## USE OF ACIDS IN PIGEONS

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One of the ways that the bowel protects itself from disease is through the maintenance of a weakly acidic environment. They are able to do this because many of the normal bacteria present, such as Lactobacillus, produce lactic acid. With stress the Lactobacilli are one of the first bacteria to be lost and so acid production falls and pH rises resulting in a less acidic bowel. Potentially disease causing organisms such as E.coli, Salmonella and yeast don't survive well in an acidic environment and so the loss of this acidic environment creates a window of opportunity for these to establish and multiply. Anything that re-establishes the normal acidic environment quickly, minimizes the chances of disease. One way of doing this is by adding acids to the birds drinking water. Initially this may seem a little bit strange, however, if done correctly it can be advantageous.

There are dose rates available for acids such as hydrochloric acid, however, as these acids can be quite dangerous to handle their use is not encouraged. There are two acids commonly used. One is acetic acid. This is available as apple cider vinegar at your local supermarket and the dose rate is 5ml per litre. Alternatively, citric acid can be used. This can be purchased as a white powder from the chemist ( we also stock it at the Knox Bird Clinic). Here the usual dose used is 1 teaspoon (3grams) to 6 liters of water. It is interesting that many of the older bird books recommend the use of acids and suggest squeezing lemon juice or adding other sources of citric acid to the birds drinker. Some old secrets still work well today.

Used correctly, acids can do the birds no harm. Fanciers can use them in a number of ways. Either to treat the birds when they are diagnosed with E.coli or "thrush" (yeast) where they are a handy way of controlling mild infection without resorting to antibiotics. Alternatively, if the loft has ongoing problems, a fancier can put them in the water for one or two days per week as part of an ongoing health management program, say on a Wednesday and Sunday. Also, if fanciers experience predictable yeast or other bowel problems following stress, say for example, following periods of cold damp weather in an open loft, then when these conditions occur he can put the acids in the water for one or more days to head problems off.

With mild yeast or bacterial bowel upsets the use of acids often results in the production of tight brown nut-like droppings with reduced odor and a healthier looking bird. A failure to respond indicates a more serious problem and veterinary assistance may be required.