





Immunity boosters

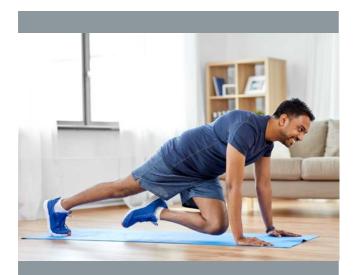
When we talk about giving our immune system a boost, we tend to think of it as a single thing that needs a jump start.

In fact - as the name suggests - it's a complex system made up of lots of different parts and processes.

That complexity means there are still lots of question marks when it comes to figuring out exactly how our immune system works and the best way to support it.

Based on what we know about how our immune systems work, the best way to help our bodies fight an illness like coronavirus is to take care of ourselves by following a healthy lifestyle.

In this factsheet, we'll look at six different aspects of a healthy lifestyle that can help boost your immune system.



In this factsheet

- Quit smoking
- Control stress
- Eat healthily
- Keep moving
- Drink in moderation
- Get enough sleep



Quit smoking

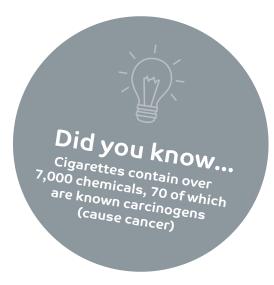
Smoking is the largest cause of preventable deaths in the world.

From blood circulation to brain function, lung capacity to hormone levels, smoking effects so many different parts of your body.

As COVID-19 is a respiratory disease, being a smoker may put even more pressure on your lungs if you become ill.

As Health Secretary, Matt Hancock, said: "It is abundantly clear from the research into previous coronaviruses that smoking makes the impact of a coronavirus worse."

It's never too late to quit. Take a look at the health benefits of quitting below - they start from just 20 minutes after smoking your last cigarette!



To get help quitting, take a look at the government's free <u>support tools for quitting smoking</u>.

20 minutes

Blood pressure and pulse begin to return to normal; lung fibres begin to move more

Your circulation improves.

2-12

weeks

3-9 months

hours

Oxygen levels

start to increase -

something that's

essential in the

fight against

COVID-19.

Coughs and breathing issues improve; lung function increases by up to 10%.

2 days

Lungs start to clear mucus; sense of taste and smell improves.

1 year

Heart disease risk is halved compared to those still smoking.

72 hours

Breathing becomes easier; energy levels increase.

15 years

Risk of heart attack is the same as someone who has never smoked.

Control stress

When we feel stressed, our body goes into fight or flight mode.

Designed to help us deal with short-term emergency situations, this mode shuts off or suppresses systems we don't need in an emergency such as digestion, reproduction and immune function.

Whilst this may be helpful in the short-term, if our stress levels remain high over a long period, this begins to take its toll on those systems.

To help us fight infections such as COVID-19, we need to try and control our stress levels to help our immune system function at its best.

Dry mouth & teeth grinding Heart rate increases Blood thickens

Red flags

These signs may show that your stress levels are rising and it's time to take action.

- Feeling overwhelmed
- Worrying more than usual
- Forgetting things
- Difficulty concentrating
- · Unable to make decisions
- Quick to anger
- Difficulty sleeping
- Using alcohol or cigarettes more to cope

When we're stressed, our body produces a cocktail of what are known as 'stress' hormones – cortisol and adrenaline.

These hormones have a physical as well as a mental impact, causing some of the symptoms outlined in the diagram on the left.

Whilst these impacts won't harm us for a short period of time, if we're often stressed and our bodies are constantly releasing these stress hormones it can make us physically ill.

Eat healthily

Eating the right foods helps our bodies get the vitamins and minerals we need as well as helping us maintain a healthy weight.

Food is how we fuel our bodies and all its systems, so getting the right amount of the right goods can help support a healthy immune system.

Eat a rainbow

By eating a wide variety of fruit and vegetables we can make sure we get the vitamins and minerals we need to stay healthy.

Whilst it's tempting to snack on junk food whilst working at home, try and prioritise eating 5 portions of fruit and veg a day as well as minimising high sugar and high fat foods.

Maintain a healthy weight

We're still learning about coronavirus but early studies seem to indicate that obesity increases the risk of developing serious complications if you catch COVID-19.

A March report by the Intensive Care National Audit & Research Centre (icnarc) found that around 65% of ICU admissions were overweight.

It's thought that carrying extra weight puts pressure on the lungs as well as increasing inflammation in the body, both of which put extra strain on someone struggling with COVID-19.

Maintaining a healthy weight involves eating healthily, eating the right amount and keeping active.

For support losing weight, take a look at the NHS's step-by-step weight loss plan.

A visual guide to portion sizes



ProteinsPalm of your hand



CarbohydratesThe size of your fist



FatsThe tip of your thumb



FruitsThe size a tennis ball



Vegetables
No limit

Keep moving

From keeping your heart and lungs in great shape to boosting your mood, there are so many benefits to staying active.

As well as strengthening your muscles and improving your brain health and memory, it significantly reduces the risk of serious diseases.

- coronary heart disease and stroke by 35%
- type 2 diabetes by 50%
- colon cancer by up to 50%
- breast cancer by up to 20%
- osteoarthritis by up to 83%
- depression by up to 30%
- dementia by up to 30%

Exercises like press ups, squats, lunges and burpees require nothing more than your bodyweight and will really get your heart rate going.

There are lots of exercise tutorials available on YouTube, including yoga and circuit training. New members of the Westfield Health group, High Five Health Promotion also have a wide range of workouts on YouTube.

Remember to listen to your body carefully. Warm up and cool down, and don't overexert yourself. If you feel any dizziness or shortness of breath you should stop and rest, and call NHS 111 if you start to feel worse.

NHS exercise guidelines

The NHS guidelines recommend that adults do 150 minutes of exercise a week. That breaks down into five 30-minute sessions.

For more information on the guidelines, visit: https://www.nhs.uk/live-well/exercise/

Free exercise resources

- Couch to 5K
- NHS Fitness Studio
- <u>High Five Health Promotion on YouTube</u>
- Joe Wicks Body Coach
- Yoga with Adrienne

Drink in moderation

Though we might not be going out to pubs or restaurants, it can still be easy to slip into the habit of drinking too regularly or too much whilst at home.

Alcohol is toxic, so as soon as it comes into contact with the body, will immediately try to break it down and remove it:

- The liver which breaks the toxicity down into water and carbon dioxide.
- The lungs breathe out alcohol molecules as you exhale, which is why you can smell alcohol on those who have been drinking.
- The kidneys through urine, which is why you go to the toilet frequently when drinking.
- Sweat through glands across the body.

The liver works the hardest and can break down one unit of alcohol per hour.

If alcohol is drunk faster or in higher quantities, this is when we begin to feel drunk.

Men and women are advised to limit alcohol consumption to a maximum of 14 units per week and avoid binge drinking.

Take a look at the diagram on the right for more information on what a unit of alcohol looks like.

For wine and beer, keep in mind that the strength and therefore number of units can vary drink to drink, so always check the label.

For support reducing your alcohol intake, visit the NHS's <u>information and support</u> <u>page on alcohol</u>.

What is a single unit of alcohol?



Wine

A small glass (125ml) of 9% ABV wine.



Beer

Half a pint of 3.5% ABV bitter or lager.



Spirits

A single measure (25ml) of 38%-40% ABV spirits.

Get enough sleep

Quantity and quality matter when it comes to getting enough rest and sleep.

Adults need around 8 hours of good quality sleep, but this can vary from person to person.

Sleeping badly on a regular basis has now been linked to serious medical conditions such as diabetes, heart disease and obesity. It can also shorten your life expectancy.

However getting enough shut-eye can boost your mood, support your immune system and even help you maintain a healthy weight!

This is because sleep is an incredibly important recovery mechanism for our bodies. It allows us to restore and repair, vital when it comes to fighting infections and staying healthy.

Here are some top tips for getting a good nights' sleep:

- Get enough exercise during the day.
- Limit caffeine intake to the morning and early afternoon.
- Set aside worry time late afternoon if you struggle to switch off.
- Create a relaxing evening routine that includes time to switch off.
- Limit alcohol intake to early evening only.
- Avoid watching TV or using other screens for at least an hour before bed.
- Keep to the same bedtime and wake-up time.

The different stages of sleep

Stage 1: When you're starting to drift off, you may hear things around you and have a sense of awareness, but your heart rate slows down as your body prepares to sleep.

Stage 2: Described as 'lighter sleep', you have now fallen asleep but could easily be woken or disturbed. The brain takes this time to repair and process memories.

Stage 3: The final stage of Non-REM is when you fall into a deeper sleep where muscles are relaxed and recovery can take place.

Stage 4: This stage is when your heart rate increases and you experience REM sleep. The most active point of dreaming, this stage is important for the brain as sorts through memories and emotions.

Wellbeing toolkit

This factsheet is part of our Wellbeing Toolkit aimed at helping teams stay well during the coronavirus outbreak.

Each week, a new pair of factsheets covering mental and physical wellbeing is released.

Take a look at <u>westfieldhealth.com/covid-19</u> for access to all resources.

