

A decorative border at the top of the page featuring various medical supplies: red and white capsules, white round pills, and blister packs of red capsules, all set against a blue background.

# MYTHBUSTERS

#1

## **Antibiotics do not work against viruses!**

Antibiotics kill bacteria or keep them from growing. They don't fight viruses, like those that give you a cold or the flu. If you don't take them properly, these drugs may cause the bacteria to change, which makes antibiotics less likely to work. That's called resistance.





# MYTHBUSTERS

#2

## **Antibiotic resistance happens when bacteria become resistant to antibiotics.**

Antibiotics target bacteria, killing or weakening them and helping you to fight off infections. Your body does not develop resistance to antibiotics; it is the bacteria which becomes resistant to antibiotics through genetic changes. This means that if you get an antibiotic-resistant bacterial infection, the usual antibiotics used to fight it will no longer be effective. A less accessible or last resort antibiotic will then need to be used, and in some cases, options for potential active antibiotics could run out.



A decorative border at the top and bottom of the slide features various medical supplies: red and white capsules, white round pills, and blister packs containing red capsules. Two red and white medicine bottles with blue accents and a cross symbol are also part of the design.

# MYTHBUSTERS

#3

## **Antibiotics cannot distinguish between harmful and useful bacteria.**

Most antibiotics can't tell the difference between good and bad bacteria. That means the medicines kill helpful bacteria in your gut while they're obliterating the bacteria making you sick. The helpful bacteria make up what's known as your microbiome. Therefore, antibiotics should be used wisely.




# MYTHBUSTERS

#4

**Antibiotic resistance spreads when humans come in contact with antibiotic-resistant bacteria through the environment.**

Antibiotics are given to humans, animals, fish and crops. Antibiotic resistance happens when bacteria change and become resistant to the antibiotics used to treat the infections they cause. Antibiotic-resistant bacteria spread through contact with humans, animals, food or environment that are carrying them. You can help to prevent the spread of infections by regularly washing your hands, covering your nose and mouth when you cough or sneeze, and practising safer sex.





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# MYTHBUSTERS

#5

**Antibiotic resistance is costly both for individuals and society and poses a major threat to sustainable development goals.**

Antibiotic resistance is happening everywhere in the world, affecting people of all ages. It is one of the biggest threats to public health today. Antibiotic resistant infections can take longer to treat, may require more frequent doctor visits, possible hospital stays, more severe side effects and expensive treatments. Serious, isn't it?




# MYTHBUSTERS

#6

## The food you eat can prevent antibiotics from helping you.

Livestock that gets antibiotics can develop resistant bacteria in their bodies. If you eat meat from them that isn't cooked or handled right, that bacteria can get into you. Fertilizer and water used on crops can also spread bacteria. The FDA says it's phasing out the use of antibiotics, except those prescribed by a veterinarian, in animals raised for food.



A decorative border at the top and bottom of the poster features various medical supplies: blister packs of red and white capsules, white round pills, and red and white capsules. There are also two small medicine bottles with red and white labels and blue caps. The background is a solid blue color.

# MYTHBUSTERS

#7

## **You can contribute to prevent antibiotic resistance from spreading.**

While antibiotic resistance occurs naturally over time, the misuse and over-use of antibiotics in plants, animals and humans have accelerated this process to dangerously high levels. BUT it's not too late to reduce the impact of antibiotic resistance and we all have a part to play in preserving the effectiveness of antibiotics. To find out more about what you and people in your community can do, take a look at the information on these posters.



# MYTHBUSTERS

#8

**You can prevent antibiotic resistance if you keep your vaccinations up to date.**

Taking action to prevent infections, such as by getting vaccinated, will stop you from getting sick and reduce your need for antibiotics. Even small actions can make a difference, like washing your hands regularly to prevent the spread of infection. And remember: if you do get sick, always consult your doctor about whether you need antibiotics. It is important to follow your doctor's advice, and not to share or use leftover antibiotics.





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# MYTHBUSTERS

#9

## **Using alcohol-based hand sanitizers does not contribute to antibiotic resistance.**

Using an alcohol-based hand sanitizer does not contribute to the spread of antibiotic-resistant bacteria, as the overuse of antibiotics does. The active ingredient in most hand sanitizers is ethyl alcohol which acts in a completely different manner than antibiotics. Because of the rapidness of the killing and the physical nature by which it acts, there is no mechanism by which the germs can become resistant to it.



# MYTHBUSTERS

#10

## Acne treatment can lead to antibiotic resistance.

Doctors often prescribe antibiotics to treat acne. Any antibiotic you take, no matter what it's for, can cause resistance. Therefore, you should never consume antibiotics unless prescribed by a doctor. You should work closely with your doctor to find the best treatment for you.

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# MYTHBUSTERS

#11

**With the shortage of effective antibiotics, several antidepressants have the potential to be used as antimicrobials.**

Psychotropic drugs have been shown to have antimicrobial activity against several groups of microorganisms. A combination study revealed that sertraline, an antidepressant, had significantly increased the activity of antibiotics, and some previously resistant strains were made susceptible. Thus antidepressants are potential sources of resistance modifying agents when used in combination.



# MYTHBUSTERS

#12

## **Antibacterial cleansers make germs stronger against antibiotics.**

Some studies suggest that triclosan, which is in many antibacterial soaps and cleansers, could lead to changes in bacteria that make antibiotics less able to fight them. The FDA wants companies that make these soaps to show more proof that they work. The agency says there is no evidence that they are better at preventing illness than plain soap and water.

