Many fertilisers used on farms across Europe contain unsafe levels of a dangerous carcinogenic heavy metal called cadmium which is of no benefit to plants and is a threat to consumers' health. It occurs naturally in phosphate rock which is the main component of mineral fertilisers.

Contaminated soil

Millions of hectares of farmland could be contaminated with unsafe levels of cadmium. A recent study showed that approximately 12,753,500 hectares of agricultural soils sampled and 22,865,250 hectares of grazing land had high cadmium levels.

Source: GEMAS project

Toxic food

The World Health Organization's tolerable monthly intake for cadmium is 25mg per kilogram of body weight. In France approximately 910,000 adults exceed this limit by 90%. High cadmium levels are found in bread, potatoes, and seafood. Recent assessments suggest cadmium exposure should be reduced among people.

Source: Julie-Jean et al., 2015 & ECHA

Polluted Water

Cadmium is classified in the EU as toxic for water. Fertilisers run off fields and pollute rivers and waterways. Cadmium toxicity in aquatic organisms, mainly via waterborne exposure, is now a major concern.

Health problems

Cadmium is a World Health Organization class 1 carcinogen. In the EU it is a category 1B carcinogen, a category 2 mutagen and a category 2 reprotoxicant. Cadmium exposure can also lead to pulmonary disorders, kidney damage and dysfunction, cardiovascular disease, fertility problems, and osteoporosis.

A current EU overhaul of fertiliser rules is a unique opportunity to reduce cadmium contamination. The amount of the toxic metal allowed in mineral fertilisers could be reduced from 60mg/kg to 40mg/kg after three years and to 20mg after 12 years. If the average phosphate fertiliser contained 20 mg of cadmium per kilogram it would still take 100 years to reduce cadmium contamination of European soils by 20%. This means that a 20mg limit is the bare minimum we should aim for.

Some industry groups want to sabotage the 20mg limit and are pushing for a 60mg limit which would actually make cadmium concentration in our soils worse. Not only will this be dangerous for people, it is also worth noting that reducing cadmium levels in fertilisers is an idea that has been in the pipeline since 2003 so companies have had plenty time to prepare. Technology exists that can help countries such as Morocco, Tunisia, and Togo lower the naturally high levels of cadmium in their phosphate rock.

In its second plenary session of October 2017, the European Parliament will have its say on the fertiliser rules overhaul. MEPs will vote on whether to side with the financial interests that are threatening people's health or whether to champion the environment and health by reducing cadmium in fertilisers.

Stand for the environment and health #CONTROLCadmium