

บรรณานุกรม

กรมควบคุมคุณภาพคุมมลพิษ 2541. สารหนู. กองจัดการสารอันตรายและการของเสีย กระทรวง
วิทยาศาสตร์ เทคโนโลยีและสิ่งแวดล้อม

กรมควบคุมมลพิษ. 2546. สถานะการณ์โลหะหนักในตะกอนดินและเนื้อเยื่ออสุรน้ำบริเวณชายฝั่ง
ทะเลของประเทศไทย. กรมควบคุมมลพิษ กระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม

กรมควบคุมมลพิษ. 2555. แผนจัดการมลพิษ พ.ศ. 2555 – 2559. กรมควบคุมมลพิษ กระทรวง
ทรัพยากรธรรมชาติและสิ่งแวดล้อม

กรมส่งเสริมคุณภาพสิ่งแวดล้อม รายงานฉบับสมบูรณ์เรื่องการประเมินความปลอดภัยจากการ
ได้รับสารหนูของประชาชนในอำเภอพิบูลย์ จังหวัดนครศรีธรรมราช 2548. กรม
ส่งเสริมคุณภาพสิ่งแวดล้อม กระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม

ชาลิต วิทยานนท์. จรัลราดา บรรณสูต และจาดุจินต์ นาีตະภู. 2540. ความหลากหลายนิodicของปลาหน้า
จีดในประเทศไทย. สำนักงานนโยบายและแผนสิ่งแวดล้อม, กรุงเทพฯ. 102 หน้า.

ประกาศกระทรวงสาธารณสุข. 2546. ประกาศกระทรวงสาธารณสุข (ฉบับที่ 273) เรื่อง
มาตรฐานอาหารที่มีสารปนเปื้อน (ฉบับที่ 2). ราชกิจจานุเบกษา เล่ม 120 ตอนพิเศษ 77 ง
วันที่ 16 กรกฎาคม 2546.

สำนักงานคณะกรรมการสุขภาพแห่งชาติ 2553. เปลี่ยนแปลง ชะตากรรมของเมืองเลยภายหลัง
การเข้ามาของแม่น้ำโขงทองคำ. บริษัท แปลนพรีนติ้ง จำกัด: กรุงเทพมหานคร. 46 หน้า.

สำนักงานมาตรฐานสินค้าเกษตรและอาหารแห่งชาติ (มกอช). ข้อมูลการบริโภคอาหารของประเทศไทย.
โรงพยาบาลจุฬาลงกรณ์. 2549.

ชนลวรรณ วุ่นพันธ์. 2551. ปริมาณสารหนูในตัวอย่างทิน พื้นที่เชียงของ จังหวัดเชียงรายและ
พะเยา. กองวิเคราะห์และตรวจสอบทรัพยากรธรรมชาติ กรมทรัพยากรธรรมชาติ

- Abdul Q.S., Tasneem G.K., Jameel A.B., Muhammad B.A., Hassan I.A., Ghulam A.K., Sumaira K., and Mohammad, K.J. 2009. Hazardous impact of arsenic on tissues of same fish species collected from two ecosystem. *J Hazardous Mater.* 167: 511–515.
- Ackerman A.H., Creed P.A., Frick, M.W., Schwegel C.A., Creed J.T., Heitkemper, D.T., and Vela N.P. 2005. Comparison of a chemical and enzymatic extraction of arsenic from rice and an assessment of the arsenic absorption from contaminated water by cooked rice. *Environ Sci Technol.* 39: 5241–5246.
- Agency for Toxic Substances and Disease Registry (ATSDR). 2007. *Toxicological profile for arsenic*. Agency for Toxic Substances and Disease Registry, U.S. Department of Health and Human Services.
- Badal K.M., and Kazuo T.S. 2002. Arsenic round the world : a review. *Talanta* 58:201–235.
- Bae M., Watanabe C., Inaoka T., Sekiyama M., Sudo N., Bokul M.H. and Ohtsuka, R., 2002. Arsenic in cooked rice in Bangladesh. *Lancet* 360: 1839–1840.
- Blakley B.R., Sisodia C.S., and Mukkur T.K. 1980. The effect of Methylmercury tetraethyl lead, and sodium arsenite on the humoral immune response in mice. *Toxicol Appl Pharmacol.* 52:245–254.
- Bosnir J., Puntranic D., Skes I., Klaric M., Simic S., Zoric I., and Galic, R. 2003. Toxic metals in freshwater fish from the Zagreb area as indicators of environmental pollution. *Collegium Antropol.* 27: 31–39.
- Buchet J.P., Lauwerus R., and Roels H. 1981. Urinary excretion of inorganic arsenic and its Metabolites after repeated ungestion of sodium metaarsenite by volunteers. *Int Arch Occup Environ Health.* 48: 111–118.
- Buschmann, J and Berg, M. 2009. Impact of sulfate reduction on the scale of arsenic contamination in groundwater of the Mekong, Bengal and Red River deltas. *Appl Geochem.* 29:1278–1286.

- Carmignani M., Boscolo P., and Castellino N. 1985. Metabolic fate and cardiovascular effects of arsenic in rats and rabbits chronically exposed to trivalent and pentavalent arsenic. *Arch Toxicol Suppl.* 8:452–455.
- Chang W.C., Chen S.H., Wu H.L., Shi G.Y., Muroto S., and Morita I. 1991. Cytoprotective effect of reduced glutathione in arsenical induced endothelial cell injury. *Toxicology* 69:101–110.
- Clemens, H.P., and Sneed, K.E. 1959. Lethal doses of several commercial chemicals for fingerling channel catfish. U.S. Fish Wild. Serv. Sci. Rep. Fish. NO. 316.
- Concha G., Vogler G., Nermell B., and Native M. 1998. Low-level arsenic excretion in breast milk of native andean women exposed to high levels of arsenic in the drinking water. *Int Arch Occup Environ Health.* 71: 42–46.
- Cubadda F., Raggi A., Zanasi F., and Carcea, M., 2003. From durum wheat to pasta: effect of technological processing on the levels of arsenic, cadmium, lead and nickel – a pilot study. *Food Add Contam.* 20: 353–360.
- Dang H.S., Jaiswal D.D., and Somasundaram S. 1983. Distribution of arsenic in humans tissue and milk. *Sci Total Environ.* 29: 171–175.
- Devesa V., Macho M.L., Jalon M., Urieta I., Munoz O., Suner M.A., Lopez F., Velez D., and Montoro, R. 2001. Arsenic in cooked seafood products: study on the effect of cooking on total and inorganic arsenic contents. *J Agric Food Chem.* 49: 4132–4140.
- Devesa V., Velez D., and Montoro, R. 2008. Effect of thermal treatments on arsenic species contents in food. *Food Chem Toxicol.* 46: 1–8.
- Ersoy B., Yanar Y., Kuckgulmez A., and Celik, M. 2006. Effects of four cooking methods on the heavy metal concentrations of sea bass fillets. *Food Chem.* 99: 748–751.

- Ferm V.H., and Hanlon D.P. 1985. Constant rate exposure of pregnant hamster to arsenate during early gestation. *Environ Res.* 37:425–432.
- Fu Z., Wu F., Mo C., Liu B., Zhu J., Deng Q., Liao H., and Zhang, Y. 2011. Bioaccumulation of antimony, arsenic, and mercury in the vicinities of a large antimony mine, China. *Microchemical J.* 97: 12–19.
- Grandjean P., Weihe P., Needham L.L., Burse V.W., Patterson D.G.J., Sampson E.J., Jorgensen P.J., and Vahter M. 1995. Relation of a seafood diet to mercury, selenium, arsenic, and polychlorinated biphenyl and organochlorine concentrations in human milk. *J Environ Sci Health A: Environ Sci Eng Toxic Hazardous Substance Contr.* 30(4): 921–938.
- Has-Schon E., Bogut I., and Strelec, I. 2006. Heavy metal profile in five species included in human diet, domiciled in the end flow of River Neretva (Croatia). *Arch Environ Contam Toxicol.* 50: 545–551.
- Hood R.D., Baxley M.N., and Harrison W.P. 1979. Evaluation of chromated copper arsenate for teratogenicity. *Teratol.* 19(2): 159–168.
- Hopenhayn-Rich C., Smith A.H., and Goeden H.M. 1993. Human studies do not support the methylation threshold hypothesis for the toxicity of inorganic arsenic. *Environ Res.* 60: 161–177.
- Hughes M.F., Menache M. and Thompson D.J. 1994. Dose-dependent disposition of Sodium arsenite in mice following acute oral exposure. *Fundam Appl Toxicol.* 22: 80–89.
- Hughes M.F. 2002. Arsenic toxicity and potential mechanism of action. *Toxicol Letters.* 137:1–16.
- International Programme on Chemical Safety (IPCS). *Environmental Health Criteria: Arsenic and arsenic compounds.* 2001. International Programme on Chemical Safety. World Health Organization, Geneva.

- Integrated Risk Information System (IRIS). *IRIS summary of inorganic arsenic* [Online]. 1998. Available from: <http://www.cfrpub.epa.gov/ncea/iris>[1998, April 1].
- Irwin R., Mouwerik M.V., Stevens L., Seese M., and Basgman, W. 1997. *Environmental contaminants Encyclopedia*. National Park Service, Water Resources Division, Fort Collins, Colorado, pp. 1–114.
- Jankong P., Chalhoub C., Kienzl, N., Goessler W., Francesconi, KA., and Visoottiviseth, P. 2007. Arsenic accumulation and speciation in freshwater fish living in arsenic-contaminated waters. *Environ Chem.* 4(1): 11–17.
- Jha A.N., Noditi M., Nilsson R., and Natarajan A.T. 1992. Genotoxic effects of sodium arsenite on human cells. *Mutat Res.* 284:215–221.
- Johnson C.R.1978. Herbicide toxicities in the mosquito fish, *Gambusia affinis*. *Proc.R.Soc. Queensl.* 89:25–27.
- Kachinskas D.J., Qin Q., Phillips M.A., and Rice R.H. 1997. Arsenate suppression of human keratinocyte programming. *Mutant Res.* 386(3): 253–261.
- Kaise T., Watanabe C., Sakurai T., and Matsubata, C. 1995. Chemical species of arsenic in fluvial algae, freshwater fish and water in river hayakawa at spa HaKone. *Kankyo Kagaku.* 5: 364–365.
- Ka, S., Maity J.M., Jean J.S., Liu C.C., Liu C.W., Bundschuh J., and Lu H.Y. 2011. Health risks for human intake of aquacultural fish: Arsenic bioaccumulation and contamination. *J Environ Sci Health.* 46: 1266–1273.
- Kerdthep P., Tongyonk L., and Rojanapantip L. 2009. Concentrations of cadmium and arsenic in seafood from Muang district, Rayong province. *J Health Res.* 23: 179–184.
- Koch I. 1998. *Arsenic and antimony species in the terrestrial environment*. BC, Canada: Disseratation. Vancouver: University of British Columbia.

- Koch I., Mcpherson K., Smith P., Easton L., Doe KG., and Reimer KJ. 2007. Arsenic bioaccessibility and speciation in clams and seaweed from a contaminated marine environment. *Mar Pollut Bull.* 54:586–594.
- Laparra JM., Velez D., Barbera R., Farre R., and Montoro R. 2005. Bioavailability of inorganic arsenic in cooked rice: practical aspects for human health risk assessment. *J Agric Food Chem.* 53:8829–8833.
- Laparra JM., Velez D., Montoro R., Barbera R., and Farre R. 2003. Estimation of arsenic bioavailability in edible seaweed by an in vitro digestion method. *J Agric Food Chem.* 51:6080–6085.
- Laparra JM., Velez D., Montoro R., Barbera R., and Farre R. 2004. Bioaccessibility of inorganic arsenic species in raw and cooked *Hizikia fusiforme* seaweed. *Appl Organomet Chem.* 8:662–669.
- Lee O.M., and Barrett J.C. 1985. Comparison of arsenic-induced cell transformation, cytotoxicity, mutation and cytogenetic effects in Syrian hamster embryo cells in culture. *Carcinogenesis.* 6:1421–1426.
- Liu C.W., Liang C.P., Lin K.K., Jang C.S., Wang S.W., Huang Y.K., and Hsuesh, Y.M. 2007. Bioaccumulation of arsenic compounds in aquacultural clams and assessment of potential carcinogenic risks to human health by ingestion. *Chemosphere.* 69: 128–134.
- Mandal B.K., and Suzuki K.T. 2002. Arsenic round the world: a review. *Talanta.* 58:201–235.
- Meador J.P., Ernest D.W., and Kagley A. 2004. Bioaccumulation of arsenic in marine fish and invertebrates from Alaska and California. *Arch Environ Contam Toxicol.* 47: 223–233.
- Munoz O., Velez D., and Montoro R. Optimization of the solubilization, excretion and determination of inorganic arsenic [As(III) + As(V)] in seafood products by acid digestion, solvent extraction and hydride generation atomic absorption spectrometry. 1999. *Analyst.* 124:601–607.

- Nemec M.D., Holson J.F., Farr C.H., and Hood R.D. 1998. Developmental toxicity assessment of arsenic acid in mice and rabbits. *Reprod Toxicol.* 12:647–658.
- Polya DA., Berg M., Gault AG., and Takahashi Y. 2008. Arsenic in ground waters of South-East Asia: with emphasis on Cambodia and Vietnam. *Appl Geochem.* 23: 2968–2975.
- Pomroy C., Charbonneau S.M., and Mc Cullough R.S. 1980. Human retention studies with 74As. *Toxicol appl Pharm.* 53:550–556.
- Pongratz R. 1998. Arsenic speciation in environmental samples of contaminated soil. *Sci Total Environ.* 224:133–141.
- Rahman M., Tondel M., Chowdhury I.A., and Axelson O. 1999. Relations between exposure to arsenic, skin lesions, and glucosuria. *Occup Environ Med.* 56:277–281.
- Rahman M.A., Hasegawa H., and Lim R.P. 2012. Bioaccumulation, biotransformation and trophic transfer of arsenic in the aquatic food chain. *Environ Res.* 116:118–135.
- Rakwong K. 1999. *Risk behaviors and sources of exposure to arsenic in schoolchildren at Tambon Ronphibun, Amphoe Ronphibun, Changwat Nakhon Si Thammarat.* Master's Thesis. Department of Environmental Management, Graduate School, Prince of Songkla University.
- Rasmussen R.E., and Menzel D.B. 1997. Variation in arsenic-induced sister chromatid exchange in human lymphocytes and lymphoblastoid cell lines. *Mutat Res.* 386:299–306.
- Rhoads K., and Sanders C.L. 1985. Lung clearance, translocation and acute toxicity of arsenic, beryllium, cadmium, cobalt, lead, selenium, vanadium, and ytterbium oxides following deposition in rat lung. *Environ Res.* 36: 359–378.
- Rianboth W. J. 1996. *FAO Species Identification. Field Guide for Fishery Purposes, Fishes of The Cambodian Mekong.* Food and Agriculture Organization of the United Nations, Rome. 293 p.

- Rosemond S., Xie Q., and Liber K. 2008. Arsenic concentration and speciation in five Freshwater fish species from Back Bay near Yellowknife, NT, Canada. *Environ Monit Assess.* 147: 199–210.
- Roychowdhury T., Uchino T., Tokunaga H., and Ando M. 2002. Survey of arsenic in food composites from an arsenic-affected area of West Bengal, India. *Food Chem Toxicol.* 40: 1611–1621.
- Ruangwises S., and Saipan P. 2010. Dietary intake of total and inorganic arsenic by adults in arsenic-contaminated area of Ron Phibun District, Thailand. *Bull Environ Contam Toxicol.* 84:274–277.
- Sikorski E.E., Burns L.A., Stem M.L., Luster M.I., and Munson A.E. 1991. Splenic cell targets in gallium arsenide-induced suppression of the primary antibody response. *Toxicol Appl Pharm.* 110:129–142.
- Sikorski E.E., McCay J.A., Whiite K.L., Bladley S.G., and Munson A.E. 1989. Immunotoxicity of the semiconductor gallium arsenide in Female B6C3F1 mice. *Fundam Appl Toxicol.* 13:843–858.
- Smedley PL. and Kinniburgh DG. 2002. A review of the source, behaviour and distribution of arsenic in natural waters. *Geochem.* 17:517–518.
- Soeroes C., Geossler W., Francesconi K.A., Kienzl N., Schaffer R., Fodor P., and Kuenhelt D. 2005. Arsenic speciation in farmed Hungarian freshwater fish. *J Agric Food Chem.* 53:9238–9243.
- Somogyi A., and Beck H. 1993. Nurturing and breast feeding: Exposure to chemicals in breast milk. *Environ Health Perspect.* 101 (Suppl. 2: 45–52).
- Styblo M., Delnomdediev M., and Thomas D.J. 1995. *Biological mechanisms and Toxicological consequences of the methylation of arsenic.* In Goyer RA and Cherian Mg Col. Toxicology of metals biochemical aspects. Springer, Berlin .pp 407–433.

- Tam G.K.H., Charbonneau S.M., F., Pomroy C., and Sandi E. 1979. Metabolism of inorganic arsenic (74 As) in humans following oral ingestion. *Toxicol Appl Pharm.* 50: 319–322.
- Tseng W.P. 1977. Effects and dose-response relationship of skin cancer and blackfoot disease with arsenic. *Environ Health Perspect.* 19:109–119.
- Tseng W.P., Chu H.M., How S.W., Fong J.M., Lin C.S., and Yeh S. 1968. Prevalence of skin cancer in an endemic area of chronic arsenicism in Taiwan. *J Natl Cancer Inst.* 40:453–463.
- United States Environmental Protection Agency (U.S.EPA). 1988. *Special report on ingested inorganic arsenic; skin cancer.* U.S. Environmental Protection Agency. EPA/625/3-87/013. Washington, DC.
- United States Food and Drug Administration. (U.S.FDA). 1996. *Guidance for industry.Q2B validation of analytical procedures: methodology.* U.S. Food and Drug Administration, Center for Drug Evaluation and Research, Rockville, MD.
- United States Environmental Protection Agency (U.S.EPA). 1997. *Peer review of EPA's research plan for arsenic in drinking water.* Office of Research and Development. Washington, DC. US. Environmental Protection Agency.
- United States Environmental Protection Agency (U.S.EPA). 2000. *Guidance for assessing chemical contaminant data for use in fish advisories. Vol. 2-Risk assessment and fish consumption limits.* U.S. Environmental Protection Agency, Washington DC:USA.
- United States Environmental Protection Agency (U.S.EPA). 2005. *Estimation of relative bioavailability of arsenic in soil and soil-like materials by in vivo and in vitro methods.* Region 8, Denver, United States Environmental Protection Agency.
- Vahter M., Concha G., Nermell B, et al. 1995. A unique metabolism of inorganic arsenic in native Andean woman. *Eur J pharmacol.* 293 (4: 455–462.)

- Wester R.C., Maibach H.I., Sedik L., Melendres J., and Wade M. 1993. Invitro and vivo percutaneous absorption and skin decontamination of arsenic from water and soil. *Fundam Appl Toxicol.* 20: 336–340.
- World Health Organization (WHO). *Environmental Health Criteria 224: Arsenic and Arsenic Compounds.* 2001. World Health Organization, Geneva.