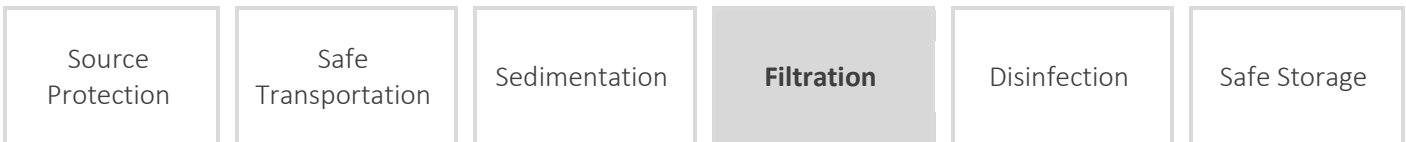


LifeStraw



What is it?

Manufactured by Vestergaard, the LifeStraw is a portable filter intended for personal use. Users put one end of the LifeStraw directly into a water source or bucket of water, and suck on it like a straw to draw the water through. The membrane cartridge within this filter removes particles larger than 0.2 microns.



Performance

Microbiological Effectiveness:

Parameter	Effectiveness
Bacteria	Very Effective (>99%)
Viruses	No independent tests
Protozoa	Very Effective (>99%)
Helminths	Very Effective*

*Assumption based on pathogen size. No independent tests.

Other Parameters

Very effective for turbidity. Effective for colour.

Source Water Requirements

Low turbidity is preferred. This filter can be used with turbid water, but it may clog more often and more frequent backwashing will be required.

Capacity

Volume filtered depends on the user, since the filter is driven by the user sucking water through it. Flow rate will vary over the filter cleaning cycle and over the filter's lifespan. Average flow rate over a 5-month study was 0.128 L/min.

Lifespan

Manufacturer states that the filter lasts long enough to treat 1,000 L of water. Actual lifespan varies, depending on source water, frequency of use, and maintenance.

Ease of Use & Acceptability

Operation & Maintenance

The user holds one end of the LifeStraw in the water they want to treat, and sucks to draw water through the filter and into their mouth. The filter requires regular backwashing, which is done by blowing through the filter to release clogged particles. More frequent backwashing is required for turbid water.

Repair & Replacement

The entire filter should be replaced at the end of its expected lifespan, or if it breaks, if flow rate suddenly increases, or if backwashing doesn't return flow rate to normal.

User Considerations & Preferences

Recommended for use by adults and children over 3 years old, when away from the home. Should not be used to filter water for friends or family or for cooking, as the filter goes directly into the user's mouth. Regular backwashing is required, and flow rate can vary.

Feasibility

Availability

Must be purchased from Vestergaard.

Cost

US\$3-6.50, available in retail and wholesale.

Size & Weight

Length 22.5 cm, diameter 2.5 cm. Weighs 56 g.

More Information

Details and references: www.hwts.info/products-technologies/471c6dce/lifestrawr

This resource is open content and licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/). Refer to CAWST's guidelines for distributing, translating, adapting, or referencing CAWST resources (resources.cawst.org/cc).

