury: Its relationship with the organ distribution of mercury and selenium in the rat. *Food Cosmet Toxicol* 18:139-145.
- *Ohlendorf HM, Hoffman DJ, Saiki MK, et al. 1986a. Embryonic mortality and abnormalities of aquatic birds: Apparent impacts. *Sci Total Environ* 52:49-63.
- *Ohlendorf HM, Kilness AW, Simmons JL, et al. 1988. Selenium toxicosis in wild aquatic birds. *J Toxicol Environ Health* 24:67-92.
- *Ohlendorf HM, Lowe RW, Kelly PR, et al. 1986b. Selenium and heavy metals in San Francisco Bay diving ducks. *J Wildl Manage* 50:64-71.

9. REFERENCES

- *Ohta H, Imamiya S. 1986. Selenium protection against the acute cadmium toxicity in testis. *Kitasato Arch Exp Med* 59:27-36.
- Oldfield J. 1987. The two faces of selenium. *J Nutr* 117:2002-2008.
- *Olson OE. 1986. Selenium toxicity in animals with emphasis on man. *J Am Coll Toxicol* 5:45-70.
- *Olson OE, Schulte BH, Whitehead EI, et al. 1963. Effect of arsenic on selenium metabolism in rats. *J Agric Food Chem* 11:531-534.
- Orhan H, Marol S, Hepşen İ, et al. 1999. Effects of some probable antioxidants on selenite-induced cataract formation and oxidative stress-related parameters in rats. *Toxicology* 139:219-232.
- *Oryszczyn MP, Godin J, Frette C, et al. 1996. Decrease in selenium status in relation to coal dust exposure. *Am J Ind Med* 30:281-284.
- OSHA. 1995a. Occupational Safety and Health Administration. Code of Federal Regulations. 29 CFR 1910.1000.
- OSHA. 1995b. Occupational Safety and Health Administration. Code of Federal Regulations. 29 CFR 1910.119 Appendix A.
- *OSHA. 2001. Limits for air contaminants. Occupational Safety and Health Administration. Code of Federal Regulations. 29 CFR 1910.1000.
http://www.osha-slc.gov/OshStd_data/1910_1000_TABLE_Z-1.html. February 22, 2001.
- Osman K, Åkesson a, Berglund M, et al. 2000. Toxic and essential elements in placentas of Swedish women. *Clin Biochem* 33(2):131-138.
- Osman K, Schütz A, Åkesson B, et al. 1998. Interactions between essential and toxic elements in lead exposed children in Katowice, Poland. *Clin Biochem* 31(8):657-665.
- *Ostadalova I, Babicky A. 1980. Toxic effect of various selenium compounds on the rat in the early postnatal period. *Arch Toxicol* 45:207-211.
- *Ostadalova I, Babicky A, Kopoldova J. 1988. Selenium metabolism in rats after administration of toxic doses of selenite. *Physiol Bohemoslov* 37(2):159-164.
- *Oster JD, Tracy JE, Meyer JL, et al. 1988a. Selenium in or near the southern coast range: Well waters and vegetable crops. In: Tanji KK, Valoppi L, Woodring RC, eds. *Selenium contents in animal and human food crops grown in California*. Cooperative Extension University of California, Division of Agriculture and Natural Resources. Publication 3330, 51-55.
- *Oster O, Prellwitz W. 1982. A methodological comparison of hydride and carbon furnace atomic absorption spectroscopy for the determination of selenium in serum. *Clin Chim Acta* 124:277-291.
- *Oster O, Prellwitz W. 1990. The renal excretion of selenium. *Biol Trace Elem Res* 24(2):119-146.
- *Oster O, Prellwitz W, Kasper W, et al. 1983. Congestive cardiomyopathy and the selenium content of serum. *Clin Chim Acta* 128:125-132.

9. REFERENCES

- *Oster O, Schmiedel G, Prellwitz W. 1988b. Correlations of blood selenium with hematological parameters in West German adults. *Biol Trace Elem Res* 15:47-81.
- *Oster O, Schmiedel G, Prellwitz W. 1988c. The organ distribution of selenium in German adults. *Biol Trace Elem Res* 15:23-45.
- *OTA. 1990. Neurotoxicity. Identifying and controlling poisons of the nervous system. Washington, DC: Office of Technology Assessment, U.S. Congress. OTA-BA-436.
- Othman AI, El Missiry MA. 1998. Role of selenium against lead toxicity in male rats. *J Biochem Mol Toxicol* 12(6):345-349.
- *O'Toole D, Raisbeck MF. 1995. Pathology of experimentally induced chronic selenosis (alkali disease) in yearling cattle. *J Vet Diagn Invest* 7:364-373.
- Ovaskainen ML, Virtamo J, Alfthan G, et al. 1993. Toenail selenium as an indicator of selenium intake among middle-aged men in an area with low soil selenium. *Am J Clin Nutr* 57(5):662-665.
- Overvad K. 1998. Selenium and cancer. In: Sandström B, Walter P, eds. *Role of trace elements for health promotion and disease prevention*. New York, NY: Kargar, 141-149.
- *Overvad K, Thorling E, Bjerring PEP. 1985. Selenium inhibits UV-light-induced skin carcinogenesis in hairless mice. *Cancer Lett* 27:163-170.
- *Owen GM, Brozek J. 1966. Influence of age, sex and nutrition on body composition during childhood and adolescence. In: Falkner F, ed. *Human development*. Philadelphia, PA: WB Saunders, 222-238.
- Pacyna JM. 1995. The origin of Arctic air pollutants: Lessons learned and future research. *Sci Total Environ* 160/161:39-53.
- *Palmer IS, Olson OE. 1974. Relative toxicities of selenite and selenate in the drinking water of rats. *J Nutr* 104:306-314.
- *Palmer IS, Arnold RC, Carlson CW. 1973. Toxicity of various selenium derivatives to chick embryos. *Poult Sci* 52:1841-1846.
- *Palmer IS, Gunsalus RP, Halveson AW, et al. 1970. Trimethylselenonium ion as a general excretory product from selenium in the rat. *Biochim Biophys Acta* 208:260-266.
- Palmquist B-M, Fagerholm P, Landau I. 1986. Selenium-induced cataract - A correlation of dry mass content and light scattering. *Eye Research* 42:35-42.
- Panter KE, James LF. 1990. Natural plant toxicants in milk: A review. *J Anim Sci* 68(3):892-904.
- *Panter KE, Hartley WJ, James LF. 1996. Comparative toxicity of selenium from seleno-DL-methionine, sodium selenate, and *Astragalus bisulcatus* in pigs. *Fund Appl Toxicol* 32:217-223.
- *Panter KE, James LF, Mayland HF. 1995. Reproductive response of ewes fed alfalfa pellets containing sodium selenate or *Astragalus bisulcatus* as a selenium source. *Vet Hum Toxicol* 37(1):30-32.

9. REFERENCES

- Parizek J. 1978. Interactions between selenium compounds and those of mercury or cadmium. *Environ Health Perspect* 25:53-55.
- *Parizek J, Ostadalova I. 1967. The protective effect of small amounts of selenite in sublimate intoxication. *Experientia* 23:142-143.
- Parizek J, Kalouskova J, Pavlik L, et al. 1992. Sex-linked, androgen-dependent differences in renal retention of trimethylselenium ions. *Biol Trace Elem Res* 34(3):257-263.
- *Parizek J, Ostadalova I, Kalouskova J, et al. 1971a. Effect of mercuric compounds on the maternal transmission of selenium in the pregnant and lactating rat. *J Reprod Fertil* 25:157-170.
- Parizek J, Ostadalova I, Kalouskova J, et al. 1971b. The detoxifying effects of selenium. Interrelations between compounds of selenium and certain metals. In: Mertz W, Cornatzer WE, eds. *Newer trace elements in nutrition*. New York, NY: Marcel Dekker, 85-122.
- Park H-S, Park E, Kim M-S, et al. 2000. Selenite inhibits the c-Jun N-terminal kinase/stress-activated protein kinase (JNK/SAPK) through a thiol redox mechanism. *J Biol Chem* 275(4):2527-2531.
- Park Y-C, Whanger PD. 1995. Toxicity, metabolism and absorption of selenite by isolated rat hepatocytes. *Toxicology* 100:151-162.
- Parnham MJ. 1996a. The pharmaceutical potential of selenium chemistry. 3(5):7-10.
- Parnham MJ. 1996b. Pulmonary-allergy, dermatological, gastrointestinal & arthritis: The pharmaceutical potential of seleno-organic compounds. 5(7):861-870.
- Parnham M, Sies H. 2000. Ebselen: Prospective therapy for cerebral ischaemia. 9(3):607-619.
- Parshad RK. 1999. Effects of selenium toxicity on oestrous cyclicity, ovarian follicles, ovulation and foetal survival in rats. *Indian J Exp Biol* 37:615-617.
- Paton GR, Allison AC. 1972. Chromosome damage in human cell cultures induced by metal salts. *Mutat Res* 16:332-336.
- *Patterson BH, Zech LA. 1992. Development of a model for selenite metabolism in humans. *J Nutr* 122(3Suppl):709-714.
- *Patterson BH, Levander OA, Helzlsouer K, et al. 1989. Human selenite metabolism: A kinetic model. *Am J Physiol* 257(3Pt2):R556-567.
- *Patterson BH, Zech LA, Swanson CA, et al. 1993. Kinetic modeling of selenium in humans using stable isotope tracers. *J Trace Elem Electrolytes Health Dis* 7(2):117-120.
- *Paul M, Mason R, Edwards R. 1989. Effect of potential antidotes on the acute toxicity, tissue disposition and elimination of selenium in rats. *Res Commun Chem Pathol Pharmacol* 66(3):441-450.
- *Peirson DH, Cawse PA, Salmon L, et al. 1973. Trace elements in the atmospheric environment. *Nature* 241:252-256.

9. REFERENCES

- Pelton R. 1999. Selenium's got the power: This wonder supplement can play a key role in the prevention and treatment of cancer, AIDS and cardiovascular disease. *Am Drug* 216:48-49.
- Pennington JA, Young BE. 1991. Total diet study nutritional elements, 1982-1989. *J Am Diet Assoc* 91(2):179-183.
- Pennington JA, Wilson DB, Young BE, et al. 1987. Mineral content of market samples of fluid whole milk. *J Am Diet Assoc* 87:1036-1042.
- Pennington JA, Young BE, Wilson DB, et al. 1986. Mineral content of foods and total diets: The selected minerals in foods survey, 1982 to 1984. *J Am Diet Assoc* 86:876-891.
- *Pennington JA, Young BE, Wilson DB. 1989. Nutritional elements in U.S. diets: Results from the Total Diet Study, 1982 to 1986. *J Am Diet Assoc* 89:659-644.
- Penrith M-L. 1995. Acute selenium toxicosis as a cause of paralysis in pigs. *J S Afr Vet Assoc* 66(2):47-48.
- *Penrith M-L, Robinson JTR. 1996. Selenium toxicosis with focal symmetrical poliomyelomalacia in postweaning pigs in South Africa. *Onderstepoort J Vet Res* 63:171-179.
- *Peretz A, Neve J, Desmedt J, et al. 1991. Lymphocyte response is enhanced by supplementation of elderly subjects with selenium-enriched yeast. *Am J Clin Nutr* 53(5):1323-1328.
- *Perona G, Cellerino R, Guidi GC, et al. 1977. Erythrocytic glutathione peroxidase: Its relationship to plasma selenium in man. *Scand J Haematol* 19:116-120.
- *Pillay KKS, Thomas CCJ, Kaminski JW. 1969. Neutron activation analysis of selenium content of fossil fuels. *Nucl Appl Technol* 7:478-483.
- *Pillay KKS, Thomas Jr. CC, Sondel JA. 1971. Activation analysis of airborne selenium as a possible indicator of atmospheric sulfur pollutants. *Environ Sci Technol* 5:74-77.
- Pillay TS, Makgoba MW. 1992. Enhancement of epidermal growth factor (EGF) and insulin-stimulated tyrosine phosphorylation of endogenous substrates by sodium selenate. *FEBS Lett* 308(1):38-42.
- Pinochet H, De Gregori I, Lobos MG, et al. 1999. Selenium and copper in vegetables and fruits grown on long-term impacted soils from Valparaiso region, Chile. *Bull Environ Contam Toxicol* 63:327-334.
- *Pletnikova IP. 1970. Biological effect and safe concentration of selenium in drinking water. *Hyg Sanit* 35:176-180.
- Podoll KL, Bernard JB, Ullrey DE, et al. 1992. Dietary selenate versus selenite for cattle, sheep, and horses. *J Anim Sci* 70(6):1965-1970.
- *Poole CF, Evans NJ, Wibberley DG. 1977. Determination of selenium in biological samples by gas-liquid chromatography with electron-capture detection. *J Chromatogr* 136:73-83.
- Portal B, Richard MJ, Ducros V, et al. 1993. Effect of double-blind crossover selenium supplementation on biological indices of selenium status in cystic fibrosis patients. *Clin Chem* 39(6):1023-1028.

9. REFERENCES

- *Poulsen HD, Danielsen V, Nielsen TK, et al. 1989. Excessive dietary selenium to primiparous sows and their offspring. I. Influence on reproduction and growth. *Acta Vet Scand* 30(4):371-378.
- Presser TS, Ohlendorf HM. 1987. Biogeochemical cycling of selenium in the San Joaquin Valley, California. *Environmental Management* 11:805-821.
- Presser TS, Swain WC, Tidball RR, et al. 1991. Geologic sources, mobilization, and transport of selenium from the California coast ranges to the Western San Joaquin Valley: A reconnaissance study. *Govt Reports Announcements & Index (GRA&I), Issue 14, San Joaquin Valley Drainage Program, Sacramento, CA. NTIS/PB91-176727.*
- Pretorius L, Kempster PL, van Vliet HR, et al. 1992. Simultaneous determination of arsenic, selenium and antimony in water by inductively coupled plasma hydride method. *F J Anal Chem* 342(4-5):391-393.
- *Pringle P. 1942. Occupational dermatitis following exposure to inorganic selenium compounds. *The British Journal of Dermatology and Syphilis* 54:54-58.
- Qian S, Yang P. 1990. Direct determination of selenium in flours by slurry sample introduction and platform graphite furnace atomic absorption spectrometry. *Fenxi Huaxue* 18(11):1064-1066.
- *Raie RM. 1996. Regional variation in As, Cu, Hg, and Se and interaction between them. *Ecotoxicol Environ Saf* 35:248-252.
- *Raisbeck MF. 2000. Selenosis. *Toxicology* 16(3):465-479.
- Raisbeck MF, Dahl ER, Sanchez DA, et al. 1993. Naturally occurring selenosis in Wyoming. *J Vet Diagn Invest* 5(1):84-87.
- *Raisbeck MF, O'Toole D, Schamber RA, et al. 1996. Toxicologic evaluation of a high-selenium hay diet in captive pronghorn antelope (*Antilocapra americana*). *J Wildl Dis* 32(1):9-16.
- *Raisbeck MF, Schamber RA, Belden EL. 1998. Immunotoxic effects of selenium in mammals. In: Garland T, Barr AC, eds. *Toxic plants and other natural toxicants*. New York, NY: CABI Publishing, 260-266.
- *Rajotte BJP, P'an AYS, Malick A, et al. 1996. Evaluation of selenium exposure in copper refinery workers. *J Toxicol Environ Health* 48:239-251.
- Ramakrishnan U, Manjrekar R, Rivera J, et al. 1999. Micronutrients and pregnancy outcome: A review of the literature. *Nutr Res* 19(1):103-159.
- Ramana A, Sengupta AK. 1992. Removing selenium (IV) and arsenic (V) oxyanions with tailored chelating polymers. *Journal of Environmental Engineering* 118(5):755-775.
- Rannem T, Hylander E, Ladefoged K, et al. 1996. The metabolism of [⁷⁵Se]selenite in patients with short bowel syndrome. *JPEN, J Parenter Enteral Nutr* 20(6):412-416.
- *Rao MV, Patil GR, Borole LV. 1998. Effect of mercury and selenite interaction on the mouse vital organs. *J Environ Biol* 19(3):215-220.

9. REFERENCES

- Rascati RJ. 1983. Induction of retrovirus gene expression by selenium compounds. *Mutat Res* 117:67-78.
- Rasco MA, Jacobs MM, Griffin AC. 1977. Effects of selenium on aryl hydrocarbon hydroxylase activity in cultured human lymphocytes. *Cancer Letters* 3:295-301.
- Rasekh HR, Soliman KFA. 1995. Effect of selenium on brain dopaminergic system. *FASEB J* 9(4):711.
- *Rasekh HR, Davis MD, Cooke LW, et al. 1997. The effect of selenium on the central dopaminergic system: A microdialysis study. *Life Sci* 61(11):1029-1035.
- *Ratnasinghe D, Tangrea JA, Forman MR, et al. 2000. Serum tocopherols, selenium and lung cancer risk among tin miners in China. *Cancer Causes Control* 11:129-135.
- *Rattner BA, Hoffman DJ, Melancon MJ, et al. 2000. Organochlorine and metal contaminant exposure and effects in hatching black-crowned night herons (*Nycticorax nycticorax*) in Delaware Bay. *Arch Environ Contam Toxicol* 39:38-45.
- *Ray JH, Altenburg JL. 1978. Sister-chromatid exchange induction by sodium selenite: Dependence on the presence of red blood cells or red blood cell lysate. *Mutat Res* 54:343-354.
- Ray JH, Altenburg LC. 1980. Dependence of the sister-chromatid exchange-inducing abilities of inorganic selenium compounds on the valence state of selenium. *Mutat Res* 78:261-266.
- Ray JH, Altenburg LC. 1982. Sister-chromatid exchange induction by sodium selenite: Plasma protein-bound selenium is not the active SCE-inducing metabolite of Na₂SeO₃. *Mutat Res* 102:285-296.
- *Ray JH, Altenburg JL, Jacobs MM. 1978. Effects of sodium selenite and methyl methanesulphonate or N-hydroxy-2-acetyl-amino-fluorescence co-exposure on sister chromatid exchange production in human blood cultures. *Mutat Res* 57:359-368.
- Ray NR, Ray AK. 1973. Studies on some blood pictures in relation to hemorrhagic tendency during selenium toxicity. *Ind J Physiol Allied Sci* 27:152-154.
- *Razagui IBA, Haswell SJ. 1997. The determination of mercury and selenium in maternal and neonatal scalp hair by inductively coupled plasma-mass spectrometry. *J Anal Toxicol* 21:149-153.
- *Rea HM, Thomson CD, Campbell DR, et al. 1979. Relation between erythrocyte selenium concentrations and glutathione peroxidase (EC 1.11.1.9) activities of New Zealand residents and visitors to New Zealand. *Br J Nutr* 42: 201-208.
- *Reamer DC, Veillon C. 1983. Elimination of perchloric acid in digestion of biological fluids for fluorometric determination of selenium. *Anal Chem* 55:1605-1606.
- *Reamer DC, Zoller WH. 1980. Selenium biomethylation products from soil and sewage sludge. *Science* 208:500-502.
- *Recknagel S, Brätter P, Tomiak A, et al. 1993. Determination of selenium in blood serum by ICP-OES including an on-line wet digestion and Se-hydride formation procedure. *F J Anal Chem* 346:833-836.

9. REFERENCES

- Reddy BS, Sugie S, Maruyama H, et al. 1988. Effect of dietary excess of inorganic selenium during initiation and postinitiation phases of colon carcinogenesis in F344 rats. *Cancer Res* 48:1777-1780.
- Reddy CC, Massaro EJ. 1983. Biochemistry of selenium: A brief overview. *Fundam Appl Toxicol* 3:431-443.
- Redman C, Xu MJ, Peng YM, et al. 1997. Involvement of polyamines in selenomethionine induced apoptosis and mitotic alterations in human tumor cells. *Carcinogenesis* 18(6):1195-1202.
- *Reid ME, Duffield-Lillico AJ, Garland L et al. 2002. Selenium supplementation and lung cancer incidence: an update of the nutritional prevention of cancer trial. *Cancer Epidemiol Biomarkers Prev* 11(11):1285-1291.
- Reis MF, Holzbecher J, Martinho E, et al. 1990. Determination of selenium in duplicate diets of residents of Pinhel, Portugal, by neutron activation. *Biol Trace Elem Res* 26-27:629-635.
- *Richter RC, Swami K, Chace S, et al. 1998. Determination of arsenic, selenium, and antimony in cloud water by inductively coupled plasma mass spectrometry. *Fresenius J Anal Chem* 361(2):168-173.
- Ridlington JW, Whanger PD. 1981. Interactions of selenium and antioxidants with mercury, cadmium and silver. *Fundam Appl Toxicol* 1:368-375.
- Ringstad J, Jacobsen BK, Tretli S, et al. 1988. Serum selenium concentration associated with risk of cancer. *J Clin Pathol* 41:454-457.
- Robberecht HJ, Deelsta HA. 1984. Selenium in human urine: Concentration levels and medical implications. *Clin Chim Acta* 136:107-120.
- *Robberecht H, Van Grieken R. 1982. Selenium in environmental waters: Determination, speciation and concentration levels. *Talanta* 29:823-844.
- *Robberecht H, Deelstra H, Van Grieken R. 1990. Determination of selenium in blood components by x-ray emission spectrometry. Procedures, concentration levels, and health implications. *Biol Trace Elem Res* 25(3):149-185.
- *Robberecht H, Vanden Berghe D, Deelstra H, et al. 1982. Selenium in Belgian soils and its uptake by rye-grass. *Sci Total Environ* 25:61-69.
- *Robertson DSF. 1970. Selenium, a possible teratogen? *Lancet* 1:518-519.
- *Robinson JR, Robinson MF, Levander OA, et al. 1985. Urinary excretion of selenium by New Zealand and North American human subjects on differing intakes. *Am J Clin Nutr* 41(5):1023-1031.
- Robinson JTR. 1995. Acute selenium toxicosis as a cause of paralysis in pigs. *S Afr Vet Assoc* 66(2):47-48.
- *Robinson MF, Rea HM, Friend GM, et al. 1978. On supplementing the selenium intake of New Zealanders. 2. Prolonged metabolic experiments with daily supplements of selenomethionine, selenite, and fish. *Br J Nutr* 39:589-600.

9. REFERENCES

- *Robkin MA, Swanson DR, Shepard TE. 1973. Trace metal concentrations in human fetal livers. *Trans Am Nucl Soc* 17:97-98.
- Roden M, Prskavec M, Fürsinn C, et al. 1995. Metabolic effect of sodium selenite: Insulin-like inhibition of glucagon-stimulated glycogenolysis in the isolated perfused rat liver. *Hepatology* 22(1):169-174.
- *Rodríguez Rodríguez EM, Alaejos MS, Romero CD. 1999. Chemometric studies of several minerals in milk. *J Agric Food Chem* 47:1520-1524.
- Rogers MA, Thomas DB, Davis S, et al. 1991. A case control study of oral cancer and pre-diagnostic concentrations of selenium and zinc in nail tissue. *Int J Cancer* 48(2):182-188.
- Romera-Alvira D, Roche E, Placer L. 1996. Cardiomyopathies and oxidative stress. *Med Hypotheses* 47:137-144.
- Ronai Z, Tillotson JK, Traganos F, et al. 1995. Effects of organic and inorganic selenium compounds on rat mammary tumor cells. *Int J Cancer* 63:428-434.
- *Rongpu Y, Jiachen H, Gongkan F, et al. 1986. Fluorometric determination of micro-amounts of selenium in human blood, using 2,3-diaminonaphthalene. *Med Lab Sci* 43:331-334.
- Rose J, Hutcheson S, West CR, et al. 1999. Fish mercury distribution in Massachusetts, USA lakes. *Environ Toxicol Chem* 18(7):1370-1379.
- Rosenfeld I, Beath OA. 1946a. The influence of protein diets on selenium poisoning. *Am J Vet Res* 7:52-56.
- Rosenfeld I, Beath OA. 1946b. The influence of protein diets on selenium poisoning. II. The influence of protein selenium administration. *Am J Vet Res* 7:57-61.
- *Rosenfeld I, Beath OA. 1947. Congenital malformations of eyes of sheep. *J Agri Res* 75:93-103.
- *Rosenfeld I, Beath OA. 1954. Effect of selenium on reproduction in rats. *Proc Soc Exp Biol Med* 87:295-297.
- *Rosenfeld I, Beath OA. 1964a. Selenium in relation to public health. In: *Selenium: Geobotany, biochemistry, toxicity, and nutrition*. New York, NY: Academic Press, 279-289.
- *Rosenfeld I, Beath OA. 1964b. Selenium poisoning in animals. In: *Selenium: Geobotany, biochemistry, toxicity, and nutrition*. New York, NY: Academic Press, 141-226.
- Ross HB. 1990. Biogeochemical cycling of atmospheric selenium. *Met Speciation Environ NATO ASI Ser., Ser G* Vol 23:523-543.
- Rotruck JT, Ganther H., Swanson A., et al. 1973. Selenium: Biochemical role as a component of glutathione peroxidase. *Science* 179:588-590.
- *Roy AC, Karunanithy R, Ratnam SS. 1990. Lack of correlation of selenium level in human semen with sperm count/motility. *Arch Androl* 25(1):59-62.

9. REFERENCES

- Roy WR. 1994. Groundwater contamination from municipal landfills in the USA. In: Adriano DC, Iskandar AK, Murarka IP, eds. Contamination in groundwaters. Northwood, England: Science Reviews, 411-446.
- *RTECS. 2001. Selenious acid. Registry of Toxic Effects of Chemical Substances. National Institute for Occupational Safety and Health. February, 2001.
- *RTI. 1993. Research Triangle Institute. National Listing of State Fish and Shellfish Consumption Advisories and Bans. Prepared for U.S. Environmental Protection Agency, Office of Water.
- *Rudd JWM, Turner MA. 1983a. The English-Wabigoon River system: II. Suppression of mercury and selenium bioaccumulation by suspended and bottom sediments. *Can J Fish Aquat Sci* 40:2218-2227.
- Rudd JWM, Turner MA. 1983b. The English-Wabigoon River system: V. Mercury and selenium bioaccumulation as a function of aquatic primary productivity. *Can J Fish Aquat Sci* 40:2251-2259.
- *Rudolph N, Wong SL. 1978. Selenium and glutathione peroxidase activity in maternal and cord plasma and cells. *Pediatr Res* 12:789-792.
- *Rusov C, Zivkovic R, Soldatovic B, et al. 1996. A study of selenium genotoxicity in the micronucleus test on mice. *Acta Vet (Belgrade)* 45(2-3):161-166.
- Ruta DA, Haider S. 1989. Attempted murder by selenium poisoning. *Br Med J* 299(6694):316-317
- *Sabé R, Rubio R, Garcia-Beltran L. 2001. Selenium determination in urine with atomic fluorescence detection. *Anal Chim Acta* 436(2):215-221.
- *Saeed K. 1986. Direct electrothermal atomic absorption spectrometric determination of selenium in biological fluids. Part 1 - Human Urine. *Acta Pharmacol Toxicol* 59(Suppl 7):593-597.
- Saiki MK. 1986a. A field example of selenium contamination in an aquatic food chain. Proceedings from the first annual symposium on selenium in the environment. Fresno, CA: California State University. California Agricultural Technology Institute Publication, CATI/860201, 67-75.
- Saiki MK. 1986b. Concentrations of selenium in aquatic food-chain organisms and fish exposed. In: Howard AQ, ed. Selenium and Agricultural Drainage: Implications for San Francisco Bay and the California Environment. Proc. Second Selenium Symp. Tiburon, CA: The Bay Institute of San Francisco, 25-33.
- *Saiki MK, Lowe TP. 1987. Selenium in aquatic organisms from subsurface agricultural drainage water, San Joaquin Valley, California. *Arch Environ Contam Toxicol* 16:657-670.
- Saiki MK, Jennings MR, Brumbaugh WG. 1993. Boron, molybdenum, and selenium in aquatic food chains from the lower San Joaquin River and its tributaries, California. *Arch Environ Contam Toxicol* 24(3):307-319.
- Saiki MK, Jennings MR, May TW. 1992. Selenium and other elements in freshwater fishes from the irrigated San Joaquin Valley, California. *Sci Total Environ* 126(1-2):109-137.
- Sakurai H, Tsuchiya K. 1975. A tentative recommendation for the maximum daily intake of selenium. *Environ Physiol Biochem* 5:107-118.

9. REFERENCES

Salamone JD. 1994. The involvement of nucleus accumbens dopamine in appetitive and aversive motivation. *Behav Brain Res* 61:117-133.

*Salbe AD, Levander OA. 1989. Effect of growth phase on deposition of selenium (Se) in tissues of rats fed elevated dietary levels of Se as either L - Selenomethionine or sodium selenate. In: Wendel A, eds. *Selenium in biology and medicine*. Springer-Verlag, 122-125.

*Salbe AD, Levander OA. 1990a. Comparative toxicity and tissue retention of selenium in methionine-deficient rats fed sodium selenate or L-selenomethionine. *J Nutr* 120(2):207-212.

*Salbe AD, Levander OA. 1990b. Effect of various dietary factors on the deposition of selenium in the hair and nails of rats. *J Nutr* 120(2):200-206.

*Salbe AD, Hill CH, Veillon C, et al. 1993. Relationship between serum somatomedin C levels and tissues selenium content among adults living in a seleniferous area. *Nutr Res* 13:399-405.

*Salonen J, Alfthan G, Huttunen J, et al. 1984. Association between serum selenium and the risk of cancer. *Am J Epidemiol* 120:342-349.

*Salonen J, Salonen R, Lappetelainen R, et al. 1985. Risk of cancer in relation to serum concentrations of selenium and vitamins A and E: Matched case-control analysis of prospective data. *Br Med J* 290:417-420.

*Salonen JT, Alfthan G, Huttenen JK, et al. 1982. Association between cardiovascular death and myocardial infarction and serum selenium in matched pair longitudinal study. *Lancet* 2:175-179.

*Sánchez-Ocampo A, Torres-Pérez J, Jiménez-Reyes M. 1996. Selenium levels in the serum of workers at a rubber tire repair shop. *Am Ind Hyg Assoc J* 57:72-75.

*Sandholm M. 1973. The initial fate of a trace amount of intravenously administered selenite. *Acta Pharmacol Toxicol* 33:1-5.

Sandholm M. 1975. Function of erythrocytes in attaching selenite-Se onto specific plasma proteins. *Acta Pharmacol Toxicol* 36:321-327.

*Sandholm M, Oksanen HE, Pesonen L. 1973. Uptake of selenium by aquatic organisms. *Limnology and Oceanography* 18:496-499.

Sanpera C, Morera M, Crespo S, et al. 1997. Trace elements in clutches of Yellow-legged Gulls, *Larus cachinnans*, from the Medes Islands, Spain. *Bull Environ Contam Toxicol* 59:757-762.

Sanpera C, Morera M, Ruiz X, et al. 2000. Variability of mercury and selenium levels in clutches of Audouin's gulls (*Larus audouinii*) breeding at the Chafarinas Islands, southwest Mediterranean. *Arch Environ Contam Toxicol* 39:119-123.

*Sani BP, Woodward JL, Pierson MC, et al. 1988. Specific binding proteins for selenium in rat tissues. *Carcinogenesis* 9(2):277-284.

9. REFERENCES

- Santolo GM, Yamamoto JT. 1999. Selenium in blood of predatory birds from Kesterson Reservior and other areas in California. *J Wildl Manage* 63(4):1273-1281.
- *Sanz Alaejos M, Diaz Romero C. 1993. Urinary selenium concentrations. *Clin Chem* 39(10):2040-2052.
- *Sayato Y, Hasegawa T, Taniguchi S, et al. 1993. Acute and subacute oral toxicity of selenocystine in mice. *Jap J Toxicol Environ Health* 39(4):289-296.
- Schafer L, Thorling EB. 1990. Lipid peroxidation and antioxidant supplementation in old age. *Scand J Clin Lab Invest* 50(1):69-75.
- Schauer JJ, Kleeman MJ, Cass GR, et al. 1999. Measurement of emissions from air pollution sources. 2. C₁ through C₃₀ organic compounds from medium diesel trucks. *Environ Sci Technol* 33:1578-1587.
- Schieke SM, Briviba K, Klotz L-O, et al. 1999. Activation pattern of mitogen-activated protein kinases elicited by peroxynitrite: Attenuation by selenite supplementation. *FEBS Lett* 448:301-303.
- *Schillaci M, Martin SE, Milner JA. 1982. The effects of dietary selenium on the biotransformation of 7,12-dimethyl-benzanthracene. *Mutat Res* 101:31-37.
- Schiønning JD, Eide R, Ernst E, et al. 1997. The effect of selenium on the localization of autometallographic mercury in dorsal root ganglia of rats. *Histochem J* 29:183-191.
- *Schmitt CJ, Brumbaugh WG. 1990. National contaminant biomonitoring program: Concentrations of arsenic, cadmium, copper, lead, mercury, selenium, and zinc in U.S freshwater fish, 1976-1984. *Arch Environ Contam Toxicol* 19(5):731-747.
- Schoental R. 1968. Selenium-75 in the Harderian glands and brown fat of rats given sodium selenite labelled with selenium-75. *Nature* 218:294-295.
- Schrauzer GN. 1992. Selenium. Mechanistic aspects of anticarcinogenic action. *Biol Trace Elem Res* 33:51-62.
- *Schrauzer GN. 2000. Selenomethionine: A review of its nutritional significance, metabolism and toxicity. *J Nutr* 130:1653-1656.
- Schrauzer GN. 2001. Nutritional selenium supplements: Product types, quality, and safety. *J Am Coll Nutr* 20(1):1-4.
- *Schrauzer GN, White DA. 1978. Selenium in human nutrition: Dietary intakes and effects of supplementation. *Bioinorg Chem* 8:303-318.
- *Schrauzer G, White D, Schneider C. 1976. Inhibition of the genesis of spontaneous mammary tumors in C3H mice: Effects of selenium and of selenium-antagonistic elements and their possible role in human breast cancer. *Bioinorg Chem* 6:265-270.
- *Schrauzer G, White D, Schneider C. 1977. Cancer mortality correlation studies. III. Statistical associations with dietary selenium intakes. *Bioinorg Chem* 7:23-24.

9. REFERENCES

- *Schroeder HA. 1967. Effects of selenate, selenite and tellurite on the growth and early survival of mice and rats. *J Nutr* 92:334-338.
- *Schroeder HA, Mitchener M. 1971a. Selenium and tellurium in rats: Effects on growth, survival, and tumors. *J Nutr* 101:1531-1540.
- *Schroeder HA, Mitchener M. 1971b. Toxic effects of trace elements on reproduction of mice and rats. *Arch Environ Health* 23:102-106.
- *Schroeder HA, Mitchener M. 1972. Selenium and tellurium in mice: Effects on growth, survival and tumors. *Arch Environ Health* 24:66-71.
- Schroeder RA, Orem WH, Kharaka YK. 2002. Chemical evolution of the Salton Sea, California: Nutrient and selenium dynamics. *Hydrobiologia* 473:32-45.
- *Schubert A, Holden MM, Wolf WR. 1987. Selenium content of a core group of foods based on a critical evaluation of published analytical data. *J Am Diet Assoc* 87:285-299.
- *Schultz J, Lewis HE. 1940. The excretion of volatile selenium compounds after the administration of sodium selenite to white rats. *J Biol Chem* 133:199-207.
- *Schutz DF, Turekian KK. 1965. The investigation of geographical and vertical distribution of several trace elements in seawater using neutron activation analysis. *Geochim Cosmochim Acta* 29:259-313.
- *Scudlark JR, Conko KM, Church TM. 1994. Atmospheric wet deposition of trace elements to Chesapeake Bay: CBAD study year 1 results. *Atmos Environ* 28(8):1487-1498.
- *Secor CL, Lisk DJ. 1989. Variation in the selenium content of individual Brazil nuts. *Journal of Food Safety* 9:279-281.
- Segerson EC, Johnson BH. 1979. Selenium/vitamin E and reproductive function in Angus bulls. *J Anim Sci* 48(Suppl 1):336.
- *Seko Y, Imura N. 1997. Active oxygen generation as a possible mechanism of selenium toxicity. *Biomed Environ Sci* 10:333-339.
- *Seko Y, Saito Y, Kitahara J, et al. 1989. Active oxygen generation by the reaction of selenite with reduced glutathione *in vitro*. In: Wendel A, ed. *Selenium in biology and medicine*. New York, NY: Springer-Verlag, 71-73.
- *Senff H, Kuhlwein A, Bothe C, et al. 1988. Allergic contact dermatitis from selenite. *Contact Dermatitis* 19(1):73-74.
- *Sesana G, Baj A, Toffoletto F, et al. 1992. Plasma selenium levels of the general population of an area in northern Italy. *Sci Total Environ* 120(1-2):97-102.
- *Setchell BP, Waites GMH. 1975. The blood-testis barrier. In: Creep RO, Astwood EB, Geiger SR, eds. *Handbook of physiology: Endocrinology V*. Washington, DC: American Physiological Society.

9. REFERENCES

- *Shamberger RJ. 1970. Relationship of selenium to cancer. I. Inhibitory effect of selenium on carcinogenesis. *J Natl Cancer Inst* 44:931-936.
- Shamberger RJ. 1980a. Evidence for the antimutagenicity and the mutagenicity of selenium. *Biol Trace Elem Res* 2:81-87.
- Shamberger RJ. 1980b. Selenium in the drinking water and cardiovascular disease. *J Environ Pathol Toxicol* 4:305-308.
- *Shamberger RJ. 1981. Selenium in the environment. *Sci Total Environ* 17:59-74.
- *Shamberger RJ. 1983. Cleveland, Ohio, personal communication. (As cited in Iyengar 1987).
- *Shamberger RJ. 1986. Selenium metabolism and function. *Clin Physiol Biochem* 4:42-49.
- Shamberger R, Willis CE. 1971. Selenium distribution and human cancer mortality. *CRC Crit Rev Clin Lab Sci* 2:211-221.
- Shamberger RJ, Tytko SA, Willis CE. 1974. Antioxidants and cancer. II. Selenium distribution and human cancer mortality in the United States, Canada and New Zealand. *Trace Substances in Environmental Health*:31-34.
- Shamberger RJ, Tytko SA, Willis CE. 1975. Selenium and heart disease. In: Hemphill DD, ed. *Trace substances in environmental health - IX*. Columbia, MO: University of Missouri, 15-22.
- *Shamberger RJ, Tytko SA, Willis CE. 1976. Antioxidants and cancer: Part VI. Selenium and age-adjusted human cancer mortality. *Arch Environ Health* 31:231-235.
- *Shane BS, Littman CB, Essick LA, et al. 1988. Uptake of selenium and mutagens by vegetables grown in fly ash containing greenhouse media. *J Agric Food Chem* 36(2):328-333.
- Shang F, Zhang J, Chang C. 1991. The aggression of rat soluble lens proteins caused by sodium selenite. *Shengwa Huaxue Zazhi* 7(4):476-481.
- Shani J, Livshitz T, Robberecht H, et al. 1985. Increased erythrocyte glutathione peroxidase activity in psoriatics consuming high-selenium drinking water at the Dead-Sea Psoriasis Treatment Center. *Pharmacol Res Commun* 17:479-488.
- Shearer TR, David LL. 1982. Role of calcium in selenium cataract. *Curr Eye Res* 2:777-784.
- *Shearer TR, Hadjimarkos DM. 1975. Geographic distribution of selenium in human milk. *Arch Environ Health* 30:230-233.
- Shearer TR, Anderson RS, Britton JL, et al. 1983a. Early development of selenium-induced cataract: Slit lamp evaluation. *Exp Eye Res* 1983:781-788.
- Shearer TR, Anderson RS, Britton JL. 1983b. Uptake and distribution of radioactive selenium in cataractous rat. *Curr Eye Res* 2:561-564.
- Shearer TR, David LL, Anderson RS, et al. 1992. Review of selenite cataract. *Curr Eye Res* 11(4):357-369.

9. REFERENCES

- Shearer TR, McCormack DW, DeSort DJ, et al. 1980. Histological evaluation of selenium induced cataracts. *Exp Eye Res* 31:321-333.
- Sheehan TM, Gao M. 1990. Simplified fluorometric assay of total selenium in plasma and urine. *Clin Chem* 36(12):2124-2126.
- Shen H-M, Yang C-F, Ong C-N. 1999. Sodium selenite-induced oxidative stress and apoptosis in human hepatoma HepG₂ cells. *Indian J Cancer* 81:820-828.
- Shenberg C, Mantel M, Izak-Biran T, et al. 1988. Rapid and simple determination of selenium and other trace elements in very small blood samples by XRF. *Biol Trace Elem Res* 16(1):87-95.
- Shendriker AD, West PW. 1973. Determination of selenium in the smoke from trash burning. *Environ Lett* 5:29-35.
- Shennan DB. 1988. Selenium (selenate) transport by human placental brush border membrane vesicles. *Br J Nutr* 59(1):13-19.
- Shimada T, El-Bayoumy K, Upadhyaya P, et al. 1997. Inhibition of human cytochrome P450-catalyzed oxidations of xenobiotics and procarcinogens by synthetic organoselenium compounds. *Cancer Res* 57:4757-4764.
- *Shimoishi Y. 1977. Some 1,2-diaminobenzene derivatives as reagents for gas chromatographic determination of selenium with an electron capture detector. *J Chromatogr* 13:85-93.
- Shimojo N, Homma S, Nakai I, et al. 1991. Nondestructive synchrotron radiation X-ray fluorescence imaging of trace elements on methylmercury and selenium administered guinea pigs. *Anal Lett* 24(10):1767-1778.
- *Shiobara Y, Yoshida T, Suzuki KT. 1998. Effects of dietary selenium species on Se concentrations in hair, blood, and urine. *Toxicol Appl Pharmacol* 152:309-314.
- Shisler JL, Senkevich TG, Berry ML, et al. 1998. Ultraviolet-induced cell death blocked by a selenoprotein from a human dermatropic poxvirus. *Science* 279:102-105.
- *Shrift A. 1964. A selenium cycle in nature? *Nature* 201:1304-1305.
- *Sindeeva. 1964. Mineralogy and types of deposits of selenium and tellurium. New York, NY: Interscience Publishers.
- *Singh PP, Junnarkar AY. 1991. Behavioral and toxic profile of some essential trace metal salts in mice and rats. *Indian Journal of Pharmacology* 23(3):153-159.
- Singh YN, Adam TJ, Lulf LA, et al. 1996. Acute effects of sodium selenite on the isolated mouse diaphragm and in the anesthetized rat. *J Nat Toxins* 5(3):351-360.
- Sinha R, Medina S. 1997. Inhibition of cdk2 kinase activity by methylselenocysteine in synchronized mouse mammary epithelial tumor cells. *Carcinogenesis* 18(8):1541-1547.

9. REFERENCES

- Sinha R, Said TK, Medina D. 1996. Organic and inorganic selenium compounds inhibit mouse mammary cell growth *in vitro* by different cellular pathways. *Cancer Lett* 107:277-284.
- Sinha R, Kiley SC, Lu JX, et al. 1999. Effects of methylselenocysteine on PKC activity, cdk2 phosphorylation and *gadd* gene expression in synchronized mouse mammary epithelial tumor cells. *Cancer Lett* 146:135-145.
- *Sioris LJ, Guthrie K, Pentel PR. 1980. Acute selenium poisoning [Abstract]. *Vet Hum Toxicol* 22:364.
- *Sirianni SR, Huang CC. 1983. Induction of sister chromatid exchange by various selenium compounds in Chinese hamster cells in the presence and absence of S9 mixture. *Cancer Lett* 18:109-116.
- *Skeaff JM, Dubreuil AA. 1997. Calculated 1993 emission factors of trace metals for Canadian non-ferrous smelters. *Atmos Environ* 31(10):1449-1457.
- *Skerfving S. 1978. Interaction between selenium and methylmercury. *Environ Health Perspect* 25:57-65.
- *Skowerski M, Czechowicz K, Konecki J, et al. 1997a. Effects of interaction between cadmium and selenium on hepatic metabolism in mice. Part II: Enzymatic activity and ultrastructure. *Med Sci Monit* 3(5):648-653.
- *Skowerski M, Konecki J, Czechowicz K, et al. 1997b. Effects of interaction between cadmium and selenium on hepatic metabolism in mice. Part I: The study on DNA, RNA and protein synthesis activities in mouse hepatocytes. *Med Sci Monit* 3(5):642-647.
- Skowerski M, Jasik K, Konecki J. 2000. Effects of interaction between cadmium and selenium on heart metabolism in mice: The study of RNA, protein, ANP synthesis activities and ultrastructure in mouse heart. *Med Sci Monit* 6(2):258-265.
- *Smith AM, Picciano MF, Milner JA. 1982. Selenium intakes and status of human milk and formula fed infants. *Am J Clin Nutr* 35:521-526.
- Smith BI, Donovan GA, Rae DO. 1999. Selenium toxicosis in a flock of Katahdin hair sheep. *Can Vet J* 40:192-194.
- *Smith MI, Westfall BB. 1937. Further field studies on the selenium problem in relation to public health. *Public Health Rep* 52:1375-1384.
- *Smith MI, Franke KW, Westfall BB. 1936. The selenium problem in relation to public health. A preliminary survey to determine the possibility of selenium intoxication in the rural population living on seleniferous soil. *Pub Health Rep* 51:1496-1505.
- *Smith MI, Westfall BB, Stohlman Jr. EF. 1937. The elimination of selenium and its distribution in the tissues. *Public Health Rep* 52:1171-1177.
- *Smyth JB, Wang JH, Barlow RM, et al. 1990. Experimental acute selenium intoxication in lambs. *J Comp Pathol* 102(2):197-209.
- Snook JT. 1991. Effect of ethanol use and other lifestyle variables on measures of selenium status. *Alcohol* 8(1):13-16.

9. REFERENCES

Söderberg A, Sahaf B, Rosén A. 2000. Thioredoxin reductase, a redox-active selenoprotein, is secreted by normal and neoplastic cells: Presence in human plasma. *Cancer Res* 60:2281-2289.

*Sohn OS, Blackwell L, Mathis J, et al. 1991. Excretion and tissue distribution of selenium following treatment of male F344 rats with benzylselenocyanate or sodium selenite. *Drug Metab Dispos* 19(5):865-870.

Sohn OS, Li H, Surface A, et al. 1995. Contrasting patterns of selenium excretion by female CD rats treated with chemically related chemopreventive organic selenocyanate compounds. *Anticancer Res* 15:1849-1856.

Solomons NW, Torun B, Janghorbani M, et al. 1986. Absorption of selenium from milk protein and isolated soy protein formulas. *J Pediatr Gastroenterol Nutr* 5:122-126.

Sonoyama E, Zaima K, Naora H, et al. 2001. Selenium deficiency causes abnormal mitochondria elongation in the mouse spermatid. *Teratology* 63(4):37A.

*Soullier B, Wilson P, Nigro N. 1981. Effect of selenium on azoxymethane-induced intestinal cancer in rats fed high fat diet. *Cancer Lett* 12:343-348.

*Spallholz JE. 1994. On the nature of selenium toxicity and carcinostatic activity. *Free Radic Res* 17(1):45-64.

Spallholz JE. 1997. Free radical generation by selenium compounds and their prooxidant toxicity. *Biomed Environ Sci* 10:260-270.

Spallholz JE, Boylan LM, Larsen HS. 1990. Advances in understanding selenium's role in the immune system. *Ann N Y Acad Sci* 587:123-139.

*Spallholz JE. 2001. Selenium and the prevention of cancer. Part II: Mechanisms for the carcinostatic activity of Se compounds. *The Bulletin of Selenium – Tellurium Development Association*, 1-12.

*Spencer RP, Blau M. 1962. Intestinal transport of selenium-75 selenomethionine. *Science* 136:155-156.

*SRI. 2000. Directory of chemical producers. Menlo Park, CA: SRI International.

Stadtman TC. 1974. Selenium biochemistry. Proteins containing selenium are essential components of certain bacterial and mammalian enzyme systems. *Science* 183:915-921.

*Stadtman TC. 1977. Biological function of selenium. *Nutr Rev* 35:161-166.

*Stadtman TC. 1980. Selenium-dependent enzymes. *Annu Rev Biochem* 49:93-110.

*Stadtman TC. 1983. New biological functions--Selenium-dependent nucleic acids and proteins. *Fundam Appl Toxicol* 3:420-423.

*Stadtman TC. 1987. Specific occurrence of selenium in enzymes and amino acid tRNAs. *FASEB J* 1:375-379.

9. REFERENCES

- *Stadtman TC. 1990. Selenium biochemistry. *Annu Rev Biochem* 59:111-127.
- Stadtman TC. 2000. Some functions of the essential trace element, selenium. In: Roussel et al, eds. *Trace elements in man and animals*. New York, NY: Plenum Publishers, 831-836.
- *Stajn A, Zikic RV, Ognjanovic B, et al. 1997. Effect of cadmium and selenium on the antioxidant defense system in rat kidneys. *Comp Biochem Physiol* 117C(2):167-172.
- Stampfer MJ, Morris JS, Willett WC. 1995. Toenail selenium level and lung cancer among men and women in a high seleniferous region of the USA [Abstract]. *Am J Epidemiol* 141(10):S68.
- Stapleton SR. 2000. Introduction: The selenium conundrum. *Cell Mol Life Sci* 57(13/14):1823-1824.
- St'Astna M, Nemcova I, Zyka J. 1999. ICP-MS for the determination of trace elements in clinical samples. *Anal Lett* 32(13):2531-2543.
- *Sternberg J, Brodeur J, Imbach A, et al. 1968. Metabolic studies with seleniated compounds. III. Lung excretion of selenium 75 and liver function. *Int J Appl Radiat Isot* 19:669-684.
- *Sternberg J, Imbach A. 1967. Metabolic studies with seleniated compounds. II. Turnover studies with Se75-methionine in rats. *Int J Appl Radiat Isot* 18:557.
- Stewart MS, Davis RL, Walsh LP, et al. 1997. Induction of differentiation and apoptosis by sodium selenite in human colonic carcinoma cells (HT29). *Cancer Lett* 117:35-40.
- *Stewart RD, Griffiths NM, Thompson CD, et al. 1978. Quantitative selenium metabolism in normal New Zealand women. *Br J Nutr* 40:45-54.
- *St. Germain DL, Galton VA. 1997. The deiodinase family of selenoproteins. *Thyroid* 7(4):655-668.
- *Stockigt JR. 2000. Serum thyrotropin and thyroid hormone measurements and assessment of thyroid hormone transport. In: Braverman LE, Utiger RD, eds. *Werner and Ingbar's the thyroid: A fundamental and clinical text*. Philadelphia, PA: Lippincott Williams & Wilkins
- Storelli MM, Marcotrigiano GO. 2000. Environmental contamination in Bottlenose dolphin (*Tursiops truncatus*): Relationship between levels of metals, methylmercury, and organochlorine compounds in an adult female, her neonate, and a calf. *Bull Environ Contam Toxicol* 64:333-340.
- Storelli MM, Zizzo N, Marcotrigiano GO. 1999. Heavy metals and methylmercury in tissues of Risso's dolphin (*Grampus griseus*) and Cuvier's Beaked whale (*Ziphius cavirostris*) stranded in Italy (South Adriatic Sea). *Bull Environ Contam Toxicol* 63:703-710.
- Storm DL. 1994. Chemical monitoring of California's public drinking water sources: Public exposures and health impacts. In: Wang RGM, ed. *Water contamination and health: Integration of exposure assessment, toxicology, and risk assessment*. New York, NY: Marcel Dekker, Inc., 67-124.
- *Stowe HD, Eavey AJ, Granger L, et al. 1992. Selenium toxicosis in feeder pigs. *J Am Vet Med Assoc* 201(2):292-295.

9. REFERENCES

- *Sturges WT, Shaw GE. 1993. Halogens in aerosols in central Alaska. *Atmos Environ* 27A(17/18):2969-2977.
- Styblo M, Kalouskova J, Klas J. 1991. Comparison of the kinetics of a trace and a sublethal dose of selenite in rats, with particular attention being given to blood selenium distribution. *J Trace Elem Electrolytes Health Dis* 5(3):155-164.
- *Suistomaa U, Saaranen M, Vanha-Perttula T. 1987. Determination of selenium in human spermatozoa and prostasomes using base digestion and electrothermal atomic absorption spectrophotometry. *Clin Chim Acta* 168:323-328.
- Sundberg J, Oskarsson A, Bergman K. 1991. Milk transfer of inorganic mercury to suckling rats. Interaction with selenite. *Biol Trace Elem Res* 28(1):27-38.
- *Sunde RA. 1990. Molecular biology of selenoproteins. *Annu Rev Nutr* 10:451-474.
- Sunde RA, Hoekstra WG. 1980. Incorporation of selenium from selenite and selenocystine into glutathione peroxidase in the isolated perfused rat liver. *Biochem Biophys Res Commun* 29:1181-1188.
- *Suzuki KT, Ogra Y. 2002. Metabolic pathway for selenium in the body: speciation by HPLC-ICP MS with enriched Se. *Food Addit Contam* 10(19):974-983.
- Suzuki KT, Itoh M, Ohmichi M. 1995. Detection of selenium-containing biological constituents by high-performance liquid chromatography source mass spectrometry. *J Chromatogr B Biomed Appl* 666(1):13-19.
- Svensson B-G, Mikoczy Z, Strömberg U, et al. 1995. Mortality and cancer incidence among Swedish fishermen with a high dietary intake of persistent organochlorine compounds. *Scand J Work Environ Health* 21:106-115.
- Svensson BG, Schutz A, Nilsson A, et al. 1992. Fish as a source of exposure to mercury and selenium. *Sci Total Environ* 126(1-2):61-74.
- Swaini DJ. 1955. The trace-element content of soils. Harpenden, England. *Comm Bur Soil Sci Tech Commun* 48:91.
- *Swanson CA, Patterson BH, Levander OA, et al. 1991. Human [⁷⁵Se]selenomethionine metabolism: A kinetic model. *Am J Clin Nutr* 54(5):917-926.
- Symonds HW, Sanson BF, Mather DL, et al. 1981. Selenium metabolism in the dairy cow: The influence of the liver and the effect of the form of Se salt. *Br J Nutr* 45:117-125.
- Szarek J, Fabczak J, Zasadowski A, et al. 1995. Pathomorphological pattern of the liver and kidney in rats exposed to mixed intoxication with selenium and diazinon. *Pathol Res Pract* 191(7-8):790.
- Takasago T, Peters EE, Graham DI, et al. 1997. Neuroprotective efficacy of ebselen, an anti-oxidant with anti-inflammatory actions, in a rodent model of permanent middle cerebral artery occlusion. *Br J Pharmacol* 122:1251-1256.
- Tandon SK, Magos L, Webb M. 1986. The stimulation and inhibition of the exhalation of volatile selenium. *Biochem Pharmacol* 35:2763-2766.

9. REFERENCES

- Tanzer D, Heumann KG. 1991. Determination of dissolved selenium species in environmental water samples using isotope dilution mass spectrometry. *Anal Chem* 63(18):1984-1989.
- Tappel A. 1984. Selenium-glutathione peroxidase: Properties and synthesis. *Curr Top Cell Regul* 24:87-97.
- *Tarantal AF, Willhite CC, Lasley BL, et al. 1991. Developmental toxicity of L-selenomethionine in *Macaca fascicularis*. *Fundam Appl Toxicol* 16(1):147-160.
- Terry N, Carlson C, Raab TK, et al. 1992. Rates of selenium volatilization among crop species. *J Environ Qual* 21(3):341-344.
- Tessier F, Margaritis I, Richard M-J, et al. 1995. Selenium and training effects on the glutathione system and aerobic performance. *Med Sci Sports Exer* 27(3):390-396.
- Thérond P, Malvy D, Favier A. 1997. [Toxicity of oral pharmacological doses of selenium]. *Nutr Clin Metals* 11:91-101. (French).
- *Thimaya S, SN Ganapathy. 1982. Selenium in human hair in relation to age, diet, pathological condition and serum levels. *Sci Total Environ* 23:41-49.
- Thomas BV, Knight AW, Maier KJ. 1999. Selenium bioaccumulation by the water boatman *Trichocorixa reticulata* (Guerin-Meneville). *Arch Environ Contam Toxicol* 36:295-300.
- Thompson B, Anderson B, Hunt J, et al. 1999. Relationship between sediment contamination and toxicity in San Francisco Bay. *Mar Environ Res* 48(4-5):285-309.
- *Thompson HJ, Becci PJ. 1979. Effect of graded dietary levels of selenium on tracheal carcinomas induced by 1-methyl-1-nitrosourea. *Cancer Lett* 7:215-219.
- *Thompson HJ, Becci PJ. 1980. Selenium inhibition of n-methyl-n-nitrosourea-induced mammary carcinogenesis. *J Natl Cancer Inst* 65:1299-1301.
- Thompson HJ, Herbst EJ, Meeker LD. 1986. Chemoprevention of mammary carcinogenesis: A comparative review of the efficacy of a polyamine antimetabolite, retinoids, and selenium. *J Natl Cancer Inst* 77:595-598.
- Thompson HJ, Ip C, Ganther HE. 1991. Changes in ornithine decarboxylase activity and polyamine levels in response to eight different forms of selenium. *J Inorg Biochem* 44(4):283-292.
- Thompson HJ, Meeker L, Becci P. 1981. Effect of combined selenium and retinyl acetate treatment on mammary carcinogenesis. *Cancer Res* 41:1413-1416.
- Thompson-Eagle ET, Frankenburger WT Jr. 1991. Selenium biomethylation in an alkaline, saline environment. *Water Research* 25(2):231-240.
- *Thomson CD. 1974. Recovery of large doses of selenium given as sodium selenite with or without vitamin E. *N Z Med J* 80:163-168.

9. REFERENCES

- *Thomson CD. 1977. Selenium in human health and disease: A review. Trace elements in human and animal health and disease in New Zealand. Hamilton, New Zealand: Waikato University Press, 72-83.
- *Thomson CD. 1991. Clinical consequences and assessment of low selenium status. New Zealand Medical Journal 104(919):376-377.
- *Thomson CD, Robinson MF. 1980. Selenium in human health and disease with emphasis on those aspects peculiar to New Zealand. Am J Clin Nutr 33:303-323.
- Thomson CD, Robinson MF. 1990. Selenium content of foods consumed in Otago, New Zealand. N Z Med J 103(886):130-135.
- *Thomson CD, Stewart RDH. 1973. Metabolic studies of [⁷⁵Se]selenomethionine and [⁷⁵Se]selenite in the rat. Br J Nutr 30:139-147.
- *Thomson CD, Stewart RDH. 1974. The metabolism of [⁷⁵Se]selenite in young women. Br J Nutr 32:47-57.
- *Thomson CD, Burton CE, Robinson MF. 1977. On supplementing the selenium intake of new Zealanders. 1. Short experiments with large doses of selenite or selenomethionine. Br J Nutr 39:579-587.
- *Thomson CD, Rea HM, Doesburg VM, et al. 1977. Selenium concentrations and glutathione peroxidase activities in whole blood of New Zealand residents. Br J Nutr 37:457-460.
- Thomson CD, Robinson BA, Stewart RDH, et al. 1975. Metabolic studies of [⁷⁵Se] selenocystine and [⁷⁵Se] selenomethionine in the rat. Br J Nutr 34:501-509.
- *Thorlacius-Ussing O. 1990. Selenium-induced growth retardation. Histochemical and endocrinological studies on the anterior pituitaries of selenium treated rats. Dan Med Bull 37(4):347-358.
- Thorlacius-Ussing O, Jensen FT. 1988. Selenium in the anterior pituitary of the rat after a single injection of ⁷⁵Se sodium selenite. Biol Trace Elem Res 15:277-287.
- *Thorlacius-Ussing O, Flyvbjerg A, Orskov H. 1988. Growth in young rats after termination of sodium selenite exposure: Studies of growth hormone and somatomedin C. Toxicology 48(2):167-176.
- Thorling EB, Overrad K, Geboers J. 1986. Selenium status in Europe--Human data. A multicenter study. Clin Res 18:3-7.
- Tilbury KL, Stein JE, Meador JP, et al. 1997. Chemical contaminants in harbor porpoise (*Phocoena phocoena*) from the north Atlantic coast: Tissue concentrations and intra- and inter- organ distribution. Chemosphere 34(9/10):2159-2181.
- Ting BT, Mooers CS, Janghorbani M. 1989. Isotopic determination of selenium in biological materials with inductively coupled plasma mass spectrometry. Analyst 114(6):667-674.
- *Tinsley IJ, Harr JR, Bone JF, et al. 1967. Selenium toxicity in rats. I. Growth and longevity. In: Selenium in biomedicine. Proceedings of the first annual symposium, Oregon State University, Oregon. 141-152.

9. REFERENCES

- Tkeshelashvili LK, Shearman CW, Zakour RA, et al. 1980. Effects of arsenic, selenium, and chromium on the fidelity of DNA synthesis. *Cancer Res* 40:2455-2460.
- Torres MA, Verdoy J, Alegrí A, et al. 1999. Selenium contents of human milk and infant formulas in Spain. *Sci Total Environ* 228:185-192.
- *Tracy ML, Möller G. 1990. Continuous flow vapor generation for inductively coupled argon plasma spectrometric analysis: Part. 1. Selenium. *J Assoc Anal Chem* 73(3):457-462.
- TRI93. 1995. Toxic Release Inventory. Washington, DC: U.S. Environmental Protection Agency, Office of Toxic Substances.
- TRI98. 2001. Toxic Chemical Release Inventory. Bethesda, MD: National Library of Medicine, National Toxicology Information Program.
- *TRI00. 2002. TRI explorer: Providing access to EPA's toxics release inventory data. Washington, DC: Office of Information Analysis and Access. Offices of Environmental Information. U.S. Environmental Protection Agency. Toxic Release Inventory. <http://www.epa.gov/triexplorer/>. April 27, 2001.
- *Tsunoda M, Johnson VJ, Sharma RP. 2000. Increase in dopamine metabolites in murine striatum after oral exposure to inorganic but not organic form of selenium. *Arch Environ Contam Toxicol* 39:32-37.
- *Tsunami H, Okawa K, Hosoya T. 1960. Experimental selenium poisoning. Part 1. The influence of absorbed selenium on the physical activities of young animals (mice). *Yokohama Med Bull* 11:368-396.
- Turan B, Fliss H, Désilets M. 1997. Oxidants increase intracellular free Zn²⁺ concentration in rabbit ventricular myocytes. *Am J Physiol* 272(5 Pt 20):H2095-2106.
- *Turan B, Hotomaroğlu Ö, Kilic M, et al. 1999a. Cardiac dysfunction induced by low and high diet antioxidant levels comparing selenium and vitamin E in rats. *Regul Toxicol Pharmacol* 29:142-150.
- *Turan B, Saran Y, Can B, et al. 1999b. Effect of high dietary selenium on the ultrastructure of cardiac muscle cells in the rabbit. *Med Sci Res* 27:795-799.
- Turner JC, Osborn PJ, McVeagh SM. 1990. Studies on selenate and selenite absorption by sheep ileum using an everted sac method and an isolated, vascularly perfused system. *Comp Biochem Physiol [A]* 95(2):297-301.
- *Ueda H, Kuroda K, Endo G. 1997. The inhibitory effect of selenium on induction of tetraploidy by dimethylarsinic acid in Chinese hamster cells. *Anticancer Res* 17:1939-1944.
- Ullrey DE. 1987. Biochemical and physiological indicators of selenium status in animals. *J Anim Sci* 65:1712-1726.
- Ullrey DE. 1992. Basis for regulation of selenium supplements in animal diets. *J Anim Sci* 70(12):3922-3927.
- *Underwood EJE. 1977. Trace elements in human and animal nutrition. 4th ed. New York, NY: Academic Press, 302-346.

9. REFERENCES

- *Urano T, Imura N, Naganuma A. 1997. Inhibitory effect of selenium on biliary secretion of methyl mercury in rats. *Biochem Biophys Res Commun* 238:862-867.
- Uria O, Estela JM, Cerda V, et al. 1990. A comparative study of a number of methods for sensitive selenium determination in waters and fodder correctors. *J Environ Sci Health. Part A - Environ Sci Eng* 25(4).
- Ursini F, Bindoli A. 1987. The role selenium peroxidases in the protection against oxidative damage of membranes. *Chem Phys Lipids* 44:255-276.
- Usami M, Ohno Y. 1996. Teratogenic effects of selenium compounds on cultured postimplantation rat embryos. *Teratog Carcinog Mutagen* 16:27-36.
- Usami M, Tabata H, Ohno Y. 1999a. Effects of ascorbic acid on selenium teratogenicity in cultured rat embryos. *Toxicol Lett* 105:123-128.
- Usami M, Tabata H, Ohno Y. 1999b. Effects of glutathione depletion on selenite- and selenate-induced embryotoxicity in cultured rat embryos. *Teratog Carcinog Mutagen* 19:257-266.
- USBM. 1988. Minerals yearbook. Vol. 1. United States Bureau of Mines, 29-49.
- USBR. 1986. Final Environmental Impact Statement: Kesterson Program. Sacramento, CA: U.S. Bureau of Reclamation, Mid-Pacific Region, in cooperation with U.S. Fish and Wildlife Service and U.S. Army Corps of Engineers.
- USDA. 1936. Toxicity of food containing selenium as shown by its effect on the rat. U.S. Department of Agriculture Technical Bulletin 534:1-25.
- USDA. 1938. Selenium occurrence in certain soils in the United States with a discussion. U.S. Department of Agriculture Technical Bulletin No. 601:74.
- USDA. 1941. Selenium occurrence in certain soils in the United States with a discussion. U.S. Department of Agriculture Technical Bulletin No. 783:26.
- USDA. 1961. Selenium content in soils. *Agriculture Handbook* 200. Washington, DC: U.S. Department of Agriculture, 27-34.
- USGS. 2001. Selenium. U.S. Geological Survey, Mineral Commodity Summaries.
- *USGS. 2002. Selenium. U.S. Geological Survey, Mineral Commodity Summaries. <http://minerals.usgs.gov/minerals/pubs/commodity/selenium/830400.pdf>.
- Vadgama JV, Wu Y, Shen D, et al. 2000. Effect of selenium in combination with adriamycin or taxol on several different cancer cells. *Anticancer Res* 20:1391-1414.
- Vaessen HA, Van Ooik A. 1987. Collaborative test of the fluorimetric determination of selenium in a test solution, milk powder, and bovine liver. *Z Lebensm Unters Forsch* 185:468-471.
- *Valentine JL, Faraji B, Kang HK. 1988. Human glutathione peroxidase activity in cases of high selenium exposures. *Environ Res* 45:16-27.

9. REFERENCES

- *Valentine JL, Kang HK, Dang P-M, et al. 1980. Selenium concentrations and glutathione peroxidase activities in a population exposed to selenium via drinking water. *J Toxicol Environ Health* 6:731-736.
- *Valentine JL, Kang MK, Spivey GH. 1978. Selenium in human blood, urine, and hair in response to exposure via drinking water. *Environ Res* 17:347-355.
- van den Brandt PA, Goldbohm RA, van't Veer P, et al. 1993a. A prospective cohort study on toenail selenium levels and risk of gastrointestinal cancer. *J Natl Cancer Inst* 85(3):224-229.
- van den Brandt PA, Goldbohm RA, van't Veer P, et al. 1993b. Predictors of toenail selenium levels in men and women. *Cancer Epidemiol Biomarkers Prev* 2(2):107-112.
- *van der Lelie D, Regniers L, Borremans B, et al. 1997. The VITOTOX test, an SOS bioluminescence *Salmonella typhimurium* test to measure genotoxicity kinetics. *Mutat Res* 389:279-290.
- *Vanderpas JB, Contempre B, Duale NL, et al. 1990. Iodine and selenium deficiency associated with cretinism in Northern Zaire. *Am J Clin Nutr* 53:1087-1093.
- Van Gossum A, Closset P, Noel E, et al. 1996. Deficiency in antioxidant factors in patients with alcohol-related chronic pancreatitis. *Dig Dis Sci* 41(6):1225-1231.
- van Niekerk FE, Cloete SWP, Heine EWP, et al. 1996. The effect of selenium supplementation during the early post-mating period on embryonic survival in sheep. *J SAfr Vet Assoc* 67(4):209-213.
- *Van Noord PAH, Maas MJ, De Bruin M. 1992. Nail keratin as monitor-tissue for selenium exposure. *Trace Elements in Medicine* 9(4):203-208.
- Van Rij AM, Thomson CD, McKenzie JM, et al. 1979. Selenium deficiency in total parenteral nutrition. *Am J Clin Nutr* 32:2076-2085.
- *Van Vleet JF, Meyer KB, Olander HJ. 1974. Acute selenium toxicosis induced in baby pigs by parenteral administration of selenium-vitamin E preparations. *J Am Vet Med Assoc* 165:543-547.
- *van't Veer P, van der Wielen RP, Kok FJ, et al. 1990. Selenium in diet, blood, and toenails in relation to breast cancer: A case control study. *Am J Epidemiol* 131(6):987-994.
- Vasconcellos MBA, Bode P, Ammerlaan AK, et al. 2001. Multielemental hair composition of Brazilian Indian populational groups by instrumental neutron activation analysis. *J Radioanal Nucl Chem* 249(2):491-494.
- Vendeland SC, Beilstein MA, Yeh J-Y, et al. 1995. Rat skeletal muscle selenoprotein W: cDNA clone and mRNA modulation by dietary selenium. *Proc Natl Acad Sci U S A* 92:8749-8753.
- *Vendeland SC, Deagen JT, Whanger PD. 1992. Uptake of selenotrisulfides of glutathione and cysteine by brush border membranes from rat intestines. *J Inorg Biochem* 47:131-140.
- *Vendeland SC, Deagan JT, Butler JA, et al. 1994. Uptake of selenite, selenomethionine and selenate by brush border membrane vesicles isolated from rat small intestine. *BioMetals* 7:305-312.

9. REFERENCES

- Vermeulen NP, Baldew GS, Los G, et al. 1993. Reduction of cisplatin nephrotoxicity by sodium selenite. Lack of interaction at the pharmacokinetic level of both compounds. *Drug Metab Dispos Biol Fate Chem* 21(1):30-36.
- Vernie LN. 1984. Selenium in carcinogenesis. *Biochim Biophys Acta* 738:203-217.
- Vežina D, Bleau G. 1988. High-performance liquid chromatography of selenium in biological samples. *J Chromatogr* 426(2):385-391.
- Vežina D, Belanger R, Bleau G. 1990. Microdetermination of selenium in protein fractions isolated by analytical methods. *Biol Trace Elem Res* 24(2):153-162.
- Vézina D, Mauffette F, Roberts KD, et al. 1996. Selenium-vitamin E supplementation in infertile men. *Biol Trace Elem Res* 53:65-83.
- Viccellio P, Bania T, Brent J, et al., eds. 1998. *Emergency toxicology*. 2nd ed. New York, NY: Lippincott-Raven, 519.
- *Vieira I, Sonnier M, Cresteil T. 1996. Developmental expression of *CYP2E1* in the human liver: Hypermethylation control of gene expression during the neonatal period. *Eur J Biochem* 238:476-483.
- *Vien SH, Fry RC. 1988. Ultrasensitive, simultaneous determination of arsenic, selenium, tin, and antimony in aqueous solution by hydride generation gas chromatography with photoionization detection. *Anal Chem* 60:465-472.
- *Vinceti M, Cann CA, Calzolari E, et al. 2000a. Reproductive outcomes in a population exposed long-term to inorganic selenium via drinking water. *Sci Total Environ* 250:1-7.
- *Vinceti M, Guidetti D, Pinotti M, et al. 1996. Amyotrophic lateral sclerosis after long-term exposure to drinking water with high selenium content. *Epidemiology* 7(5):529-532.
- *Vinceti M, Rothman KJ, Bergomi M, et al. 1998. Excess melanoma incidence in a cohort exposed to high levels of environmental selenium. *Cancer Epidemiol Biomarkers Prev* 7:853-856.
- Vinceti M, Rovesti S, Bergomi M, et al. 2000b. The epidemiology of selenium and human cancer. *Tumori* 86:105-118.
- *Vinceti M, Rovesti S, Gabrielli C, et al. 1995. Cancer mortality in a residential cohort exposed to environmental selenium through drinking water. *J Clin Epidemiol* 48(9):1091-1097.
- *Virtamo J, Valkeila E, Alfthan G, et al. 1987. Serum selenium and risk of cancer. A prospective follow-up of nine years. *Cancer* 60:145-148.
- *Viitak A, Hödrejärvi H, Treumann M. 1995. Concentration of microelements in the biomedica between the mother and the newborn. *44(2/3):212-217*.
- *Volgarev MN, Tschertes LA. 1967. Further studies in tissue changes associated with sodium selenate. In: Muth OH, ed. *Selenium in biomedicine*. Proceedings of the First International Symposium, Oregon State University. Westport, CT: AVI Publishing Co., 179-184.

9. REFERENCES

- Wahba ZZ, Coogan TP, Rhodes SW, et al. 1993. Protective effects of selenium on cadmium toxicity in rats: Role of altered toxicokinetics and metallothionein. *J Toxicol Environ Health* 38(2):171-182.
- *Wahlstrom RC, Olson OE. 1959a. The relation of pre-natal and pre-weaning treatment to the effect of arsanilic acid on selenium poisoning in weanling pigs. *J Anim Sci* 18:579-582.
- *Wahlstrom RC, Olson OE. 1959b. The effect of selenium on reproduction in swine. *J Anim Sci* 18:141-145.
- Wang D, Alfthan G, Aro A, et al. 1992a. Selenium in precipitation and its effect on infiltration water and groundwater. *J Trace Elem Exp Med* 5(2):144.
- Wang GA, Zhou RH, Sun SZ, et al. 1979. Differences between blood selenium concentrations of residents in Keshan disease-affected and non-affected areas. Correlation between selenium content. *Chin Prev Med J* 13:204-206.
- Wang RD, Wang CS, Feng ZH, et al. 1992b. Investigation on the effect of selenium on T lymphocyte proliferation and its mechanisms. *J Tongji Med Univ* 12(1):33-38.
- Wang Z, Hess JL, Bunce GE. 1992. Deferoxamine effect on selenite-induced cataract formation in rats. *Invest Ophthalmol Vis Sci* 33(8):2511-2519.
- Wasowicz W, Gromadzinska J, Szram K, et al. 2001. Selenium, zinc, and copper concentrations in the blood and milk of lactating women. *Biol Trace Elem Res* 79(3):221-233.
- Watanabe C, Ohba T, Nakahara H, et al. 1988. Modification of lethal, hypothermic and hyperphagic effects of sodium selenite by reduced glutathione in mice. *Toxicology* 51(2-3):167-176.
- Watanabe C, Yin K, Kasanuma Y, et al. 1999a. *In utero* exposure to methylmercury and Se deficiency converge on the neurobehavioral outcome in mice. *Neurotoxicol Teratol* 21(1):83-88.
- Watanabe C, Yoshida K, Kasanuma Y, et al. 1999b. *In utero* methylmercury exposure differentially affects the activities of selenoenzymes in the fetal mouse brain. *Environ Res* 80:208-214.
- Waterlow JC, Garrow JS, Millward OH. 1969. The turnover of [⁷⁵Se] selenomethionine in infants and rats measured in a whole body counter. *Clin Sci* 36:489-504.
- *Watkinson JH. 1981. Changes of blood selenium in New Zealand adults with time and importation of Australian wheat. *Am J Clin Nutr* 34:936-942.
- *Weast RC, ed. 1988. *CRC handbook of chemistry and physics*. 69th ed. Boca Raton, FL: CRC Press Incorporated, B-124, B-126, B-132.
- Weisberg SB, Wilson HT, Heimbuch DG, et al. 2000. Comparison of sediment metal: Aluminum relationships between the eastern and Gulf coasts of the United States. *Environ Monit Assess* 61:373-385.
- *Weiss G, ed. 1986. *Hazardous chemicals data book*. 2nd ed. New Jersey: Noyes Data Corporation, 884-923.

9. REFERENCES

- Weiss SL, Sunde RA. 1998. *Cis*-acting elements are required for selenium regulation of glutathione peroxidase-1 mRNA levels. *RNA* 4:816-827.
- *Weissman SH, Cuddihy RG, Medinsky MA. 1983. Absorption, distribution, and retention of inhaled selenious acid and selenium metal aerosols in beagle dogs. *Toxicol Appl Pharmacol* 67:331-337.
- Welch WH, Howell WH. 1995. Toenail selenium level and lung cancer among men and women in a high seleniferous region of the USA. *Am J Epidemiol* 141:270.
- *Welsh EA, Holden JM, Wolf WR, et al. 1981. Selenium in self-selected diets of Maryland residents. *J Am Diet Assoc* 79:277-285.
- *Welz B, Melcher M. 1985. Decomposition of marine biological tissues for determination of arsenic, selenium, and mercury using hydride-generation and cold-vapor atomic absorption spectrometries. *Anal Chem* 57:427-431.
- *Welz B, Verlinden M. 1986. IUPAC interlaboratory trial - selenium determination in human body fluids using hydride-generation atomic absorption spectrometry. *Acta Pharmacol Toxicol* 59:577-580.
- Wendel A. 1997. Future trends of selenium in clinical applications. *Biomed Environ Sci* 10:359-362.
- Wendel A, Otter R. 1987. Alterations in the intermediary metabolism of selenium-deficient mice. *Biochim Biophys Acta* 925:94-100.
- Weres O, Bowman HR, Goldstein A, et al. 1990. The effect of nitrate and organic matter upon mobility of selenium in groundwater and in a water treatment process. *Water Air Soil Pollut* 49(3-4):251-272.
- Wesley RE, Collins JW. 1982. Pseudopterygium from exposure to selenium dioxide. *Ann Ophthalmol* 14:588-589.
- *West DW. 1967. Selenium containing inorganics in paper may play cancer role. *Chem Eng News* 45:12.
- West DW, Slattery ML, Robison LM, et al. 1991. Adult dietary intake and prostate cancer risk in Utah: A case control study with special emphasis on aggressive tumors. *Cancer Causes Control* 2(2):85-94.
- *West JR, Smith HW, Chasis H. 1948. Glomerular filtration rate, effective renal blood flow, and maximal tubular excretory capacity in infancy. *J Pediatr* 32:10-18.
- *Wester P, Brune D, Nordberg G. 1981. Arsenic and selenium in lung, liver, and kidney tissue from dead smelter workers. *Br J Ind Med* 38:179-184.
- *Whanger P. 1981. Selenium and heavy metal toxicity. *Selenium Biol Med [Proc Int Symp]* 2:230-255.
- Whanger PD. 1985. Metabolic interactions of selenium with cadmium, mercury, and silver. *Adv Nutr Res* 7:221-250.
- *Whanger PD. 1989. China, a country with both selenium deficiency and toxicity: Some thoughts and impressions. *J Nutr* 119(9):1236-1239.

9. REFERENCES

- *Whanger PD, Pedersen ND, Hatfield J, et al. 1976. Absorption of selenite and selenomethionine from ligated digestive tract segments in rats (39531). *Proc Soc Exp Biol Med* 153:295-297.
- *Whanger P, Vendeland S, Park Y-C, et al. 1996. Metabolism of subtoxic levels of selenium in animals and humans. *Ann Clin Lab Sci* 26(2):99-113.
- *White AF, Benson SM, Yee AW, et al. 1991. Groundwater contamination at the Kesterson Reservoir, California. 2. Geochemical parameters influencing selenium mobility. *Water Res Research* 27(6):1085-1098.
- *Whiting FF, Wei L, Stich HF. 1980. Unscheduled DNA synthesis and chromosome aberrations induced by organic selenium compounds in the presence of glutathione. *Mutat Res* 78:159-169.
- *WHO. 1987. Environmental Health Criteria 58. Selenium. Geneva, Switzerland: World Health Organization.
- WHO. 1996. Selenium. In: Trace elements in human nutrition and health. Geneva, Switzerland: World Health Organization.
- *WHO. 2001. Water, sanitation and health: Guidelines for drinking water quality. Geneva, Switzerland: World Health Organization.
http://www.who.int/water_sanitation...1th/GDWQ/Chemicals/seleniumfull.htm. February 22, 2001.
- Wichtel JJ, Craigie AL, Freeman DA, et al. 1996. Effect of selenium and iodine supplementation on growth rate and on thyroid and somatotrophic function in dairy calves at pasture. *J Dairy Sci* 79:1865-1872.
- *Widdowson EM, Dickerson JWT. 1964. Chemical composition of the body. In: Comar CL, Bronner F, eds. Mineral metabolism: An advanced treatise. Volume II: The elements Part A. New York, NY: Academic Press.
- *Wiedmeyer RH, May TW. 1993. Storage characteristics of three selenium species in water. *Arch Environ Contam Toxicol* 25:67-71.
- *Wilber CG. 1980. Toxicology of selenium: A review. *Clin Toxicol* 17:171-230.
- Willett WC. 1986. Selenium, vitamin E, fiber, and the incidence of human cancer: An epidemiological perspective. *Adv Exp Med Biol* 206:27-34.
- *Willett W, Polk B, Morris S, et al. 1983. Prediagnostic serum selenium and risk of cancer. *Lancet* 2:130-134.
- Willhite CC. 1993. Selenium teratogenesis. Species-dependent response and influence on reproduction. *Ann N Y Acad Sci* 678:169-177.
- *Willhite CC, Ferm VH, Zeise L. 1990. Route-dependent pharmacokinetics, distribution, and placental permeability of organic and inorganic selenium in hamsters. *Teratology* 42(4):359-371.
- *Willhite CC, Hawkes WC, Omaye ST, et al. 1992. Absorption, distribution and elimination of selenium as L-selenomethionine in non-human primates. *Food Chem Toxicol* 30(11):903-913.

9. REFERENCES

- Williams KT, Byers HG. 1935. Occurrence of selenium in the Colorado River and some of its tributaries. *Indust Eng Chem* 7:431-432.
- Wilson AC, Thompson HJ, Schedin PJ, et al. 1992. Effect of methylated forms of selenium on cell viability and the induction of DNA strand breakage. *Biochem Pharmacol* 43(5):1137-1141.
- *Wilson HM. 1962. Selenium oxide poisoning. *N C Med J* 23:73-75.
- Wilson TM, Drake TR. 1982. Porcine focal symmetrical poliomyelomalacia. *Can J Comp Med* 46:218-220.
- *Wilson TM, Cramer PG, Owen RL, et al. 1989. Porcine focal symmetrical poliomyelomalacia: Test for an interaction between dietary selenium and niacin. *Can J Vet Res* 53(4):454-461.
- *Wilson TM, Hammerstedt RH, Palmer IS, et al. 1988. Porcine focal symmetrical poliomyelomalacia: experimental reproduction with oral doses of encapsulated sodium selenite. *Can J Vet Res* 52(1):83-88.
- *Wilson TM, Scholz RW, Drake TR. 1983. Selenium toxicity and porcine focal symmetrical poliomyelomalacia: Description of a field outbreak and experimental reproduction. *Can J Comp Med* 47:412-421.
- *Windholz M, Budavari S, Blumetti RF, et al., eds. 1996. *The Merck index: An encyclopedia of chemicals, drugs, and biologicals*. 12th ed. Whitehouse Station, NJ: Merck & CO.
- Witte ST, Will LA, Olson CR, et al. 1993. Chronic selenosis in horses fed locally produced alfalfa hay. *J Am Vet Med Assoc* 202(3):406-409.
- Witting LA, Howrith MK. 1964. Effects of dietary selenium, methionine, fat level, and tocopherol on rat growth. *J Nutr* 84:351-357.
- *Wlodarczyk B, Biernacki B, Minta M, et al. 1995. Male golden hamster in male reproductive toxicology testing: Assessment of protective activity of selenium in acute cadmium intoxication. *Bull Environ Contam Toxicol* 54:907-912.
- Wood M. 1989. Selenium-loving plants cleanse the soil. *Agri Res* 37(5):8-9.
- Woshner VM, O'Hara TM, Bratton GR, et al. 2001. Concentrations and interactions of selected essential and non-essential elements in ringed seals and polar bears of Arctic Alaska. *J Wildl Dis* 37(4):711-721.
- *Woutersen RA, Appel MJ, Van Garderen-Hoetmer A. 1999. Modulation of pancreatic carcinogenesis by antioxidants. *Food Chem Toxicol* 37:981-984.
- Wu L, Lanfear J, Harrison PR. 1995a. The selenium metabolite selenodiglutathione induces cell death by a mechanism distinct from H₂O₂ toxicity. *Carcinogenesis* 16(7):1579-1584.
- Wu L, McGarry I, Lanfear J, et al. 1995b. Altered selenium-binding protein levels associated with selenium resistance. *Carcinogenesis* 16(11):2819-2824.

9. REFERENCES

- Wu L, Van Mantgem PJ, Guo X. 1996. Effects of forage plant and field legume species on soil selenium redistribution, leaching, and bioextraction in soils contaminated by agricultural drain water sediment. *Arch Environ Contam Toxicol* 31:329-338.
- *Wu SH, Oldfield JE, Whanger PD, et al. 1973. Effect of selenium, vitamin E, and antioxidants on testicular function in rats. *Biol Reprod* 8(5):625-629.
- *Yaeger MJ, Neiger RD, Holler L, et al. 1998. The effect of subclinical selenium toxicosis on pregnant beef cattle. *J Vet Diagn Invest* 10:268-273.
- *Yamada H, Miyamura T, Yasuda A, et al. 1994. Determination of trimethylselenonium ion and its behavior in soil. *Soil Science Plant Nutrition* 40(1):49-56.
- Yang FL, Chen Y-S, Weaver CV. 2002. Toxic level of selenium induces hepatic injury and biliary ductule apoptosis in rats. *FASEB J* 16(5):A994.
- Yang G, Gu L, Zhou R, et al. 1989. Studies of human maximal and minimal safe intake and requirements of selenium. In: Wendel A, ed. *Selenium in biology and medicine*. New York, NY: Springer-Verlag, 224-228.
- Yang GQ. 1984. Research on selenium-related problems in human health in China. *Proc 3rd Int Symp Biol Med Beijing*, 9-32.
- Yang GQ. 1985. Keshan disease: An endemic selenium-related deficiency disease. In: Chandra, ed. *Trace Elem Nutr Child Nestle Nutr*. Vol. 8. New York, NY: Raven Press, 273-290.
- Yang G-Q, Xia Y-M. 1995. Studies on human dietary requirements and safe range of dietary intakes of selenium in China and their application in the prevention of related endemic diseases. *Biomed Environ Sci* 8:187-201.
- *Yang G, Zhou R. 1994. Further observations on the human maximum safe dietary selenium intake in a seleniferous area of China. *J Trace Elem Electrolytes Health Dis* 8:159-165.
- *Yang G, Ge K, Chen J, et al. 1988. Selenium-related endemic diseases and the daily selenium requirement of humans. In: Bourne GH, ed. *World review of nutrition and dietetics. Sociological and medical aspects*. Vol. 55. Basel: Karger, 98-152.
- *Yang G, Wang S, Zhou R, et al. 1983. Endemic selenium intoxication of humans in China. *Am J Clin Nutr* 37:872-881.
- *Yang G, Yin S, Zhou R, et al. 1989a. Studies of safe maximal daily dietary Se-intake in a seleniferous area in China. II. Relation between Se-intake and the manifestation of clinical signs and certain biochemical alterations in blood and urine [published erratum appears in *J Trace Elem Electrolytes Health Dis* 1989 Dec 3(4):250]. *J Trace Elem Electrolytes Health Dis* 3(3):123-130.
- *Yang G, Zhou R, Yin S, et al. 1989b. Studies of safe maximal daily dietary selenium intake in a seleniferous area in China. I. Selenium intake and tissue selenium levels of the inhabitants. *J Trace Elem Electrolytes Health Dis* 3(2):77-87.

9. REFERENCES

- Yang GQ, Chen JS, Wen ZM, et al. 1984. The role of selenium in Keshan disease. In: Drapper G, ed. *Advances in nutrition research*. Vol. 6. New York, NY: Plenum Press, 203-231.
- Yang GQ, Wang SZ, Zhou RH, et al. 1981. Investigation on loss of hair and nail disease of unknown etiology--endemic selenosis. *Acta Acad Med Sin* 3:1-6.
- *Yiin S-J, Chern C-L, Sheu J-Y, et al. 1999. Cadmium induced lipid peroxidation in rat testes and protection by selenium. *BioMetals* 12:353-359.
- Yin SA, Sato I, Hosokawa Y, et al. 1991. The necessity of dietary vitamin B6 to selenium biopotency for tissue selenium and glutathione peroxidase in rats. *J Nutr Sci Vitaminol (Tokyo)* 37(5):509-516.
- Yin TA, Su SZ, Wang SZ, et al. 1979. Difference of the amounts of selenium excretion in urine in children of Keshan disease-affected and non-affected areas. *Chin Prev Med J* 132:207-210.
- *Yonemoto J, Hongo T, Suzuki T, et al. 1984. Toxic effects of selenodiglutathione on pregnant mice. *Toxicol Lett* 21:35-39.
- Yoshida M, Fukumoto M, Kishimoto T, et al. 1993. Effects of zinc, selenium, and calcium on the nephrotoxicity of cadmium in primary cultures of rat renal proximal epithelial cells. *Biol Trace Elem Res* 36(3):219-227.
- Yoshida M, Sunaga M, Hara I. 1990. Selenium status in workers handling aromatic nitro-amino compounds in a chemical factory. *J Toxicol Environ Health* 31(1):1-10.
- *Yoshizawa K, Willett WC, Morris SJ, et al. 1998. Study of prediagnostic selenium level in toenails and the risk of advanced prostate cancer. *J Natl Cancer Inst* 90(16):1219-1224.
- *Young J, Christian GD. 1973. Gas-chromatographic determination of selenium. *Anal Chim Acta* 65:127.
- Young JD, Crowley C, Tucker EM. 1981. Haemolysis of normal and glutathione-deficient sheep erythrocytes by selenite and tellurite. *Biochem Pharmacol* 30:2527-2530.
- *Young VR, Nahapetian A, Janghorbani M. 1982. Selenium bioavailability with reference to human nutrition. *Am J Clin Nutr* 35:1076-1088.
- Yu Q, Cerklewski FL, Whanger PD, et al. 1992. Effect of dietary fluoride on selenite toxicity in the rat. *Biol Trace Elem Res* 34(3):265-278.
- Yu SY, Zhu YJ, Li WG, et al. 1991. A preliminary report on the intervention trials of primary liver cancer in high-risk populations with nutritional supplementation of selenium in China. *Biol Trace Elem Res* 29(3):289-294.
- *Yukawa M, Suzuki-Yasumoto M, Amano K, et al. 1980. Distribution of trace elements in the human body determined by neutron activation analysis. *Arch Environ Health* 35:36-44.
- Zachara BA, Wardak C, Didkowski W, et al. 1993. Changes in blood selenium and glutathione concentrations and glutathione peroxidase activity in human pregnancy. *Gynecol Obstet Invest* 35(1):12-17.

9. REFERENCES

- Zagrodzki P, Szmigiel H, Ratajczak R, et al. 2000. The role of selenium in iodine metabolism in children with goiter. *Environ Health Perspect* 108(1):67-71.
- Zalgeviciene V, Zukiene J, Grazeliene G, et al. 1998. Embryotoxicity and teratogenicity of some derivatives of chloroethylaminophenylacetic acid. *Pathol Oncol Res* 4(1):27-29.
- *Zeisler R, Harrison SH, Wise S. 1984. Trace elements in human livers using quality control in the complete analytical process. *Biol Trace Elem Res* 6:31-49.
- *Zhang P, Ganje TJ, Page AL, et al. 1988. Growth and uptake of selenium by Swiss chard in acid and neutral soils. In: Tanji KK, Valopp L, Woodring RC, eds. *Selenium contents in animal and human food crops grown in California*. Cooperative Extension University of California, Division of Agriculture and Natural Resources. Publication 3330, 13-18.
- Zhang P, Ota R, Omaye ST, et al. 1997. Effects of mercury on selenoproteins in rats fed different levels of selenium. *Environ Nutr Interact* 1:39-52.
- Zhang X, Yang G, Gu L. 1991. Detoxification mechanism of methionine and vitamin E in selenium toxicity in rats. *Acta Nutrimenta Sinica* 13(1):32-38.
- Zhang Y, Xiao H. 1998. Antagonistic effect of calcium, zinc and selenium against cadmium induced chromosomal aberrations and micronuclei in root cells of *Hordeum vulgare*. *Mutat Res* 420:1-6.
- Zhang YQ, Frankenberger WT, Moore JN. 1999. Effect of soil moisture on dimethylselenide transport and transformation to nonvolatile selenium. *Environ Sci Technol* 33:3415-3420.
- Zhang Z, Yang X, Mu W, et al. 1999. [Selenoproteins in rats with chronic selenium intoxication]. *Weisheng Yanjiu* 28(3):155-157. (Chinese).
- Zhang Z-W, Moon C-S, Shimbo S, et al. 2000. Further reduction in lead exposure in women in general populations in Japan in the 1990s, and comparison with levels in east and south-east Asia. *Int Arch Occup Environ Health* 73:91-97.
- Zheng J, Kosmus W. 1996. Simultaneous speciation of arsenic and selenium compounds by ion-chromatography with inductively coupled plasma mass spectrometry as elemental specific detector. *J Liq Chrom & Rel Technol* 21(18):2831-2839.
- *Zhou H, Lui J. 1997. The simultaneous determination of 15 toxic elements in foods by ICP-MS. *Atom Spectrosc* 18(4):115-118.
- Zhou R, Gu L, Wan H, et al. 1996. [Selenium metabolism in rats with chronic selenium intoxication]. *Weisheng Yanjiu* 25(1):53-56. (Chinese).
- *Zhu L. 1981. Keshan Disease. In: McHowell J, ed., *Proc TEMA-4*. Australian Academy of Sciences, Canberra, 514-517.
- Zhu L-Z, Piao J-H, Xia Y, et al. 1989. Biochemical studies on selenium and Keshan Disease - The oxidant stress and defence capacity in blood of selenium-deficient children. In: Wendel A, ed. *Selenium in biology and medicine*. New York, NY: Springer-Verlag, 118-121.

9. REFERENCES

Zhu Z, Jiang W, Ganther HE, et al. 2000. *In vitro* effects of Se-allylselenocysteine and Se-propylselenocysteine on cell growth, DNA integrity, and apoptosis. *Biochem Pharmacol* 60:1467-1473.

*Ziegler EE, Edwards BB, Jensen RL, et al. 1978. Absorption and retention of lead by infants. *Pediatr Res* 12:29-34.

*Zierler S, Theodore M, Cohen A, et al. 1988. Chemical quality of maternal drinking water and congenital heart disease. *Int J Epidemiol* 17(3):589-594.

*Zi-Jian Jie Z, An P. 1992. Metabolic differences and similarities of selenium in blood and brain of the rat following the administration of different selenium compounds. *Biol Trace Elem Res* 33:135-143.