

## Medical Advancements

### Developing a Theory for Disease

If you lived in before the 17<sup>th</sup> Century, chances are that a simple cut or broken bone would have killed you. This is because of infection and the lack of knowledge about cleanliness.

### The First Vaccine

In the late 1700's **Edward Jenner**, an English country doctor, developed the first vaccine. He noticed that milkmaids who had cowpox (a mild form of smallpox) did not get smallpox. He began infecting people with cowpox so that they would become immune to smallpox, and it worked – the first **vaccine** was created. The last case of smallpox reported was in 1979.

### Watch Out Germs!

**Louis Pasteur** was the first person to identify living micro-organisms as “germs”. He suggested, and later proved his theory that these germs were the cause of most infectious diseases. The process of heating food, to kill the micro-organisms, worked. The process was called **pasteurization** and is still used today.

### Cleaning Up the Germs

As doctors realized that ‘germs’ were what caused disease, other discoveries followed. **Joseph Lister** determined that these germs were entering his patient’s wounds, so he introduced the practice of **cleanliness** and **sterilization** to surgery.

### Nutritional Research

During the time of discovery, explorers would travel on ships for very long periods of time. The only foods they could take along were ones that wouldn’t spoil. Many sailors developed **scurvy** as a result – with open sores, bleeding gums, loose teeth, and an unsteady gait. **James Lind** treated these sailors by feeding them oranges and lemons. It was later discovered that scurvy was caused by a lack of Vitamin C.

Researchers have discovered that various diseases can be treated by proper dietary choices. **FDA’s Food Pyramid** was developed to show people how much of certain types of foods are necessary to stay healthy.

### Healthy Life Style

Proper care means maintaining healthy organs and organ systems. This can be accomplished with clean air and water, nutritious foods, exercise and sleep. This is a healthy lifestyle, which makes you feel better and helps your body resist disease. Your immune system will work best when you are well fed and rested.