1. Accelerating regeneration:

Carbohydrates
To speed up recovery we take advantage of the readily available carbohydrates in Mummu and the organic phosphorus in Rotosal. After a flight, racing pigeons have mainly depleted their energy stores. Therefore, they recover significantly faster after a flight if they are fed carbohydrates and Butafosfan.

Protein
The day after a flight, we provide racing pigeons with the highly concentrated animal protein from K + K Protein 3000 to make sure that muscles and tissue are regenerating. This protein is digested easily. It is indispensable for a fast recovery.

Short Chain Amino Acids
Immediately after the flight, the amino acid stores need to be replenished. Bt-Amin forte is designed to accomplish this. It contains large doses of the essential amino acids while also providing the pigeons with the needed B vitamins after the flight without unnecessary stress on the metabolism.

2. Reduce infection pressure

Prevention is better than cure
We use Avirdress Plus for the disinfection of the drinking water. This lowers the pH of the water. This together with the use of Usne-Gano reduces the risk of infection.

3. Strengthening immunity

Improving the Immune Response
The (1.3/1.6)-ß-Glucans in the Jungterpulver (powdered supplement) activate the immune system while specific cellulose molecules in powder form lead to larger villi. As a result the pigeons are more resilient against infections.

Probiotics – Healthy from the gut
Providing pigeons with probiotics has been proven beneficial after stress phases, high performance demands, and drug treatment. Probiotic bacteria in Entrobac improve the intestinal flora thus strengthening the pigeons’ immune response.

4. Stimulating the Metabolism

L-Carnitine and Iodine
At the beginning of every week, we stimulate the metabolism with Hexenbier and iodine. Supplementation with L-carnitine (Carni-Speed) allows the muscles to perform at top capacity. Pigeons supplemented in such a way tire noticeably slower in flight and consequently, the training is significantly more efficient. Therefore, cramping feet are a problem of the past.

5. Replenishing vitality reserves

Vital Nutrients
Supplementing the pigeons with additional energy sources is essential for long flights. Oregano-sheep fat and our Energy Oil supply this energy. We recommend drying with RO 200 ready to satisfy the increased metabolic demands.

6. Keeping the airways free

Probiotics - Tiny Helpers with Huge Impact
After flights in the rain or long express stays treatment of the mucus membranes with Avisana is a tried and proven method. After the treatment, the pigeons have bright white noses and clean throats.

The Power of Nature
In particular ahead of flights in hot weather but also before the season starts, it makes sense to use plant oils and herb mixtures such as Avivin® and Atemfrei (Free Breath) to keep the insides of the pigeons’ airways free. The most beneficial characteristic of this combination is the fact that it does not damage the intestinal flora.

Realeased breathe – NEW
Before important races and 2 week before the season starts we have to clean the respiratory tract with Rozitol.

7. Optimised mineral supply

Minerals and Trace Elements
Aside from the above described targets, the optimal supplementation with grit and minerals should be part of the routine. Including Premium Mineral Reise (Flight) along with Taubenfreund Grit with Anise and Expert Mineral in the daily feed ensures that your pigeons will receive the optimal amounts of minerals and trace elements.

Röhnfried’s 7-point plan for the racing season

You can find our feeding concept for a successful season on pages 4/5. Simply remove the double page and hang it up in the pigeon loft!
# Feeding concept

<table>
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<tr>
<th>Racing Day</th>
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<th>Basketing day Friday</th>
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<td><strong>Feed supplements</strong></td>
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<td>In the morning:</td>
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<tr>
<td>Strengthening immunity: Moorgold + Entrobac + Jungtierpulver</td>
<td>Reducing infection pressure: Avidress Plus</td>
<td>Stimulating the metabolism: Carni-Speed</td>
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<td>In the evening:</td>
<td>In the evening:</td>
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<td>Reducing infection pressure: Avidress + Jungtierpulver</td>
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<td><strong>Water additives</strong></td>
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<tr>
<td>Accelerating regeneration: Rotosal + Bt-Amin forte</td>
<td>Reducing infection pressure: Avidress Plus</td>
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<td>Reducing infection pressure: Avidress Plus</td>
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</tbody>
</table>
Reducing infection pressure: Avidress Plus | 
Stimulating the metabolism: Carni-Speed | 
Stimulating the metabolism: Carni-Speed | 
Stimulating the metabolism: Carni-Speed | 
Stimulating the metabolism: Carni-Speed + Blitzform | 
Stimulating the metabolism: Carni-Speed + Rotosal | 
Stimulating the metabolism: Carni-Speed + Rotosal |
| The recommended water additives can be fed together in one drinker | | | | | |

**TIP:**
1. Respiratory: Every 4 weeks and before important races we recommend to give three days Avimycin together with Energy-Oil over the corn.
2. Muscle regeneration: After heavy races we recommend to give 4 meals K+K Protein 3000
Feeding concept breeding:
The quality of young pigeons is a direct consequence of optimum nutrition. What’s crucial for breeding is whether the performance potential can develop to the full. For this reason, it’s not enough to invest in the best and healthy parents, you must also ensure that the breeding animals receive the best possible nutrition at all times. With the feeding concept outlined below you leave nothing to chance.

The result of these efforts are perfectly developed young pigeons. The feeding concept is based on a reduced amount of the difficult-to-digest peas and instead includes more high-quality and easily digestible toasted soya beans and seeds such as hemp, which are rich in valuable linoleic and linolenic acids. The optimised feeding concept also includes as vitamins, minerals, trace elements and amino acids for best breeding performance. Especially when preparing for breeding the focus should be on administration of vitamin E.

Winter breeding: Especially during the cold time of the year the optimised feeding concepts will promote regular egg laying, high fertilisation and hatching rates and healthy and quick development of the young.

Tip: Gradually convert to breeding food before breeding no later than 5 days prior to coupling. After egg laying and until shortly before hatching up to 50% winter food can be fed.

Feeding concept: young pigeons during the training phase
At the beginning of the training phase the youngsters should get used to the training basket. As feed we recommend a light mix, to get the pigeons to explore their environment. If they then become more inclined to fly, this has to be taken into account through adding fat-containing grains. If the young still don’t show much willingness to explore despite being in excellent health, we recommend that you add Carni-Speed to their drinking water for 7 days. After that the pigeons should want to fly a lot. As soon as the training phase starts infection pressure should be lowered and the immune system strengthened from the gut. Once the preliminary flights are over you should convert to the feeding concept of old pigeons (page 4/5).

Tip: Gradually convert to breeding food before breeding no later than 5 days prior to coupling. After egg laying and until shortly before hatching up to 50% winter food can be fed.

Feed concepts winter / rest
The winter can be used to get the animals in the best possible condition for breeding and racing after moulting. Vaccinations are also carried out in winter. Only if the pigeons are fed properly including all essential nutrients is it possible for vaccines to work properly and for immunoglobulins (antibodies) to develop.

This includes optimum feeding in the long term and intermittent administration of feed supplements that support the immune system.

Furthermore, the feeding concept for the winter phase is based on high-fibre with a high percentage of filling crude fibre. Protein content is reduced to avoid metabolic strain. Dosed administration of vitamins and trace elements in the winter ensures the best possible preparation, especially before and after vaccinations. Proper drinking water hygiene should also be part of any feeding concept during the rest and winter period.

Tip: After moulting and until coupling feeding should be kept to a minimum.

Products 2016

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Carbohydrates

Our first goal in the week after every competitive flight is a speedy recovery. Science provides us with the necessary insights for supporting the recovery with demand-oriented strategies.

Every competitive flight means stress. The longer the flight, the more energy is spent. Today’s well-informed breeders know that carbohydrates are metabolised in the first flight phase. Then, after about an hour of flying, the fat burning process supplies the pigeons with most of the energy. In flight, protein is negligible as a source of energy. Independent of whether pigeons in flight have the wind in their backs or coming from the front, immediately after the competitive flight, pigeons start building up their energy reserves. The simplest and fastest way to do this is to store carbohydrates as glycogen in the liver and muscles.

It therefore stands to reason to shorten the recovery phase by feeding carbohydrates as early as possible. The ‘fastest’ way is feeding carbohydrates as early as possible. The ‘fastest’ way is to do this is to store carbohydrates as glycogen in the liver and muscles.

In the course of longer competitive flights, increased fat burning is another factor. This involves the oxidation of free fatty acids, a process, which also leads to the formation of ketone bodies. After more than 2 hours of flight time, we therefore recommend adding the organic phosphorus supplement Butafosfan to the feed to speed up the utilisation and clearance of metabolic side products. For many years now, Butafosfan is fed to working animals to lighten the stress on the liver and to accelerate the recovery after physical stress. Especially in cases of medium and intense exhaustion, the pigeons recover fast and quickly regain their physical strength.

Antioxidative vitamin C can not only help to replenish depleted glycogen stores on a cellular level, but it can also strengthen the body’s own defence system and accelerate the regeneration process. Moreover, it supports iron absorption in the gastro-intestinal tract and is a part of the body’s own hormonal synthesis. Additionally, this valuable vitamin also participates indirectly in the fat burning process in the muscular system. That is why we recommend to supplement vitamin C immediately after the race.

Butafosfan to the feed to speed up the utilisation and clearance of metabolic side products. For many years now, Butafosfan is fed to working animals to lighten the stress on the liver and to accelerate the recovery after physical stress. Especially in cases of medium and intense exhaustion, the pigeons recover fast and quickly regain their physical strength.

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Rotosal is a liquid feed supplement based on organic phosphorus and oligosaccharides to quickly counter phosphor and energy deficits before and after long-distance races and general stress such as after treatments, moult and breeding. The Butafosfan it contains provides liver relief, which in turn leads to improved performance during the race. Rotosal is stable in the trough for more than 8 hours and is mainly used to accelerate regeneration.

Feeding recommendation:
- For feeding with drinking water or with grain feed.
- Before and after stresses: 5 ml for 20 pigeons.
- After intense stress: 10 ml for 20 pigeons.
- Moult / breeding: 2-3 times a week 5 ml for 20 pigeons.
- Fresh drinking water daily.
- Tip: 5 ml Rotosal for 20 pigeons as the last meal before a flight (e.g. peeled sunflower seeds) with feed.

Mumm is an easy to digest and water soluble tonic that provides energy and replenishes glycogen stores. Because it contains various carbohydrates, Mumm is able to provide energy before the flight and quickly replenish glycogen stores after the flight. Mumm also contains various vitamins, potassium and magnesium, which ensures straightforward muscle regeneration after the flight.

Feeding recommendation:
- During the entire racing period, Mumm should be given via the trough. Before the flights 2 measuring spoons (10g) with 1 l water for 2 days. On the flight day only clear water. It is important to feed Mumm after the pigeons’ return for 1-2 days (2 measuring spoons (10g) with 1 l water) to ensure fast recovery.
- Can be fed together with Rotosal.

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- Can be fed together with Rotosal.
Protein

Maintaining or restoring the health of tissues such as the muscles and tendons as well as the inner organs, the blood and liver is our second priority in the course of the week.

Therefore, it is of utmost importance to feed readily digestible protein in substantial amounts on the day following a competitive flight. Aside from observations, there are also scientific data on the protein metabolism in pigeons. They were gathered by Professor Haas from the University in Kiel (Germany). On the day after a competitive flight, analyses of pigeon blood reveal a marker for the catabolism (decomposition) of muscle tissue. This marker is not present immediately after the competitive flight, i.e. muscle tissue (protein) is not catabolised during the competition. However, on the day after the competitive flight – when the quickly replenishable energy reserves (glycogen) are already filled up again – some kind of ‘metabolic review’ takes place in the organism of the pigeons. As part of the musculoskeletal system regeneration the body renews the structure of muscle fibres. To accomplish this, the body needs available amino acids (AAs) to serve as building blocks. The different essential amino acids must be met. The best suited protein sources amounts. Still, this complex requirement can be easily met. The body renews the structure of muscle fibres.

To accomplish this, the body needs available amino acids (AAs) to serve as building blocks. The different essential amino acids must be met. The best suited protein sources would first generate the required energy using the protein. Protein cannot be completely metabolised. This leads to the accumulation of considerable amounts of ammonia. Since ammonia is cytotoxic, this leads to a condition often referred to as blue blood. The body eliminates ammonia by turning it into urea and uric acid, which will be eliminated via the urinary tract. These processes require energy and are therefore an unnecessary burden on the metabolism. Longer recovery periods will be the result. These counter-productive processes can be avoided by implementing the recommendations for the energy recovery phase and the protein recovery phase in the above time sequence.

Feeding electrolytes and short-chain AA compounds support the recovery after stress and lighten the load for the liver.

Under no circumstances should you feed large amounts of protein on the day the pigeons fly. In such a case, the metabolism would first generate the required energy using the protein. Protein cannot be completely metabolised. This leads to the accumulation of considerable amounts of ammonia. Since ammonia is cytotoxic, this leads to a condition often referred to as blue blood. The body eliminates ammonia by turning it into urea and uric acid, which will be eliminated via the urinary tract. These processes require energy and are therefore an unnecessary burden on the metabolism. Longer recovery periods will be the result. These counter-productive processes can be avoided by implementing the recommendations for the energy recovery phase and the protein recovery phase in the above time sequence.

Feeding electrolytes and short-chain amino acids is yet another way to speed up the recovery. Electrolytes are essential for the acid-base balance and they furnish needed salt. Since pigeons like other birds do not have sweat glands, electrolytes are not depleted in flight. Therefore, electrolytes are more important in the preparation for the next competition starting about mid-week until the end of the week.

The scientific literature confirms the importance of amino acid (AA) supplements in the recovery process. In contrast to feeding protein-rich grains or ‘modern’ protein powders, the respective supplements merely provide specific AA and/or short-chain AA compounds, which are often given in the drinking water. In flight, the latter supplements do not stress the metabolism like the supplementation with protein. Instead, these AAs and short-chain AA compounds support the recovery after stress and lighten the load for the liver.

K+K Protein Dragees
Feed supplement for pigeons

Coated K+K protein tablets contain readily digestible animal protein. This protein is extracted from top quality blood plasma. It also contains methionine, lecithin, and magnesium to support the fast recovery of racing pigeons. The tablets cause hardly any metabolic stress. Therefore, they are well-suited for the individual supplementation of pigeons arriving late from a flight or very exhausted pigeons.

Feeding Recommendation:
One coated K+K Protein tablet (0.54 g) per pigeon after the race.

Sedochol
Feed supplement for pigeons

Sedochol is a mix of the sulphurous amino acid methionine, sorbitol and choline. Methionine is contained in large amounts in the feathers, which makes it essential for a faultless moult. Choline and sorbitol, which are involved in protein and fat metabolism, provide active liver protection and fast regeneration after a race. Sedochol is especially recommended when changing rations and to promote digestion.

Feeding recommendation:
After stress, during breeding and moult 10 ml per 1 litre of drinking water or 750 g feed. The solution has to be changed daily.

Sedochol can be fed with Avimycin, UsneGano, Elektrolyt 3Plus together in a trough.

K+K Protein 3000
Feed supplement for pigeons

K+K Protein 3000 is an easily digestible protein concentrate made from animal and plant proteins with a crude protein content of 65%. In addition to muscle development K+K Protein 3000 supports digestion with the silicous and healing earth it contains. K+K Protein 3000 also contains valuable immunoglobulins which support the immune system and thus strengthen the body’s defences after the flight. The added limiting amino acid methionine ensures smooth protein metabolism and excellent plumage development during the moult.

Feeding recommendation:
Racing season: 4 meals starting on the day of return , two measuring spoons (20 g) per 500 g feed. Can be fed together with Entradac and Avimycin.
Breeding and moulting period: 4 meals per week.

Contains blood products, must not be fed to ruminants!
Avipharm®, powder
Feed supplement for pigeons

- Amino Acid Balance
- Regeneration
- Stimulation of the Metabolism

Avipharm powder contains electrolytes, vitamins and amino acids. It ensures speedy recovery periods after a flight. Very small protein building blocks make it easier for the pigeon to rebuild essential tissue and also stimulate the metabolism during moulting and breeding. The vitamins in Avipharm support the pigeons after treatment with antibiotics and after stress phases.

**Feeding Recommendation:**
5g = 1 teaspoon per 1 liter drinking water after the race.

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Elektrolyt 3Plus
Feed supplement for pigeons

- water balance
- muscle function
- quick energy

Elektrolyt 3Plus is an excellent combination of electrolytes and carbohydrates, which ensures that body fluids are restored to normal again quickly after moisture loss. Elektrolyt 3Plus should always be administered before and after major exertion. It supports the body’s water balance and significantly shortens the recovery phase. It contains magnesium and potassium which are important for proper muscle and heart function.

**Feeding Recommendation:**
20 ml Avipharm daily (4 screw caps full) in 1 litre of drinking water during the moulting and breeding periods, for raising squabs, after competitive flights, and to meet the increased need for nutrients after treatment with antibiotics.

**Feed recommendation:**
1 measuring spoon (10 g) with 1 litre of drinking water after the race.

---

Bt-Amin® forte
Feed supplement for pigeons

- amino acids
- B vitamins
- electrolytes

Bt-Amin forte contains high doses of amino acids, electrolytes and B-vitamins in a defined composition. The essential amino acids are readily available and are thus during medication treatments and in the travel time an optimal relief. The numerous high-dose B-vitamins are essential for blood formation and nerve tonic during the travel season.

**Feeding Recommendation:**
15 ml per litre of drinking water.

While medication cures daily.
In the first drinker on flight day.
In the moulting season 3 times per week.

**Storage:** not more than + 25 °C, tightly closed and protected from light store!

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Avipharm®, liquid
Feed supplement for pigeons

- Amino Acid Balance
- Regeneration
- Stimulation of the Metabolism

An active metabolism is essential for the rapid regeneration and strengthening after the race. An optimal moulting and vigorous growth of young animals are decisive for the pigeon sport. The fancier uses Avipharm powder specifically for an additional supply of races, and regularly during the breeding, rearing and moulting.

**Feeding recommendation:**
5g = 1 teaspoon per 1 liter drinking water after the race.

---

Elektrolyt 3Plus
Feed supplement for pigeons

- water balance
- muscle function
- quick energy

Elektrolyt 3Plus is an excellent combination of electrolytes and carbohydrates, which ensure that body fluids are restored to normal again quickly after moisture loss.

**Feeding recommendation:**
3 times per week.
In the moulting season 3 times per week.

---

Avipharm® forte
Feed supplement for pigeons

- amino acids
- B vitamins
- electrolytes

**Feeding recommendation:**
15 ml per litre of drinking water.

---

Elektrolyt 3Plus
Feed supplement for pigeons

- water balance
- muscle function
- quick energy

Elektrolyt 3Plus is an excellent combination of electrolytes and carbohydrates, which ensure that body fluids are restored to normal again quickly after moisture loss.

**Feeding recommendation:**
3 times per week.
In the moulting season 3 times per week.
**Prevention is better than cure**

We know many infections are transmitted through the drinking water. Because of this, we have concentrated on water hygiene and the reduction of infection from cross contamination.

The following graph describes the cell division and proliferation of E. coli dependent on pH value. Similar results have also been obtained for salmonella.

As we can see (from the graph), bacteria can’t thrive under a pH value of 4.5. This led us to develop the product Avidress Plus. This adjusts the pH value of the drinking water to this level. Many vets who specialise in bird sickness confirm that there is rarely any evidence of pathogenic organisms (trichomonads & bacteria) in the crop smear of pigeons fed with Avidress Plus.

**Avitestin** is a mix of butyric acid and short and medium-chain fatty acids. It reduces the pH value of drinking water and thus reduces the risk of infection with gram-positive bacteria. The high-quality medium-chain fatty acids exert their effect far into the small intestine and promote intestinal health by promoting the growth of the body’s own probiotics. The butyric acid it contains is active in the intestine, promotes the growth of villi and therefore improves immune defences. Furthermore, the acids ensure that the drinking water stays fresh for longer and they have a positive effect on the pigeons’ metabolism.

**Avitestin**
- **Intestinal health**
- **drinking water quality**
- **metabolic efficiency**

**Feeding recommendation:** In general: 5ml with drinking water.
- **Before and after stresses**
- **Daily for young pigeons during the training phase.**

**Tip:** Get the pigeons used to the flavour gradually.

**Please note:** Avitestin must not be administered together with Avidress Plus. It may be given with UsneGano, Carni-Speed and Entrobac without a problem.

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**UsneGano** Feed supplement for pigeons and domestic animals
- **Oregano**
- **Usnea barbata**
- **strengthened combination**

**UsneGano** consists of a beard lichen (Usnea barbata) tincture and oregano with the natural ingredients usnic acid, carvacrol and thymol. The importance of this unique combination of ingredients is known from the literature. Pigeons who are given UsneGano will have firm droppings and bright, white noses shortly after feeding.

**Feeding recommendation:**
- **Pigeons:** Daily to promote digestion, or 2 to 3 times a week.
- **Racing pigeons:** 1-2 days after race, 2 before the flight. UsneGano can also be administered with Avidress Plus, Carni-Speed and Entrobac in a trough.

**Storage information:** Store well-sealed and away from light!

**Avidress® Plus** Feed supplement for pigeons
- **health**
- **drinking water quality**
- **metabolic efficiency**

Avidress plus contains short-chain acids that lower the pH value of the drinking water to such an extent that the risk of infection is also lowered. It also contains minerals, trace elements, oregano and cinnamon. This mix together with the acids makes the metabolism more efficient. Pigeons looked after this way are simply healthier.

**Experiences:** Many vets who specialise in pigeons confirm that there is rarely any evidence of pathogenic organisms (trichomonads & bacteria) in the crop smear of pigeons fed with Avidress Plus.

**Feeding recommendation:**
- **Administer daily throughout the year during the racing season, breeding, moult and rest time:** 10ml (1 dosage) per 2 litre of drinking water.
- **ring racing season, breeding, moult and rest time:** 10ml (1 dosage) per 2 litre of drinking water.

**Storage information:** Store well-sealed and away from light!

**Tip:**
- Before and after stresses
- Daily for young pigeons during the training phase.

**Please note:** Avitestin must not be administered together with Avidress Plus. It may be given with UsneGano, Carni-Speed and Entrobac without a problem.

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**Prevent Canker**

**Protection of the gut**

As we know the trough is an ideal medium for pathogenic organisms, which is why they are the main mode of transition of diseases of racing pigeons. For this reason, a lowering of the pH value of the drinking water for racing pigeons became established 10 years ago. Lowering the pH value to 4.5 means that trichomonads cannot multiply in the trough and having to treat this pest with medicine has been reduced to a minimum.

Traditional preparations for acidifying drinking water reliably and safely exert their effect in the trough and in the upper digestive tract. Initially it was not possible to a sufficient degree to affect the intestinal tract because acids after passing through the stomach are neutralised in the front part of the small intestine by buffer substances of the pancreas. To achieve an effect far into the small intestine, we started to expand the mode of action using special fatty acids this year. This mix of short and medium-chain fatty acids has the traditional pH value lowering function in the trough and the crop. However, further into the intestine the acids act against difficult-to-combat bacteria such as streptococci, staphylococci and clostridia.

The mode of action of the new medium-chain fatty acids is simple yet very effective. They are not neutralised by the buffer substances and reach the pigeons’ small intestine unchanged. The pathogenic organisms want to use the fatty acids as an energy source and therefore absorb them into the cell. In the cell the medium-chain fatty acids have an antibacterial effect and destroy the pathogenic microorganisms. At the same time, the new combination of acids also maintains a good intestinal flora and optimises nutrient uptake. This destroys the pathogens in the intestine and at the same time reduces the risk of reinfection via the trough.

As an addition to the short and medium-chain fatty acids the use of butyric acid has proven to be useful, because butyric acid is a main source of nutrients for the epithelial cells of the intestinal mucosa and therefore strengthens the intestinal mucosa cells and in particular helps regenerate the intestine after illness. These new acid combinations are therefore ideal to prevent intestinal imbalances. To ensure that this combination is as effective as possible experience shows that they should be used over a longer period of time during stress, such as the start of the training phase of the young.

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**Special acids against the young bird sickness**

**Avitestin**
- **Intestinal health**
- **drinking water quality**
- **metabolic efficiency**

Avitestin is a mix of butyric acid and short and medium-chain fatty acids. It reduces the pH value of drinking water and thus reduces the risk of infection with gram-positive bacteria. The high-quality medium-chain fatty acids exert their effect far into the small intestine and promote intestinal health by promoting the growth of the body’s own probiotics. The butyric acid it contains is active in the intestine, promotes the growth of villi and therefore improves immune defences. Furthermore, the acids ensure that the drinking water stays fresh for longer and they have a positive effect on the pigeons’ metabolism.

**Feeding recommendation:** In general: 5ml with drinking water.
- **Before and after stresses**
- **Daily for young pigeons during the training phase.**

**Tip:** Get the pigeons used to the flavour gradually.

**Please note:** Avitestin must not be administered together with Avidress Plus. It may be given with UsneGano, Carni-Speed and Entrobac without a problem.

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**Reducing infection pressure**

**Prevention of young bird sickness.**
The goal of keeping racing pigeons healthy throughout the flying season involves protecting them against infections during stress situations as much as possible.

Pigeons are frequently given pre-and probiotics, bovine colostrum and antibiotics from egg yolk to boost their immune system. Especially in the recent ten years, scientists made tremendous discoveries relating to the activations of the active and passive immune systems. Aside from the frequently given pre- and probiotics, bovine colostrum, and egg yolk antibiotics, we can now also feed the special carbohydrates 1,3/1,6-ß-D-glucan; if fed regularly, these glucans will increase the number of immune-competent cells. These cells are for example macrophages and lymphocytes, which play a significant role in the complex organisation of the immune system. Scientists also found that feeding ß-glucans leads to a significantly faster immune response. A fast immune response is crucial to fight the rampant spread of the multifactorial young pigeon disease.

Also recommended for the development of a healthy immune system is the feeding of powdered cellulose, which has a positive effect on the intestines. Not only pigeons in their first year of life profit from the improved digestion of their feed as a result of eating active powdered cellulose. The improved digestion is based on longer villi in the gut. Villi are the uptake stations for nutrients and active agents. They are also the locations where the immune system shows enormous activity. Another benefit of feeding powdered cellulose with its active influence on the gut is the increased enzyme activity during the digestive process. The more effective digestion of food leaves fewer nutrients for pathogens, which are kept in check due to starvation. ß-Glucans, powdered cellulose, and allin are excellent means of supporting the immune response, which happens in the intestines. Pigeons experience tremendous stress especially while they are in flight. It therefore stands to reason to help them cope with this stress.

Due to the instability of allicin, freeze drying garlic turns out to be the best solution because in this method the stable allin remains intact. In the body, the ingested allin is then turned into the potent allin. The combination of allin and cinnamon is used as bactericidal agent against E. coli and Salmonellae while at the same time protecting the beneficial gut flora with bacteria such as Lactobacilli. Also recommended for the development of a healthy immune system is the feeding of powdered cellulose, which has a positive effect on the intestines. Not only pigeons in their first year of life profit from the improved digestion of their feed as a result of eating active powdered cellulose. The improved digestion is based on longer villi in the gut. Villi are the uptake stations for nutrients and active agents. They are also the locations where the immune system shows enormous activity. Another benefit of feeding powdered cellulose with its active influence on the gut is the increased enzyme activity during the digestive process. The more effective digestion of food leaves fewer nutrients for pathogens, which are kept in check due to starvation. ß-Glucans, powdered cellulose, and allin are excellent means of supporting the immune response, which happens in the intestines. Pigeons experience tremendous stress especially while they are in flight. It therefore stands to reason to help them cope with this stress.

A successful probiotic has to meet the many different needs of modern pigeon racing. It also makes sense for it to be acid stable to be able to easily withstand the low pH value of the stomach so that it can exert its effect in the intestine with-out being destroyed by the stomach acids. The area of application of a probiotic leads to further requirements. Often they are prescribed to restore the gut flora following a course of antibiotics. Nowadays we have probiotics that contain high numbers of probiotic bacteria that can withstand frequently used antibiotics such as Colistin, Enrofloxacin and Amoxicillin. It is therefore possible to restore the damaged intestinal flora even while antibiotics are administered.

The probiotic bacteria promote the growth of lactobacilli in the small intestine by optimising the living conditions of the body’s own probiotic bacteria. This crowds out pathogens such as E.Coli, salmonella and clostridia. An additional benefit of these new probiotics is that their metabolites inhibit the growth of fungi. It therefore makes sense that many prepara-tions for nutrients and active agents. They are also the locations where the immune system shows enormous activity. Another benefit of feeding powdered cellulose with its active influence on the gut is the increased enzyme activity during the digestive process. The more effective digestion of food leaves fewer nutrients for pathogens, which are kept in check due to starvation. ß-Glucans, powdered cellulose, and allin are excellent means of supporting the immune response, which happens in the intestines. Pigeons experience tremendous stress especially while they are in flight. It therefore stands to reason to help them cope with this stress.

Feeding recommendation:
- after the competition over 1 - 2 meals, 20 g per kg feed or approx. 40 pigeons.
- before inserting over 2-4 meals, 10 g per kg of feed, or approx. 40 pigeons

With increased performance requirements such as breeding, training or molting should be fed 4 - 5 times a week, 10 g per kg of feed.

Many scientific studies indicate that pre- and probiotics can have health-promoting effects on the host organism. A distinction must be made between probiotics and probiotics. The probiotics are a food resource for probiotic bacteria in the intestine. They create a healthy intestinal environment and stabilise the intestine’s natural flora, thus supporting the immune system.

To complete therapy after stressful periods such as training stress of young pigeons, stays in the enclosure and administration of medicine, it also contains vitamins in specific concentrations to accelerate regeneration as best as possible.
### Feed supplement for pigeons

**Winput**
- Better immune response
- Better sperm quality
- Better ovum quality
- Improved oxygen transport
- Better muscle functions
- Suppression of microbes
- Enlarged villi
- Optimised intestinal flora
- More efficient wound healing

**Hexenbier**
- Increase in fitness
- Immune response
- Moulting of down feathers

Hexenbier is a vitality drink made of onions, honey, propolis, Echinacea (cone flower), el-derberry juice, beard lichen (Usnea barbata), and garlic, which strengthens the resilience and causes exceptional eagerness to fly.

After several days of giving Hexenbier the breast meat of the pigeons turns pink, the nose-wart turns white, and the down feathers moult extensively.

**Feeding Recommendations**
- Dependent on the expected performance, feed between one and four 4-g dose of Winput daily per pigeon; we recommend feeding Winput mixed with seeds before the main feeding.
- Racing pigeons: 3 – 4 g per pigeon daily when the flights start
- Moulting: 2 g daily per pigeon
- Winter: 1 g daily per pigeon
- Breeding pigeons: 2 g daily per pigeon
- Young pigeons: 3 g to maximally 6 g daily per pigeon; to meet the increased need in cases of acute young pigeon disease we recommend feeding 4-10 g doses of Winput daily per pigeon (no other feed should be given); large doses of up to 20 g Winput per pigeon daily should be given for no more than 5 days

**Racing Time:**
- 20 ml per 1 Litre Drinking Water
- Feeders must be mixed with Avidress

**Moorgold®**
- Down feather moulting
- Support of the airway health
- Healing herb mixture

Moorgold® is a pure concentrate of healing mud. The humic acids contained in the intestinal bind harmful substances and thus promote the natural discharge from the body. The new formula also contains special fibers, causing firm droppings after two to three feedings with Moorgold and the digestion is affected positively. The new formula of Moorgold is gel-like, which makes it particularly user-friendly and efficient.

**Feeding instructions:**
- During the moulting, resting or breeding in the preparation, as required 2 – 3 times per week
- 1 tablet per kg feed
- To bind we recommend Jungtierpulver, Entrobac or Kräuter-Mix.

**Feeding Recommendations:**
- Racing pigeons receive 1 tablet per day for two days after a race.
- Squabs receive 1 tablet Taubenglück every morning starting on their seventh day of life.

**Deposition of dog’s excrement in the fields.**
- Their instincts and feed on herbs, humus, and soil in the fields. Pigeons do not have the chance to follow their instincts and feed on herbs, humus, and soil in the fields. Such deficiencies may occur because the ingredients correct nutritional deficiencies. The mixture of a large variety of natural ingredients corrects nutritional deficiencies.

**Recommendations:**
- In the winter months, we also recommend feeding 15 ml per kg food daily! Do not feed more than 3 measuring spoons, we recommend feeding 15 ml per kg food daily!

**Moorgold®**
- Better sperm quality
- Better muscle functions
- Better immune response
- Better ovum quality
- Improved oxygen transport
- Better muscle functions
- Suppression of microbes
- Enlarged villi
- Optimised intestinal flora
- More efficient wound healing

**Feeding Recommendations:**
- 2 Measuring spoons (1 Measuring spoon = 10 g) per kg oil (Energie-Öl)
- 2 Measuring spoons (1 Measuring spoon = 10 g) per kg oil

**Jungtierpulver**
- Better immune response
- Better sperm quality
- Better ovum quality
- Improved oxygen transport
- Better muscle functions
- Suppression of microbes
- Enlarged villi
- Optimised intestinal flora
- More efficient wound healing

**Feeding Recommendations:**
- 3 g to maximally 6 g daily per pigeon
- Winter: 2 g daily per pigeon
- Young: 1 g daily per pigeon
- Breeding pigeons: 2 g daily per pigeon
- Dependent on the expected performance, we recommend feeding 15 ml per kg feed daily!
An active metabolism is a precondition for top performance in modern pigeon racing. We recommend a traditional preparation that stimulates the metabolism. Additional functional ingredients can have performance improving effects! This is a central focus of our recommendations.

To stimulate the metabolism we use the highly stimulating effect of large doses of iodine on the metabolism. This makes it very easy for pigeons to be in top form. After only a few administrations of elemental iodine you can observe a clear change in the pigeons, which can only be achieved with elementary iodine. In addition to its role in thyroid function, iodine plays an important role in regulating physiological processes such as growth, moult and reproduction as well as immune functions; it also has anti-inflammatory and antioxidative effects.

Iodine also plays quite an important role in the treatment of fungal diseases such as candida infections. Following anti-biotic treatment several days of iodine administration is advisable. Iodine, because of its disinfectant effect, also plays quite an important role in treating and preventing poux diseases.

L-carnitine is a functional component that has a key function in energy metabolism. Studies show a clear effect from long-term feeding of pure carnitine. It has been shown that administration of at least 50 mg of L-carnitine per pigeon must be provided in order for there to be a significant improvement in performance. It is absolutely essential to ensure continuous administration of L-carnitine during the racing period, because only then can L-carnitine be absorbed by the muscle cells. The performance improving effects can only be ensured with longer-term administration, which manifests itself in increased willingness to train.

The main importance of L-carnitine lies in the transport of fatty acids from the cytoplasm to the mitochondria, i.e. to the power stations of the cells, which makes it important for the race because of energy production from fatty acids. L-carnitine is able to prevent muscle cramping and fatigue by binding free acetyl radicals and therefore avoid their damaging effect on muscle cells. L-carnitine is also a buffer for the damaging lactic acid, which means that the muscle, when under extreme stress, will not become “acidic” as quickly. Under “normal” living conditions (outside the racing season) the L-carnitine requirement can mostly be met by self-synthesis. A deficiency can occur if in the case of low administration (mixed grain feed contains an extremely low amount of L-carnitine) there is an increased requirement. We have to assume a significantly higher requirement if physical strain is increased through training and racing.

We therefore recommend that you feed L-carnitine over a longer period of time, which should deliver a positive effect. Racing pigeons fatigue less quickly, which allows flying speed to be maintained at a high level over a longer period. The indirect cell protection function of L-carnitine protects the muscles. This prevents the muscles from becoming “acidic”, which is harmful, allowing the pigeon to deliver high performance in the long term.

During normal training at home, constant administration of L-carnitine leads to a much higher willingness to fly because of the influences mentioned above. The longer and more intense training units easily achieved this way lead to a proven training effect that puts a strain on all metabolic functions. The pigeons regenerate quickly even after heavy strain and the right conditions for top performance are in place.

L-carnitine increases performance indirectly by improving cell metabolism and leads to a shortening of the rest periods.

Areas of application:
- to improve performance and to disinfect trough water
- Dosage: To improve performance during the racing period every day 5 ml per 2-3 litres (2ml/litre) of clear drinking water. On very hot days increase amount of water to 5 litres. On the day of the flight only give clear water! During breeding and moult: 5 ml per 5 litres (1ml/litre) clear drinking water 1-2 times per week. To disinfect the trough water during the rest of the year: Once a week 5 ml per 5 litres (1ml/litre) drinking water.

Tip: Never use copper and galvanised metal troughs. Stainless steel can be used. Do not use with animals involved in food production. Keep out of the reach of children. Do not use after expiration date. Dispose of unused medicines at the pharmacy.

Storage information: Do not store above + 25°C.
Aside from the already mentioned components of the 7-point plan, the supplementation with vital nutrients is essential for an optimal feeding regimen throughout the year. This includes vitamins, trace elements, and minerals. These micro-nutrients are essential to keep the pigeons healthy. However, they do not provide energy. This distinguishes micro-nutrients from the macro-nutrients fat, carbohydrates, and proteins. Micro-nutrients are involved in many metabolic processes. Therefore, the pigeon feed should be supplemented with micro-nutrients throughout the racing season, when raising young pigeons, and during resting periods.

Arguably, vitamins are the best-known group of vital nutrients. The vitamins are grouped in water-soluble and fat-soluble vitamins. Vitamin A, D, E, and K are fat-soluble vitamins. Vitamin E for example is used as a “breeding vitamin”. Meanwhile, vitamin E was proven to work well when preparing pigeons for mating. The well-known C and D vitamins are water-soluble. Vitamin B12 is another essential ingredient because it contains many significant ingredients such as vitamin E and gamma-oryzanol. Vitamin E increases the fertility and is well-known as radical scavenger, which protects the cell from oxidative damage. The also present gamma oryzanol has a positive effect on muscle building. We want to enter into the discussion on the optimal way to give pigeons vital nutrients that saturated as well as unsaturated fatty acids from fish and plant oils. Fish oil is best suited for this purpose. The unsaturated fatty acids from fish and plant oils are important substances in the synthesis of hormones and cell components. They also suppress inflammation. By contrast, saturated fatty acids are mainly used as energy sources. Saturated sheep fat is now properly used in the upkeep of racing pigeons.

Two components are beneficial in the preparation of optimal mixing oils for pigeon feeds. Lecithin should be added because it is scarce in plant oils but has tremendous benefits for the metabolism. Rice germ oil is another essential ingredient because it supplies many significant ingredients such as vitamine E and gamma-oryzanol. Vitamin E increases the fertility and is well-known as radical scavenger, which protects the cell from oxidative damage. The also present gamma oryzanol has a positive effect on muscle building. We want to enter into the discussion on the optimal way to give pigeons vital nutrients that saturated as well as unsaturated fatty acids from fish and plant oils. Fish oil is best suited for this purpose. The unsaturated fatty acids from fish and plant oils are important substances in the synthesis of hormones and cell components. They also suppress inflammation. By contrast, saturated fatty acids are mainly used as energy sources. Saturated sheep fat is now properly used in the upkeep of racing pigeons.

Energy oil is a natural energy supplement from a mixture of complementary, high-quality, cold-pressed oils. The fish oil content provides unsaturated fatty acids and the lecithin ensures smooth lipometabolism. The rice germ oil content promotes muscle development.

Feeding recommendation: During the racing season 1-2 times per week mix 5 ml = 1 capsule with 1 kg of grain feed. Dry this mixture slightly with RO 200 ready.

Shake well before use.

Storage: Tightly closed, protected from light and not exceed + 25 °C

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In modern pigeon sport maintaining a healthy respiratory tract during the season has top priority.

Traditional methods such as treatment with antibiotics for one or two days leads to poor resistance of the available medicines to pathogens, which can cause respiratory diseases. For this reason, Röhnfried took its research in a different direction and now uses innovative probiotic bacteria, which is an absolutely harmless way of keeping the airways of pigeons healthy.

If you examine the mucous membranes microbiologically in more detail, you can see that it has pathogenic as well as non-pathogenic germs (so-called probiotics) on it.

Recent research shows that bacteria exchange information through cellular communication (quorum sensing). These are very complex processes at the end of which messenger substances form the relevant signals. For instance, bacteria signal to each other “optimal conditions” if there is plenty of space and nutrition, which then leads to the bacteria multiplying and dividing more. Free space and good nutrition thus signal “good conditions” and encourages them to multiply. Not a lot of space and little nutrition, on the other hand, tends to cause the microorganisms to assume an arrested state, a so-called sporoid form.

This means that bacteria, as a result of high environmental conditions, produce signals that cause the mucous membrane to stop multiplying, which as a result are crowded out by the probiotic bacteria.

The mucous membrane is continuously populated with probiotic bacteria. This process is called microbiological management. It means that benign bacteria clean, so to speak, the surfaces. They do this by causing (through signalling) the undesirable bacteria to stop multiplying, which as a result are crowded out by the probiotic bacteria.

The new generation probiotic microorganisms make use of this entirely new hygiene approach by populating the mucous membranes and thus enter into competition with the pathogenic organisms for food and space. This process of the “microbiological cleaning” of the mucous membrane creates a healthy and stable microflora. The formation of this probiotic microflora on the pigeons’ mucous membranes provides protection from infections before and after a race, especially while the pigeons are transported.

**Avisana** is an active cleaner for all mucous membranes as well as noses and eyes, wounds, injuries and endangered body parts. It forms a stable and healthy microflora by populating the affected areas with safe probiotic bacteria. It is pH-neutral, very economical to use, and contains no colourings or odours. Avisana forms a probiotic liquid film on the surface with a long-term effect, which usually means that disinfection is not necessary.

**Application recommendation:**
- For each long-distance flight one drop per nostril
- After each long-distance flight on the day of arrival or when separating genders
- After training flights in the rain to protect the mucous membranes from irritation

**All year round:** If nostrils are discoloured or eyes are watery, 2 times a day 1 drop or fully cover the affected skin surfaces.

Always shake product well before use! The cleaner can be used permanently.

**Special storage information:**
Keep away from frost and do not store above +25°C.

**Probiotic bacteria – small helpers, big effect**

6.

**Probiotic shield**

- **white noses**
- **clean throats**
- **free airways**

**Avisana Nose drops**

Nose drops for pigeons

The benzyl mustard oil in nasturtium has a broad antibacterial effect for gram-positive as well as gram-negative bacteria. Allyl mustard oil in horseradish has good efficacy in the gram-positive spectrum (streptococc, staphylococc), while the 2-phenyl mustard oil shows an extended efficacy spectrum of gram-negative (E. coli and salmonella) bacteria. Both plant substances together are therefore a particularly effective plant alternative to chemical antibiotics. In contrast to the classic antibiotics, these natural active substances can also kill viruses, yeasts and fungi – in exactly the place where the infection is. This is because the mustard oils enter the blood in the upper intestinal tract. This means that the naturally occurring “good” intestinal bacteria are not affected. These are important in the gut for digestion and a functioning immune system. After their absorption into the blood the mustard oils circulate in the circulatory system bound to proteins and ultimately accumulate in the excretory organs, the urinary tract and the lung, where they also exert their efficacy.

**There is a herb for every illness!**

6.

The importance of this piece of wisdom continues to rise from year to year in modern pigeon sport. Because more and more bacteria are becoming resistant to classic antibiotics. Plant-based antibiotics are therefore increasingly the focus of our research.

In addition to the anti-bacterial effect there is often also an anti-fungal and anti-viral effect. There are few or very few side-effects of plant-based antibiotics; resistance is not observed at all. Another advantage of natural antibiotics: they do not harm the beneficial bacteria that live in harmony with us, such as intestinal bacteria, which means that they indirectly strengthen our defences. They are therefore also well suited for prevention. And they also supply us with vitamins, minerals, trace elements and other essential nutrients.

We find substances with a strong antibiotic effect in all cruciferous plants (e.g. horseradish) and many members of the lily family (e.g. garlic). The inhibiting effect is usually due to the sulphur compounds and essential oils contained in these plants. It is only thanks to our modern procedures that we are able to make full use of these natural substances.

Traditional monastic medicine has known the healing effects of the ingredients (the mustard oils) of nasturtium and horseradish for centuries. They are used to treat infections of the upper airways and the urinary tract. Only through breeding and controlled cultivation are we able to reach a high concentration of mustard oil in the medicinal plant. Mustard oils inhibit the growth of pathogens.

**Avimycin** supports the airways of pigeons based on horseradish and nasturtium. It stimulates the physiological secretion of dust, mucus and coating of the airways. With its unique mix of freeze-dried horseradish and nasturtium, Avimycin contains the precursors of the otherwise unstable mustard oils in high concentrations. These are enzymatically formed and become active only through feeding.

**Feeding recommendation:**
Feeding with grain feed. For 20 pigeons 10 grams per day, shared between meals a day. Feed regularly for metabolic support in all phases where there is increased infection pressure. Can be fed together with Entrobac and K+K Protein 3000.

**Racing season:**
After long-distance flights over 2-3 days at the start of the week.

**Young pigeons:**
To improve their natural vigour during all stress phases over several days.

**Moult:**
2-3 times per week.

**Breeding:**
Do not feed to nestlings.

**Storage:**
Do not store above +25°C.
### Forcés of nature

**Liquorice:**
Liquorice is the medicinal plant of 2012. It is a blood depurative and expectorant. The glycyrrhizin in liquorice roots suppresses the growth of bacteria, viruses, and fungi.

**Thyme:**
The volatile oils in thyme are bactericidal, mucolytic, and they promote expectoration. Thyme is also an antioxidant.

**Anise:**
Anise is the medicinal plant of 2014. It has a mucolytic effect, stimulates the intestinal glands, and it is used to control vermin.

**Eucalyptus:**
Eucalyptus has an antibacterial effect; it is mucolytic and improves the circulatory tract. The volatile oils in eucalyptus have been used to maintain the health of the respiratory organs for generations.

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**Keeping Pigeons for the Pure Joy of it!**

**Atemfrei**
Feed supplement for pigeons
- Frees the airways
- Strengthens the immune response
- Pure, natural herbal oils

**Bio-Air-Fresh**
Spray solution
- air quality improvement
- dust binding
- free airways

**Bio-Air-Fresh** is an herbal elixir, which contains various herbal oils such as liquorice, thyme, anise, fennel, and peppermint. These oils stimulate the metabolism inside the respiratory tract and promote the immune response. This increases the vitality of pigeons.

**Feeding Recommendations:**
Atemfrei may be added to the drinking water or the feed:
- 10 ml per 1 litre drinking water
- 15 ml per 1 kg feed

Give to pigeons for 5 to 10 days as needed.

The dosage may be doubled in cases of severe stress.

**In the racing season after competitive flights:** give for 2 days during the first two days of the week.

Shake well before use!

**Application:**
Spray 2-3 strokes into each loft, especially in the winter months. Also spray it at regular intervals during the breeding period and the 2 days a week in the racing season.

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**Rozitol**
Nose drops for pigeons
- clean throats
- more top prices
- clears the airways

As we know for a long time, the pigeon-oriented in their home region even after the sense of smell. It is therefore important that the pigeons will be sent with free airways to the races. Rozitol cleans the nose and promotes the segregation of fixed mucus. Old mucus and dust is being liquefied and then swallowed by the pigeons or remotely via cotton swab.

**Recommended Use:**
Applications: 1 to 2 drops per nostril or 30 drop per liter of water.

**Breeding Pigeons:**
14 days prior to pairing

**Racing pigeons:**
14 days before the first free flight
14 days before the first training
3-4 times per season 6 days before important races
Youngsters: always after recovering of the Young Bird Sickness
14 days before the first training

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**Bio-Air-Fresh Spray** solution containing essential oils for improvement of air. It contains destillates of various herbs. These essential oils have been used to maintain the health of the respiratory organs for generations. Use of this product makes pigeons resistant to all kinds of colds.

**Top quality herbal oils with their aromatic flavour and vitamin C and zinc support the physiological functions of the respiratory tract.**

**Application:**
Spray 2-3 strokes into each loft, especially in the winter months. Also spray it at regular intervals during the breeding period and the 2 days a week in the racing season.

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**Why is it important to keep free the airways?**
For decades, we pigeon breeders talked about how keeping free the airways of our birds helps to achieve top prizes. We, too, share this conviction and this is not only because we know that birds need clear air ways to inhale an optimum of oxygen. For some years now, it is also common knowledge that the pigeons’ sense of orientation can be supported by their olfactory sense.

This is why for quite some time, Röhnfried focuses on boosting the pigeons’ air ways from within. On the one hand, the mustard oil of nasturtium, and horseradish proved to be very efficient agents – natural antibiotics effecting the air ways via the bronchial tubes – causing no damages at all to the intestinal flora of the pigeons (Avianicin). On the other hand, we make use of the stimulating effects of pure herbal oils like thyme, liquorice and eucalyptus which stimulate the trachea (Atemfrei) and thus help to haul out dust particles.

Lately, we found a new way how to liberate the air ways – especially in case of crusty or heavy mucous obstruction in the upper sinuses. By boosting mucus production, this new Röhnfried product clears the upper sinuses fast and efficiently from stuck crusty and dust deposits collected during autumn and winter time. Additionally, this new clearing product has antibacterial effects on the mucous membranes and helps to fight pathogenic germs.

Experience from recent years shows that these methods in combination with probiotic bacteria protect and keep the sinuses healthy (Avisana). Like this, one can reduce antibiotic treatments of the air ways which always have undesirable damaging effects on the intestinal balance. Moreover, this new method allows to abandon antibiotics during an entire racing period.

You can apply the new cleaner directly into the nose of the pigeon or feed it with the drinking water. Shortly after the application of the product, there might occur a temporary restriction of the olfactory sense of orientation (olfactory sense). We therefore suggest to allow for a time-lag of at least 5 days before a race or training when applying the product directly into the nose.

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**Rozitol**
Nose drops for pigeons
- clean throats
- more top prices
- clears the airways

**Keeping the airways free**

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**Atemfrei**
Feed supplement for pigeons

**Bio-Air-Fresh**
Spray solution

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**500 ml bottle**  Art.Nr.  11161
**400 ml spray can**  Art.Nr.  11487
Minerals for racing pigeons

**For successful fanciers**

**Premium Mineral Zucht & Mauser**

- Formation of feathers
- Osteogenesis
- Growth

**Expert Mineral**

- Optimal mineral supplementation
- Support of the digestive system
- Excellent acceptance

**Premium Mineral Reise**

- In-flight performance
- Support of the digestive system
- Stimulation of the metabolism

**Standard Mineral**

- Balanced minerals
- Promotes the digestion
- Finely granulated quality

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**TIP**

Now also available in a 10 kg bucket!

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Feeding Recommendations:

- **Premium Mineral Zucht & Mauser**
  - is a pure, natural product containing oregano and herbs such as e. g. fenugreek, Aloe, sage, thyme, and cinchona bark. The amino acid methionine and all essential minerals and trace elements are also present to meet the special needs of breeding and moulting pigeons. The preparation promotes the correct shell formation and improves the bone formation in just hatched pigeons. The vital substances and valuable herbs stimulate the digestion and the metabolism.

- **Expert Mineral**
  - is a pure, natural product; it contains oregano and the Herba-San formula herbs. All essential minerals and trace elements as well as valuable effective agents and vital compound are included. Thanks to the excellent acceptance by the pigeons, the mineral demands are also met in the racing season. Vital components and valuable herbs stimulate the digestion and the metabolism. This boosts the flight performance.

- **Premium Mineral Reise**
  - is a pure, natural product containing oregano and the Herba-San formula herbs. All essential minerals and trace elements as well as valuable effective agents and vital compound are included. Thanks to the excellent acceptance by the pigeons, the mineral demands are also met in the racing season. Vital components and valuable herbs stimulate the digestion and the metabolism. This boosts the flight performance.

- **Standard Mineral**
  - is a pure, natural product; it contains all essential minerals, trace elements, and valuable vital agents and components. Feeding Standard Mineral provides and balances needed minerals and trace elements as well as valuable effective agents and vital compound. Feeding Standard Mineral every day, not only during the breeding and moulting periods but also e. g. for competitive racing in rest and winter phases. Given today’s forms of pigeon upkeep with drastically limited free flights, the pigeons must rely on breeders to provide them with the crucial minerals. Calcium (Ca) and phosphorus (P) are the basic building blocks for the bone formation and metabolism. In addition, Ca plays an important role in the functions of muscle and heart, in blood clotting, and for the proper acid-base equilibrium. In breeding, calcium deficiency causes problems with the egg shell formation and distorted breast bones. The chemical elements magnesium, sodium, potassium, chlorine, and sulphur are involved in many metabolic processes. They activate enzymes, are needed for the neuromuscular signal transport, are essential for the optimal function of the muscles, and they play a role in establishing the proper osmotic pressure, electrolyte balance, and acid-base equilibrium. They are also required for the production of the stomach acid (HCl). A sufficient supply of minerals is therefore prerequisite to the ability to perform at a high level.

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**Minerals and Trace Elements**

As the name suggests, trace elements are present in the body in only very small quantities. By no means does this imply that they are unimportant. Trace elements and other chemicals are vital for the body whether they are required in larger or trace amounts. As a general rule, they cannot be substituted with other elements. Deficiencies of these elements compromise the well-being and ability to perform. Therefore, minerals and trace elements must be provided on a continuous basis. Special mineral mixtures are available for various demands. Of course, all mixtures must contain stomach stones (gastroliths), which are necessary for the mechanical digestive activity of the stomach muscle. Without the stomach stones, digestive problems will ensue and the fed grain is not optimally used. The variety of components in our supplements and the excellent acceptance are the perfect basis for the optimal supplementation.

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The special mineral feed is given to the pigeons daily in small amounts before the main meal. These daily doses ensure that the pigeons are ready to take up the vital minerals. Our minerals are enriched with herbs and substances, which regulate the activity of the intestines. The mineral feed is coated with loam, which promotes the formation of digestive juices. This has a positive influence on the digestion. In the long run, the improved utilisation of the feed and the stimulation of the intestines will lead to improved performances. This is the crucial benefit of optimising feeding.
Topfit®-Spezial-Futterkalk
Special feed lime for pigeons

- vitamins
- minerals
- trace elements

Topfit Futterkalk is a specially defined mix of vitamins, minerals and trace elements. If administered regularly, it promotes growth, muscle development, fertility and bone structure development. Especially for breeding and rearing Topfit produces excellent results.

Feed recommendation:
Röhnfried Topfit can be given to racing pigeons in a feed container on its own to take freely or mixed in with food. During moult, breeding and racing period approx. 20g Röhnfried Topfit (1 tablespoon) for 10 pigeons.

Taubenfreund® Grit mit Anis
Minerals for racing pigeons

- Excellent acceptance
- Better digestion
- Stable acid-base equilibrium

Taubenfreund Grit with anise consists of a mixture of sea shells, quartz and redstone. These ingredients optimise the calcium level because calcium is available for a relatively long time. Quartz and redstones promote the digestion and the ingested minerals are part of the acid-base regulation in the pigeon organism. The excellent acceptance of Taubenfreund Grit is due to the added anise oil and the special structure of this mixture.

Feeding Recommendation:
Liberally supply as much Taubenfreund Grit as the pigeons ingest in a day.

Röhnfried Taubenstein
Minerals for racing pigeons

- Contains oyster shells
- Increased digestive activity
- Acid-base equilibrium

The chosen granulation of the tasty Röhnfried Taubenstein (pigeon stone) ensures that pigeons accept the supplement well. The oyster shells in the supplement provide available calcium for an extended time. This is very important for egg laying pigeons and when raising squabs.

Feeding Recommendation:
Liberally supply as much Taubenstein as the pigeons want to ingest.

Lecker-Stein®
Minerals for racing pigeons

- Excellent acceptance
- Increased digestive activity
- Supply of iodine and magnesium

Pigeons like the Lecker Stein because of the granulation and the way it is produced. In the breeding period, it prevents mineral deficiency and in races, the included iodine and magnesium have a positive effect on the motivation of the pigeons. The good acceptance ensures that the pigeons also take up enough minerals and trace elements during races.

Feeding Recommendation:
Liberally provide as much Lecker-Stein as the pigeons want to ingest.

Optimising the Supplementation with Minerals

For many years, performing a wide range of quality tests is standard operating procedure for the Röhnfried Company. Quality testing guarantees consistently superior results worldwide. Among other analyses, we determine the concentration of every nutritionally important ingredient in our products as well as in the raw materials. In addition, we voluntarily test for undesired substances such as dioxin, heavy metals, and pesticides. If our tests show undesired substances in raw materials we will not use them and exclude the respective supplier.

For years, we have worked on length to supply you with the safest possible feed stuff. Therefore, we have switched our formulations for loam-containing feed products to secured raw materials. Colour changes are a result of this measure. They indicate the safety and quality of Röhnfried products.
Vitamin E & Selenium

Feed supplement for pigeons Taubenfit-E 50®

32 33

ml mixed into 1 kg feed 2 to 3-times a week

ml in 1 litre drinking water or alternatively

Racing pigeons:

During flights, provide

Breeder pigeons:

1 Screw cap (5 ml) per litre of drinking water

Feeding Recommendation:

radicals.

and cells from the deleterious effects of free radicals.

Vitamin E is known as antioxidant; it has a positive effect on the immune system. Selenium has a positive effect on the immune system.

Together with other feed, Taubenfit E50 is meant to supply breeding pigeons with the needed amount of vitamin E. Especially in combination with selenium, vitamin E has a beneficial influence on the fertility, the hatch rate, the upbringing, the muscular structure, and the flight performance. In addition, selenium has a positive effect on the immune system. Vitamin E is known as antioxidant; it protects unsaturated fatty acids, vitamin A and cells from the deleterious effects of free radicals.

Feeding Recommendation:

1 Screw cap (5 ml) per litre of drinking water in times of increased performance requirements.

Breeder pigeons: Provide 5 ml per litre of drinking water on five consecutive days before mating and before the next depositing of eggs (ovipositioning)

Racing pigeons: During flights, provide 5 ml in 1 litre drinking water or alternatively 10 ml mixed into 1 kg feed 2 to 3 times a week.

Pavifac®-Spezialbierhefe

Feeding Recommendations:

2 Tablespoon Pavifac per 1 kg slightly moistened feed once or twice a week;

Röhnfried Oregano-Sheep Fat is ideally suited as thickener.

Storage:

Keep in a tightly closed container and protect from moisture!

Gervit-W® Taubenfit-E 50®

Feeding Recommendations:

Once or twice a week;

2 full screw caps = 10 ml

Feeding recommendation:

Gervit-W is given during the breeding and racing period 2 times a week, 2 full screw caps = 10 ml Gervit-W with 2 litres of water or 1.5 kg grain feed. During the rest of the time, giving Gervit-W once a week is enough. To meet increased vitamin needs, administer Gervit-W several times a week. Do not give Gervit-W during the journey season on day the of a flight. Copper and iron troughs can have a negative effect on the shelf life of the vitamins.

Feeding Recommendation:

Once or twice a week;

2 Tablespoon Pavifac per 1 kg slightly moistened feed.

Feeding Recommendation:

Once or twice a week;

2 Tablespoon Pavifac per 1 kg slightly moistened feed.

Gervit-W® Taubenfit-Dragees

Feeding Recommendation:

1 coated tablet per pigeon when sending it off to a race.

Please follow the feeding recommendation on the package insert to the letter. (1 coated tablet contains 0.60 g)

Flugfit-Dragees supply pigeons with high doses of vitamins, amino acids, honey, and carbohydrates. The significant benefit of Flugfit is based on the special way it is made to release the nutrients several hours after it is given to a pigeon. This ensures that the pigeon has all the power it needs to come home.

Feeding Recommendation:

1 coated tablet per pigeon when sending it off to a race.

Blitz-Total-Vitamin-Kapseln

contain a particularly fine, micronized vitamin emulsion with many valuable vitamins. The special emulsion ensures an excellent absorption of the vitamins through the intestinal mucous membrane. The vitamins have a positive effect on the metabolism and therefore also increase the fitness level.

Feeding Recommendation:

1 - 2 capsules per week and pigeon

Storage Instruction:

Do not store above 25 °C
Wurm-T (Wormtabs) are indicated for treatment against roundworm, hairworm and tapeworm infestations in racing pigeons. They are easy to give and effective in treatment of worm infections.

**Dosage:** Simply 1 tablet per pigeon, repeat 1 tablet after 6 weeks.

Gambakokzid RO is one of our most popular products for the treatment and prevention of Trichomoniasis (canker) and intestinal Coccidiosis and inflammation of crop mucosa worldwide. For the treatment and prevention in the loft it is recommended to add to the drinking water. Simply add 2 g of powder per 1 litre of drinking water for a period of 6 days. Drinking water volumes refer to normal consumption levels and should be doubled on hot days. Gambakokzid RO does not have any known negative side-effects. Following this treatment we recommend administration of Gervit-W for pigeons.

Gamba-Tabs R are indicated for the treatment and prevention of Trichomoniasis (canker) and intestinal Coccidiosis. Gamba-Tabs R are also for the treatment and prevention of trichomoniasis which cause mucosal inflammation in the crop of pigeons. Prevention dosage (Prophylaxis) during the racing season give 1 tablet per pigeon every 8-14 days. At the beginning of the week. Weaning of Youngsters from parents 1 tablet per Youngster.

Aparasit® Anti-parasite spray solution

Aparasit plus Spray is an anti-parasite spray solution for pest control. It quickly and reliably destroys mites, ticks, fleas, lice and other pests. Because it is easy to use it is ideal for treating nesting cells and equipment.

**Instructions:**
- Aparasit plus works against ticks, lice, mites and other pests.
- The pigeons’ head, beak and especially the eyes must be protected.
- The young without full plumage, feed, eggs and drinking water must also not be sprayed. The majority of the parasites are in the pigeons’ environment. Therefore especially the nesting cells, seating and the immediate environment should be sprayed thoroughly. Especially in the case of tick infestation, the treatment should be repeated after 3 days.

Badesalz Bath salt for pigeons

Röhnfried Badesalz is recommend for all times of the year and especially during moul. Dust, skin residue and dander, bad feathers and down are loosened, which promotes new feather growth and cares for the skin. This pigeons will have a shiny, silky plumage and it also acts against mites, bird lice and other parasites.

**Application:** 1 measuring spoon of approx. 20g bath salt is added to 10 l bathing water. Depending on the weather, the pigeons should be offered a bath 1-2 times a week.

These products are marketed in accordance with the Small Animal Exemption Scheme. Do not use on Animals intended for human consumption. Keep out of reach of children. Not to be used after the expiration date. Dispose of unused medicines in a safe manner. The products are only available in the UK.
They trust us ...

Gaby Vandenabeele
1. National Tulle (614 km) against 5734 pigeons

Dirk Van Dyck
1. National Bourges II (487 km) against 10141 pigeons

Rudi de Saer
1. National Cahors (741 km) against 7140 pigeons

Veronika & Georg Fröhlingdorf
1. Ace pigeon 2015 cock of Germany

Wolfgang Roeper
1. National Champions yearlings 2015

Theo Jappe
1. National Champion Germany 2013

Heinrich Lübben
1. Ace pigeon 2014 cock of Germany

Guido Weinrich
1. National Champion Germany 2014

Your retailer:

www.roehnfried.de