



Get Real! Tackling Nutritional Misconceptions about Plant-Based Diets



Webinar with Heather Russell RD, Dietitian for The Vegan Society and Dr Sarah Bath RD, Lecturer at the University of Surrey.

Speaker answers to the most commonly asked questions:

Q: Infants – Guidance on the suitability of a vegan diet for babies and young children, including use of supplements?

A: The British Dietetic Association works with The Vegan Society to share the [statement](#) that well-planned vegan diets can support healthy living in people of all ages, which is in line with the [position paper](#) about vegan and vegetarian diets published by the American Academy of Nutrition and Dietetics.

During breastfeeding, supplementation is a reliable way of ensuring that breastmilk is a rich source of certain nutrients like vitamins D and B₁₂ and iodine, which is crucial for brain development. In the UK, appropriate supplementation for young vegans takes into account government guidelines around vitamins A, C and D for under-fives and the need to maintain complete nutrition as plant-based foods become the significant source of nourishment.

Vegan Society guides about pregnancy, breastfeeding and childhood are available [here](#), including information about fortified foods and supplementation. Also, First Steps Nutrition Trust provide a comprehensive guide about vegan under-fives [here](#).

Q: Iodine – What about the role of iodine in those people who are not pregnant or of childbearing age? Can individuals get iodine from sea salt (e.g. Celtic salt) or from seaweed?

A: Iodine is essential for thyroid hormone production – and this is important for all life stages. For example, thyroid hormones control metabolic rate, as well as growth and development. A deficiency of iodine can lead to enlarged thyroid (goitre). Therefore, it is important that iodine recommendations are met.

Salt is only a source of iodine if it is labelled as iodised. Sea salt or rock salt contains a low concentration of iodine. Salt intake should be within salt-reduction targets. Seaweed is not recommended as a source of iodine as it is not a reliable

source and some species (particularly Kelp and Kombu) can lead to excess iodine intake.

There is more information on salt, seaweed and supplements in the BDA iodine food fact sheet [here](#).

Q: Omega-3 fats - Advice to help achieve a good balance of omega 3:6 whilst eating a plant-based diet. Are supplements advisable?

A: The basic requirement for omega-3 fat is to obtain essential ALA from foods like walnuts, linseed (flaxseed), chia seeds or hemp seeds and information about quantities is provided in the [handout](#) for this webinar. Some experts have suggested that omega-3 fat status can be optimised by consuming double the amount of foods rich in ALA or taking a microalgae EPA and DHA supplement.

Also, avoiding excessive amounts of omega-6 fat may support conversion of ALA to long-chain omega-3 fats. This might include limiting servings of pumpkin or sunflower seeds to 30g and using vegetable (rapeseed) oil in cooking instead of sunflower, corn or sesame oils. Further information is available on The Vegan Society website [here](#).

Q: Protein bioavailability - can you give advice on the bioavailability of plant protein?

A: The [handout](#) for this webinar provides examples of some of the best sources of plant protein. Plant foods can provide all the essential amino acids and soya and Vegan Quorn™ are high quality alternatives to animal products. Lysine has been described as the limiting amino acid in vegan diets; protein needs can be met by consuming a balanced and varied diet that is adequate in calories and contains rich sources of lysine. Our bodies hold a pool of amino acids, so it is not necessary to get the perfect mix from every meal.

Further reading:

♥ Norris, J. 2016. Protein Part 1 - Basics. Available at veganhealth.org/protein-part-1/ (accessed 05 May 2020)

Q: Sports nutrition - is a plant-based diet adequate for people engaged in sport?

A: Nutrition is key to optimising performance in sport. There are a number of nutrients which need special consideration, including energy, protein, calcium and vitamin D, iron and fluid.

Research and recommendations are increasingly acknowledging that a well-managed plant-based diet (with appropriate supplementation) is compatible with health and performance in sports men and women.

Athletes engaged in competitive sports would be well advised to access a sports and exercise nutrition professional from the SENR register [here](#).

Further reading:

♥ Rogerson, D. (2017). Vegan diets: Practical advice for athletes and exercisers. Journal of the International Society of Sports Nutrition, 14:36.

♥ IAAF. (2013). Nutrition for athletics. A practical guide to eating and drinking for health and performance in track and field. Available at file:///C:/Users/Owner/Downloads/Practical%20(3).pdf (accessed April 2020).

♥ Jäger R., et al. (2017). ISSN Position Stand: protein and exercise. Journal of the International Society of Sports Nutrition, 14:20.

Q: Vitamin B₁₂ - advice on B₁₂ in plant-based diets, particularly on supplements?

A: Obtaining adequate B₁₂ from fortified foods requires careful planning, so supplementation may be a more convenient approach for some people. Cyanocobalamin is a good option; this type of B₁₂ is well-researched, stable, widely available and economical. The Vegan Society's guidelines have been geared towards optimising homocysteine levels as well as maintaining B₁₂ status and further information is available [here](#).

Q: Vitamin D - advice regarding vitamin D. Has it changed with covid-19?

A: In 2016, UK public health authorities started advising everyone to supplement vitamin D during autumn and winter as a minimum and recommended that groups at higher risk of deficiency

consider year-round supplementation, including people who do not get regular safe sun during spring and summer. Government guidelines are now drawing everyone's attention to the latter recommendation because our activities are restricted during lockdown. Many supplements contain vitamin D₃ derived from an animal source - lanolin. Vegan supplements contain vitamin D₃ derived from lichen or vitamin D₂.

The handout from this webinar has useful vitamin D advice.

Q: Phytates/oxalates - can you tell us more about these anti-nutrients?

A: Phytates are one of the components of our diets that has an inhibitory effect on absorption of calcium, iron and zinc. Adding food rich in vitamin C to meals enhances the absorption of plant iron. Wholemeal bread is a useful source of zinc because leavening enhances zinc absorption and the fermentation required to produce tempeh and miso is also thought to have the same effect. The soaking and canning involved in preparing legumes is thought to help too and sprouting is another useful method of preparation.

Oxalates are one of the components of our diets that has an inhibitory effect on calcium absorption. It is important that dairy is replaced by foods containing good amounts of well-absorbed calcium, such as fortified foods and drinks and calcium-set tofu. Maintaining vitamin D status through regular safe sun during spring and summer or supplementation helps our bodies to make the most of the calcium in our diets. Breakfast cereals, plant-based drinks and yoghurt alternatives fortified with D₂ can also make useful contributions to vegan intakes of this vitamin.

Q: Selenium - Can you advise on best food sources and when supplements may be needed? Are Brazil nuts a good source?

A: Brazil nuts are a rich source of selenium but their concentration of selenium is highly variable, so it is difficult to know how much is being consumed, and it is

possible to exceed the safe upper level of selenium intake. Furthermore, Brazil nuts contain barium and it is also possible to overdose on barium. Do not treat Brazil nuts as if they were a supplement of selenium.

A supplement of selenium would provide a reliable source of selenium, and a supplement may be required for vegans and vegetarians. The dose of selenium in the supplement should be close to the Recommended Nutrient Intake (e.g. 60 mcg/day for adult women and 75 mcg/d for adult men) and not more than 100 mcg/day.

Q: Is eating a healthy plant-based diet more expensive?

A: Some research has suggested that a shift in the average UK diet to one more like that recommended in the government's Eatwell Guide would not significantly change the price of the diet. Nevertheless, for many food affordability is a major issue. Those living on low incomes frequently eating poorer diets and having worse health outcomes. Tackling the many barriers to eating a healthy plant-based diet needs addressing from a number of angles. Those living on low incomes may need additional advice and support to help make healthy choices easier.

The BDA have good practical guidance ([here](#)).

Further reading:

♥ Scarborough P, Kaur A, Cobiac L, Owens P, Parlesak A, Sweeney K, Rayner M (2016). Eatwell Guide: modelling the dietary and cost implications of incorporating new sugar and fibre guidelines. Available at *BMJ Open*, 6(2): e013182. doi:10.1136/bmjopen-2016-013182 (Accessed May 2020)

♥ Scott C, Sutherland J, Taylor A (2018). The Food Foundation. Affordability of the UK's Eatwell Guide. Available at https://foodfoundation.org.uk/wp-content/uploads/2018/09/Affordability-of-the-Eatwell-Guide_Final_Web-Version.pdf. (Accessed May 2020)