

Het Duivengazetse

(Pigeon Paper)

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Many pigeon fanciers may be disappointed after a general check up of their pigeons ahead of the breeding or racing season, because there are still some “unpleasant” little animals in the droppings or in the pigeon’s body.

What is the reason for this?

Are the products used for treatment that bad?

Or are the products not so effective as they used to be?

Or are the microbes much more resistant than in the past?

Or is the immune system of our pigeons less effective than in the past?

Or....

Whatever the reason is, most of the time there is one rule that is violated by the pigeon fanciers:

The right use of medication!!!



No matter what kind of treatment you have to give, always remember these five very important rules:

1. **When:** Treat only when necessary!!!
2. **What:** Treat with the right medication!!!
3. **How long:** Treat for the required period of time!!!
4. **How:** Treat in the most suitable way!!!
5. **How much:** Treat with the right dosage!!!

If you keep these rules in mind, many problems can be avoided in the future, and there will be no further disappointments because of treatments that didn’t work properly.

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1. Know when to treat.

During a general check up of the health of your pigeons, droppings, throat and eye swabs are examined...

Examinations for coccidia, worms, trichomonads, Chlamydia,... are necessary because many pigeons are affected by these pathogenic agents without the owner's knowledge. Periodic bacterial cultures to search for Salmonella are certainly recommended.

Your vet can help you to decide whether to treat depending on the level of infection and also the season (breeding, molt, race season, ...)

Treating without knowing if it is necessary is certainly not recommended, because if this is done, the pathogens can develop resistance against the medication being used. Resistance to medication is a more frequent problem now. This means that the medication you use won't be as effective as it once was if it wasn't used according to directions given in the prescription, or if the dosage was not correct, or if it was unnecessary, and so on.

Some pigeon fanciers avoid having their pigeons examined by a vet because they believe the costs are too high for a hobby.

Always keep in mind that medication is also very expensive, and if you know that a great deal of unnecessary medication is given, you can be sure that there is also a great deal of money and medication thrown away without any help for the fancier and his pigeons.

A general examination of the pigeon, plus the examination of droppings etc., is a very good investment that will return financial profits and many fewer problems!!!!

2. Know what to give!!!

There is no point in using a mystery powder that you obtained 2 years ago from a fellow pigeon fancier, if you don't know the name of the disease it is supposed to treat.

Just because your friend had very good results in his pigeons with a specific product, is no guarantee that it will be as effective in your pigeons. First of all you have to identify the problem in your pigeons.

It is very important that you know what medication to give!!

1. The right product
Don't use a product because it worked very well at one time, if you are unaware what it is or what diseases it will treat.
2. The product should not have passed its expiry date.
The expiry date shows the length of time that the company will guarantee 100 % reliable activity.
3. The product was stored according to recommendations on the label.
If products that should be stored in the fridge have been exposed to the sun for a long period of time, they will lose much of their activity.



3. Know how long to treat!!!

A treatment of only one day with a product that should be given for a much longer period of time is almost always insufficient to solve a problem completely. It is possible that a day after the treatment there will be an improvement, but it is likely that a relapse of the problem within a short time is very probable.

Also very frequent treatments for short periods are not good because resistance to the product will develop. It is always better to give one treatment for the correct number of days rather than 5 different short treatments.

The length of the treatment will depend on different factors:

- The kind of product,
- The nature of the problem,
- The infection level,
- The season in which the problem occurs

Examples:

It is better to treat a mild infection of trichomoniasis during the **racing season** because of its potential to become more severe during shipment and through contact with the other pigeons.

During a mild infection of trichomoniasis in the **molting season**, I would rather wait to treat, so the pigeons can build up some immunity against trichomonas.

4. Know how to give the product!!!

Is it a product to mix in the food, or can it also be used in the drinking water?

Is it a product for local use (such as eye drops), for individual treatment, or to be injected...??

Can you use tap water with a high level of calcium, or does it have to be mixed with distilled water, so the treatment will work better? Can you leave grit and minerals in the loft?

Do you need to mix fresh solutions daily, or does the product maintain its activity from more than one day, once it is mixed with the water?

Can you give the pigeons a bath during or after a treatment?

These questions are really important, because they can make the difference between a successful treatment and a failed treatment, and furthermore they can affect an entire season!!!

A few months ago I had a client with a pigeon that had a very bad eye, but he claimed that he had already treated it for several days with some eye drops, without any improvement. When he showed me the drops he used, I saw that they were supposed to be given orally, and that the expiry date had already passed. It was not surprising that these drops weren't effective in treating the eye since the leaflet accompanying the product clearly stated that the drops had to be given orally...



From time to time, mixing the product in the food can be difficult to insure that every pigeon receives the same amount of product.

5. Know how much to give!!!

The dosage can be of great importance in insuring that the treatment is effective.

There are lots of mistakes made in arriving at the right dosage, since more drug or less can do more damage than you realize.

The correct dosage has to be followed. It is not true that your pigeons will recover twice as fast by the use of a double dose, or that it will be sufficient to give only half of the required dosage.

Giving half of the indicated dosage, or treatment for only half of the required time will simply create great problems for you and your birds, because after a while the medication won't be effective, and pathogens can become resistant to the medication.

Following is a short history showing why a treatment that isn't administered as it should be, doesn't work properly.

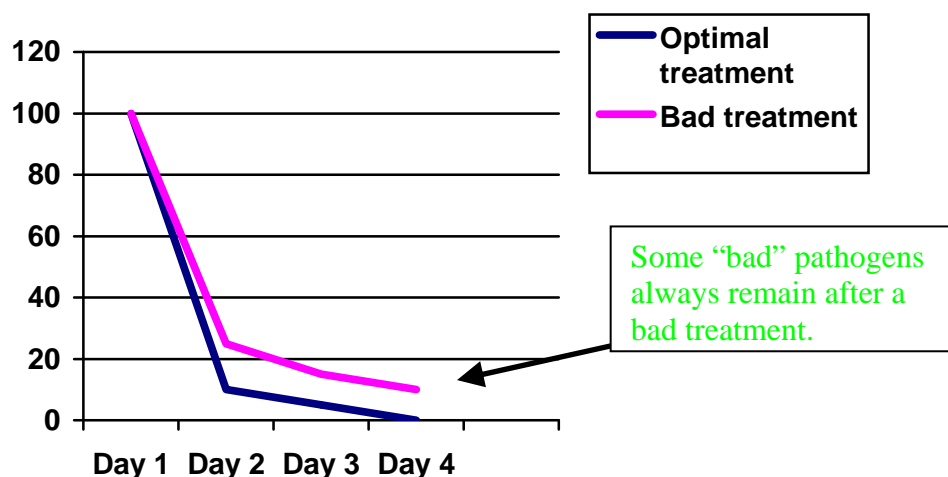
Suppose that your pigeons are infected with 100 bacteria. You treat with a product that normally has to be used for 4 days at a dosage of 1 teaspoon in two liters water.

But you treat your pigeons for only 3 days at 1 teaspoon per 3 liters of water, because you believe that there aren't many bacteria present.

On day 2 there are just 75 dead bacteria from the 100, but only the most resistant survived. After 3 days, only 15 bacteria survived, but even after Day 4, 10 bacteria survived.

These 10 are the most resistant, but they would have been dead after the 4th day, if the dose had been correct. But with the treatment finishing after 3 days, means that the most resistant organisms will multiply, and further treatments with the product will not be effective.

If a treatment is used according to the directions on the prescription (the optimal dosage), will there be very little chance that resistant strains of bacteria will develop, because they will all have been killed after the first complete treatment.



Under these conditions, if you think that you have treated well, that you followed the right dose and the right number of days, then you are wrong!!!



A very important factor is the actual water/food intake of the pigeons.

As you know, a pigeon (like any other animal) will drink more water during warm weather, compared with the colder days. The opposite is true for food intake.

This will have a great impact on the intake of the medication.

A more accurate way of dosing the medication is to treat each pigeon individually, and not per liter of water or per kilogram of feed. In this way, the pigeons will receive the right amount of medication they need, and the treatment will also be more successful!!

I don't mean you always have to treat the pigeons individually, because this is not always possible for every pigeon fancier.

What I do mean is to make sure that every pigeon gets the medication it needs, by mixing the medication in the water or in the food (sometimes it is more difficult to have a more equal mixture) via a more calculated way!!

You have to keep in mind, two important factors:

The actual water / food intake
The correct dose needed per pigeon per day

An example:

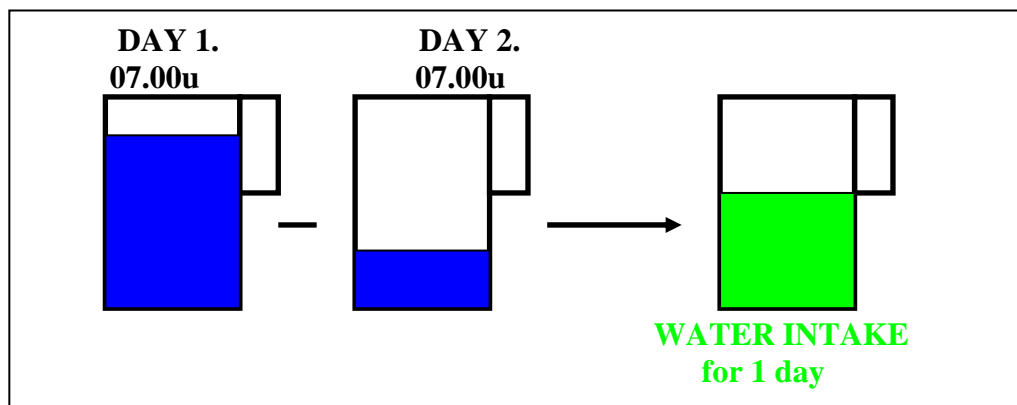
20 pigeons will normally drink about 1 liter per day, and will eat about ½ kg (of course this is an average, and it will depend on the kind of food, weather, etc...)

If the dosage is 1 spoon per liter, this means that you have to give 1 spoon of medication for 20 pigeons. But if these 20 pigeons only drink ¾ liter per day, then you need to give 1 spoon in this ¾ liter, and this is the only way will they receive the right amount of medication.

I always suggest the following method:

Take a drinker that is completely filled with water. Measure the amount that is left 24 hours later. If you calculate the difference, you will have the real water intake per day for that specific loft.

Scheme:



If you know how much water the pigeons drink per day, then you have to know the right dose for that number of pigeons.

Therefore you can use this formula:

$$\text{Daily units of medication} = \frac{\text{Units following the prescription needed} * \text{number of pigeons in the loft}}{20 * \text{number of liters following the prescription.}}$$

Daily units of medication: Amount of units you need to give in 1 day for that number of pigeons.

Units following the prescription: Amount of units you need to give according to instructions in the leaflet.

Number of liters according to the prescription: Number of liters to which you need to add the number of units according to the instructions in the leaflet.

If you use this number of units of medication in the volume of water they drink per day, then the pigeons will received the correct dose!!

An example:

I have a loft with 30 pigeons, and these pigeons drink 1,25 liters of water per day .

According to the leaflet I have to use 1 unit per 2 liters of water

*1 unit in 2 liters means for 2 * 20 pigeons = 40 pigeons,
because 20 pigeons drink +/- 1liter*

This means for a loft with 30 pigeons you need to give $\frac{3}{4}$ units in 1,25 liters of water.

Suppose you just followed the prescription, then those 30 pigeons would only receive 0,625 units instead of the 0,75 units needed!!!

This is the calculation based on the number of units you need to give in the amount of water that they drink per day, so that no water remains in the drinker. If you want, you can also adapt the dosage so that a little remains in the drinker (cf. below)

This looks all very theoretical and a lot of calculation, but below you will find a very easy method to use, so you can see very quickly the right dosage for a certain number of pigeons.

Number of Units in the daily water: food intake

Number of pigeons to treat->		5	10	15	20	30	40	50
Number of units	Per liter or kg							
1 unit	Per liter or 0.5 kg	0,25	0,50	0,75	1,00	1,50	2,00	2,50
2 units	per liter or 0,5 kg	0,50	1,00	1,50	2,00	3,00	4,00	5,00
3 units	Per liter or 0.5 kg	0,75	1,50	2,25	3,00	4,50	6,00	7,50

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1 unit	per 2 liter or 1 kg	0,13	0,25	0,38	0,50	0,75	1,00	1,25
1 unit	per 3 liter or 1,5 kg	0,08	0,17	0,25	0,33	0,50	0,67	0,83

1 unit can be 1 cc, 1 teaspoon, 1 measure, 1,... as in the prescription

How to use this table??

- Find in the prescription how many units you need to use in how many liters?
The first column is the number of units to administer
In the second column are the number of liters or kg you have to use
- Count the number of pigeons you want to treat.
The number of pigeons to treat is given in the top row of the table.
- Read the right amount of units to use and mix them with their daily water or food
The right amount of units is given at the intersection of the column with the number of pigeons with the row showing the dosage.

An example:

You want to treat 15 pigeons with a product that normally requires 1 unit per 2 liters of water.

You have to make sure that those pigeons get 0,38 units of the medication per day.

Number of pigeons to treat->		5	10	15	20	30	40	50
Number of Units	Per liter or kg							
1 unit	Per liter or 0.5 kg	0,25	0,50	0,75	1,00	1,50	2,00	2,50
2 units	per liter or 0,5 kg	0,50	1,00	1,50	2,00	3,00	4,00	5,00
3 units	Per liter or 0.5 kg	0,75	1,50	2,25	3,00	4,50	6,00	7,50
1 unit	per 2 liter or 1 kg	0,13	0,25	0,38	0,50	0,75	1,00	1,25
1 unit	per 3 liter or 1,5 kg	0,08	0,17	0,25	0,33	0,50	0,67	0,83

This table shows you the number of units you have to mix in the daily amount of food or water intake, and **NOT** per liter water!!!

If you want to calculate it per liter, you can use the following formula:

Adapted units per liter = $\frac{\text{Units according to the table}}{\text{Water intake for that number of pigeons}}$

With “Water intake for that number of pigeons”, I mean the theoretical number of liters, based on 1 liter per 20 pigeons.

Warning: Some products will not mix too well if the concentration is too high, or if the taste is too strong. With some products the pigeons can vomit when the dosage is too high.

I have also made a very-easy-to-use small program where you just have to enter the dosage



and the number of pigeons to treat, and the computer calculates it all for you. You can find this after 01/01/2009 on my website: www.pascallanneau.be

There will be many advantages if you take the time and pay attention to calculate the right dosage for your pigeons, so the treatment will do a proper job!!!

Remarks about the units:

The different kinds of spoons and the level to which they are filled will have a lot of influence on the right quantity and also the dosage.

To be 100% accurate, you can use a weighing scale, but this is not very functional and practical, therefore I work with units, that can stand for teaspoon, soup spoon etc. Every spoon represents a certain quantity.

Below you will find a short summary of the different weights. But always keep in mind that not every powder or liquid weighs the same, and this can make a little difference.

*1 tea spoon → +/- 5 gram → +/- 5 ml
1 soup spoon → +/- 15 gram → +/- 15 ml*

I use a set of 4 spoons, that are the same as a different unit, a half-teaspoon, a teaspoon, a half soupspoon, a soupspoon. You can make all kinds of combinations and you can try to obtain the desired units. This set of spoons is very handy, cheap and easy to rinse!!

Set of spoons



Remarks on the product

Before using a product read the prescription very carefully to be sure that it is the right medication and the correct dosage for your pigeons.

Be sure that the product has not expired.

Always store the product according to the directions on the label (dry, cool, fridge, not in the sunlight, etc...)

Remarks about mixing products in the water / food

Some products can only be administered via the food because of the quick loss of activity when mixed in the water. Some products (most of them) can be mixed in the water and in the food.

The choice of mixing in the water or in the food is up to you, but always remember that the pigeons will not drink that much water during colder periods and that the food intake will be the same or even higher.

On the other hand is it more difficult to mix medication thoroughly in the food.



Remarks on potential sources of (re) infection

All pigeon fanciers will treat their racers during the racing season, because they are most important at that time. Fanciers don't look after the other pigeons in the loft, because they don't need to race, so they "neglect" them concerning medication.

This is completely WRONG because there is always the chance of reinfection from the hens to the racers when they are coupled – even if it is just for a very short time.

Pay attention to the pigeons that the racers have contacted, by examining and treating them when necessary.

Pigeon fanciers think that youngsters that were in separate baskets during the first training tosses, and were not exposed to strange pigeons from other lofts, are not likely to become infected.

This is also WRONG, because sometimes the drinkers are moved from one basket to another without rinsing and disinfecting them.

And what about those bacteria or viruses that can be spread through the air?

*Never forget to examine
Your hens or contact pigeons
And to treat them when necessary!!!*

Some advantages of giving the right dosage:

**Cheaper, you don't throw products away.
The treatment will work as it should.
The pathogens in pigeons will not become resistant to a product
that quickly.**

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In this edition of "Het Duivengazetse", I have focussed only on flock treatments. Individual treatments with injections, pills, drops and so on, provide more certainty about the intake of the product and the right dose, but is impractical and financially hard to do.

From January 2009, you will have the opportunity to read all my articles of "Het Duivengazetse" on: www.pascallanneau.be

You will find also a small program to calculate very quickly and accurately the dose of medication specific for your needs.

In the attachment you will find a dosage table, a must with every medication.

Don't hesitate to contact me for more information.



Thanks to my friend *Gordon Chalmers* for reading and editing this paper.

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