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PCOS

Polycystic Ovary Syndrome (PCOS) is an inflammatory health condition that affects around 1 in 10 people with ovaries. A full introduction to PCOS, with causes, diagnosis, and treatment can be found [here](#).

Vitamin D

PCOS nutrition tips and supplements are a whole market, and today we are focusing on vitamin D. Vitamin D is a fat-soluble vitamin-like substance, essential for bones, teeth, muscles, and interactions with other nutrients. You're probably wondering "A vitamin-like substance, what does that even mean?" - Vitamin D is actually a hormone that is made in the body. The chemical reactions that need to take place to produce vitamin D require sunlight or vitamin D from foods.



Why does vitamin D matter if I have PCOS?

There's a growing amount of evidence that people with PCOS may be more likely to be deficient in vitamin D, than people without PCOS (1). Furthermore, the metabolic conditions that people with PCOS can be affected by (e.g. insulin resistance and raised cholesterol) are also linked to vitamin D deficiency, and vitamin D plays a role in fertility and period regulation (2). Therefore, there is likely a cyclic relationship between PCOS and vitamin D, so these 5 tips for getting more vitamin D should be helpful.

Top tips for getting more vitamin D

1. A supplement

The public health message is that everyone in the UK and Ireland should take a 10ug (400IU) vitamin D supplement daily between September and April. However, people with PCOS would do well taking a supplement daily, year-round. There are extra considerations too, such as having darker skin, covering up when outside, and spending a lot of time indoors, so you might also have some of these factors too.

A supplement of 10ug is the recommended daily dose, and taking that daily will be effective. If you are looking to take a stronger supplement, I would advise you to speak to your GP if you're extra concerned about vitamin D levels and they can arrange a blood test for you. The NHS puts caution on taking more than 100ug (10x the recommended dose) and my advice to you is that: A 10ug supplement is likely enough, and a 25ug supplement would be the highest dose I would recommend.

Note: Opt for an omega 3 supplement, rather than a cod liver oil because these naturally are high in vitamin A, which is not recommended for those who can become pregnant.

The upcoming 3 sources will be an additive effect, and a vitamin D supplement should still be taken alongside eating these foods.

2. Oily fish

A dietary recommendation for people with PCOS is to increase the consumption of oily fish, which you can read about in more detail here. Oily fish are rich in omega 3 fatty acids, that are associated with reduced risk of conditions related to PCOS, like cardiovascular disease, insulin resistance, and linked to better fertility outcomes.

One serving per week (120g) of oily fish per week is the recommended intake, which can be in a variety of different forms, including:

- Salmon or mackerel homemade/shop bought fish cakes
- Using canned salmon sometimes instead of tuna
- Cooking up teriyaki-marinated herring or salmon
- Eating toast with anchovies or sardines
- Fish fingers with extra omega 3 - cod isn't an oily fish, but supermarkets stock fortified options



3. Fortified foods

This includes milk (vitamin D is added to some kinds of milk, check the label), plant-based dairy alternatives, and breakfast cereals, all of which can be surprisingly high sources of vitamin D. Aim for 2-3 portions of dairy or plant-based alternatives daily, plus adding in breakfast cereals for breakfast or snacks. Some examples include:

- Breakfast cereal (e.g. Weetabix) and milk
- Ready Brek made with fortified soya milk
- 100g Greek yoghurt with some banana & berries w/ fortified granola on top

4. Eggs, including yolks

Have you heard that you should only eat white of eggs? Or you might have even heard that egg yolks are powerhouses of nutrition... It's confusing, right? Never fear: Eggs are a great source of protein and fats, and provide essential nutrients. Egg yolks are a rich source of vitamin D that offers an accessible, quick to prepare a meal for any time of the day.



- Scrambled eggs on toast
- Poached eggs with smoked salmon and toast
- Eggs on toast with avocado
- An omelette made with vegetables and cheese served with toast

If you are looking for personalised, compassionate support, [book an appointment](#) with Shannon. You will receive science-backed, sustainable nutrition, and lifestyle advice together with any additional help you may need around body image and emotional eating support - all of which is common with PCOS.

If you want to read Shannon's top tips for PCOS management, check out [this article](#) written by Shannon.

References

1. Thomson RL, Spedding S, Buckley JD. (2021) Vitamin D in the aetiology and management of polycystic ovary syndrome. *Clin Endocrinol (Oxf)*. Sep; 77(3):343-50.
2. Miao, C., Fang, X., Chen, Y., Zhang, Q. (2020) Effect of vitamin D supplementation on PCOS: A meta-analysis. *Exp Ther Med*. Apr; 19(4):2641-49.