

Summary

Spoilage bacteria are microorganisms too small to be seen without a microscope that cause food to deteriorate and develop unpleasant odors, tastes, and textures. Microorganisms can cause fruits and vegetables to get mushy or slimy, or meat to develop a bad odor. *Mesophiles* prefer moderate temperatures ranging from 41 °F (5 °C) to 50 °F (10 °C). In a favorable medium, these bacteria double their numbers in as little as 30 minutes.

Psychrotrophiles : can grow at about 32 °F (0 °C) (the freezing temperature of water), but grow best at moderate temperatures. *Thermophiles* and Mesophiles. Wide variety of fungi spoil foods. Some of the most common fungi include *Rhizopus* , *Alternaria* , *Penicillium* , *Aspergillus* and *Botrytis* .

Freshly laid eggs are generally sterile, but soon become contaminated with numerous genera of bacteria. Eventually, these MO will penetrate the eggshell and spoilage will occur. Pseudomonads are common spoilage agents, but molds like *Penicillium* and *Cladosporium* sometimes grow in the air sac and spoil the egg.