

This is an Education Platform

We provide Free PDF Notes and Videos Classes for Pharmacy Students

Web Site http://www.fdspharmacy.in/

You tube https://www.youtube.com/channel/UC77iEsiuZolU4pB8WAJIR5Q

What app https://chat.whatsapp.com/IzSgXtFEvhS4LN5xhUgq5z

Telegram https://t.me/+cvxmi7xSloA4MjVl

Face book <u>https://www.facebook.com/Fdspharmacy-105764311994440/</u>

E-mail fdspharmacyinfo@gmail.com



Diploma in Pharmacy 1st Year Social Pharmacy Experiment

To study the different types of water purification techniques used in present scenario

Aim:

To study the different types of water purification techniques used in present scenario.

Reference :

Dr. Gupta G.D , Dr. Sharma Shailesh , Dr. Sharma Anshu , " Practical Manual of Social Pharmacy " Published by Nirali Prakashan , Pg.No 71 - 74

Theory :

Water purification is the process of removing impurities or pollutant from contaminated water to make it clean water. Water purification is a refinement of water through the exclusion of undesirable chemicals, impurities that lay suspended in the water.

Water purification is the process of removing undesirable chemicals, biological contaminants, suspended solids, and gases from water. The goal is to produce water fit for specific purposes. The standards for drinking water quality are typically set by governments or by international standards.

Importance of Water Purification

- 1) Water purification system reduces the risk of water borne diseases.
- 2) Water purification system can reduce the risk of medical conditions such as bladder cancer, colon cancer, and rectal cancer by removing chlorine from drinking water.
- 3) A whole house filter will benefit children to develop healthy immune systems through the consumption of pure water.
- 4) Pure water can benefit people with skin allergies.



- 5) Pure water can is necessary for pregnant women as impure water can lead to several birth defects and congenital health problems
- 6) Home water purification system will prevent more than 2100 water contaminants.
- 7) Water purification system eliminates the risk of drinking contaminated water and environmental or pollution.

Different Methods of Water Purification

1) **Boiling :** In this process, water needs to be rolling boiled and should be kept in a clean pot and covered.



2) Sedimentation and Decantation : Sedimentation is a process of removing solids that lies at the bottom of the surface through gravity. Decantation is a process for the separation of mixtures of immiscible liquids and solids such as suspension. It is a commonly used method for water purification.



3) **Chlorination of Water :** Chlorination method is the process of mixing chlorine in the water that kills germs and purifies the water. However, pregnant women are not recommended to drink chlorinated water. This method is usually considered appropriate during emergency conditions. In this method, a chlorine

Page | 3

tablet or drop is kept in the water. The mixture should be then stirred and left for at least 30 minutes. Within this time frame, the chlorine will react and oxidise any organic matter in the water. Chlorine is powerful oxidising agent thereby getting rid of many.

4) **Filtration :** This process includes removing harmful toxins from the hard water where the water will go through various kinds of equipments. I also helps in the reduction of high concentration of the minerals in the water. Likewise, it is a very common method for water purification.



Result : The different type of water purification techniques used was studied.

