

## UK researchers devise a simple water test to prevent bone disease

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Researchers at the University of Bath in the UK are working on devising a simple colour-changing test to rapidly detect fluoride in drinking water and this may help prevent skeletal fluorosis, a crippling bone disease.

This disease causes crippling deformities of the spine and joints, especially in children whose skeletons are still forming.

While low amounts of fluoride are beneficial for healthy teeth, high levels of fluoride can weaken bones, leading to skeletal fluorosis.

The test is at the proof of concept stage, and the team aims to develop it into a disposable test strip that is low cost and easy to use by anyone.

The Bath researchers are partnering with the Nasio Trust, a charity that works to protect and support vulnerable children in East Africa, to develop their system for ease of use in the field.

The team is now looking for additional partners to take the technology forward and help develop the test. They are also working towards adapting the technology to other types of notorious water contaminants of global concern, including mercury, lead and cadmium.