A wholesome diet is your best insurance!
Nutrition Month 2016

Causes of water pollution in MMORS

Water pollution occurs when pollutants are directly or indirectly discharged into rivers without adequate treatment to remove harmful compounds.

- Water pollution may take the form of oil spills, industrial waste, and municipal sewage. It can also be caused by agricultural practices and naturally occurring processes.

- Solid waste... (text continues)

- Industrial waste... (text continues)
Health Effects of Water Pollution

- Water-related diseases are one of the leading causes of death in underdeveloped countries. Each year, over 3 million people die from diarrheal diseases, many of them children under the age of five. For example, in 2005, 3 million children younger than five died from diarrheal diseases, constituting 1 in every 10 child deaths globally.

- The biggest killer of aquatic species is plastic pollution. A recent study showed that 80% of the world’s oceans are contaminated with plastic debris. While this statistic is concerning, species like sea turtles mistake plastic for jellyfish and other foods, leading to their death.

- Swimming in and drinking contaminated water can cause skin rashes and health problems like diarrhea, intestinal], and respiratory problems. Also, in some cases, people have even found dead animals, such as turtles and fish, inside water bodies.

- Industrial waste and agricultural pesticides that end up in aquatic environments can kill yard fish and other aquatic species. This is especially concerning in areas that rely on fish as a source of protein for the local population.
Bioaccumulation

It is used to describe the increase in concentration of a contaminant in an organism over time.

Some contaminants interact with the body's systems and are stored in fat tissue or excreted out. These can pass from one species to the next.

In all, understanding bioaccumulation will help us to protect people and economies from the harmful effects of exposure to chemical pollutants or contaminants in water systems.
Nutrition Month 2014

Biomagnification

Bioaccumulation is the increase in concentration of a pollutant or chemical within an organism. This process begins when environmental pollutants pass into the first organism in the food chain. Since pollutants/contaminants can pass from any species to the next, these can increase to higher concentrations at each level of the food chain.

- The rate of bioaccumulation of heavy metals is higher in aquatic organisms than in terrestrial organisms. These elements have a high affinity to the aqueous environment.
- The ability of the organism to excrete the metal.
- The concentration of such metal in the food web.
- Presence of other metals, such as binding metals inside the organism.
- Time of exposure and
- Step of metal uptake.

When metals are transferred to other animals, including humans, through consumption of contaminated seafoods, biomagnification occurs, thereby magnifying the adverse effects on the human body.

In the food chain, pollutants are transferred from one organism to another. As a result, the pollutants accumulate in the tissues of higher level organisms, resulting in an increase in concentration of pollutants in the higher level organisms.

- Heavy metals accumulate in organs and bones of higher level organisms.
- Heavy metals can cause damage to the nervous system, reproductive system, and cause cancer.

Nutritional Health Council
Fighting Contaminants Turned Good Health in the Philippines