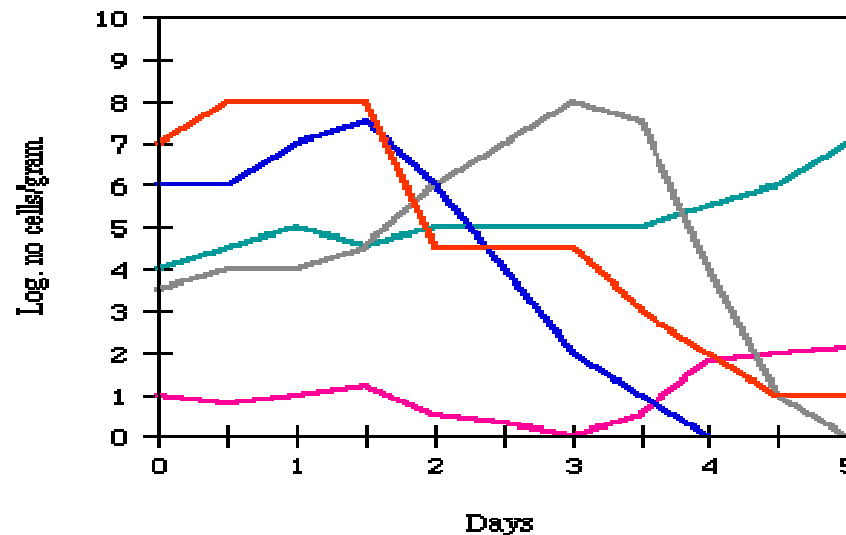


Did you know that chocolate comes from trees?

- Cacao seeds come from chocolate trees. The trees produce small flowers that produce pods containing 30-40 bitter seeds. In order to get the chocolate flavor, cacao seeds need to be fermented, dried, and then roasted. Fermentation and drying are done at the tree farm.
- The pods are split open and piled in a heap covered with banana leaves. Seeds are in the heap for 5-7 days and absorb flavors and change chemical composition during that time. The changes are the result of microbial growth. The microorganisms can come from the machete used to split the pods, the workers' hands, and the fermentation process.
- Chocolate acquires its color and flavor during fermentation. A variety of microorganisms grow in the fermentation heap, but not at the same time (see graph).



Source: Dr. Christine Case
Skyline College



Did you know that chocolate comes from trees?

- The fermentation process lasts 5 days; during that time the seeds germinate. If the seeds are allowed to ferment longer than 5 days, it will effect the flavor.
- The beans are then dried and bagged for sale to chocolate manufacturing companies.
- Chocolate beans are sold on New York's Coffee, Sugar and Cocoa Exchange.

Scientific careers in the chocolate industry

- Microbiologists evaluate the fermentation process in an effort to achieve a consistent, high quality flavor.
- Biochemists investigate the chemicals responsible for chocolate's flavor.



Source: Dr. Christine Case
Skyline College