



Antibiotics in Food production: risks

BEUC WORKSHOOP

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The questions:

- Could the antibiotics used in food production be a risk for consumers?
 - ◆ Resistance
 - ◆ Toxicity (banned, chloranphenicol, nitrofuranes)

Some figures to begin

- 11.2 million kilograms of antibiotics for non therapeutic use in animals(USA)
- 900.00 kilograms for therapeutic purposes in animals(USA)
- 1.3 million kilograms of antibiotics used in humans(therapeutic always)(USA)
- 10.000 kg/year used in plants (streptomycine and tetraciline) (USA)

Antibiotics used in Food producing animals

- Growth promoters (diminishing according to European legislation)
- Prevention of infectious diseases
- Therapeutic agents in infectious diseases.

- But some uncontrolled use
- Our study, up to 80% of shops selling veterinary antibiotics without prescription.
- 1998 10/75 positives pork meat to AB, 25% sulfamides. 1997 8% bovines, 5% pork, 2% poultry with AB.

Use of antibiotics in humans

- Only therapeutic use but:
- Not specificity, self medication, not correct patterns of treatment.
- Uncontrolled selling and buying of antibiotics without prescription, up to 32% pharmacies have sold us antibiotics without prescription, and for diseases not to be treated with them (influenza) in our study done in 1997.
- Others, up to 25% of antibiotics sold without prescription.

And the consequences? Some examples

- - 20% of minced meat in supermarkets where contaminated by salmonella, and up to 84% of the serotypes isolated where resistant to at least one antibiotic and at worst to 9-12 antibiotics.*
- In 58% of chicken samples contaminated with Enterococcus faecium resistant to one new antibiotic(quiupristin.-dalfopristin*
- They have found that the bacteria resistant to some antibiotics coming from animal food can colonize the intestine form humans.*

■ * New England Journal of Medicine 18 October 2001

And the consequences? More examples

- It is estimated that 80% of infections of Salmonella and Campylobacter are acquired from animals. In USA 1.4 million of people are infected from Salmonella each year and 2.4 millions of campylobacter. Up to 26% of Salmonella and 54% of campylobacter are resistant to at least one antibiotic.
- In Spain it was estimated in 1996 that about 2000 persons die in Spain each year because of infections not responding to antibiotics.

Conclusions

- The link between the abuse of antibiotics in food production and the appearance of resistant bacteria is more and more proved.
- Abuse in humans also has to be taken into account.
- The discovery of new antibiotics is getting more and more difficult, we can not expect a lot of new antibiotics for the next years to appear in the market

Resistance is a great problem of public health.

- The discovery of new antibiotics is getting more and more difficult, we can not expect a lot of new antibiotics for the next years to appear in the market
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What to do?

- The use of antibiotics should be only therapeutic, and specific, prescribed by a doctor or a vet (animals and humans).
- Growth promoter use and prophylactic use should be avoided and banned
- The new antibiotics and antimicrobials should be reserved for humans and not allow for food producing animals.
- Strong controls in the implementation of the law, banned antibiotics as growth promoters, waiting periods...