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A sensitive and selective analytical method for the simultaneous determination of sildenafil and tadalafil in water, energy drinks and sewage sludge matrices by LC-QTOF-MS/MS

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Abbreviations: **ECD**, electrochemical detection; **ED**, erectile dysfunction; **EIC**, extracted ion chromatogram; **IMS**, ion mobility spectrometry; **PDE-5**, phosphodiesterase-5; **QTOF**, quadrupole-time-of-flight.

Highlights

- A fast and direct injection method was developed for sildenafil and tadalafil determination.
- The method presented high accuracy and precision.
- The developed method was applied to energy drink, tap water and sewage sludge samples.
- 17 different energy drinks were determined for sildenafil and tadalafil contents.

4 of 17 energy drinks found to contain high amounts of sildenafil and tadalafil.

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