

## FABRIC THAT SAVES LIVES

What do smelly socks and hospital sheets have in common? The answer is bacteria. An Israeli professor, Aharon Gedanken, has developed a special anti-bacterial fabric which can be used to make socks. The advantage of these socks is that they can be worn for a whole week without washing and they won't smell. More important, Professor Gedanken believes that this fabric can also be used to save lives.

Every year, about a million people die from infections caught in the hospital. These infections are caused by bacteria, which spread when people don't wash their hands or equipment is not sterilized. Bacteria also multiplies on hospital pajamas, sheets and the curtains surrounding beds. It turns out that fabric is the most common conveyor and carrier of bacteria.

Professor Gedanken believes that the anti-bacterial fabric he created can be used by hospitals to make sheets, curtains and clothes. So far, Gedanken's anti-bacterial fabric is the only material on the market that can withstand the frequent washings at high temperatures carried out in hospitals. Time will tell if this fabric will drastically reduce the incidence of hospital infections.

## JUST A BOTTLE OF WATER

Most of us don't think twice when we are thirsty. We turn on the faucet, fill a glass and that's it. But in many parts of the world, it's a different story. Health organizations report shocking statistics: One in ten people don't have access to clean drinking water, and six thousand children die every day from an illness spread by dirty drinking water. Incredibly, more people die from drinking contaminated water than they do from violence and war.

Israeli inventor Ron Shani may have a solution to this problem. He has developed a water purification system that allows anyone with a standard water bottle to drink clean water. His system is simple to use and inexpensive. It consists of a chlorine tablet and a small mouthpiece that fits onto a standard water bottle. The user drops a chlorine tablet into the bottle of water and waits a few minutes for the chlorine to kill most of the bacteria. Then the user attaches the mouthpiece to the bottle and drinks. The mouthpiece filters out pollutants that the chlorine isn't able to destroy, like viruses, chemicals, dirt and the remaining bacteria.

This portable filter also has major implications for disaster victims who are often left stranded without running water. This new life-saving invention is a simple solution because it is cheap to manufacture and requires no maintenance or electrical power.



## Reading Comprehension

### Getting the Facts

- Why does the writer mention smelly socks and hospital sheets in line 1?  
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  - Why is bacteria a problem in hospitals? Complete the cause and effect chart. (lines 6-10)
- | Cause  | Effect                         |
|--|--------------------------------|
| Bacteria in hospitals is found on<br>1. ...., 2. ....<br>and 3. .... | The result is 4. ....<br>..... |
- Why is Professor Gedanken's anti-bacterial fabric better than other materials? (lines 11-15)  
.....
  - Complete the sentence according to lines 16-20.  
The writer of the second text finds it surprising that less people .....  
.....
  - Number the instructions for using the water purification system in the correct order. (lines 21-28)
- Wait a few minutes.
  - Drink.
  - Fill a bottle with water.
  - Drop a chlorine tablet into the bottle.
  - Attach the mouthpiece to the bottle.
- Give two reasons why the water purification system is an ideal solution in a natural disaster. (lines 29-33)
- .....
  - .....

### Putting It Together

- What do the two inventions have in common?
  - They help victims of natural disasters.
  - They are cheap to manufacture.
  - They destroy dangerous bacteria.
  - They can be used by doctors.

### Personal Response

- Write one question you would like to ask either Professor Gedanken or Ron Shani about his invention.  
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