

GUIDANCE NOTES
WEEK 10

WHAT	Supplements
WHY	<p>To take or not to take? There are a number of supplements that can be beneficial to health and well-being, but at the same time, we are given a lot of information that overstate the benefits of supplements...in fact some may do us no good at all, or even cause some harm...so what are the guidelines?</p> <ul style="list-style-type: none"> - When living with a medical condition of any kind, we regularly come across claims of miracle cures and amazing benefits to be had from taking the latest wonder supplement, and it is very hard not to get drawn in! Here's what the evidence tells us about some common supplements.
HOW	<p>Depending on individual health and medical situation, there can be real benefits from intelligent supplementation, but it is so important to separate fact from fiction. So the taking of supplements should always involve conversations with your medical team, particularly to be aware of any interactions with other medications.</p> <ul style="list-style-type: none"> - As we have seen, the balance between nutrition and digestion is complex. Supplements, however sophisticated, will still fall short of the biomatrix and bioavailability of nutrients in food. Use supplements sensibly to fill gaps and enhance health, without disrupting the natural balance of the body and nutrition. • Vitamin D: <ul style="list-style-type: none"> - Vitamin D works together with calcium and another essential mineral, phosphorus, to optimise bone, muscle and teeth health, amongst other jobs. - Blood levels of vitamin D have been found to be generally lower in people with Parkinson's and this can have significant knock-on effects. - The human body relies mainly on sunlight hitting exposed skin to produce vitamin D, but UV light levels in the UK through the months of October to April are generally not sufficient to stimulate production. Current UK government guidelines suggest all adults take a 10 microgram (400iu) Vitamin D supplement daily between these months. • Omega 3 : <ul style="list-style-type: none"> - As we saw in the video on Fats (<i>Week 8 Nutrition</i>), Omega 3 is a type of essential fat that our bodies cannot produce naturally, and it is lacking in modern diets. - Research has shown that it can have beneficial effects for our immune system, as well as our heart and the health of our brain

- Much of the evidence regarding these health benefits focuses on two types of **Omega 3 – DHA and EPA**.
- The best way to reap the rewards of these nutrients is to eat oily fish, at least 150gms twice per week, as mentioned previously.
- If for any reason you cannot or do not eat fish, then it's worth thinking about supplementation. Opt for Omega 3 tablets, rather than fish liver oil. This can have too much vitamin A which can be toxic, and also provides less Omega 3.
- Check the label for DHA and EPA content – aim for 450 to 500 mg EPA and DHA combined per daily adult dose.
- If you are vegan or vegetarian you could consider plant sources such as walnuts, or flax and chia seeds. These are sufficient, but slightly less efficient. Or you could consider micro algae EPA and DHA tablets.

You can find more information in The Research Library, or in these links -
<https://ods.od.nih.gov/factsheets/Omega3FattyAcids-HealthProfessional/>
<https://www.bda.uk.com/resource/omega-3.html>

- **Coenzyme Q10 :**

- At one stage the Parkinson's community had high hopes for this supplement, as people with Parkinson's seem to present with low levels of Coenzyme Q10.
- Unfortunately, recent studies and large-scale clinical trials have shown that this supplement has no effect on symptom alleviation, progression of disease or quality of life in people with Parkinson's.

- **Vitamin E :**

- Again, clinical trials and studies have shown no beneficial effect from this supplement on its own for people with Parkinson's. One high-quality study in 2017 did suggest benefits from supplementation of both omega-3 and vitamin E together, including slowing of progression of the condition... so this is one to keep an eye on for the future.

- **Coconut oil :**

- Coconut oil contains high amounts of fat called **medium chain triglycerides**. These are processed in the body in a different way to long chain triglycerides, and some people believe they can improve brain function.
- Again, unfortunately there is no solid scientific evidence to support this yet, but within the Parkinson's community there have been some anecdotal reports of benefits for movement and non-movement symptoms.
- If you are going to try adding coconut oil to your diet, bear in mind it is a saturated fat and so should not be used as an additional fat. Rather use it to replace other saturated fats such as butter, those found in red meat, fatty chicken or cheese.

- **Probiotics :**

- Our **microbiome** is a complex ecosystem. It is made up of trillions of organisms such as bacteria, yeast, fungi and viruses, and these live in our digestive tract and around the body. Collectively, they can weigh up to 2 kg... that's heavier than the average human brain!
- **Each person's microbiota is as individual as a fingerprint. Scientists are increasingly treating the gut as its own organ, and recognising how vital the microbiome is for digestion and our immune system.**
- As yet we know very little for sure about how to look after or improve our microbiota. One of the things we do know is that eating a wide variety of **whole, plant-based foods** – at least 30 different types every week – helps to promote a healthy microbiome.
- And we know that a combination of our diet, the environment, stress, exercise and drugs such as antibiotics, also influence the microbiome.
- Some research has shown that there is a difference in gut bacteria between people with and without Parkinson's, and even a difference between people with Parkinson's who have different symptoms.
- Supplementing with **probiotics**, or healthy bacteria has been shown to be effective in treating constipation, and may have other benefits, but as yet we have no evidence for which strains particularly help in Parkinson's.
- If you would like to try probiotics, opt for products containing **Bifidobacterium lactis**, as well as a variety of other strains, and take for at least 4 weeks to allow time for beneficial effects.

More information can be found here -

<https://www.nccih.nih.gov/health/probiotics-what-you-need-to-know>

<https://www.nhs.uk/conditions/probiotics/>

- **Glutathione :**

- Studies have shown that glutathione – an antioxidant and compound that affects nerve cell metabolism – is reduced in people with Parkinson's.
- Again, studies have not shown any improvements in motor symptoms when diet supplements are taken, and glutathione taken orally is not absorbed well via the human digestive tract.

Unlike medication, over-the-counter supplements do not undergo the rigorous testing that medications must go through before being sold to the public. 'Natural' is not always synonymous with 'safe', and some of these supplements can have harmful side-effects, and may also interfere with the effectiveness of medication you may currently be taking.

- For example vitamin E and Omega 3 may increase the risk of bleeding, so care must be taken if you are on blood thinning medication.... and Coenzyme Q10 can augment blood clotting.

There can be real benefits from intelligent supplementation, so putting in the effort to establish the right supplement programme for you is really worth it, but it is important you discuss with your doctor and pharmacist any supplements you wish to take.