

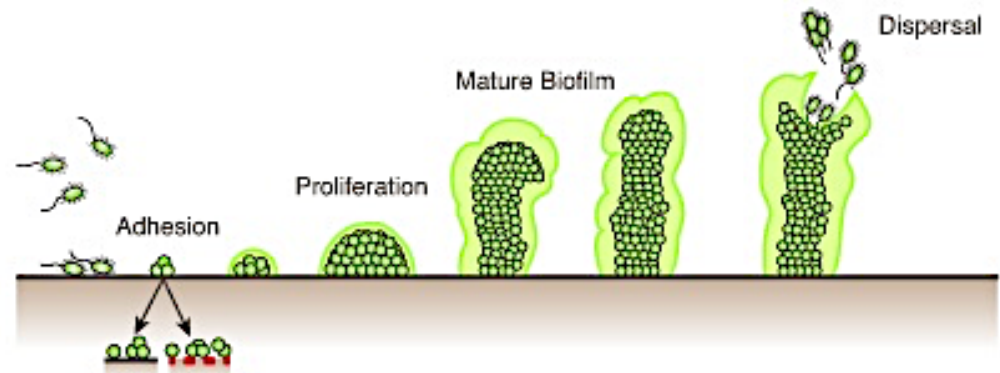
SterilFood™ Biofilm

Despite good manufacturing practices and correct food packaging and manipulation, re-contamination of foods exists due to a number of causes. Most common and dangerous is BIOFILM and represents a problem heading mad industry and technicians within food processing plants, slaughtering premises, cutting factories, consumption premises, kitchens and creating a food safety issue and public health concern. To fight against such threatening circumstances and risks is part of our business. This is why we have created the only 100% natural-mineral solution for foodborne bacteria killing, consumer's health and safety protection, maximum performance and cheap solution of broad use.

SterilFood™ Biofilm is an eco-friendly food grade mineral product with broad applications within industry health.

Biofilm Explained

www.ndpharmabiotech.com



The biofilm is an efficient strategy for microorganisms to survive and proliferate even in adverse circumstances.

The formation and maturation processes are as follows:

After adhesion the microorganisms proliferate on the surface of pipes, tubes, tanks, and other premises forming a multi-layered 3-D structure that develops into a **stable cell matrix**. Due to their slow growth, bacteria in the biofilm are **up to 1,000 times more resistant** to antibiotics and detergents than unattached bacteria. Over time individual microorganisms leave the biofilm and transform into **planktonic bacteria**, which are **metabolically active again and proliferate quickly**. The consequences are vary and **sometimes devastating for products, human health and consumers**. When detected, sometimes bacteria has spread from all around, but unfortunately, late detection may result in praecox spoilage, product quick deterioration and infection of consumers with different degrees of impact in dependence of population consuming infected products and their immunological status.