

Simple Recommendations to help individuals stay safe from Coronavirus

Some countries, of comparable size and wealth to the UK, have been far more successful in controlling the spread and fatality rates for COVID 19 than we have been in the UK. This may come down, at least partly, to things that we, as individuals, can do to minimise our own risk, such as the simple recommendations in this note.



Please be assured that this note is not selling anything, and I'm not after your money or your vote and no one is paying me to write this! However, I believe it is important to share some practices from Taiwan, South Korea and Japan, where COVID19 coronavirus has infected and killed far fewer people than almost anywhere in Western Europe.

VULNERABLE PEOPLE

People who are young, fit and healthy are generally less vulnerable to COVID-19, than the elderly and those in poor health. Whilst the recommendations in this note are aimed at everyone, irrespective of age and state of health, they may be *most* important for people who are elderly, unfit and/or in poor health.

GOVERNMENT ADVICE

The recommendations in this note represent things that we might do, *in addition* to following government recommendations and rules.

The Recommendations

FOOD AND SUPPLEMENTS

➤ **Eat less processed and sweet foodstuffs.** Try to avoid highly-processed foods, low GI food (which includes most 'fast food') and sweet sugary food. Instead, eat more fresh food and vegetables, to support your health and **keep your weight down.** Check your Body Mass Index (BMI) – you can do this yourself [[see page 5](#)] or ask your doctor's surgery to help) and aim to keep it below 26.



➤ **Ensure your diet includes foods rich in Vitamin D and zinc.** **If you are dark skinned and/or unable to spend time outside in the sun, ask your pharmacy or doctor to recommend a vitamin D supplement.** Vitamin D and zinc support the body's natural immune-response biochemistry, including production of antiviral proteins and wound healing. Our skin naturally produces vitamin D when exposed to sunlight, but over-exposure to sunshine is harmful of course, and individuals with darker skin produce less vitamin D with the same amount of

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... *Food and Supplements continued*

... sunlight exposure than individuals with lighter skin colour. South Korean and Japanese diets in particular tend to be high in seafood - which is generally rich in vitamin D and zinc.

- **Take probiotics** (good bacteria that are essential to our health) – **at the very least, live yogurt or kefir, but preferably fermented vegetables** (which are very easy to make at home and which form an important part of South Koreans' diet) and/or a multi-strain probiotic supplement.



- **Drink green tea.** If you don't like the taste, try adding honey, or just pop a green tea bag in with your usual brew. Studies indicate that drinking just 2 cups of green tea per day improves lung function. Green tea is consumed extensively in Japan and South Korea, where the average life expectancy is longer than in the UK.



- **Limit intake of alcoholic drinks and do not drink them every day.** Alcohol suppresses our immune systems (and the concentration needed to kill coronavirus would also be lethal to humans – so drinking doesn't help!).

For more information and suggestions regarding Food & Supplements, see page 4

DON'T SHARE BODY FLUIDS

Wear a simple face mask or scarf over your mouth and nose whenever you are in proximity to other people outside of your household, then dispose of it or sanitise or wash it thoroughly with warm soapy water as soon as you get home. This simple practice helps to protect yourself and others. Remember that the COVID-19 virus has a long incubation period, during which an infected person may have no obvious symptoms and may be totally unaware that they are infected and infectious! Wearing of simple face masks has been practised in Taiwan since the SARS epidemic of 2003, and has been practised for even longer in Japan and South Korea, out of respect and consideration for others, by anyone having an infection such as cold or flu.



EXERCISE AND RESPIRATORY HEALTH

- **Don't smoke or take recreational drugs.** Stop smoking cigarettes if you possibly can; COVID19 primarily attacks the lungs – so we all need to keep our lungs as healthy as possible! Also, repeatedly bringing anything (such as cigarettes) into contact with your mouth increases your chances of infection.
- **Take regular exercise,** including breathing exercises; completely filling and emptying your lungs to 'flush' out contaminants and secretions is an important part of lung health. Daily gentle exercise & stretching sessions are commonplace across Taiwan and South Korea. We are fortunate in Milton Keynes to have so many green areas, where we can get pleasant exercise while maintaining social distancing.



For more suggested breathing exercises, see page 4

HYGIENE & CLEANING

➤ **Washing hands, using hand sanitiser, and keeping hands off faces** have been well-promoted and are now, hopefully, well-established precautions. If you want to make your own hand sanitiser, you may like to follow the World Health Organisation recipe [see page 4].



➤ The ability of COVID-19 virus to remain active for long periods on hard surfaces means that we should **aim to sanitise anything that has been handled by others who could be carrying the virus**, including items from shops and markets. Wash items with soapy water whenever practical. Pure alcohol can also be used to sanitise surfaces, but it is highly flammable. Temperatures above about 60°C will also destroy the virus (i.e. it will not survive cooking or high-temperature washing).



➤ The virus can stay active for many hours on shoes: **keep your shoes outside!**

STAYING POSITIVE

➤ **Keep busy and stay positive.** Japanese people enjoy the longest average lifespan in the world; aside from a healthy diet, they have a national practice called Ikigai, which may be roughly translated as ‘Reason to get out of bed in the morning’. Everybody can contribute something in society – whether it’s looking after your own family or pets, volunteering, helping to clean up your street or neighbourhood, making things that are needed, planting wild flowers, sharing useful information (like this note, I hope!), or simply calling and chatting with someone who may be lonely. Feeling needed can have a massive effect on your health, and you don’t have to be able-bodied, smart or wealthy to contribute to your community and be needed; the biggest beneficiary of doing so may be yourself.



*The above recommendations are made with best intent; the author does not and can not accept liability for any actions you take or do not take. **Your health is your responsibility**; use the above information to help keep yourself and your loved ones safe. Be considerate to others if you want them to be considerate to you.*

A lot of online research and discussions with knowledgeable and passionate people in our community has gone into distilling out the above recommendations, and several people have kindly reviewed this note and provided valuable feedback to improve it. Please feel free to share these recommendations if you think they may be helpful to others, and do get in touch if you would like additional information such as:*

- *Breathing exercises*
- *Vitamin D* - Which foods are naturally high in vitamin D?
 - How much sun exposure do I need for my body to synthesise its own Vitamin D?
 - How much Vitamin D should I be taking each day?
- *How to make probiotics at home*
- *Making anti-viral hand sanitiser* - WHO recipe
 - Other recipes.

SUPPLEMENTARY INFORMATION

VITAMIN D**How much?**

The generally recommended intake of Vitamin D for adults is 400–800 IU/day, or 10–20 micrograms. However, some studies suggest that a higher daily intake of 1000–4000 IU (25–100 micrograms) is needed to maintain optimal blood levels

Foods that are rich in Vitamin D (animal sources provide D3, vegetable sources D2, both are good)

- Fatty fish, like herring, mackerel, sardines, salmon and tuna
- Cod liver oil (taken as a supplement)
- Egg yolks
- Mushrooms
- Unprocessed cheese
- Foods fortified with vitamin D (like some dairy products, cereals and soy milk).

Vitamin D from sunlight

Your skin will make vitamin D when exposed directly to sunshine (not through glass) during the summer months in the UK, but not during winter. However, you should not risk sunburn.

HOME-MADE HAND SANITISER

There are many recipes online for home-made hand sanitiser; to be effective against coronavirus, a sanitiser should comprise at least 60% alcohol. Beware that alcohol is highly flammable.

Here's the WHO recommended recipe:-

World Health Organisation (WHO) recipe for home-made hand sanitiser

Ingredients:

- Ethanol or Isopropyl alcohol
- Aqueous 3% Hydrogen peroxide solution
- Glycerol
- Distilled water

Mix in the following volumetric proportions and immediately bottle:

- Ethanol 80%, or Isopropyl alcohol 75%
- Glycerol 1.45%
- Hydrogen peroxide 0.125%
- Water – to make up to 100%

BREATHING EXERCISES

Not everybody can do energetic aerobic exercises, so here's a couple of simple breathing exercises to try.

Deep breathing helps to replace air that may be trapped in your lungs with fresh air. To do this:

- While standing or sitting, draw your elbows back slightly to allow your chest to expand.
- Take a deep inhalation through your nose.
- Retain your breath for a count of 5.
- Slowly release your breath by exhaling through your nose.

Belly breathing helps to exercise your diaphragm and make better use of it for deep breathing. You may find this tiring at first, but over time the technique should become easier and should feel more natural.

To do it:

- Lie on your back with your knees slightly bent and your head on a pillow.
- You may place a pillow under your knees for support.
- Place one hand on your upper chest and one hand below your rib cage, allowing you to feel the movement of your diaphragm.
- Slowly inhale through your nose, feeling your stomach pressing into your hand.
- Keep your other hand as still as possible.
- Exhale using pursed lips as you tighten your stomach muscles, keeping your upper hand completely still.

GREEN TEA

Green tea has more health benefits than black tea, as it is not processed to the same extent as black tea. Green tea is higher in protective polyphenols that function as powerful antioxidants. Antioxidants are known to protect the body against disease and are an important part of a healthy diet. Antioxidants can be found in a range of fruits, vegetables and other unprocessed foods. As part of a balanced diet, green tea can be a good source of antioxidants.

PROBIOTICS

You can obtain probiotics (that is, friendly bacteria that support our health and wellbeing) from foods prepared by bacterial fermentation, as well as from supplements. Probiotic foods include yogurt, kefir, sauerkraut, tempeh and kimchi. If you are buying yogurt, ensure that the label says it contains live cultures.

Here's a recipe for naturally fermented vegetables that is simple to follow and should provide a rich source of health-promoting probiotics. Ideally, use organically grown vegetables, but if you can't get organic, you can still use this recipe and allow a little longer for the fermentation process:

Ingredients: Cabbage (any type will do), salt, spring water and any of the following to suit your taste: carrots, ginger, parsnips, beets, turnips, cauliflower leaves.

Equipment: large jar with lid, small food-grade plastic bag, food blender if available, chopping board and knife or other slicing device.

Make sure your hands and equipment are thoroughly cleaned and sanitised. Gently wash your vegetables, but do not use soap or any chemicals on them. Thinly slice root vegetables if you are using any, and tear-up cabbage leaves. If you have a blender, blend a handful of cabbage leaves with a little spring water. Stuff alternate layers of cabbage leaves, sliced vegetables and the cabbage-water blend into your jar, sprinkling a little salt on each layer before adding the next layer. Stop when you are about an inch from the top of the jar and, if you didn't add any cabbage-water blend, just add about an eggcup full of spring water now. Put enough water into your plastic bag to enable the bag of water to completely fill the space at the top of the jar, then put the lid on, screwing it down lightly; the fermentation process will produce some gas that needs to escape from the jar, so we don't want the lid to completely seal at this point. Leave the jar of veges to ferment for about 5 days at room temperature, checking each day for pressure build-up by unscrewing the lid. More liquid will form in the jar and there may be some spillage, so best to keep the jar on a saucer or plate. After about 5 days, your fermented vegetables should be ready to move to the fridge where fermentation will continue at a slower pace. You can also remove the plastic bag of water and start eating them (not all at once!) at this stage; they should have a mildly pickled taste.

SUPPLEMENTARY INFORMATION continued...

BODY MASS INDEX (BMI)

Body mass index (BMI) is a measurement of a person's weight in relation to their height. Excessively high or low BMI values indicate potential health risk. The units of BMI are kg/m².

Normal healthy weights correspond to BMI values between 18.5 and 24.9

A BMI of less than 18.5 would indicate that you are underweight, whilst a BMI between 25.0 and 29.9 indicates that you are 'overweight' and BMI's of 30.0 and above correspond to being clinically obese.

To calculate your BMI, divide your weight in kilograms by your height in meters squared. For example, if you are 175cm (1.75m) in height and 75kg in weight, you would calculate your BMI as:

$$75\text{kg} / (1.75\text{m}^2) = 24.49\text{kg/m}^2$$