

CONTAMINATION OF FARM PRODUCE

Special cases concerning more sensitive products

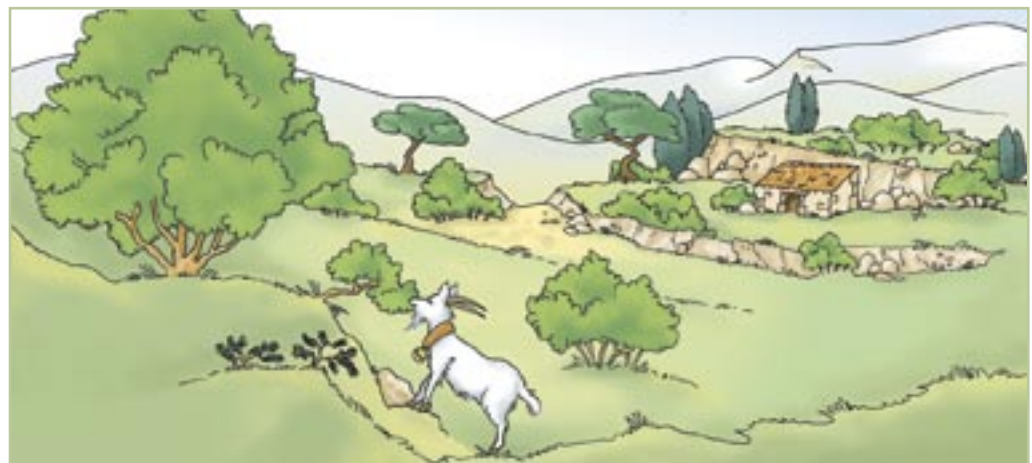
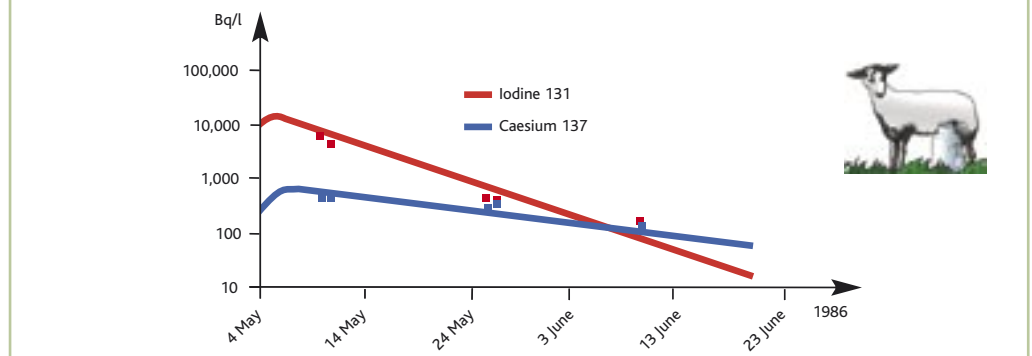
In 1986, dry fruit, some Mediterranean plants and goats' and ewes' milk were particularly sensitive to contamination. Today, forest products such as mushrooms and game are the most sensitive to residual contamination in soil.

IN 1986, THE MOST CONTAMINATED PRODUCTS WERE CERTAIN AROMATIC PLANTS AND DRY FRUIT

Contamination is greater in these products (particle specific activity in Bq/kg fresh weight) due to their lower water content. This is the case for Mediterranean plants such as thyme and rosemary, which exceeded levels of 1,000 Bq/kg in 1986, and dry fruits such as hazelnuts.

Contamination of milk from goats and ewes feeding on Mediterranean plants may have exceeded 10,000 Bq/l in iodine 131 and 500 Bq/l in caesium 137 immediately following deposition, to fall very quickly afterwards.

Contamination of ewes' milk in the south of France



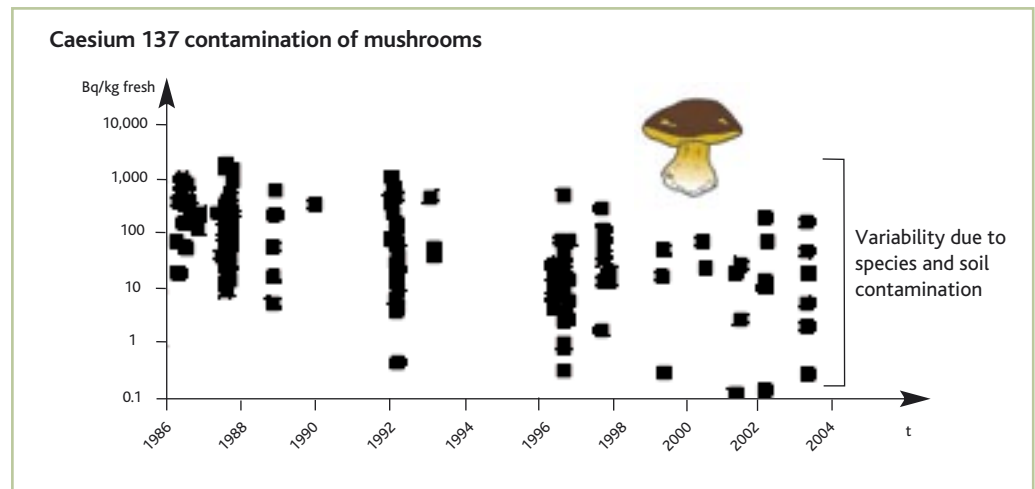
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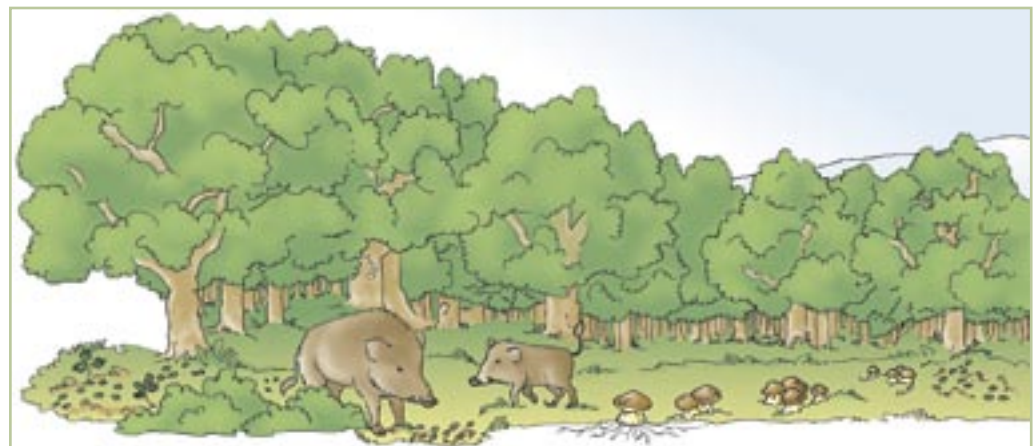
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PERSISTENT CONTAMINATION CAN STILL BE DETECTED IN SOME SPECIES OF MUSHROOMS, IN GAME AND IN WILD BERRIES IN SOME FORESTS IN THE EAST OF FRANCE TODAY

■ **Mushrooms** grow in the superficial layer of forest or permanent meadow soil, i.e. between 3 and 10 cm down. In unploughed soil, and particularly in the forest, this layer may still contain 70% of the caesium 137 activity deposited in 1986, 20 years on. This explains why the contamination in mushrooms is currently 100 to 10,000 times higher than that of farm produce. It varies by less than 1 Bq/kg to a few hundred Bq/kg according to soil and species contamination.



■ **The contamination of boar meat** is related to the contamination of roots, acorns, berries and mushrooms that boars feed on. It is therefore highly variable with a highly significant seasonal effect. In 1996, caesium 137 activity of a few hundred to 2,000 Bq/kg was measured in boar meat from the Vosges. This now stands in the region of a few tens to a few hundred Bq/kg.



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