Enhancing Your Immune Health

Facilitator's Guide

Module 1

UIC Center on Mental Health Services Research and Policy

Collaborative Support Programs of New Jersey
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Contributing authors: Jessica A. Jonikas, MA; Margaret (Peggy) Swarbrick, PhD, FAOTA; Kelsey Arnold, MA, MPH; George H. Brice, Jr., MSW, Judith A. Cook, PhD; and Patricia B. Nemec, PsyD, CRC, CPRP

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Due to the COVID-19 pandemic, many people are seeking information and tips for enhancing their immune systems. Nobody likes being sick, whatever the cause, so it’s natural to look for ways to avoid infection and illness. We want our bodies to be as strong as possible!

It’s important to understand that our immune system is not a single organ in our bodies. Instead, it is a complex system that works on many different levels to fight infection. This means that our immune systems cannot technically be boosted, even though many people on TV, the internet, and social media say otherwise. However, we can improve our immune health to feel better and be healthier. Also, we can take precautions to avoid infections and illnesses.

This manual has 5 modules. You can use each one separately to educate about enhancing immune health. Or, you can use all of the modules together to teach a 5-week class on improving immunity. We’ve designed this material specifically to educate people with lived experience of mental illness, but it can be used by anyone who wishes to understand and enhance their immune health.

The modules are:

Module 1: What is Immune Health?
Module 2: Vaccination & Health Screening for Immunity
Module 3: Adequate Sleep for Immune Health
Module 4: Managing Stress for Stronger Immunity
Module 5: Functional Foods, Immunity Aids, & Credible Health Information

Each module uses an “Explain, Evaluate, and Engage” framework. We explain the key information to know in each area. Using exploration and activities, we then evaluate what participants already know about immune health. This is followed by further information. Each module also includes engaging activities to work on improving immunity and health.
Guide participants to understand that our immune system is not one simple structure or action in our bodies. Instead, it is a complex network functioning on many different levels to fight infection. Our immune system recognizes harmful bacteria, viruses, and parasites when they enter our bodies. Once recognized, our system takes immediate action to destroy them.

Humans have two types of immunity. One is called innate or natural immunity. The other is called adaptive or learned immunity. This is complicated, but we'll break it down to make it easier to understand.

Invite participants to share what they know about how their body fights infection. You don’t need to fully address their misunderstandings right now. Just take note of what they know and do not know. Stick to what they know versus what they do, which is addressed later.

Emphasize that it’s ok if they don’t know much yet, since many people don’t understand how immunity works. Also, there are plenty of myths and misconceptions out there.

Sample questions to choose from include the following.

What have you learned from others about how your body fights off infection?

What kinds of problems does our immune system help to fix?

Why do you think people get sick?
Our skin keeps the majority of germs from entering our bodies. Mucus in our nose and throat traps germs, which are then removed by sneezing or coughing. Stomach acids kill germs. Certain substances in our sweat and tears, called enzymes, help fight bacteria. Immune cells attack unwanted or harmful cells that enter our bodies.

Another part of our body’s natural immune response is called inflammation. You may hear the words infection and inflammation used together, but they are different.

**Infection** refers to germs entering and growing in our bodies when our protective barriers did not keep them out.

**Inflammation** is what our bodies do to fight infection. The four signs of inflammation include a feeling of warmth, redness, swelling, and pain. It feels bad when we feel pain and swelling around a wound. But these things let us know that our body is working to heal. When inflammation occurs, our bodies also send out white blood cells to fight infection. All this means that temporary inflammation is helpful when we are sick.
Guide participants to understand that **learned immunity** is when our bodies learn over time to recognize bacteria, viruses, or other germs that cause illness. Learned immunity is controlled by cells and organs in our bodies, like the spleen, thymus, bone marrow, and lymph nodes.

When something harmful, like a virus, enters our bodies, these cells and organs create both immune cells and antibodies to destroy it. Antibodies are a kind of protein that builds immunity. As we talked about earlier, this response is part of our natural immunity. But, then our bodies do something amazing. Our immune system learns to remember the harmful virus, so the next time we catch it, our body is ready to destroy it. As covered in another module, this is also how vaccines work, by introducing a sort of blueprint for our bodies to learn to wipe out specific viruses.

**Evaluate**

What do you think about the information so far?

Are you surprised by how many protective barriers we have to fight illness?

Did you know that temporary inflammation is actually good because it helps reduce infection?

**Explain**

Guide participants to reflect on natural immunity by asking the following.
Evaluate

What do you think about this information on learned immunity?

Did you know that your body learns over time how to fight certain illnesses?

What’s your thinking about vaccines helping your body learn how to destroy specific viruses?

Explain

Share that despite what people hear from TV, the internet, or social media, there are no quick fixes to boost our immune health. Other than vaccination, there is no one medicine or supplement we can take to have a stronger immune system. Like many things in life, we need to commit ourselves to choosing healthier habits.

We’ll talk more about these habits in other modules, but some that are proven to make our immune health better are:

- keeping current on vaccinations
- getting regular medical & lab tests to make sure our bodies have what they need
- getting good sleep
- managing our stress & getting exercise
- eating certain foods or taking certain supplements, if you need them
- going outdoors for sunshine

Other simple behaviors to protect immune health include:

- wearing a mask when in public, or when around people who are ill or unvaccinated
- washing hands throughout the day: when coming in from outdoors, before and after preparing and eating food, after using the toilet, after coughing or blowing your nose
- sneezing or coughing into a tissue or your inner elbow to prevent the spread of germs
Help participants complete the **Module 1 Review** worksheet to reinforce important information.

Use the **Module 1 Immunity Quiz** to review concepts with participants. If you wish, you can ask participants to take it before and after this module. This will help you to assess what they have learned and what concepts require additional review.

Ask participants to complete the **Immune Health Behaviors log** over the coming week to track how many times they engage in protective activities. Review with them what information they’ll record and how often.
MODULE 1 HANDOUTS & WORKSHEETS
Understanding Immunity

This is how infection can lead to inflammation to start the healing process:

The organs and tissues of our Immune System:
- Tonsils
- Lymphatic Vessels
- Thymus
- Lymph Nodes
- Appendix
- Spleen
- Bone Marrow
- Lymphatic Vessels
Strategies for better immune health
Module 1 Review

Some of my body's protective barriers against germs are:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Some habits to support my immune health

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Signs of inflammation:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

My questions or notes
THESE QUESTIONS ARE TO REVIEW WHAT YOU KNOW OR HAVE LEARNED ABOUT IMMUNITY SO FAR. DON'T WORRY IF YOU GET SOME WRONG! THAT SHOWS WHERE MORE REVIEW WOULD BE HELPFUL.

1. Learned immunity is controlled by...
   a. Heart and lungs
   b. Liver and kidneys
   c. Cells and organs like the spleen and bone marrow
   d. Frontal and temporal lobe of the brain

2. Inflammation...
   a. Opens air flow in lungs
   b. Is helpful for fighting infection
   c. Benefits us when it is chronic
   d. Clears skin irritation or rashes

3. Enzymes in our sweat and tears...
   a. are cells that attack unwanted or harmful cells
   b. work as an acid to destroys germs
   c. form traps for pathogens
   d. are anti-bacterial to kill germs

4. How does skin help our immunity?
   a. Protects against hot weather
   b. Protects against cold temperature
   c. Keeps out the majority of harmful germs
   d. Absorbs the rays of the summer sun

5. One of the best ways to strengthen immunity is to...
   a. Have surgery
   b. Get good sleep
   c. Drink alcohol
   d. Take oral steroids

6. What is one benefit of temporary inflammation?
   a. Helps the stomach digest food
   b. Helps us deal with healthy stress
   c. Decreases mucus to dry out the sinuses
   d. Sends signals to release white blood cells to fight infection

7. Natural immunity is a first-line defense against...
   a. prediabetes and diabetes
   b. bacteria and viruses
   c. vaccinations and side-effects
   d. common colds and fevers

Answer key: 1c, 2b, 3d, 4c, 5b, 6d, 7b
IN THE EVENINGS THIS WEEK, PUT A MARK IN THE COLUMN NEXT TO THE IMMUNE HEALTH HABITS YOU'VE USED DURING THE DAY. NOTICE HOW OFTEN YOU DO THINGS TO PROTECT YOUR OWN & OTHERS’ HEALTH!

<table>
<thead>
<tr>
<th>Habit</th>
<th>Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>I wore a mask in public or indoors when close to others.</td>
<td></td>
</tr>
<tr>
<td>I washed my hands throughout the day, especially when coming home, before meals, after the bathroom, &amp; after coughing/blowing my nose.</td>
<td></td>
</tr>
<tr>
<td>I sneezed or coughed into a tissue or my inner elbow to prevent the spread of germs.</td>
<td></td>
</tr>
<tr>
<td>I got 7-8 hours of good sleep.</td>
<td></td>
</tr>
<tr>
<td>I did something to reduce my stress like deep breathing, yoga, exercise, hobbies, etc.</td>
<td></td>
</tr>
<tr>
<td>I ate healthy foods for at least one meal today.</td>
<td></td>
</tr>
<tr>
<td>I took my prescribed medications as instructed.</td>
<td></td>
</tr>
<tr>
<td>I used safe and proven supplements, if needed, like Vitamin D, Vitamin C, or Zinc.</td>
<td></td>
</tr>
</tbody>
</table>
REFERENCES

Content


Images

Understanding inflammation: https://lambdastories.com/how-to-fight-inflationation/

How to boost your immune system: https://www.freepik.com/free-vector/boost-your-immune-system-infographic_8810791.htm

How does the immune system work? https://sciencefortheday.blogspot.com/