Where does Salmonella hide after grinding of meat?

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Where does *Salmonella* hide after grinding of meat?

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**Background and hypothesis**

Transfer of *Salmonella* during grinding of the first pieces of meat decrease rapidly after which the decrease become markedly slower (Fig. 1). This is explained as a biphasic transfer from two distinct environmental loci in the grinder (Fig. 2). In one locus (E1), *Salmonella* is hypothesized to be loosely attached supporting a fast transfer. In another locus (E2), *Salmonella* is hypothesized to be tightly attached making the transfer slow. The objective was to verify this hypothesis.

**Conclusions – attachment**

- Difference between environments likely caused by physical structure
- Irreversible adhesion to the grinder could take place – especially in loci from group 2
- Recovered level of *Salmonella* likely much lower than actual level – dependent on recovery method?

**Conclusions – detachment**

- Difference between recovery methods depended on physical structure
- Toothbrush swab method recovered higher levels of *Salmonella* – especially in loci from group 2
- Recovered level of *Salmonella* increased 10-fold with the optimized recovery method using toothbrush and mild detergent