

CONTAMINATION OF FARM PRODUCE

Since 1987, the contamination of farm produce has fallen faster than the radioactive decay of caesium

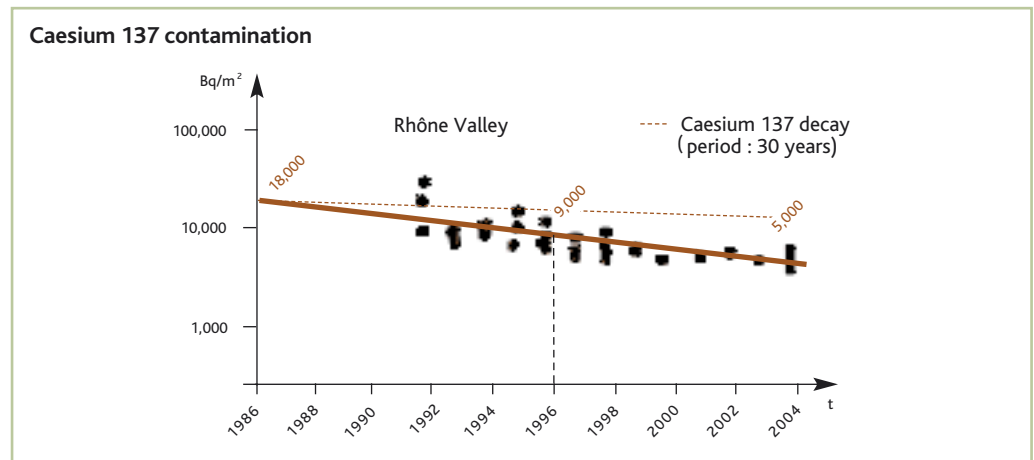
The radioactive decay period for caesium 137 is 30 years, whereas caesium 137 contamination in farm produce is falling about five times faster. The migration of caesium into the depths of the soil combined with a lower level of bioavailability explains this phenomenon.

REDUCED ACTIVITY IN SURFACE SOIL

In the first 20 centimeters down, the noted decrease in activity occurs faster than the decrease caused by the radioactive decay of caesium 137 (30 years). Indeed, the radioactive disintegration of caesium 137 combines with natural migration phenomena

and ploughing to drive the radionuclides down.

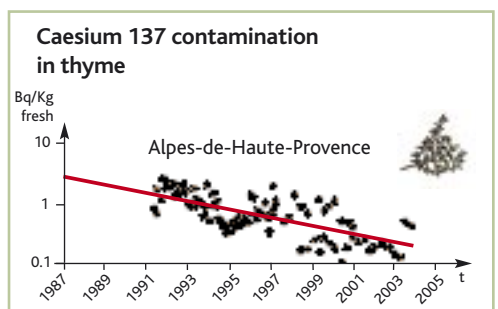
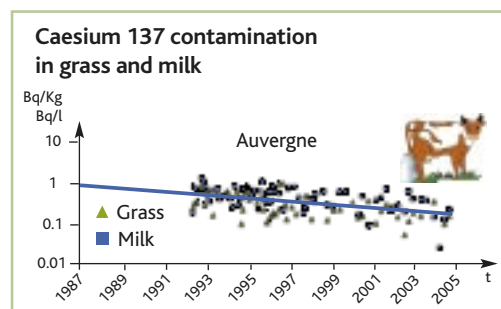
Today, only 25 to 50% of the caesium deposited in the soil in 1986 reaches the roots of plants and vegetables.



THE ACTIVITY IN GRASS IS FALLING EVEN FASTER THAN THAT IN SOIL

Indeed, the caesium fixes to the soil particles and becomes less accessible to the roots: or it becomes less bioavailable.

This reduction affects contamination activity in milk.

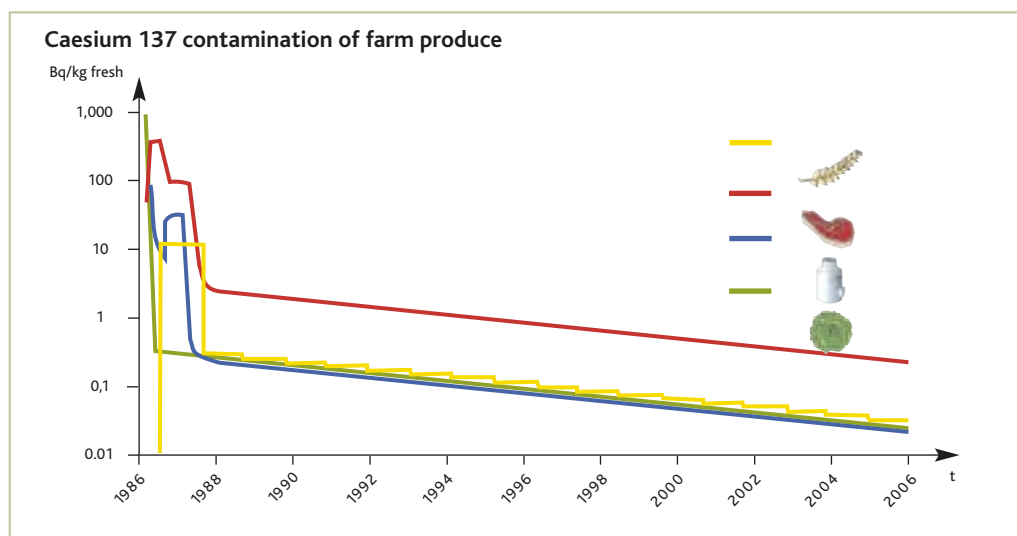


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TO CONCLUDE, THE EVOLUTION IN FARM PRODUCE CONTAMINATION OVER THE LAST 20 YEARS CAN BE BROKEN DOWN INTO TWO SEPARATE PERIODS

- In 1986, contamination took place on the leaves (direct deposition on the leaves). It was high but fell quickly.
- Since 1987, contamination has been through the roots. It is not as high and falls more slowly.
- The contamination levels from 1986 continued into 1987 for some products. This was the case of cereals consumed over the period until the next harvest, milk and meat, mainly due to the hay consumed by animals during winter.



Contamination of farm produce is now 10 to 30 times lower than in 1987 and 1,000 to 10,000 times lower than immediately after the deposition from May 1986.

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