

- [J]. BMC Cardiovasc Disord, 2018, 18(1): 18. DOI: 10.1186/s12872-018-0761-0.
- [3] 中国心血管病风险评估和管理指南编写联合委员会. 中国心血管病风险评估和管理指南 [J]. 中华预防医学杂志, 2019, 53(1):13-35. DOI:10.3760/cma.j.issn.0253.9624.2019.01.004.
- [4] Shadbolt B. Some correlates of self-rated health for Australian women[J]. Am J Public Health, 1997, 87(6): 951-956. DOI: 10.2105/ajph.87.6.951.
- [5] DeSalvo KB, Bloser N, Reynolds K, et al. Mortality prediction with a single general self-rated health question. A meta-analysis[J]. J Gen Intern Med, 2006, 21(3):267-275. DOI: 10.1111/j.1525-1497.2005.00291.x.
- [6] Jylhä M. What is self-rated health and why does it predict mortality? Towards a unified conceptual model[J]. Soc Sci Med, 2009, 69(3):307-316. DOI: 10.1016/j.socscimed.2009.05.013.
- [7] Idler EL, Benyamini Y. Self-rated health and mortality: a review of twenty-seven community studies[J]. J Health Soc Behav, 1997, 38(1):21-37. DOI: 10.2307/2955359.
- [8] Bamia C, Orfanos P, Juerges H, et al. Self-rated health and all-cause and cause-specific mortality of older adults: individual data meta-analysis of prospective cohort studies in the CHANCES Consortium[J]. Maturitas, 2017, 103: 37-44. DOI: 10.1016/j.maturitas.2017.06.023.
- [9] Mavaddat N, Parker RA, Sanderson S, et al. Relationship of self-rated health with fatal and non-fatal outcomes in cardiovascular disease: a systematic review and meta-analysis [J]. PLoS One, 2014, 9(7): e103509. DOI: 10.1371/journal.pone.0103509.
- [10] Zhao Y, Hu Y, Smith JP, et al. Cohort profile: the China health and retirement longitudinal study (CHARLS) [J]. Int J Epidemiol, 2014, 43(1):61-68. DOI: 10.1093/ije/dys203.
- [11] 赵耀辉, Strauss J, 杨功焕, 等. 中国健康与养老追踪调查 2011—2012 年全国基线调查用户手册 [EB / OL]. [2019-06-01]. <https://www.docin.com/p-1094703970.html>.
- [12] Moradi-Lakeh M, El Bcheraoui C, Tuffaha M, et al. Self-rated health among saudi adults: findings from a national survey, 2013[J]. J Community Health, 2015, 40(5): 920-926. DOI: 10.1007/s10900-015-0014-4.
- [13] Rumsfeld JS, Alexander KP, Goff DC, et al. Cardiovascular health: the importance of measuring patient-reported health status: a scientific statement from the American Heart Association[J]. Circulation, 2013, 127(22): 2233-2249. DOI: 10.1161/CIR.0b013e3182949a2e.
- [14] Barger SD, Cribbet MR, Muldoon MF. Participant-reported health status predicts cardiovascular and all-cause mortality independent of established and nontraditional biomarkers: evidence from a representative US sample[EB / OL]. [2019-06-01]. <https://sci-hub.tw/10.1161/jaha.116.003741>.
- [15] Latham K, Peek CW. Self-rated health and morbidity onset among late midlife U.S. adults[J]. J Gerontol B Psychol Sci Soc Sci, 2013, 68(1): 107-116. DOI: 10.1093/geronb/gbs104.
- [16] van der Linde RM, Mavaddat N, Luben R, et al. Self-rated health and cardiovascular disease incidence: results from a longitudinal population-based cohort in Norfolk, UK[J]. PLoS One, 2013, 8(6):e65290. DOI: 10.1371/journal.pone.0065290.
- [17] Dong W, Pan XF, Yu C, et al. Self-rated health status and risk of ischemic heart disease in the China kadoorie biobank study: a population-based cohort study[J]. <https://www.ahajournals.org/doi/pdf/10.1161/JAHA.117.006595>.
- [18] Orimoloye OA, Mirbolouk M, Uddin SMI, et al. Association between self-rated health, coronary artery calcium scores, and atherosclerotic cardiovascular disease risk: the multi-ethnic study of atherosclerosis (MESA) [J]. DOI: 10.1001/jamanetworkopen.2018.8023.

(收稿日期:2019-06-07)

(本文编辑:吕相征)

·文献速览·

上海市饮用水中 N-亚硝胺的致癌风险:使用臭氧预处理的适应指征

Chen Z, Yang L, Huang Y, et al. Carcinogenic risk of N-nitrosamines in Shanghai drinking water: indications for the use of ozone pretreatment [J]. Environ Sci Technol, 2019, 53(12): 7007-7018. DOI: 10.1021/acs.est.8b07363.

N-亚硝胺是饮用水的消毒副产品,具有很高的致癌风险。该研究假设原水处理过程会影响饮用水中亚硝胺的类型和浓度,从而造成不同的健康风险。该研究比较了中国上海的两个水处理厂(WTP-A 和 WTP-B)的出厂水。两个水处理厂均以青草沙水库作为水源,采用常规但不同的处理工艺生产饮用水,即次氯酸钠(WTP-A)与臭氧(WTP-B)的预氧化处理。WTP-A 出厂(饮用)水中亚硝胺的平均浓度,特别是可能致癌物(2A类)的 N-亚硝基二甲胺的平均浓度(35.83 ng/L)要高于 WTP-B 出厂水的平均浓度(5.07 ng/L)。

饮用水中平均亚硝胺的其他差异包括 WTP-A 中含有 N-亚硝基二丙胺(42.62 ng/L)和 N-亚硝基二甲基乙胺(26.73 ng/L),而相反, WTP-B 中则含有 N-亚硝基二乙胺(7.26 ng/L)和 N-亚硝基二吡咯烷(59.12 ng/L)。与 WTP-B 饮用水相比, WTP-A 的混合亚硝胺的估计成人癌症风险要高出 1.83 倍。儿童暴露亚硝胺的致癌风险显著高于成人($P < 0.05$)。综上所述,这些数据表明,在预氧化处理过程中使用臭氧可以减少饮用水中亚硝胺的形成,从而降低人群的癌症健康风险。

(陈达炜编译)