

Salmonella



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BUSTER**

They are oceanographers (a primary nutritional group), getting their energy from oxidation (the interaction between oxygen molecules and other substances) and reduction reactions using organic sources, and are facultative anaerobes (an organism that can use oxygen but also has anaerobic (any organism that does not require oxygen for growth) methods of energy production, however, it can survive in either environment). Most species produce hydrogen sulfide. Salmonella found worldwide in cold and warm blooded animals (including humans), and in the environment.

They cause illnesses such as typhoid fever, paratyphoid fever, and bedroom illness. 2. Explain how the micro-organism reproduces Salmonella reproduce by binary fission. This is an asexual way of reproduction, and only produces two, usually identical cells from the original one. This reproduction occurs at a fast rate; producing once every 20-40 minutes if the conditions are suitable. The new cells then follow the lit cell cycle (viral reproduction) to continue reproducing.

Keeping salmonella in a cool place restrains growth, but doesn't kill the bacteria. Storing chicken in the fridge won't let the bacteria grow, but the chicken will still have salmonella. 3. Explain how it infects humans People can become infected with salmonella by ingesting (swallowing) the bacterium. This can happen by eating food that has not been fully cooked, or by food that has been contaminated after preparation. Salmonella can be spread from human to human when an infected person does not thoroughly wash their hands after using the toilet.

Health care providers and food handlers who are infected with this bacterium can contaminate food during preparation, or whilst they are feeding a patient, if their hands have not been washed with care. 4 Diddles ways In wanly unmans prevent Intention Trot tons Lasses Salmonella is highly contagious but many people are not aware of the dangers. Salmonella can be easily spread through foods such as meat and can be transferred from surface to surface. The most effective way to prevent humans from being infected from salmonella is good hygiene practices.

There are several practices one can do to protect themselves from being infected with this bacterium. These procedures of protection include: - Keeping uncooked meats away from produce, cooked foods, and eating utensils. - Washing your hands before and after handling any foods, and between handling separate food items. - Washing chopping boards, bench tops and cooking/eating utensils thoroughly after touching uncooked foods. - Washing all fruits and vegetables thoroughly before eating. - Washing your hands after coming into contact with feces. Immediately wash your hands after touching any bird or anything in their environment. - Cooking all poultry and meat fully. There should not be any pink in the middle. - Drinking only pastured dairy products and Juices. - Avoiding consumption of raw eggs. Dispose of cracked or dirty eggs. - Keeping all eggs, poultry, and meat products refrigerated or frozen. The human defense system manages to digest invading bacteria; this is why a healthy human being will only become ill if he/she ingests more than 100, 000 salmonella bacteria from contaminated foods.

A salmonella infection is set to begin with the bacteria entering the epithelial cells of the intestinal mucosa. To stop them from duplicating, unique cell organelles (any of a number of organized or specialized structures within a living cell) called 'autobiographies' are activated. These surround the invaders and then become absorbed in other organelles called 'lissome' intonating certain digestive enzymes, which break down the bacteria into their constituent (being a part of a whole) parts. 5. Describe how it affects humans The salmonella bacteria attack the stomach and intestines.

In very serious cases, the bacteria could enter the lymph tracts (similar to veins), which carry water and protein to the blood, and the blood itself. The bacteria attack rapidly regardless of gender or age. The very young, the elderly and people who are already sick are more likely to get a serious infection. Symptoms of salmonella poisoning Diarrhea 7 Headaches Stomach cramps Nausea Vomiting In the case of minor infections, there are fewer symptoms; usually only diarrhea maybe for two or three times a day for a couple of days.

Many mild types of salmonella infection clear up within four to seven days without requiring any treatment other than rest and plenty of liquid. In more severe infections may cause excessive diarrhea, stomach cramps and other health problems. 6. Discuss any cures/treatments that are possible after infection Most humans with salmonella poisoning do not need specific treatment. The homonyms usually improve within a few days as their immune system has time to clear up the infection.

The key is to make sure that the infected person has plenty of fluids to avoid dehydration. The aim is to prevent dehydration so it is vital to intake many fluids because diarrhea and vomiting causes the body to lose bodily fluids in quick succession. The fluid lost in vomit and/or diarrhea needs to be replaced. However, avoid fruit juices or soft drinks as these can make diarrhea worse. People with salmonella can usually be nursed at home. Rarely, hospital admission is needed only if the symptoms are severe, or if complications develop.

Antibiotics may then be given to help clear the infection if needed.