



## Antibiotics

The basis for dairy products is safe milk from healthy cows. Farmers use antibiotics with great care, meaning it is used only within the rules and regulations of a farm treatment plan and the prescriptions of a veterinarian. Antibiotics are to be used only to treat sick animals, any preventive use is prohibited. When a cow is treated with antibiotics, her milk is not used for produce. Furthermore, after the treatment, the milk is not used for produce for a certain amount of time. To ensure that no milk with antibiotics residue is used, raw milk is tested intensively for antibiotics. Dairy products in store therefore contain no antibiotics.

### What is the role of the dairy farmer?



Dairy farmers in the Netherlands have to handle antibiotics **responsibly**. There are strict rules and regulations. Antibiotics are to be used only for sick animals, preventive care is not allowed. Not every type of antibiotics can be administered. For every dairy farm the veterinarian has drafted a farm treatment plan, which states which type of antibiotics is to be used for which disease. Selection of the antibiotics is based on the highest effectiveness for a specific type of disease and minimizing the risk of antibiotic resistance.



The dairy farmer is allowed to administer antibiotics only **on prescription of the veterinarian**. This means a farmer works according to the guidelines provided by farm treatment plan drafted by the veterinarian. Certain animal drugs can be administered only by the veterinarian, the farmer is not allowed to administer some type of drug by him or herself. Also the farmer is allowed only to keep a limited amount of antibiotics on the farm only.

# Factsheet Antibiotics

## What is the status of antibiotics use in the Netherlands and how is it regulated?



48%

In the Netherlands there is a strict policy for reducing the use of antibiotics in the dairy sector. And with good result. In the period of 2009 until 2016 the use of antibiotics has **gone down with 48%**. As a result, the dairy sector now has lower use of antibiotics than the poultry and pig farming sector.



In January 2012, the mandatory central database 'MediRund' (MediBovine) was founded. In this nationwide central database the exact amount of antibiotics used in the bovine sector is registered. This obligation is listed in the 'Decree veterinarians' and the 'Decree animal keepers' from the ministry of Economic affairs and holds for all entrepreneurs in the Netherlands who keep a bovine stock with the size of five or larger. For each dairy farm, the veterinarian registers all antibiotics delivered into the **'MediRund'** database.



With the data stored in MediRund the amount of days that one animal has been exposed to antibiotics in a year can be calculated: an **AnimalDayDosage**. For each dairy farm the total amount of AnimalDayDosage units can be calculated. This figure is yearly evaluated and managed independently by the veterinary medicine authority foundation or VMAF. With the AnimalDayDosage dairy farmers can compare their own antibiotics use to the national average.

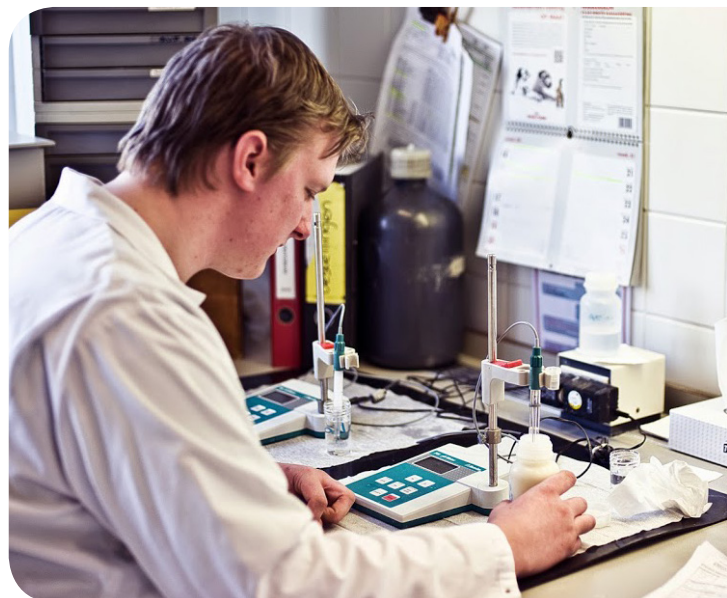
## What is antibiotics resistance?



The process of bacteria becoming resistant to antibiotics they have encountered is called antibiotic resistance. The antibiotic is then no longer effective against this bacterium. It is therefore of the utmost importance that the farmer uses antibiotics in the right way to prevent antibiotic resistance, for instance by using the right type and the right amount of antibiotics. Determining **the right kind and amount** of antibiotics is described in the farm treatment plan drafted by the veterinarian.



Through careful handling of antibiotics a reduction in antibiotic resistance has been observed. The veterinary medicine authority (SDa) has reported a **reduction of antibiotic resistance** in the dairy farming sector of 48% between 2009 and 2016.



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## How is the milk being monitored?



Check for absence of antibiotics in milk is done at several instants. As such there is 100% check for absence of antibiotics. When the milk is collected from the farm, a sample is taken from the milk tank by a schooled and certified chauffeur of the milk truck. **Each sample** from the milk tank is tested by an independent and specialized laboratory for absence of antibiotics. When a sample is tested positive for antibiotics, the farmer receives a fine.



Another sample is taken before the milk enters the dairy company from the milk truck. This sample is **tested for antibiotics immediately at location**. If this sample tests positive for antibiotics, the complete cargo of milk is destroyed.



Surveillance of dairy companies and dairy farmers is executed by the independent **Dutch Food and Drug Administration (Dutch FDA)**.

## What happens to milk from treated cows?



When a cow is treated with antibiotics the milk is not used for produce. Even after the treatment period, it is possible the milk is not yet eligible for delivery to the factory. This is referred to as the **waiting period**. The duration of the waiting period depends on the type of antibiotic that has been used. In this the farmer always follows the treatment plan and the prescription of the veterinarian. All milk produced in the Netherlands, is checked for absence of antibiotics.





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## Did you know ...

- ✓ ... in the Netherlands there are strict rules and regulations for the use of antibiotics? A cow can only be treated with antibiotics when she is sick. Preventive use is prohibited.
- ✓ ... when a cow is treated with antibiotics, the milk of this cow can not be used for produce? When the period of treatment is over, there is also a waiting period in which the milk is still not used for produce.
- ✓ ... all milk in the Netherlands that is used for produce is checked in advance for absence of antibiotics? Should any antibiotics be found, the milk is destroyed and the farmer receives a fine.
- ✓ ... an independent specialized laboratory tests all the samples taken from each milk tank? These samples are tested for absence of antibiotics, but also for other things such as fat and protein content.
- ✓ ... in 2016 the use of antibiotics dropped with 48% with respect to 2009? Currently the dairy sector has a lower use of antibiotics than the pig and poultry farming sector.