



BRUMMANA HIGH SCHOOL
MEDICAL DEPARTMENT

The Immune System

What is the immune system?

The immune system is a complex network of cells and proteins that is on the job around the clock to protect you from infectious bacteria, viruses, fungi, and parasites that cause disease, suffering, and death. The immune system defends the body against infection.

Why boosting your immune system is important?

To maintain good health and prevent malnutrition in all its forms.

What are signs of a weak immune system?

- Your stress level is sky high
- You always have a cold
- You have frequent infections
- You feel tired all the time

Can stress lower your immune system?

When we're stressed, the immune system's ability to fight off antigens is reduced. That is why we are more susceptible to infections. The stress hormone can suppress the effectiveness of the immune system.

How to keep healthy while in quarantine or isolation due to COVID-19?

When spending more time at home, the best recommendation for staying healthy is following general healthy living advice such as eating a balanced diet, staying hydrated, being physically active, and getting enough sleep.

What can you do to strengthen your immune system?

Be active:

Physical activity and regular exercise:

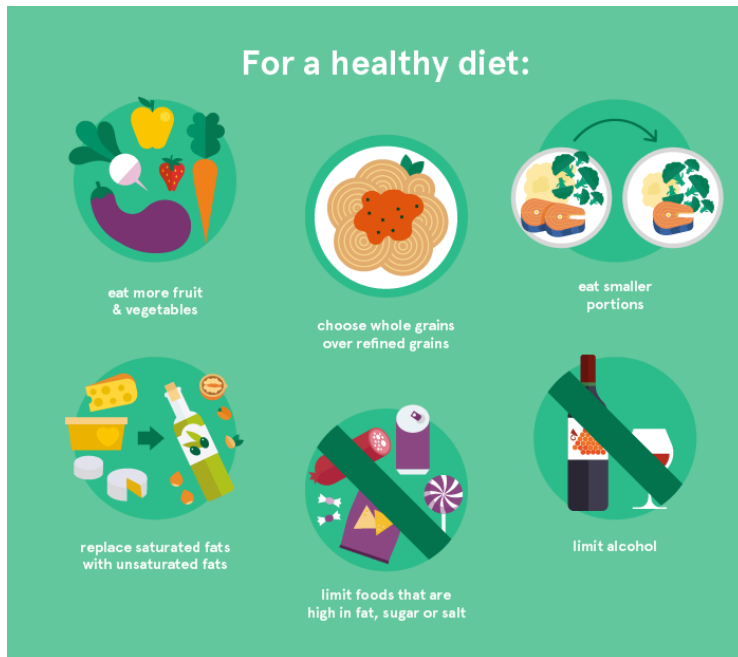
- Improves and can give your immune system a great boost
- Increases your body's production of antibodies, causing them to circulate more rapidly
- It helps expel toxins from your body, which can energize your cells and metabolism
- Lowers your body's stress hormones
- At least 5 days/week reduces the risk of getting an upper respiratory infection

Eat right:

- One of the keys to a healthy immune system is eating right. So, it should come as no surprise that eating healthy foods leads to a healthy immune system that can help fight off infection faster.
- The immune system requires the support of many nutrients.
- Eat healthy and whole foods when you can, and try to include a "rainbow" of colours, which is a good way to ensure that you're getting key vitamins and nutrients in your diet. Consume a variety of foods for a healthy and balanced diet, including whole grains, legumes, vegetables, fruits, nuts and animal source foods.
- There is no single food that will prevent you from catching COVID-19.
- It's also a good idea to include fermented foods like yogurt in your diet. These are probiotic foods that

“feed” the good bacteria in your gut.

- On the flip side, aim to limit your intake of meats, processed foods, fried foods and sugars.
- Maintain a healthy weight.



Get enough sleep:

Sleep and the immune system are old friends and linked.

- Sleep reboots your mind and your body, so it’s no surprise that it also reboots your immune system.
- Not getting enough sleep causes your body to increase its production of stress hormones. This elevation in stress hormones doesn’t just keep you awake it also puts stress on the immune system.
- Getting a good night’s sleep will help you to not get a depressed immune system.
- How much sleep you need varies according to your age. Recommended 7 to 9 hours of sleep for young adults and adults (18-64 years), and 7 to 8 hours of sleep for older adults (≥ 65 years).



Keep hydrated

Keeping hydrated is essential for overall health.

- How much water we need depends on our age, sex, weight, height, level of physical activity and

environmental conditions

- Taking into account that around 20-30% of the water we need comes from our food.
- If you have access to safe tap water, this is the healthiest and cheapest drink. For a refreshing boost, you can add slices of lemon, cucumber, mint or berries. - Other unsweetened, infused drinks are also good choices.



Practice good hygiene.

Don't smoke.

Keep your mind active.

Spend at least 30 minutes per day outdoors:

People who spend at least 2 hours per week outdoors are more likely to report that they are in good health both physically and psychologically.

Stay in touch while social distancing:

Get in touch with friends, family - this can help fight feelings of depression, helplessness, and reduce your stress levels.

BHS Medical Team

Ref: University of Texas South western Medical Center, Dallas, TX.

Ref: Harvard Medical School

Ref: www.eufic.org