



Newsletter

Term: **Spring** | Issue **13** | October 2023

By **Dr. Rob Conradie**

STRESS

in racing pigeons

Of all the mammals and birds on this earth none are likely to experience the stress that racing pigeons are subjected to.

Let's list the various factors as they occur in the pigeon's lifetime...

- Before weaning, the bird lives a pretty calm, stress free life under the care of the parents. At weaning it is separated from its parents and possibly its nest mate. For the first time it has to find its own food and water in an unfamiliar surrounding. It possibly gets bullied by its fellow inmates.
- After eventually settling in it may still have to fight for a place at the food trough, wait for its chance to drink water and fight for its perch space at night.
- When allowed outside into the wide, wide world it is exactly that - probably frightening at first, especially if made worse by predator attacks (hawks and cats etc.). Being in the air for the first time could be exciting and terrifying at the same time. Losing its bearings and having to sleep out for a few nights are not going to do much for its confidence.
- Next on the agenda is its first experience in the basket. Confined to a relatively small space with its loft mates.
- General management would include being handled regularly – stressful if they are wild (making them tame by constant handling in the nest will obviate this) or handled roughly. Being vaccinated would add to the stress.
- As part of their training the food would be rationed at times to encourage discipline and fast trapping.
- When racing starts they spend, in most cases three nights in a basket every week, always with strange pigeons from other lofts – one early in the week for the long combined toss organized by their federations and two on the two nights preceding the race. At times, especially when this is unfamiliar to them, they would get very little sleep.
- During the race itself we are not aware of what they put themselves through. They are exposed to everything Mother nature throws at them. The longer and harder the race the more stress. This continues for 4 -5 months.

Is there another mammal or bird that is subjected to the same unnatural stress?

What is the initial main symptom exhibited by pigeons that are under stress?

Loose droppings.

Why does this happen?

Under normal circumstances the digested food moves slowly down the intestinal tract. In the lower part of the tract, water is absorbed from the faeces, which are eventually passed by the pigeon. We see a perfectly formed stool with the normal white urine cap.

If a bird is stressed, excited or given a fright the colon muscles contract prematurely resulting in a loose stool being passed before some of the fluid part has been absorbed.

We often see this as a normal event during the day especially when the birds have been handled or disturbed more than normal.

The droppings at night should be perfectly formed if the birds have not been disturbed by rats, cats and pigeon flies as an example. The droppings passed during the night are a better indication of the bird's well-being.

What changes do we see in the good bacteria in the intestine?

Lactobacillus acidophilus is the most common good bacteria in the intestine but also the most susceptible to changes.

During any stressful episode it is the first bacteria to be affected by being flushed out. Growth and multiplication of the bacterium is slowed dramatically. The acid produced by this bacterium is reduced resulting in a more alkaline intestinal environment.

The less acidic intestinal environment then becomes more favourable for yeasts, E.Coli and Salmonella.

These organisms would worsen the symptoms of the loose stools/diarrhoea.

How do we prevent /treat this good bacterial loss and resultant acid loss?

Probiotics like **Entero-Plus** or **Intestum** contain Lactobacillus as well as other acid forming bacteria. This is why they are also recommended for the treatment of non-specific diarrhoea. Using these on a regular basis would replace the Lactobacilli and resultant acid lost as well as having the other beneficial effects that they are known for.

Many fanciers use acidifying products as well. The most commonly used of these products would be Apple Cider Vinegar.

What happens when the stress is ongoing?

The bird's immune system is put under enormous pressure resulting in increased susceptibility to pathogens (disease causing organisms).

Ongoing stress could lead to complete collapse of the whole immune system.

In humans, short bouts of stress will lead to a common cold and susceptibility to infections but ongoing stress leads to high blood pressure, heart attacks, strokes, gastric ulcers, chronic fatigue and headaches to name but a few.

How can we prevent the consequence of this stress?

- Preventing the triggering factors as far as possible would be an obvious start but it admittedly would be impractical to prevent most of the factors listed above.
- Immune stimulants would need to play a big role here.

Medpet's immunostimulatory medications that can be used would be...

Medimune
Probiotics – Entero-Plus and Intestum
Liquorice powder
Viroban
MediBrew
Vitaton 34

The above products would be particularly useful for viral infections.

The other pathogens (Canker, Candida, Coccidiosis, bacteria and worms) can at least be treated with antimicrobials in the form of antibiotics, antiprotozoals and anthelmintics.

Treatment of these infections would be less dependent on the immune boosting products mentioned earlier but interestingly it has been found by researchers that the prevalence of these conditions increases as the races get longer and harder.

Here again, stress is playing a major role.

In closing, mention must be made here of the loose droppings we get when it rains. We tend to put it down to Coccidiosis because the lofts are wet. This could be the case but in many cases when we do faecal examinations no Coccidiosis is found. Many fanciers find that even without treatment the droppings return to normal when weather becomes dry again.

What is happening here?

The birds are stressed by the wet weather (they do not like it especially if on-going), loose droppings develop, good bacteria are flushed out and yeasts and E.coli are able to proliferate.

The treatment in these cases would be probiotics.