

ANTIBIOTIC RESIDUES IN MILK

What antibiotics are used on the dairy farm?

There are several different groups of antibiotics which are available to treat infected dairy cattle. The most common groups include the beta-lactams (e.g. penicillin), sulphonamides (e.g. sulfamethazine), aminoglycosides (e.g. streptomycin) and tetracyclines (e.g. tetracycline).

These antibiotics may be used singly or at times in combination when treating dairy cattle.

How do antibiotic residues enter the milk supply?

Dairy cattle that have been treated with antibiotics produce milk containing antibiotic residues for a period of time after treatment.

Treated cows are therefore required to be excluded from the milk supply for a specific time period to ensure that antibiotic residues no longer remain in their milk.

Antibiotic residues enter the milk supply when treated cows are returned to the milking herd early or when a cow retains antibiotic residues in her system for an extraordinary length of time.

Why are antibiotic residues of concern?

Antibiotic residues in milk may lead to:

- severe allergic reactions in sensitive consumers
- culture failure and subsequent loss of product

- a change in consumer perception of milk being a pure, unadulterated, natural product

All of these concerns may result in major economic losses to the dairy industry.

Is “dilution the solution”?

No! Modern technology can detect drug residues down to parts per billion. One (1) part per billion is equivalent to one (1) second in 32 years.

Dilution will therefore almost never be sufficient to eliminate trace amounts of drug residues.

Hence, the solution to milk contaminated with drug residues is **NOT** dilution.

What can I do?

Dairy processors can protect the milk supply by testing milk for penicillin, sulfa drugs and other antibiotics before accepting each shipment at the dairy plant.

In addition, efforts continue to educate producers and veterinarians on the need to eliminate drug residues from the milk supply.

Processors have a key role in ensuring that milk containing drug residues is not accepted at dairy plants and processed into finished dairy products.

*For further information please contact
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