

Toxin mediated / food poisoning

Bacteria	Characteristics
s.aureus	<p><u>Consuming dairy products , meat , poultry, cream , mayo</u> Its resistant to gastric PH & heat Clinically : incubation 1-6 hrs , mild fever , symptoms last for (12 hrs – 2 days)</p>
B.Cereus	<p><u>Eating contaminated meat , fish , starchy foods , veggies</u> 95% of the cases are associated with rice (fried Rice Syndrome) The diarrhea is caused by in vivo production of a heat-labile enterotoxin Clinically : longer incubation (6-24) hrs , it lasts for (20-36) hrs (24 median) Symptoms: Watery diarrhea, abdominal cramps, vomiting (25%)</p>
Clostridium botulinum	(flaccid paralysis)

Clostridium botulinum

Foodborne botulism home-canned foods	Infant botulism
Onset : 18 to 36 hours after exposure (range, 6 hours to 8 days)	Contaminated food with spores from varied sources (Honey, food, dust, corn syrup) -
Symptoms : early : NAVY D (: nausea, vomiting, weakness, dizziness) Late : (DD) double vision, difficulty in swallowing, and speaking	Symptoms : <u>Baby will develop a weak cry, decreased sucking, floppy head and decreased motor response to stimuli</u>
In severe cases, death due to respiratory muscle paralysis	Death if not treated



Cell invasion

Shigella	<p>S. dysenteriae (Group A, the most pathogenic)</p> <p>Pathogenesis : Destruction of endothelial cells causing hemorrhage</p> <p>Bacteria enter blood are quickly killed by phagocytes</p> <p>Clinically : the infective dose between 10 – 200 organisms</p> <p>Incubation for (1-7 days) , Followed by <u>fever, cramping, abdominal pain, and watery diarrhea</u> for 1-3</p> <p><u>This may be followed by scant stools with blood, mucous, pus, and tenesmus</u></p>	<p>Diagnosis : <i>Dehydration with fast heart rate and low blood pressure , Abdominal tenderness, Elevated white blood cell count , Stool culture , White and red blood cells in stool</i></p>
Enteroinvasive E. coli (EIEC)	<p>Pathogenesis : same as shigella</p>	<p>-</p>
Enterohemorrhagic E. coli (EHEC)	<p>Consumption of contaminated <u>food water, milk, or by contact with animals, feces and contaminated soil , Infected hamburger, salami, and sausages served at fast food chains</u></p> <p>Produces Shiga-like toxin (also called verotoxin)</p>	
Salmonella		

