



# VEGGIE-DIETS

## PROTECTING YOUR HEALTH

A guide to vegetarian and vegan diets  
for healthcare professionals



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**Scientific evidence continues to mount regarding the health benefits of plant-based diets. They can cut the risk of killer diseases such as heart disease, stroke and certain cancers. They are useful in controlling diabetes, lowering blood pressure and cholesterol. They are an invaluable way of maintaining a healthy weight, and can add years to life expectancy.**

Consider cancer, for instance. A poor diet is the second largest preventable risk factor for cancer, coming close behind smoking. An estimated 70 per cent of cancers could be prevented by diet <sup>(1)</sup>. Yet according to a nationwide survey <sup>(2)</sup>, nearly 83 per cent of the general cancer population are not given any dietary advice by healthcare teams following cancer diagnosis – and nor are they directed elsewhere.

The majority of patients would like more information on healthy eating than they receive. Many would like to receive this information at the point of diagnosis.

A further study <sup>(3)</sup> acknowledges that GPs and nurses simply do not have the time, knowledge or skills to advise their patients about desirable dietary practices.

This is exactly why health charity the Vegetarian & Vegan Foundation (VVF) was set up. We aim to become the major resource on vegetarian and vegan health and nutrition for health professionals and the public – publishing imaginative guides to help the public's understanding of health; launching dynamic campaigns; producing groundbreaking scientific reports; and producing simple fact sheets on complex subjects. See the end of this guide for a full list of our resources and details of how to order.

Some key research regarding the many health benefits of vegetarian and vegan diets is highlighted over the page.

**“Vegetarian and vegan diets can cut the risk of heart disease, stroke and certain cancers, and increase life expectancy”**

#### References:

- (1) Greger M, 2002. Stopping Cancer Before It Starts. DVD. Available from VVF.
- (2) Bristol Cancer Help Centre Survey, Summer 2006.
- (3) Pineiro R et al., 2005. Healthy diet in primary care: views of general practitioners and nurses from Europe. Eur J Clin Nutr; 59 Suppl 1 : S77-80.

## General health benefits

“It is the position of the American Dietetic Association that appropriately planned vegetarian diets, including total vegetarian or vegan diets, are **healthful, nutritionally adequate, and may provide health benefits in the prevention and treatment of certain diseases.**”

Craig WJ *et al.*, 2009. Position of the American Dietetic Association: vegetarian diets. *J Am Diet Assoc.* 109 (7) 1266-82.

“Well-balanced vegetarian diets are **appropriate for all stages of the life cycle**, including children, adolescents, pregnant and lactating women, the elderly and competitive athletes. In most cases, vegetarian diets are **beneficial in the prevention and treatment of certain diseases**, such as **cardiovascular disease, hypertension, diabetes, cancer, osteoporosis, renal disease and dementia**, as well as **diverticular disease, gallstones and rheumatoid arthritis.**”

Leitzmann C, 2005. Vegetarian diets: what are the advantages? *Forum Nutr.* [57] 147-56.

“...vegetarians have a **lower mean BMI, a lower mean plasma total cholesterol concentration, and a lower mortality from IHD** (ischaemic heart disease).

They may also have a **lower risk** for some other diseases such as **constipation, diverticular disease, gallstones and appendicitis.**”

Key *et al.*, 1999. Health benefits of a vegetarian diet. *Proc Nutr Soc.* 58 (2) 271-5.

## Overweight and obesity

Vegetarians and vegans weigh less than meat-eaters. Evidence shows that a plant-based diet is the healthiest option for weight loss or to maintain a healthy weight and that replacing meat with a plant-based alternative can help control weight.

- Newby PK *et al.*, 2005. Risk of overweight and obesity among semi-vegetarian, lactovegetarian, and vegan women. *Am J Clin Nutr.* 81 (6) 1267-74.
- Barnard ND *et al.*, 2005. The effects of a low-fat, plant-based dietary intervention on body weight, metabolism, and insulin sensitivity. *Am J Med.* 118 (9) 991-7.
- Appleby *et al.*, 1998. Low body mass index in non-meat eaters: the possible roles of animal fat, dietary fibre and alcohol. *Int J Obes Relat Metab Disord.* 22 (5) 454-60.

## Vegetarian diets for children

“Research has highlighted nutritional advantages to vegetarian diets and has indicated that this style of eating can lead to lifelong healthy eating habits when adopted at a young age...”

“Nurse practitioners... can reassure parents, children, and adolescents that a well-planned vegetarian diet is a healthy choice that promotes (normal) growth and decreases the risk for diabetes, heart disease and cancer.”

Dunham L and Kollar LM, 2006. Vegetarian eating for children and adolescents. *J Pediatr Health Care.* 20 (1) :27-34.

## Diabetes

**Diabetes is less frequent among vegetarians and vegans** as a 21-year study in the USA found. Over 25,000 adults were studied. Those on meat-free diets had a **45% reduced risk** of developing diabetes compared to the population as a whole. **Meat consumption was positively associated with diabetes** in both men and women.

Snowdon DA and Phillips RL, 1985. Does a vegetarian diet reduce the occurrence of diabetes? *Am J Public Health*. 75 (5) 507-512.

A 2006 study looked at the health benefits of a low-fat vegan diet in people with type 2 diabetes. Vegetables, grains, fruits, and pulses were unlimited. The vegan diet group was compared with a group following a diet based on American Diabetes Association (ADA) guidelines. Over the 22-week study, **43% of the vegan group** and 26% of the ADA group **reduced their diabetes medications**. Furthermore, the vegan group **lost an average of almost two stone**, compared with just 9 pounds in the ADA group. **Study participants found this way of eating highly acceptable and easy to follow.**

Twenty-one diabetics with diabetic neuropathy volunteered to follow a vegan, whole food diet and exercise programme for 25 days. Within 16 days, 17 of the patients reported that the **pain of neuropathy had been completely alleviated.**

Crane MG and Sample C, 1988. Regression of diabetic neuropathy with vegan diet. *Am J Clin Nutr*. 48 : 922.

Barnard ND *et al.*, 2006. A low-fat, vegan diet improves glycemic control and cardiovascular risk factors in a randomized clinical trial in individuals with type 2 diabetes. *Diabetes Care*. 29 (8) 1777-83.

## Kidney stones

A diet rich in **animal protein increases the risk of kidney stones**. The link between animal protein and kidney stone formation is now well documented in several studies.

- Breslau *et al.*, 1988. Relationship of animal protein-rich diet to kidney stone formation and calcium metabolism. *J Clin Endocrinol Metab*. 66 (1) 140-6.
- Curhan *et al.*, 1993. A prospective study of dietary calcium and other nutrients and the risk of symptomatic kidney stones. *NEJM*. 328 (12) 833-8.
- Taylor *et al.*, 2004. Dietary factors and the risk of incident kidney stones in men: new insights after 14 years of follow-up. *J Am Soc Nephrol*. 15 (12) 3225-32.
- Curhan GC, 2005. A 44-year-old woman with kidney stones. *JAMA*. 293 (9) 1107-14.

## Cardiovascular disease

“The results of an evidence-based review showed that a vegetarian diet is associated with a **lower risk of death from ischaemic heart disease**. Vegetarians also appear to have **lower LDL cholesterol levels, lower blood pressure, and lower rates of hypertension and type 2 diabetes** than non-vegetarians. Furthermore, vegetarians tend to have a **lower BMI and lower overall cancer rates**.”

Craig WJ *et al.*, 2009. Position of the American Dietetic Association: vegetarian diets. *J Am Diet Assoc.* 109 (7) 1266-82.

“The evidence available suggests that **widespread adoption of a vegetarian diet could prevent approximately 40,000 deaths from IHD in Britain each year**.”

Key *et al.*, 1999. Health benefits of a vegetarian diet. *Proc Nutr Soc.* 58 (2) 271-5.

## Gallstones

**Vegetarians suffer less from gallstones** than meat-eaters. A study published in the *British Medical Journal* reported that meat-eaters are twice as likely to develop gallstones as vegetarians. The low incidence of gallstones in vegetarians compared to meat-eaters has now been well documented. **Vegetarian diets have been shown to be beneficial for both the prevention and treatment of gallstones.**

“...a dietary factor associated with vegetarianism may prevent this common condition.”

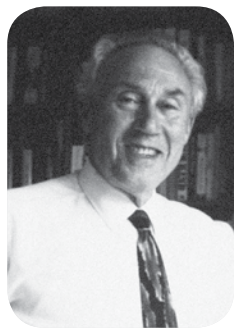
- Pixley *et al.*, 1985. Effect of vegetarianism on development of gallstones in women. *BMJ* (Clinical Research Edition). 291 (6487) 11-2.
- Key TJ *et al.*, 1999. Health benefits of a vegetarian diet. *Proc Nutr Soc.* 58 (2) 271-5.

## Bone health

“Moderation of animal food consumption and **an increased ratio of vegetable/animal food consumption may confer a protective effect** (against hip fracture).”

Frassetto *et al.*, 2000. Worldwide incidence of hip fracture in elderly women: relation to consumption of animal and vegetable foods. *J Gerontol A Biol Sci Med Sci.* 55 (10) M585-92.

## Dr Who?



David Ryde (left) was Britain's lowest prescribing doctor who cured his patients in a novel way. This vegan GP built a career out of saying no to bottles of 'jollop'. He prefers giving advice – and it has dramatically changed people's lives.

There were some 35,000 general practitioners in Britain when Dr David Ryde MB, BS, FRCGP was practising and none wrote out fewer prescriptions than him. The UK's lowest prescribing doctor had discovered that diet was the answer to many health problems, not pills and potions. There was clearly something in it because he had some of the best health outcomes in the UK.

David Ryde was successfully treating angina and other heart conditions, high cholesterol levels, obesity, high blood pressure, diabetes, strokes and even rheumatoid arthritis by getting people to switch to a vegan diet. His practice was in one of the poorest parts of London's East End and he saw more than his share of all these conditions.

*"Compared to meat-eaters, long term vegans live on average six years longer and spend about one fifth of the time in hospital over the age of 60,"* states David Ryde.

*"The truth is that most people eat two to three times more fat and protein than they need and we're just beginning to discover that animal protein may be as damaging to health as fat and cholesterol. The medical establishment just doesn't seem to want to know. They seem to resist any new advances where the positive impact of vegetarian and vegan diets on health are concerned."*

David Ryde himself has experienced the lethargy of officialdom. The Department of Health and Social Security – as it was then – invited him to London to discuss his low prescribing and excellent outcomes. He hoped this would be the start of a revolution in primary health care and explained his simplicity of approach, asking what they intended to do. "Absolutely nothing", was the answer. Such an approach would simply be unacceptable to GPs, they said.

You couldn't get a better example of veganism than Dr David Ryde. A keen sportsman, he was doctor to all the World Jewish Games, an honorary member of the British Association of Sport Medicine, a county athlete and rugby player and served on the medical sub-committee of the British Olympic Association for 15 years. He is now in his seventies, extremely active and still looks as though he could take his place in a rugby scrum.





## Dr Dean Ornish

Back in 1990, Dr Dean Ornish, a Harvard-trained doctor, published a study that set out to test whether heart disease could not only be prevented, but could also actually be reversed. He wanted to see whether it could be done with diet and lifestyle changes alone rather than surgery or drugs.

Dr Ornish studied 47 patients in the San Francisco Bay area, all of whom had significant heart disease. Some had already had heart attacks. One group of heart patients was given the standard care that doctors usually prescribe – a diet based on 'lean' meat, poultry and fish, along with various medications, and were advised not to smoke. Another group went on a low-fat, vegetarian diet (less than 10 per cent of their calories from fat) exercised moderately (brisk walking for half an hour per day or an hour three times per week), were taught stress management and were also advised not to smoke.

A year later, all patients had an angiogram – an X-ray showing any blockages in the coronary arteries.

The results were astonishing. For the patients receiving standard medical care, blockages were, on average, worse than at the start of the study; they still had chest pain and still needed medication. For patients in the experimental group, however, the story was very different.

Chest pain had begun to disappear within weeks, cholesterol levels dropped dramatically and, at the end of the year, 82 per cent saw plaques in their coronary arteries start to dissolve without medication, surgery or side effects! The only 'side effects' were good

ones – the average patient lost around one-and-a-half stone in the first year!

Many doctors still recommend 'chicken and fish' diets even though numerous studies have shown that heart patients who just tinker with their diets in this way generally get worse over time. Those who adopt a low-fat, vegetarian diet, take daily exercise, avoid tobacco and manage stress stand the best chance of reversing heart disease.





## Dr Caldwell Esselstyn

A surgeon named Dr Caldwell Esselstyn used the same type of diet for severely ill heart patients, the majority of whom had, in effect, received a death sentence. Doctors had told them there was nothing more they could do and some had been given less than a year to live.

Just about everything had been tried – repeated open heart surgery, angioplasties, stents and a plethora of medications. There was no longer any useful effect and almost all the men were impotent, most had angina and for some, things were so

bad that they couldn't lie down and had to sleep sitting up.

Having completely run out of options they agreed to the demanding conditions Dr Esselstyn set for entry into the trial cure he had come to believe in. They agreed to join him in a diet not unlike two-thirds of the world's population (outside the West) – a low-fat, plant-based diet.

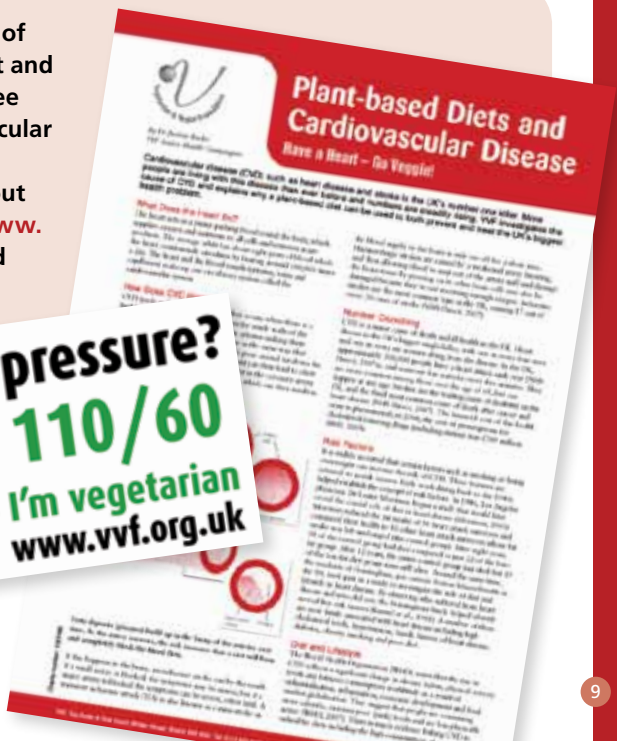
Of the patients who stuck to Dr Esselstyn's programme, there was not a single cardiac event over the next 12 years! All were alive and well and had reversed their disease.

Dr Esselstyn has since gone on to counsel and treat many more patients.

For more information on the use of plant-based diets to help prevent and reverse cardiovascular disease, see the VVF's resources on cardiovascular disease (see order form on back cover). For more information about Drs Ornish and Esselstyn, see [www.webmd.com/dean-ornish-md](http://www.webmd.com/dean-ornish-md) and [www.heartattackproof.com/](http://www.heartattackproof.com/)



**Blood pressure?**  
**only 110/60**  
**Because I'm vegetarian**  
[www.vvf.org.uk](http://www.vvf.org.uk)



## Veggie case notes

*"In 2002 I became a vegan, having been a veggie for 31 years. My hot flushes were particularly unpleasant and my GP offered the usual but I declined. I started reading up on nutrition and cut out dairy produce, eggs, spinach and hot spices. I still get hot flushes but not nearly as strongly. I eat lots of tofu and soya products, veg, fruit, beans, cereals, and as a bonus have lost weight, too. I have very low cholesterol, normal blood pressure for my age and am fit and healthy."* **Paquita Perez**

*"...by April this year my husband and I will have been veggie for two years. I can't say we really missed meat, but we make sure we eat healthily, eating plenty of variety – nuts, seeds, pulses, grains, soya, tofu, quorn, and at least 10 portions of fruit and veg a day.*

*"Almost straight away I noticed an improvement in my skin (having always had sensitive skin prone to eczema and rashes). I also have loads more energy and have even lost a few pounds in weight."* **Anne Sommerville**

*"Since becoming vegetarian I have lost over two stone and have given up cake and chocolate. I am losing weight at a rate of one or two pounds per week. I find my new diet filling and delicious and I have a lot more energy."* **L Burgess**

*"My full medical last year showed excellent blood pressure, low cholesterol, liver and kidneys functioning brilliantly and no-one believes I'm 44! My GP's response? 'A vegan diet is an extremely healthy one!'"* **Peter Bagshaw**

*"I used to suffer with irritable bowel syndrome and severe constipation – nice! Whatever my doctor prescribed didn't work, but what did work was going vegan. Since then, my stomach feels great; I am no longer bloated and have slimmed down in the process!"* **J Roberts**

*"I had tried several remedies for hay fever but with little success. According to my doctor I had allergic rhinitis due to pollen and dust and although not severe, it was uncomfortable and caused itchy eyes and a stuffy, runny nose.*

*"After a year as a vegan I suddenly realised that I'd survived a whole summer with no hay fever symptoms. My diet has become much more varied and healthy and I've embraced such things as tofu and my hay fever has completely disappeared! The occasional skin problems I used to experience have also gone and my skin condition has improved dramatically."* **Gaynor Armitage**

**"Going vegetarian? But what about your PROTEIN? What about your HEALTH? It can't be good for you!?" Or, so say some people... Wrong!**

# Vegetarian and vegan nutrition

## Protein

Although protein is vital for our survival, we don't need as much as is commonly believed. The maximum required, according to leading health bodies like the World Health Organisation (WHO), is only eight per cent of our calories from protein.

Almost all foods – grains, pulses (peas, all types of beans, lentils), nuts, seeds and vegetables – can easily provide us with eight per cent of our calories from protein. The foods that are exceptions to this include fruits (which contain about five per cent of their energy from protein) and many sweets and junk foods. This makes it very easy to meet your protein needs and unnecessary to go out of your way to get protein in your diet.

There is a persistent myth that vegetarians need to be well educated and choose protein foods that complement one another, meaning that foods make up for the amino acid deficiencies of one another. But research shows that this is unnecessary, and that both vegetarians and omnivores get enough protein, including plenty of the amino acids they need, as long as they are getting enough calories.

By eating a range of whole, plant-based foods you will get all the different amino acids you need – and in the right proportions. Especially good sources of high quality protein include soya products (eg tofu, soya milk, edamame, veggie mince), cereals (eg brown rice, wholegrain pasta, wholemeal bread), pulses (eg baked beans, chick peas, lentils, kidney beans), nuts and seeds.

## How much protein do we need?

Not as much as we think – recommended amounts have more than halved in the past 20 years as several chronic diseases have been linked to eating too much animal (not plant) protein. The average adult needs to consume between 45 and 55.5 grams of protein per day.

### Protein requirements (grams needed per day)

AGE GROUP (YEARS)	REFERENCE NUTRIENT INTAKE (RNI), G PER DAY (VALUES FROM WHO)	
	Females	Males
11-14	41.2	42.1
15-18	45.4	55.2
19-50	45.0	55.5
50+	46.5	53.5

To give you a comparison between some meat and vegetarian products, a standard 50g beef burger contains 10.2g of protein and three (90g) fish sticks 12.1g; half a can of 225g baked beans contains 11.5g of protein; an average serving of pasta (190g cooked) contains 8.5g, an average serving of kidney beans (160g cooked) 12.4g, and a small packet (25g) of peanuts contains 6.1g.

## Too much of a good thing?

Excess protein, on the other hand, is linked with kidney disease, osteoporosis, cancers, type 2 diabetes and cardiovascular disease – and getting too much is usually a result of eating too many animal products.

There is a compelling case that animal proteins – independent of other associated nutrients – increase the risk for cancer, atherosclerosis, osteoporosis and type 2 diabetes. This was particularly evident in the China Study – one of the largest and most comprehensive studies ever undertaken to examine the relationship between diet and disease. Huge differences were seen in disease rates based on the amount of plant foods participants ate compared to animal foods.

Plant proteins can do a better job of meeting your protein needs than animal products, both because they are less concentrated sources of protein (making it less likely that you'll get too much) and because they are more likely to be bundled with other nutrients such as fibre, vitamins, minerals, phytochemicals and healthy fats.

For more information on protein, including scientific references and a chart detailing the protein content of some common foods, see the VVF's fact sheet, *The Protein Myth* (see order form on back cover).

## Iron

All the world's leading health advisory bodies agree that meat-eaters are just as likely to suffer from iron deficiency anaemia as vegetarians. Everyone – especially women – should ensure a good supply of iron in their diet. It's needed for healthy red blood cells to transport oxygen to all parts of the body. Good sources of iron are baked beans, wholegrain bread, molasses, leafy green vegetables, dried fruit (particularly apricots and figs), cocoa, pulses (all types of beans, peas, lentils) and pumpkin seeds. Vitamin C can increase the absorption of iron by a factor of four – another reason why fresh vegetables and fruits are so important in the diet.

The British Medical Association and the American Dietetic Association state that vegetarians are no more likely to suffer from iron deficiency than meat-eaters.

BMA, 1996. Diet, nutrition and health. BMA Report 4.11. Craig WJ *et al.*, 2009. Position of the American Dietetic Association: vegetarian diets. *J Am Diet Assoc.* 109 (7) 1266-82.



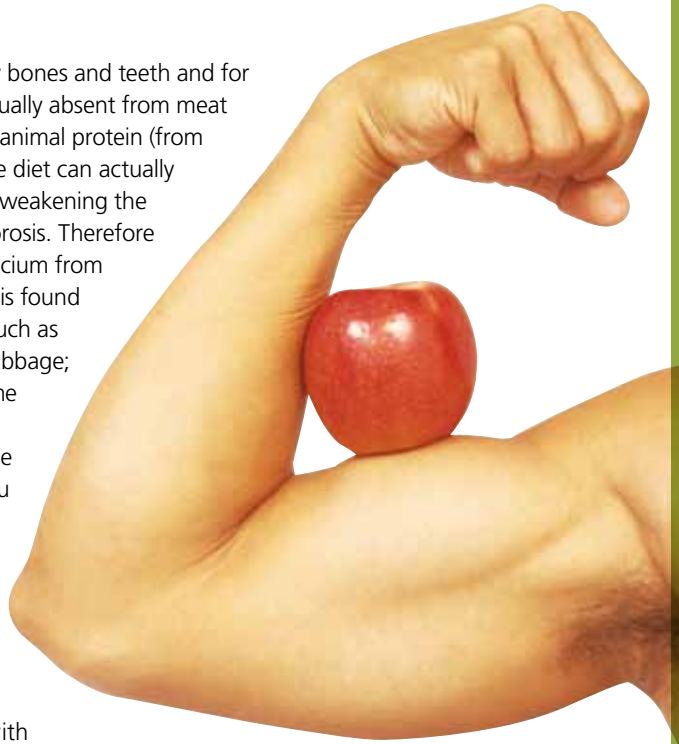
## Calcium

Calcium is important for healthy bones and teeth and for the working of muscles. It is virtually absent from meat products. Excessive amounts of animal protein (from meat, dairy, fish and eggs) in the diet can actually leach calcium from the bones – weakening the skeleton and leading to osteoporosis. Therefore it is much healthier to obtain calcium from plants than from dairy. Calcium is found in dark green leafy vegetables such as broccoli, kale, watercress and cabbage; pulses; dried fruits; tahini (sesame seed butter) and nuts and seeds (particularly almonds and sesame seeds). Many soya milks and tofu are fortified with calcium.

## Vitamin B12

A daily source of this vital vitamin is required – easily available from foods fortified with it. Vegetarians get B12 from free range eggs and dairy. Vegans need to obtain B12 from eating B12-fortified foods, such as breakfast cereals, margarines, nutritional yeast (eg Marmite) and soya milk. Vitamin B12 from fortified foods is better absorbed than the B12 from animal foods.

For further information, see the VVF's detailed fact sheets: **Ironing out the Facts**, **Boning up on Calcium, B12 and the Vegan Diet**, and **Chewing the Fat**. Or send for our guide **Nutrition in a Nutshell** and **Veggie Vitamins and Other Good Things! Wallchart**. (See resources order form on back cover.)



## Omega-3 fatty acids and the vegetarian diet

Most healthy people are able to obtain the essential omega-3 fatty acids they need by including rich plant-based sources of omega-3 in their diet, such as linseed (flaxseed), rapeseed and their oils. The table (below) shows how much people should aim to include in their diet each day. These fats are easily damaged by light or heat so try and keep these foods refrigerated and use them cold, for example on cold vegetable/rice/pasta salads and so on.

OMEGA-3 FATTY ACIDS	1 DAILY PORTION IS...
<b>Flaxseed (linseed) oil</b>	<b>1 teaspoon</b>
<b>Ground flaxseed (linseed)</b>	<b>1½ tablespoons</b>
<b>Hempseed oil</b>	<b>1 tablespoon</b>
<b>Rapeseed oil</b>	<b>1½ tablespoons</b>
<b>Walnuts</b>	<b>8 halves/28g/1oz</b>
<b>Hempseed</b>	<b>5 tablespoons</b>

Most people are able to convert the type of omega-3 fat that these foods contain (called ALA) to EPA and DHA. This process isn't amazingly efficient but there are many steps you can take to improve the rate at which ALA is converted.

- Cut down on cholesterol (avoid eggs, meat and dairy products);
- Avoid or cut down on processed foods, trans-fatty acids from margarines and hydrogenated vegetable oils;
- Avoid or reduce fried foods, alcohol, caffeine, sugar, smoking and stress;
- Make sure that you get all the minerals you require including zinc and chromium (found in sesame and pumpkin seeds, green vegetables, lentils, wholegrain cereals, pepper, yeast and wholemeal bread);
- Cut down on omega-6 oils (sunflower and corn oil).

Consumption of the above-mentioned plant-based sources of omega-3 should be sufficient for most healthy people. However, for people who already consume fish oil, vegetarian supplements containing EPA and DHA derived from algae could be a good substitute.

For further information, see the VVF's detailed fact sheets: **Ironing out the Facts, Boning up on Calcium, B12 and the Vegan Diet, and Chewing the Fat**. Or send for our guides **Nutrition in a Nutshell** and **Veggie Vitamins and Other Good Things! Wallchart**. (See resources order form on back cover.)

## Pregnancy

A balanced vegetarian or vegan diet provides all the nutrients needed for a healthy pregnancy. Healthy babies are being born to sixth and seventh generation vegetarians and vegans in the UK and, of course, around the world, whole cultures have been vegetarian for thousands of years! It is the most natural, healthy diet and perfect for nurturing an unborn child.

A healthy pregnancy should just be an extension of a woman's normally healthy diet. If she eats well anyway, then eating right for her unborn child won't be such a radical change.

The secret of a healthy diet is to eat a variety of foods, but focusing on wholegrains, pulses (peas, beans and lentils of all types), unsalted mixed nuts and seeds and fresh fruit and vegetables. The chart on page 16 suggests what to eat each day.

During pregnancy, daily nutrient requirements increase considerably. Iron, folic acid, thiamin, niacin, riboflavin as well as vitamins A, C and D, calcium and protein are all needed in greater amounts. It's not surprising – you're making a whole new person and you'll need more nutrients than you do normally! If a woman's diet includes plenty of fresh fruit and vegetables, she will probably be getting more than enough of vitamins A and C, folate and thiamin, but it doesn't hurt to give them all a bit of a boost.

For information on how to boost nutrient intake during pregnancy, including weaning recipes, see the VVF's *Vegetarian & Vegan Mother and Baby guide* (see order form on back cover).

*"I have been a vegetarian for most of my life and had no concerns about my health during my very easy pregnancy; in fact I believe my balanced veggie diet was a positively helpful factor. Jessi is now seven and was brought up with a balanced vegetarian diet. She is a very healthy girl and has developed a taste for healthy food which many other children don't. Some of her favourite foods are salads, avocado, broccoli, tofu and most fruits, as well of course, as chips and pasta!"* **Kee Macmillan**





"Nurse practitioners... can reassure parents, children, and adolescents that a well-planned vegetarian diet is a healthy choice that promotes (normal) growth and decreases the risk for diabetes, heart disease and cancer."

Dunham L and Kollar LM, 2006. Vegetarian eating for children and adolescents. *J Pediatr Health Care*. 20 (1) 27-34.

Make sure you're getting a balanced diet with the VVF's handy chart (see page 16). Healthy eating stems from knowing the size of a portion of food and how much to eat every day.

## What vegetarians and vegans should have each day

No. of servings	Foods	Healthy portion size	To provide
At least 5	<b>Fruit &amp; Vegetables to include: Dark Green Leafy Vegetables, Orange Vegetables, Fresh Fruit, Dried Fruit</b>		Folate, Calcium, Vitamin A, Vitamin C, Fibre & Iron
	Eg Fresh Fruit	1 medium piece the size of a tennis ball	
	Dried fruit	1-1½ tablespoons or 1 golf ball	
	Green or Root Veg	2-3 tablespoons or ½ tennis ball	
	Salad Veg	80g or 1 large cereal bowl	
3-4	<b>Cereals &amp; Grains (eg Wholemeal Pasta, Brown Rice, Oats, Wholemeal Bread etc)</b>		Energy, Fibre, B Vitamins, Calcium, Iron, Protein
	Eg Cooked Brown Rice	2-3 heaped tablespoons or ½ teacup	
	Breakfast Cereal	25g or 1 regular sized cereal bowl	
	Wholemeal Pasta	1 cup (cooked) as side dish or 2 cups as main dish	
	Wholemeal Bread	2 slices	
2 or 3	<b>Pulses (eg Peas, all types of Beans &amp; Lentils), Nuts or Seeds</b>		Protein, Energy, Fibre, Iron, Calcium, Other Minerals
	Eg Peas, Beans and Lentils	½ cup (cooked)	
	Nuts	2 tablespoons or a small handful	
Small amounts	<b>Vegetable Oil (eg Flaxseed or Rapeseed Oil, used cold; Olive Oil), Margarine</b>		Energy, Vitamin E (Vegetable oils), Vitamins A & D (Fortified Margarine), Essential Omega-3 and Omega-6 Fats (Flaxseed, Soya, Walnut, Hemp)
At least 1	<b>B12 Fortified Foods, eg Fortified Soya Milk, Fortified Breakfast Cereal, Reduced Salt Yeast Extract (essential if vegan)</b>		Vitamin B12

1-2 litres of water per day (at least eight glasses) should also be consumed as part of a healthy, balanced diet

# Say what?

## What's a vegetarian?

A person who avoids eating red and white meats, fish and all other water creatures such as prawns and lobsters; and who also avoids slaughter by-products such as gelatine (made from horns, hooves, bones etc), lard and cochineal (crushed insects). A vegetarian may or may not eat dairy products, free range eggs or honey.

## What's a vegan?

A person who tends to be much healthier than their dairy and meat-eating counterparts! Why? Because a vegan eats no animal products – red and white meats, fish and other water creatures, eggs, dairy and insect products such as honey and cochineal. That means no damaging animal protein, animal fats or cholesterol in their diet. Far from going short, they can – and are more likely to – pack their diet with a wide range of healthy, disease busting foods high in vegetable protein, fibre, complex carbohydrates, vitamins, minerals and good fats. These include fresh fruit and veg, a wide range of pulses, including peas, beans and lentils, wholegrain pastas, breads and rice, nuts and seeds, herbs and spices and vegetable oils – especially flaxseed and virgin olive oil.

For more information on whether or not food or medicines are suitable for your vegetarian or vegan patients, see the VVF's A-Z glossary of animal substances, **A-Z of Hidden Nasties**, available online at [www.vegetarian.org.uk/factsheets/hiddennasties](http://www.vegetarian.org.uk/factsheets/hiddennasties) or see order form on back cover. Also see the Electronic Medicines Compendium section of the website [www.medicines.org.uk](http://www.medicines.org.uk) which provides a list of 'ingredients' for each drug on its database.

## Essential reading for health professionals

Britain's leading health and nutrition charity the Vegetarian & Vegan Foundation produces a range of colourful, easy-to-read guides, scientific reports and informative fact sheets on a number of issues. These publications are available for healthcare professionals to purchase for resale at half price, providing helpful resources for your patients at fantastic value for money. To order, simply complete and return the order form overleaf with payment and your order will be processed within 21 days. If you would like to view a sample copy of any of the guides before ordering you can request these using the form overleaf (or by calling Katrina Gazley on 0117 944 1000 or emailing [katrina@viva.org.uk](mailto:katrina@viva.org.uk)).

### Viva!life magazine incorporating Veggiehealth

Free to healthcare professionals (RRP £15 per annum)

*Published three times a year. Exclusive science and health news, features and VVF campaign news from our well-qualified team. Includes Viva!'s campaigns for animals, reviews of new products, probing features, recipes and lots more.*

#### FACT SHEETS

One fully-referenced fact sheet FREE then each fact sheet 20p after that (RRP 40p).

##### **A-Z of Hidden Nasties!**

*A-Z glossary of animal substances.*

##### **B12 and the Vegan Diet**

*All you need to know about B12 in vegetarian and vegan diets.*

##### **Boning up on Calcium**

*Why plant calcium is best.*

##### **Chewing the Fat**

*How a plant-based diet provides all the essential fats you need.*

##### **Ironing out the Facts**

*Why plant iron is best.*

##### **Plant-based Diets and Cardiovascular Disease**

*Have a heart – go veggie!*

##### **The Protein Myth**

*Why vegetarian and vegan diets contain all the protein you need.*

##### **The Safety of Soya**

*The latest science on soya.*

##### **Soya-based Infant Formula**

*A safe alternative.*

##### **Talking Thyroid Facts**

*Why iodine is important.*

#### REPORTS

All the VVF's scientific reports are fully-referenced

##### **White Lies**

£2.50 (RRP £5)

*This groundbreaking report reviews the scientific evidence linking dairy to disease and reveals the health consequences of consuming cow's milk. This health report by the VVF is 76 pages and reviews over 200 research papers.*

##### **Globesity**

£2.50 (RRP £5)

*This scientific call for action shows how meat and dairy are at the core of the world's expanding epidemic. Read why plant-based diets are the solution.*

##### **One in Nine**

£1.25 (RRP £2.50)

*Explains how breast cancer cases are rising and looks at how diet affects your risk of what has become a major killer in the West. The title refers to the number of women in the UK who will get breast cancer in their lifetime.*

##### **White Meat Black Mark**

£2.50 (RRP £5)

*Reveals the truth about the health consequences of eating chicken, duck, turkey and goose. An important, revelatory and life-saving work.*

##### **The Fish Report**

£2.00 (RRP £2.50)

*An in-depth examination of the science behind the health claims for oily fish. Describes why omega-3s are important and reveals the research showing that plant-based oils are better for human health and the environment.*

## GUIDES

## General Health

**Your Health In Your Hands**

50p (RRP £1)

*Easy-to-read and listing many of the common diseases, a vegetarian diet is shown as the overwhelmingly healthier alternative to the typical Western diet.*

## Cardiovascular Disease

**Have a Heart**

95p (RRP £1.90)

*Shows how a plant-based diet combats heart disease, stroke, high cholesterol and high blood pressure. Includes 7-day menu plan with recipes.*

## Blood Pressure

**Mini-Guide**

Order up to 20 free

*This handy pocket-sized guide gives the low-down on blood pressure and explains why a plant-based diet is the perfect way to lower it.*

## Breast Cancer

**A Fighting Chance**

95p (RRP £1.90)

*Looks at why breast cancer cases are rising and describes which foods can help and which foods may harm. Include recipes.*

## Dairy-Free

**It's Easy to be Dairy-Free**

50p (RRP £1)

*Pocket-sized shopping advice for new vegans and information on why dairy damages health.*

**How to be Dairy-Free**

FREE

*A guide to healthier shopping and eating. Includes 20 vegan recipes with Tofu Heaven section.*

## Slimming/Healthy Eating

**Nutrition in a Nutshell**

50p (RRP £1)

*Why a plant-based diet is healthy and nutritious. Includes vitamin chart and where to obtain all the nutrients you need on a vegetarian and vegan diet.*

**Veggie Vitamins and Other Good Things Wallchart**

£1 (RRP £2)

*Colourful and laminated wallchart which shows at a glance where to get all the nutrients needed for a healthy vegetarian or vegan diet. Size 21 x 60cm.*

**The V-Plan Diet**

£1.25 (RRP £2.50)

*Helpful guide packed with easy to follow tips to help maximise both health and weight loss. Contains 7-day meal plan with tasty and inspiring recipes.*

## Babies &amp; Children

**Vegetarian & Vegan Mother and Baby Guide**

95p (RRP £1.90)

*Contains a wealth of practical information covering all aspects of vegetarian or vegan pregnancies and how to bring your baby up on a meat-free diet. Includes daily nutrient guide, best veggie foods for weaning and more.*

**Veggiehealth for Kids**

75p (RRP £1.50)

*A guide for parents showing why vegetarian/vegan diets are the healthiest option for children. It lists which nutrients are needed for 0-16 year olds, how much and where to obtain them.*

## Sports Nutrition

**The Food of Champions**

50p (RRP £1)

*Why plant-based diets are ideal for sports people.*

## Meat and Fish-Free

**White Meat Myths**

95p (RRP £1.90)

*Colourful and ground-breaking guide explaining why white meat is not the healthy option for adults or children. Includes exciting recipes using meat alternatives.*

**Fish-Free for Life**

95p (RRP £1.90)

*Explains why plant omega-3s are the healthy option and why fish is not a health food. Includes fish-free recipes with a taste of the ocean.*

**The Soya Story**

£1.15 (RRP £2.30)

*Find out why soya is so controversial. Explains what the research really shows and why soya is a nutritious, safe, versatile food that offers many benefits for health and the environment. Includes recipes.*

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