Food Preparation Survey- Etiologic Agents

Note: These organisms should be placed on your etiologic agent list.

1. *Staphylococcus aureus* - pathogenesis from heat-stable toxin. Can cause vomiting and diarrhea. The incubation period is approximately 2-6 hours later. Can get from pastries, meat etc. if these are left unrefrigerated for four or more hours. This provides the organism with an opportunity to grow and produce toxin.

2. *Salmonella spp.* - pathogenesis from infection. The incubation period is 12-36 hours after ingestion. Symptoms include diarrhea, G.I. pain and fever. Poultry, fish, meat not cooked properly, unpasteurized milk and fecal contamination can be sources of infection.

3. *Shigella spp.* - pathogenesis from infection. The incubation period is 24-72 hours after ingestion. Symptoms include diarrhea and fever. Poultry, fish, meat not cooked properly, unpasteurized milk and fecal contamination can be sources of infection.

4. *Campylobacter jejuni* - pathogenesis from infection. The incubation period is 2-5 days after ingestion. Symptoms include diarrhea, cramps and fever. Poultry, fish, meat not cooked properly, unpasteurized milk and fecal contamination can be sources of infection.

5. *Escherichia coli* - pathogenesis from infection. The incubation period is 3-4 days after ingestion. Sometimes they appear after 1 day and sometimes as long as 10 days. Symptoms include watery and/or bloody diarrhea, severe abdominal pain, mild fever and possibly anemia. Undercooked contaminated meat, unpasteurized milk and juice and leafy green vegetables can be sources of *E. coli* infection.

6. *Clostridium botulinum* - pathogenesis from heat-labile toxin. The incubation period is variable, anytime from hours to days. Symptoms include nausea, vomiting, abdominal cramps, paralysis and respiratory failure. Home canned foods can be a source of botulinum toxin. The organism can grow in this anaerobic environment and produce its toxin.