From surface water to drinking water

A drinking straw that purifies water as it passes through could help solve the problem of waterborne diseases in the developing world, where one person in six is denied access to clean water. Every day 6,000 people die from dysentery and diarrhoea caused by drinking contaminated water

Required daily water intake 1-2 litres

FILTERING WATERBORNE DISEASE

1 PE textile filter:
100-micron mesh traps large particles and parasites particles and bacteria

1 PE textile filter:
1 2 Polyester textile filter:
15-micron mesh filters smaller particles and bacterial clusters

LifeStraw – cost \$3.50 per unit – can be hung around neck ready for use

> 3 Iodineimpregnated resin beads: Kill bacteria, parasites and viruses Void space: Iodine washed off beads continues to kill bacteria

4 Granulated active carbon:
Removes unpleasant iodine smell, filters remaining parasites

Guinea worm parasite

Shell: High-impact polystyrene

Length: 25cm Diameter: 2.9cm

Life span: 700 litres (1 year)*
Filters: Salmonella, Shigella.

Enterococcus, Staphylococcus aureus. E. coli

Prevents: Diarrhoea, dysentery, typhoid, cholera

Water direction

Source: LifeStraw *Calculated approximately on consumption of 2 litres water per day © GRAPHIC NEWS

Cholera

bacteria