

### **Advice 15-2010 of the Scientific Committee of the FASFC regarding the presence of heavy metals and uranium in well water**

Following a (local) soil and groundwater contamination with arsenic, lead and uranium in Uccle, the Scientific Committee evaluated the acute and chronic risks for adults and children on consumption of the contaminated ground- or well water in a school and of the vegetables and fruit grown in an adjacent garden situated in another school.

The contaminated well water was used for sanitary purposes (toilets and showers) in a gymnasium of a school, and not for drinking. However, assuming that the water would have been consumed, the toxicological guideline values for arsenic and uranium (chemical and radiological) would have been exceeded. The contaminated water should therefore not be used as drinking water, nor as a precaution, for any other application.

The exposure to uranium, arsenic and lead through consumption of the crops cultivated in the vegetable garden of a neighbouring school was calculated by means of soil-to-crop transfer factors mentioned in literature due to a lack of concentration data in the crops. Calculations show that the chemical and radiological exposure to uranium and the exposure to arsenic and lead are well below the toxicological guideline values. Based on the values measured in the soil of the vegetable garden and assuming that the 'hot spot' of contamination is located at the gymnasium, it thus can be assumed that the consumption of the crops grown in the garden poses no risk.

The full text is available on this website in dutch and in french, respectively under the section "Wetenschappelijk Comité/Adviezen" and "Comité scientifique/Avis".