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WELCOME TO 2016



We at FCS would like to wish everyone a Happy New Year. We hope that you all had a rejuvenating festive season and are ready for an exciting and successful 2016.

This year we aim to bring you a monthly newsletter filled with insight and answers to our most commonly asked queries.

For any queries regarding the newsletter, or if you would like a specific topic covered, please contact Tara at tara@foodconsulting.co.za

Here is to another year as your partners in food safety.

THE IMPORTANCE OF FOOD SAFETY

A large majority of people will experience a food borne illness at some point in their lives. Every year, millions of people become ill and many die from eating unsafe food. For infants, pregnant women, the sick and the elderly, a food borne disease can often be fatal. Contaminated food can also cause long-term health problems such as cancer and neurological problems.

This highlights the importance of making sure that the food we eat is not contaminated with potentially harmful bacteria, parasites, viruses and toxins. Food borne illnesses have been an issue throughout the ages of time. However, over the past century the process by which food gets from farm to fork has changed drastically. Food contamination that occurs at one point in the chain, may affect consumers on the other side of the planet.

This means that food safety is a shared responsibility between, governments, industry, producers, academia and consumers and it is essential that all are well informed on safe food handling practices.

Millions of people fall ill every year and many die as a result of eating unsafe food. Diarrhoeal diseases alone kill an estimated 1.5 million children annually, mostly attributed to food and drinking unsafe water. Proper food preparation can prevent most food borne diseases

WHAT IS A FOOD BORNE DISEASE/ ILLNESS

Food borne illness, or more commonly called food poisoning, is caused by consuming food that is contaminated with harmful (pathogenic) bacteria, viruses or parasites or the toxic products of a microorganism's growth. Generally, a foodborne illness often involves a disturbance of the gastrointestinal tract, abdominal pain, diarrhoea, fever and vomiting. However, different foodborne pathogens may cause different bodily reactions. Incubation periods (the time delay between the consumption of the contaminated food and the onset of first symptoms) can also vary, depending on the amount of contaminated food consumed, and what the food was contaminated with.

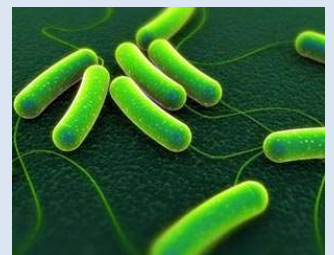
During the incubation period, microbes pass through the stomach into the intestine and attach to the intestinal wall cell lining and begin to multiply. Some types of microbes stay in the intestine, while others will produce a toxin that can be absorbed into the blood stream and invade deeper tissues.

Food borne illnesses are usually caused by improper food handling, preparation, storage or a lack of hygiene in food handlers. However, a number of factors can contribute to food being contaminated; often this is a combination of events. Regular handwashing is an excellent defence against the spread of food borne illness.

SAFER FOOD SAVES LIVES

WHO Statistics (2010)

1. There were an estimated 582 million cases of 22 different foodborne enteric diseases and 351 000 associated deaths.
2. The most deaths were caused by Salmonella Typhi and enteropathogenic E.coli.
3. The African region recorded the highest disease burden for enteric foodborne disease.
4. Over 40% of those suffering from enteric diseases caused by contaminated food were under the age of 5 years.



COMMON FOOD BORNE DISEASES

Bacteria:

- Salmonellosis: Caused by the bacterium Salmonella found in contaminated meat and poultry. Infected people generally develop diarrhoea, fever, vomiting, and abdominal cramps often lasting from 12-72 hours.
- Listeria: a bacterial infection spread by consuming contaminated raw vegetables, processed meats, smoked fish and soft cheeses. It can result in blood poisoning and meningitis.
- Cholangitis: One of the many bacterial infections caused by *E.coli*. *E.coli* can cause many symptoms such as pain, fever, jaundice, nausea and diarrhoea.
- Cholera: causes watery diarrhoea that can be fatal within hours if left untreated. Caused by consuming foods contaminated with *Vibrio cholera*.

Virus:

- Hepatitis A: A virus that is transmitted through food that is contaminated by the faeces of an infected person. It is a liver disease that causes nausea, jaundice, anorexia, fever, malaise and abdominal pain.

Parasites:

- Toxoplasmosis: Caused by *Toxoplasma gondii*, spread through consuming undercooked meat and fresh produce. Often results in impaired vision and neurological conditions

Toxins:

- Aflatoxin: a toxin that is produced by moulds that grows in incorrectly stored grains. It can cause deadly liver cancer.

High risk foods:

1. *Nearly any food items can cause a food borne illness. However, the most likely to be contaminated is seafood, beef, poultry and eggs. The simplest reminder is that, if these foods provide us with nutrients, it almost always provides nutrients for bacteria.*
2. *Fruits and vegetable are also of particular concern as although washing does decrease the risk, it often does not completely rid the food of contaminates. The quality of the water is essential in the washing of fresh produce.*
3. *Unpasteurized milk, fruit juice and other dairy products are often be a risk.*



Food borne illness often occurs as outbreaks. For example: In Limpopo January 2014, a diarrhoeal outbreak which hospitalized 42 people was attributed to Salmonella, and in Pietermaritzburg March 2015, 56 Children were hospitalized after consuming incorrectly prepared foods

Five keys to safer food



Keep clean

- ✓ Wash your hands before handling food and often during food preparation
- ✓ Wash your hands after going to the toilet
- ✓ Wash and sanitize all surfaces and equipment used for food preparation
- ✓ Protect kitchen areas and food from insects, pests and other animals

Why?

While most microorganisms do not cause disease, dangerous microorganisms are widely found in soil, water, animals and people. These microorganisms are carried on hands, wiping cloths and utensils, especially cutting boards and the slightest contact can transfer them to food and cause foodborne diseases.



Separate raw and cooked

- ✓ Separate raw meat, poultry and seafood from other foods
- ✓ Use separate equipment and utensils such as knives and cutting boards for handling raw foods
- ✓ Store food in containers to avoid contact between raw and prepared foods

Why?

Raw food, especially meat, poultry and seafood, and their juices, can contain dangerous microorganisms which may be transferred onto other foods during food preparation and storage.

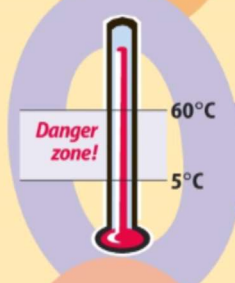


Cook thoroughly

- ✓ Cook food thoroughly, especially meat, poultry, eggs and seafood
- ✓ Bring foods like soups and stews to boiling to make sure that they have reached 70°C. For meat and poultry, make sure that juices are clear, not pink. Ideally, use a thermometer
- ✓ Reheat cooked food thoroughly

Why?

Proper cooking kills almost all dangerous microorganisms. Studies have shown that cooking food to a temperature of 70°C can help ensure it is safe for consumption. Foods that require special attention include minced meats, rolled roasts, large joints of meat and whole poultry.



Keep food at safe temperatures

- ✓ Do not leave cooked food at room temperature for more than 2 hours
- ✓ Refrigerate promptly all cooked and perishable food (preferably below 5°C)
- ✓ Keep cooked food piping hot (more than 60°C) prior to serving
- ✓ Do not store food too long even in the refrigerator
- ✓ Do not thaw frozen food at room temperature

Why?

Microorganisms can multiply very quickly if food is stored at room temperature. By holding at temperatures below 5°C or above 60°C, the growth of microorganisms is slowed down or stopped. Some dangerous microorganisms still grow below 5°C.



Use safe water and raw materials

- ✓ Use safe water or treat it to make it safe
- ✓ Select fresh and wholesome foods
- ✓ Choose foods processed for safety, such as pasteurized milk
- ✓ Wash fruits and vegetables, especially if eaten raw
- ✓ Do not use food beyond its expiry date

Why?

Raw materials, including water and ice, may be contaminated with dangerous microorganisms and chemicals. Toxic chemicals may be formed in damaged and mouldy foods. Care in selection of raw materials and simple measures such as washing and peeling may reduce the risk.