

About Antimicrobial Product 關於抗菌產品



Natural Made “Antimicrobial Product” applying Antimicrobial Technology, mixing antimicrobial additive into plastic before injection moulding without additional coating, which can inhibit bacterial growth in plastic, including “Staphylococcus Aureus” & “Escherichia Coliform”.

Natural Made **【抗菌產品】** 應用抗菌技術，混合抗菌添加劑於塑料之中，一體成型無額外的塗裝，可抑制塑料中的細菌滋生，包括**【金黃色葡萄球菌】**及**【大腸埃希氏菌】**。

We have conducted Antimicrobial Test “ISO22196” through “SGS-CSTC Standards Technical Services Co., Ltd.”, antimicrobial rate up to 99.9%.

我們通過**【通標標準技術服務有限公司】**進行抗菌測試**【ISO22196】**，抗菌率高達 99.9%。

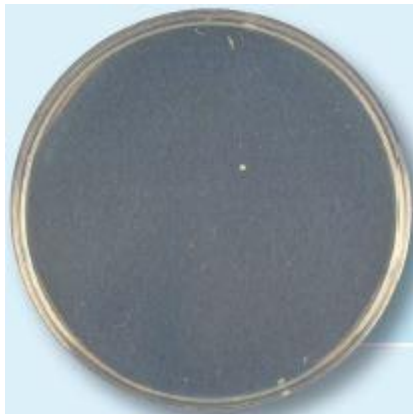
Treated vs Untreated Sample

經處理 vs 未經處理的樣品

Bacteria recovered from

Treated sample

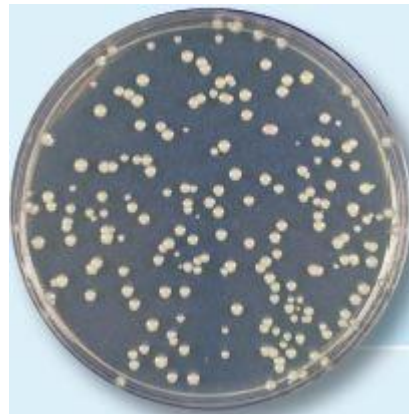
經處理樣品中的細菌量



Bacteria recovered from

Untreated sample

未經處理樣品中的細菌量



葡萄球菌屬（包括最常見的金黃色葡萄球菌）



問：甚麼是金黃色葡萄球菌？

答：金黃色葡萄球菌在顯微鏡下排列成葡萄串狀，是常見的引起食物中毒的致病菌，常見於皮膚表面及上呼吸道黏膜。

問：對人類有甚麼威脅？

答：金黃色葡萄球菌為表皮之正常菌叢，常造成伺機性感染。細菌引起不同程度的化膿性炎症擴散疾病。金黃色葡萄球菌已經進化出了抵抗免疫系統攻擊的特徵。

問：傳播途徑？

答：食物處理人員身上的金黃葡萄球菌有可能傳播到食物。食物如配製時工序較多但無需烹煮，並在室溫下存放過久，容易引致金黃葡萄球菌迅速繁殖並產生毒素，進食受污染的食物後便可能引致食物中毒。

問：為何在食物中常見？

答：葡萄球菌屬因為營養要求較低，是食品中極為常見的菌屬，可分解食品中的糖類並產生色素。

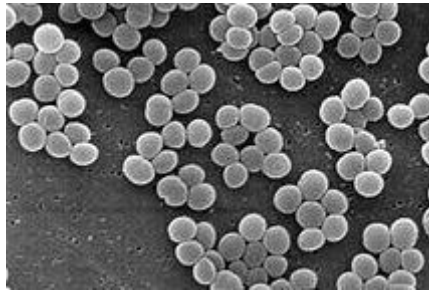
問：潛伏期及病徵？

答：潛伏期由 30 分鐘至 8 小時不等，通常 2 至 4 小時。病徵包括噁心、嘔吐、腹瀉、肚痛，偶有出現發燒。

問：嬰幼兒屬於高危人群？

答：幼兒及 5 歲以下兒童為高危人群，容易患上葡萄球菌性燙傷樣皮膚綜合症，皮膚像被熱水大面積燙傷，幼兒可能會發高燒及脫皮。

Staphylococcus (including the most common Staphylococcus Aureus)



Q: What is Staphylococcus aureus?

A: Staphylococcus aureus is arranged in bunches of grapes under the microscope. It is a common pathogen causing food poisoning. It is commonly found on the skin surface and upper respiratory tract mucosa.

Q: What are the threats to humanity?

A: Staphylococcus aureus is the normal flora of the epidermis, often causing opportunistic infections. Bacteria cause various degrees of purulent inflammation spreading disease. Staphylococcus aureus has evolved to resist the attack of the immune system.

Q: How does it spread?

A: Staphylococcus aureus on food handlers may spread to food. If the food is prepared with many processes but does not need to be cooked, and stored at room temperature for too long, it is easy to cause Staphylococcus aureus to multiply quickly and produce toxins. Contaminated food may cause food poisoning after eating.

Q: Why is it common in food?

A: Staphylococcus is a very common fungus in food because of its low nutritional requirements. It can decompose sugar in food and produce pigment.

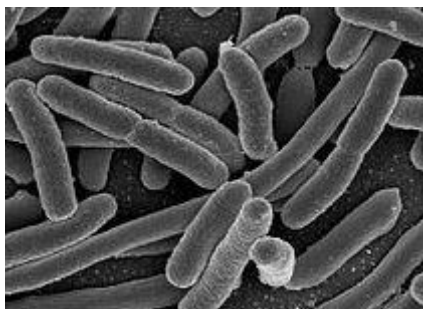
Q: Incubation period and symptoms?

A: The incubation period varies from 30 minutes to 8 hours, usually 2 to 4 hours. Symptoms include nausea, vomiting, diarrhea, abdominal pain, and occasional fever.

Q: Infants and young children belong to high-risk groups?

A: Toddlers and children under 5 years of age are at high risk. They are susceptible to staphylococcal scald-like skin syndrome. The skin is likely to be scalded by hot water. Children may have high fever and peeling.

大腸埃希氏菌（指大腸桿菌）



問：甚麼是埃希氏大腸桿菌？

答：埃希氏大腸桿菌屬其中一種埃希氏大腸桿菌，它生存在人類及其他哺乳類動物的腸道中。此病源性大腸桿菌能分泌出烈性毒素，使人嚴重生病甚至死亡。

問：感染途徑

答：埃希氏大腸桿菌可經由水及食物傳播而感染人體；飲用受污染的水或進食未煮熟透和受污染的食物會感染此菌而引起腸道傳染病。另外，如人們忽略個人衛生，此病菌亦可經由口糞途徑在人與人之間傳播。

問：有何病徵？

答：感染此病菌的人會出現嚴重腹瀉、血便、發燒、肚痛或嘔吐等病徵，病情嚴重者更會感染腎衰竭併發症。如治療不當，此病可引致死亡。

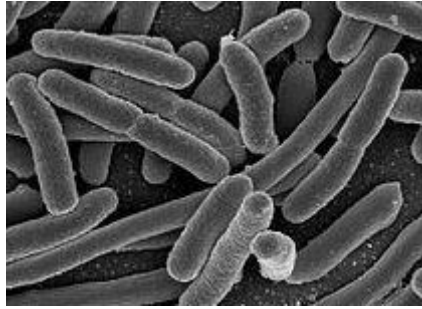
問：潛伏期？

答：由3至9日不等。有些受感染者可能沒有任何徵狀，但有些則出現嚴重病徵。

問：小孩特別易於感染嗎？

答：無論任何年齡的人士都可能感染此病菌，其中以小孩及老年人較易受此細菌感染而產生嚴重併發症。

Escherichia (i.e. Escherichia Coliform)



Q: What is Escherichia Coliform (E. coli)?

A: E. coli is a strain of Escherichia coli that lives in the intestines of humans and other warm-blooded mammals. This pathogenic E. coli strain can produce a powerful toxin, verotoxin, and may cause severe illness and death.

Q: What is the mode of transmission?

A: Men will contract this gastro-intestinal disease through consumption of contaminated water or undercooked and contaminated foods. Moreover, due to poor personal hygiene, person-to-person transmission of this pathogen is possible through oral-faecal route.

Q: What are the symptoms?

A: Victims may develop symptoms that include severe watery diarrhoea, bloody diarrhoea, fever, abdominal cramps or vomiting. In serious cases it may lead to a complication haemolytic uremic syndrome (HUS) characterized by acute kidney failure. If not properly treated, the infection may cause death.

Q: What is the incubation period?

A: From 3 to 9 days. Some infected persons are asymptomatic but some develop severe symptoms.

Q: Children are the high risk group?

A: E. coli may infect all ages, but children and the elderly are more vulnerable to develop serious complication.