Supporting Information

Detection and identification of high molecular weight disinfection byproducts using matrix-assisted laser desorption/ionization time-of-flight mass spectrometry in simulated drinking water

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Contents of the Supporting Information

Pretreatment of simulated drinking water samples

A centrifugal vacuum concentrator is used to enrich 1 L simulated drinking water sample to 10 mL, and then the simulated drinking water sample was placed into a pretreated dialysis bag, and dialyzed through tubing cellulose membrane (Sigma-Aldrich, retaining MW > 500 Da) against distilled water for 2 d to remove low MW materials and salt. After the purification, the simulated drinking water sample was concentrated again to 0.5 mL using a rotary vacuum evaporator to obtain a concentrated simulated drinking water sample (Maity et al., 2017).

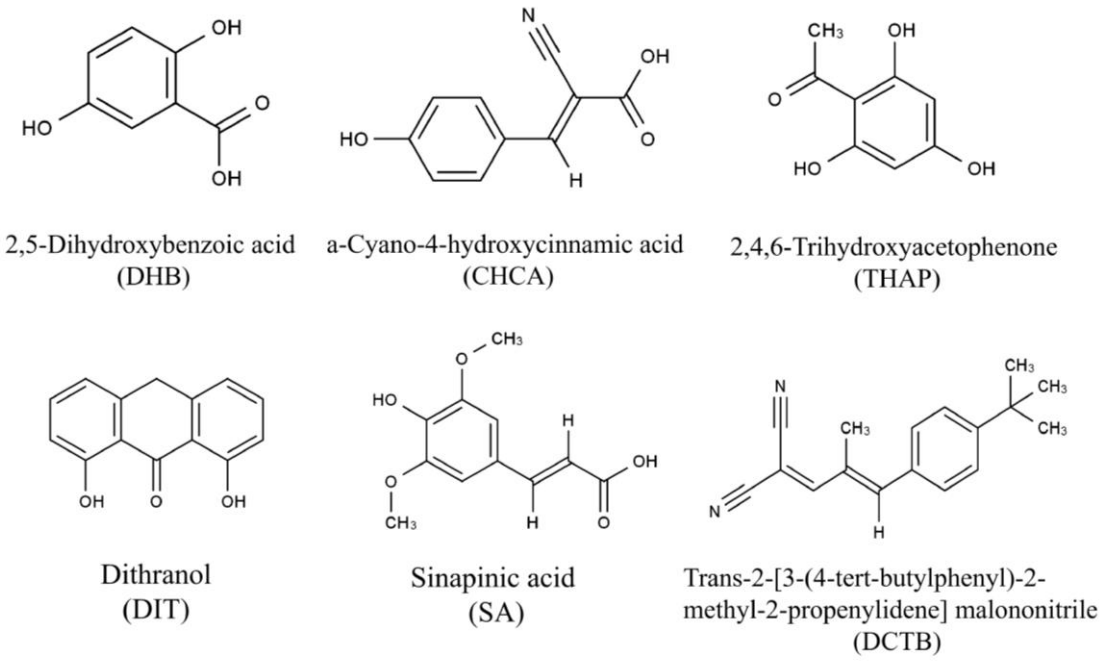

Fig. S1. Structures of the six matrices in this study.

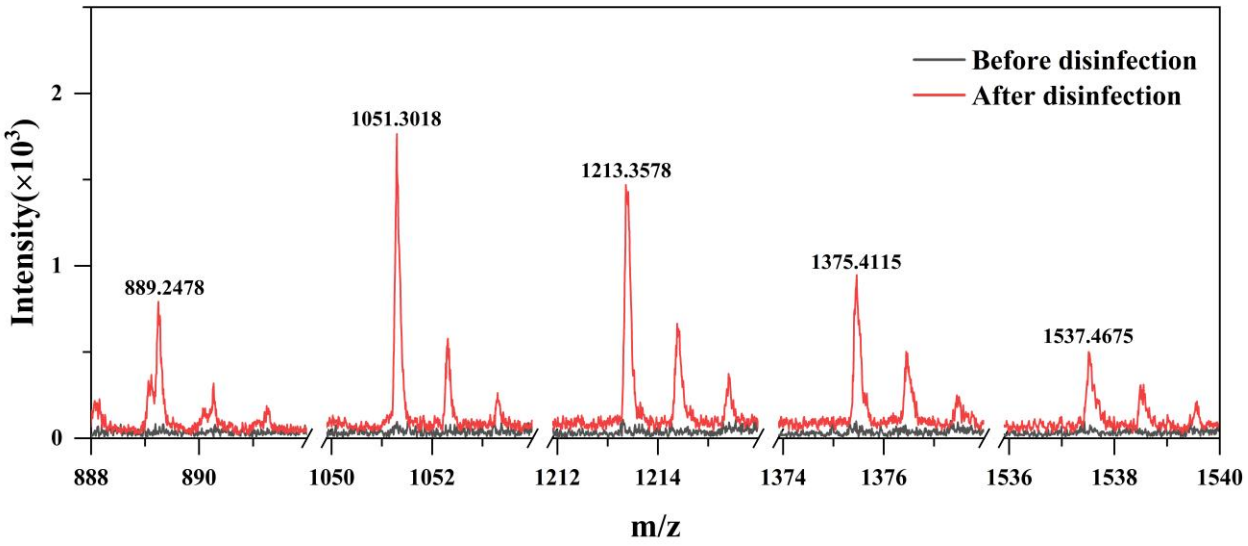

Fig. S2. Peaks of five HMW DBPs at *m/z* 889.2478, 1051.3018, 1213.3578, 1375.4115, and 1537.4675 before optimization. The parameters were set as follows: the matrix was 10 mg/mL DHB, the cationization reagent was 5 mg/mL NaTFA, the ion mode was reflection-positive, the laser intensity was 90%, and the deposition method was the dried droplet method.

References

Maity P, Nandi A K, Manna D K, Pattanayak M, Sen I K, Bhanja S K, Samanta S, Panda B C, Paloi S, Acharya K, Islam S S (2017). Structural characterization and antioxidant activity of a glucan from Meripilus giganteus. Carbohydrate Polymers, 157(10): 1237–1245