

# Webinar

## VEGETARIAN AND VEGAN

### Improving performance?

There is no strong evidence to suggest a well-balanced vegetarian or vegan (V) diet is more likely to improve performance than an omnivore diet (Neti et al. 2017)

A badly planned V diet may be detrimental to performance (under-fuelling, macro/micronutrient deficiencies).

### Challenges:

Poorly structured V diets may predispose athletes to deficiencies:

Macronutrients (total energy, protein, omega 3)

Micronutrients (vitamin B12, vitamin D, iron, zinc, calcium & iodine).

### Potential Positives:

A plant-based diet is likely to increase the intake of fruits & vegetables that contain antioxidants/micronutrients (vitamin C & E) & carbohydrate rich foods.

Both can aid training & recovery ..... but you can do this as an omnivore too!

## TOP TIPS FOR PARENTS

- ✓ Record your food for a few days & assess macro/micronutrient intake - work with a dietitian/nutritionist where possible.
- ✓ Ensure meals are balanced
- ✓ Ensure energy intake is sufficient for training volume/type
- ✓ Aim for ~20 g protein per meal from a variety of sources
- ✓ Include healthy fats
- ✓ Include calcium fortified foods (& iron sources)



## Macro & Micro Nutrients

Plant-based diets often contain a high % of carbohydrate which is essential during high volume training!

You CAN consume sufficient energy but sometimes people don't which can mean unwanted weight loss and make it harder to build power and strength to perform.

**Top Tip** - When energy demands are high, try to reduce fibre intake slightly.

CARBOHYDRATES

FATS

V diets are typically lower in fat and saturated fat

Lower fat intake can contribute to weight loss

V diets are typically higher in omega 6 fats (soybeans, corn, safflower oil, nuts & seeds).

Omega 3 fatty acids play a structural role in your eyes & brain, & aid muscle recovery from exercise.

**Top Tip** - Focus on omega 3 sources such as flaxseed, walnuts, tofu, canola oil and fortified foods

PROTEIN

Vegans consume less protein than non-vegans

Plant-based protein sources are often incomplete (missing AA's) and less well absorbed

**Top Tip** - Consume a range of plant-based protein sources to ensure you meet protein and AA needs.

IRON

V diets often include a similar amount of iron (wholegrains, greens & legumes) but the bio-availability of plant-based iron is not as high and requirements are 1.8 times greater in vegans.

Menstruating females at higher risk - May cause anaemia = ↓ RBCs = tired/weakness/fatigue/ ↓ exercise tolerance.

V iron sources include cruciferous veg, tofu, beans, lentils, sprouted beans/seeds, soy, fortified cereals/bread, green veg, nuts & dried fruit

VITAMINS AND MINERALS

CALCIUM

Found in dairy, soya beans, tofu, green veg, nuts, fortified foods & fish with bones (sardines/pilchards)

Use fortified foods to replace the ease of calcium consumption from dairy products.

VITAMIN D

The best way for V's to ensure they are getting enough Vitamin D is to have blood levels tested. Those unable to get enough from fortified foods and sunshine should consider taking a daily Vitamin D2 or lichen derived D3 supplement.