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INTERPRETATION OF INDIVIDUAL MILK RESULTS

E. COLI - Environmental organism, from contaminated bedding, dirty teats etc. Can cause severe mastitis in early lactation cows, but often milder in mid/late lactation. Many cases "self cure". Some remain persistently infected, needing prolonged treatment. Controlled by environmental hygiene and predipping.

NLFs (non –lactose fermenting coliforms). These are environmental and not enteric coliforms. Many are Pseudomonas species.

STREP. UBERIS - Environmental, especially from straw bedding. Causes hot, hard and swollen quarter and high temperature. Should respond to almost any antibiotic, including straight penicillin. Try Tylan for persistent cases. Currently a most isolate from chronic recurrent mastitis. Controlled by predipping. Can cause fluctuating high TBCs.

STAPH AUREUS (coagulase positive Staphs). Has adhesive and other properties producing a chronic mastitis difficult to treat. Prolonged antibiotic injection (e.g. Tylan) and tubes may help. If cows are repeatedly or persistently infected they are best culled, as they are a risk to others.

CNS (coagulase negative Staphylococci). Originally only associated with teat canal infections, an increasing number of high cell count cows now give CNS in pure growth. Presumably should respond to the Tylan regime.

STREP. AGALACTIAE - highly infectious organism, spread from cow to cow during milking. Usually controlled by careful post-milking teat dipping and dry cow therapy. Produces a high cell count but is easy to treat.

STREP. DYSGALACTIAE - often associated with cuts and bruises on teats and may cause mastitis in heifers. Easy to treat, except when it is part of the summer mastitis complex.

ARCANOBACTERIUM PYOGENES (C. pyogenes) - produces, foul smelling pus/milk. Part of the summer mastitis complex. Will not respond to treatment and the quarter is lost. Give penicillin injection if cow is sick.

CORYNEBACTERIUM BOVIS - Teat end organism, often found in increased numbers when post-milking teat disinfection poor.

KLEBSIELLA - another coliform. Environmental organism which can produce very severe mastitis.

PSEUDOMONAS - sometimes associated with contaminated teat washing water. Very difficult to treat because organism can survive within cells. Can make cow chronically ill. Best culled.

BACILLUS SPECIES - can cause a chronic hard quarter, but also very commonly found in contaminated samples. Originates from dust. Occasionally B. cereus (from brewers grains) can cause a gangrenous mastitis.

PASTEURELLA - environmental organism which may also be associated with respiratory disease. Common cause of mastitis in sheep.

YEASTS AND FUNGI (including Aspergillus) - environmental organisms. Iodine infusions are needed for treatment.

STREP FAECALIS AND PROTEUS - both organisms are found in faeces and their presence in milk usually indicates a contaminated sample.

NO GROWTH. This is to be expected in around 30% of the samples received. Most commonly caused by an E. coli infection which has been very rapidly eliminated from the udder, perhaps leaving hard, hot, swollen quarter but no bacterial growth. Staphylococci can be intermittent excretors of infection. The quarter may have been under treatment.

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