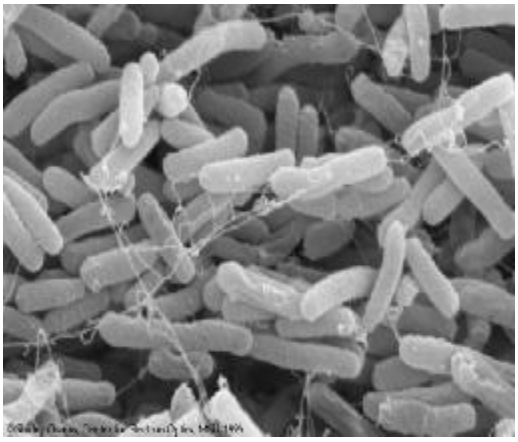
FOODBORNE ILLNESS vs. SPOILAGE

PENICILLIUM NOTATUM



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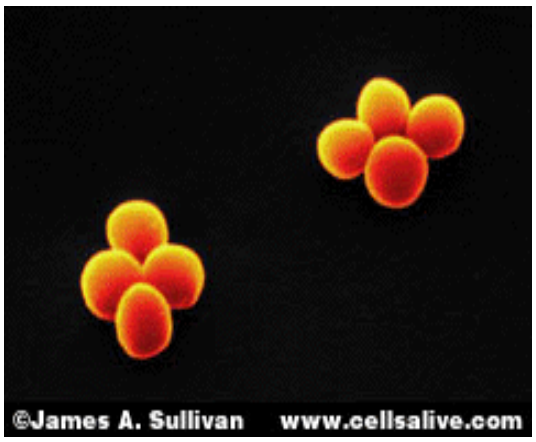
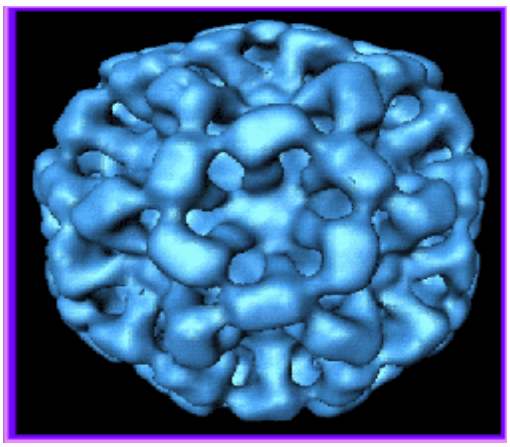
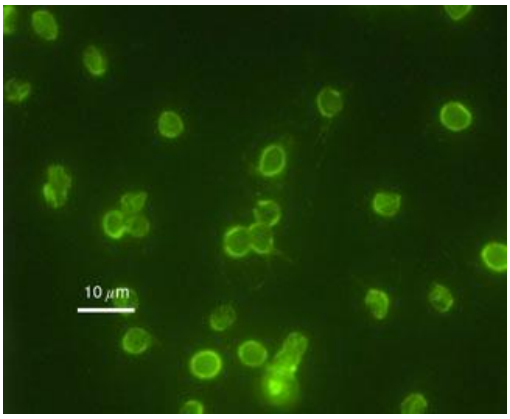


STAPHYLCOCCUS



NORO VIRUS

PSEUDOMONAS AERUGINOSA



CRYPTOSPORIDIUM

FOODBORNE ILLNESS IS THE RESULT OF CHEMICAL OR MICROBIOLOGICAL CONTAMINATION OF FOODS!!!!

FOODBORNE ILLNESS vs. SPOILAGE

SPOILAGE ORGANISMS

Spoilage organisms do not make you sick.
Spoilage organisms make your food look, smell and/or taste bad.
Spoilage organisms used under controlled conditions produce beneficial products.
Certain bacteria are used to produce yogurt, cottage cheese, and buttermilk.

PATHOGENS

Foods containing dangerous levels of pathogenic organisms may not show any signs of spoilage.
Pathogenic organisms do not compete well with spoilage organisms.

INFECTIONS

Some pathogenic organisms make you ill directly. This is called an infection. "THE BUG GETS YOU".
The infective dose (how many organism are needed to make you sick) can vary from a few (10 to 100) to many (1,000,000 or more).
The infective dose is also determined by other factors such as age (infant, elderly) and state of heath (immunocompromised, organ transplant, cancer treatment).

INTOXICATIONS

Some pathogenic organisms produce toxins in the food. The organism itself does not make you sick but, the toxin does.
Some toxins are destroyed by proper heating. (Botulism Toxin)
Some toxins are not destroyed once produced even after boiling the food for hours. (Staph Toxin)

TOXICO-INFECTIONS

Some pathogens once eaten, produce a toxin in the intestinal tract which causes the illness symptoms.

WE CAN PREVENT FOODBORNE ILLNESS BY FOLLOWING SOME BASIC CONTROLS!!!!

CLIMATE – by controlling temperature, we can control growth of microorganisms.

- Keep refrigerated foods at or below 41 ^{0} F.
- Cook food to the proper temperature.
- Reheat foods to at least 165 ^{0} F.
- Hold hot foods at or above 140 ^{0} F.
- Follow proper thawing procedures.
- Follow proper cooling procedures.
- Minimize the time food is in the danger zone.

AVOIDANCE – prevent cross contamination by following proper procedures.

- Do not process raw foods and ready to eat foods on the same surface or with the same utensils.

FOODBORNE ILLNESS vs. SPOILAGE

- Clean and sanitize work surfaces when changing from one type product to another.
- Purchase from only approved sources.
- Use pasteurized eggs as a substitute for raw eggs in preparation of foods such as Caesar salad, hollandaise sauce, eggnog, ice cream, etc. that do not receive an adequate cook and, when serving High Risk individuals.

SANITATION – proper cleaning and sanitizing can effectively reduce the number of microorganisms.

- Follow proper procedures: wash, rinse, sanitize, air dry.
- Use the proper concentration of sanitizer.
- Routinely check sanitizer concentrations.
- Store wiping cloths in a sanitizing solution.

HYGIENE – follow good hygienic practices.

- Wash hands after using the rest room, eating, smoking, drinking.
- Wash hands prior to beginning work duties, upon returning to your work station, when changing from one type food to another.
- Avoid direct hand contact of ready to eat foods.
- DO NOT allow disposable gloves to become a substitute for hand washing.

By using C. A. S. H. we can prevent foodborne illness!!!!!!

Climate
Avoidance
Sanitation
Hygiene