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# Easy-Peasy Plant-based Eating

with  
vegan nutrition guide



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with Kamina Wust**

# Hello from us!



We're a mother-daughter team and we're passionate about making healthy plant-based eating as easy for you as possible.

We've been working together in vegan businesses ever since Amanda brought newborn Kamina home from the hospital and took her to work in her vegan health food shop. Over the years we've done heaps of fun projects together to help people become vegan.

We created this e-book together to combine our expertise and reach even more people with quality, **evidence-based** information about planning a healthy plant-based diet.

## Is this book right for you?

Are you transitioning to plant-based eating or already following a vegan diet?

Are you confused, unsure or afraid about getting enough nutrients?

Do you need help with meal planning and knowing what to eat?

Do you want to feel good?

Do you want to increase your chances of living a long and healthy life?

Would you like to be at your ideal weight?

Are you concerned about the environment? Do you want to minimise waste and conserve resources?

Are you against cruelty to animals?

Would you like to contribute to the fight to overcome world hunger?

If you answered 'yes' to any of those questions, we wrote this book for you!

In the following chapters we'll cover:

**The definition of plant-based eating**, why we promote it, who can be plant-based and the relationship between food and health,

**How to choose the right foods**, add flavours and get enough of certain elusive nutrients,

**How to plan a day of plant-based eating based on the 6 plant food groups**, with a three-day sample meal plan to get you started

**Commonly asked questions about specific nutrients**, plus a list of extra reading and references.

We're so happy that you're exploring plant-based eating.

For further information and support on your plant-based journey, you can find Amanda online at [www.humanherbivore.com](http://www.humanherbivore.com) and Kamina at [www.lifelongvegan.com](http://www.lifelongvegan.com).

Let's dive in!

*Amanda & Kamina xo*

## ABOUT THE AUTHORS

Amanda has been a vegan since 1983 and practising as a vegan dietitian since 1992. Kamina is a lifelong vegan who offers her services as a plant-based eating coach and consultant to individuals and businesses. Together we present educational sessions around Australia on topics including the basics of plant-based eating, the principles of raising healthy plant-based children, and our experiences as a vegan family in a non-vegan world. You can read more about us at the back of this book.

## DISCLAIMER

The information in this e-book is of a general nature only and is not intended to replace individualised advice from an appropriately qualified health professional.

It is strongly recommended that you have a consultation with a registered dietitian when you adopt a plant-based eating pattern, to help ensure that you are on track to get all your essential nutrients and get the maximum benefit from your plant-based diet. This is especially important if you are planning a pregnancy, are pregnant, breastfeeding or have children.



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What do we mean by  
plant-based eating?



When we say 'plant-based' we mean a diet that is composed entirely of foods derived from plants rather than animals.

In fact, we find the concept of eating animals and their products so problematic that we don't consider these to be 'foods'.

Just to be clear, animal 'foods' include:

All animal flesh, including beef, lamb, chickens, ducks, fish, sea'food', frog's legs, snakes, snails, quails, dogs, hogs, shark's fins, monkey brains, and deep-fried insects on sticks.

Animal milk and products made from milk, including cream, cheese, cream cheese, cottage cheese, yoghurt, labne, quark, butter, buttermilk, milk powder, condensed milk, creme fraiche, ghee, animal-milk ice cream, goats milk, horse milk, yak milk, kulfi, paneer, powdered milk, sour creme, lactose and whey. (The only exception to this is human breast milk, which is perfect for humans under weaning age.)

Animal eggs, including fish eggs.

Honey, honeycomb and bee pollen.

Animal fats and oils including lard and fish oil.

Assorted animal-derived ingredients including gelatine (made from boiled skin, horns, hooves and bones), cochineal (a colour derived from crushed red beetles), rennet (from the stomach lining of newborn calves, lambs or kids), and shellac (beetles again).

The list above is not exhaustive—but we're already exhausted by it, so we'll stop there.

It's simple to choose  
plant-based foods. Just ask yourself:  
"did this come from a plant  
or from an animal?"

# Why Plant-based?



# Report from the 'Oxford-Martin Programme on the Future of Food'

In a study published in 2016,<sup>1</sup> researchers from Oxford University projected the future effects (to the year 2050) of the global adaptation of different diets. That is, they modelled what would happen if everybody in the world hypothetically adopted a certain type of diet, projecting outcomes for greenhouse gas emissions, mortality rates, and healthcare spending.

They did this with 4 different diets: what people currently eat, an omnivorous diet that adheres to current recommendations for reducing impact, a vegetarian diet and a purely plant-based (vegan) diet.

Here's what they projected would happen by 2050 if everybody in the world adopted a **vegan (plant-based)** diet:

- global greenhouse gas emissions would be cut by a projected 70% (compared to 63% for vegetarian and 29% for an omnivorous diet that adhered to current guidelines)
- healthcare-related costs could be reduced by \$1,067 billion US dollars per year (compared to \$973 billion for vegetarian and \$735 billion for the recommended omnivorous diet). Also, economic savings due to reduced greenhouse gas emissions were projected as approximately \$570 billion US dollars per year (compared to \$511 billion for vegetarian diet and \$234 billion for the recommended omnivorous diet).
- approximately 8 million diet-related deaths would be avoided every year (compared to 7.3 million for the vegetarian diet model and 5.4 million for the omnivorous diet). They found that "moving to diets with fewer animal-sourced foods would have major health benefits".

"We project that health and climate change benefits will both be greater the lower the fraction of animal-sourced foods in our diets".<sup>1</sup>

[Springmann et al, 'Analysis and valuation of the health and climate change benefits of dietary change', 2016, page 1]



# The world is embracing plant-based eating

Diets low in animal products have traditionally been typical in lower-income countries, due to poverty. But now there's a growing trend among people in higher-income countries to adopt a plant-based diet by choice.

A 2016 report<sup>2</sup> found that in Australia between 2012 and 2016 the number of Australian adults whose diet is all or almost all vegetarian rose from 1.7 million people (9.7% of the population) to almost 2.1 million (11.2%). Market research in the United States<sup>3</sup> has reported that the sales of meat alternative products have risen significantly in recent years, with some 36% of consumers surveyed in 2013 indicating they used meat alternatives, despite only 7% reporting being on a vegetarian diet.

More and more people are going plant-based, and it's no surprise!

## Why?

### For Humanity

Most wealthy people don't realise that what we choose to eat can actually impact the availability of food to poorer, underfed people. The world is producing more than enough food to feed everyone, but not everyone can access it or afford it.

One factor which affects this is that around half the world's agricultural land is devoted to farming livestock, which is much less efficient than if the land was used to produce plant foods for human consumption.

As people of higher economic status continue to demand meat and dairy products, the pressure on the earth's resources goes up, which drives up commodity prices and reduces the affordability of food for the poor.

In a 2016 study<sup>4</sup> which assessed the relationship between land resources, food prices and the UN's Sustainable Development Goals, researchers found that 'in many countries, future demand for meat and animal products will have a major impact on resource availability and food security trends.' A shift away from the consumption of meat and dairy products in developed economies 'would decrease food prices in developing countries, reduce mortality and deforestation, and enable progress toward food security for all.'

## For Environment

When we think about saving the environment, we usually think of recycling, shopping with re-usable bags and having shorter showers. But did you know that the single most effective thing you can do to reduce your personal carbon footprint and resource use is to stop consuming animal products?

Raising animals for food or their products is an inefficient use of resources, including land, water, fossil fuels and even food itself, when compared to consuming plant foods directly.

Consider these challenging statistics:

- Producing soymilk requires on average 297 litres of water per litre, whereas producing cows' milk requires on average 1050 litres of water per litre of milk produced.<sup>5</sup>
- On average it takes 2350 litres of water to produce a single 150 gram beef burger, compared to 158 litres for a soy burger. The soy burger requires less than 7% of the water that the beef burger requires for production.<sup>5</sup>
- The beef, sheep and dairy industries have a negative impact on land quality. They account for 92% of forest clearance and land degradation in Australia.<sup>6,7</sup> Reducing these industries would free up land for other uses such as food production, forestry and the production of plant-based foods, fuels and fabrics.
- Producing food from animals uses far more energy (often in the form of non-renewable fossil fuels) than producing food from plants.<sup>8,9</sup> Producing animal protein requires *eleven times* as much fossil fuel as producing the same amount of protein from plants.<sup>8</sup>
- The biggest source of food waste in the world is raising animals for food. Most of the edible grain produced globally is used to feed animals for meat, milk and egg production rather than being used directly for humans to eat.<sup>10</sup> This represents a huge waste of food. For example, six kilos of plant protein is consumed by livestock in order to produce one kilo of meat protein. Approximately 5 kilos of wild fish is fed to farmed fish to produce one kilo of farmed salmon!<sup>11</sup>

Not only is the production of animal products an inefficient use of resources, it is also a major contributor to greenhouse gas emissions.

- Methane produced by animals is much more dangerous than CO<sub>2</sub> as a contributor to global warming, having a warming potential at least 72 times that of CO<sub>2</sub> over a 20 year period.<sup>7</sup> In Australia the farming of livestock will contribute substantially more to global warming over the next 20 years than all of our coal-fired power stations put together.<sup>12</sup>

- A 2002 Australian Greenhouse Office report found that beef production generated 51.7 kg of CO<sub>2</sub>eq 2 per kg of meat produced, compared with wheat at 0.4 kg of CO<sub>2</sub>eq per kg.<sup>13</sup>

- Ruminant animals raised for meat are a major cause of methane production. Not surprisingly, University of Chicago researchers found that all diets containing animal products generated higher amounts of greenhouse gas emissions than a vegan diet.<sup>14</sup>

A 2014 climate study<sup>15</sup> listed 'human diet changes' as one of three possible approaches to mitigating climate change, and concluded that **even if the other measures were taken, 'only by also assuming reduced meat and dairy consumption do we find agricultural emission levels that do not take more than half of the total emissions space in 2070. We therefore conclude that dietary changes are crucial for meeting the 2°C target with high probability'**.

**"A substantial reduction of impacts would only be possible with a substantial worldwide diet change, away from animal products."<sup>16</sup>**

[ 'Assessing the Impacts of Consumption and Production: Priority Products and Materials', United Nations Environmental Program, 2010 ]





## For Animals

Most people love animals. In a 2008 survey<sup>17</sup> conducted by the Humane Research Council, almost 3 out of 4 Americans surveyed agreed that we should eventually end all forms of animal cruelty and suffering.

But human consumption of meat and animal products relies on our use of animals. It's not possible to extract meat, eggs, milk or anything else from an animal without harming the animal; even if it were, the animal ends up being slaughtered when it's no longer useful. If you love some animals and use others, you're living a paradox.

In many countries animals are supposed to be stunned before their throats are slit, usually via a bolt gun to the head or electrocution. It often doesn't work.

Dairy cows are kept perpetually pregnant or lactating, and their calves are taken from them within hours of birth causing immense distress to mother and baby. Most of the female calves and all of the males are trucked off to slaughter when they are less than a week old, as they are surplus to the industry and their mothers' milk is taken by humans.

Likewise, male chicks are superfluous to the egg industry, so they are suffocated or crushed up in a huge industrial macerator as soon as they're born. Female chickens have the tips of their beaks (which are more sensitive than a human fingertip) cut off without anaesthetic to prevent them pecking each other.

These are only a few facts about the reality of the animal exploitation industry.

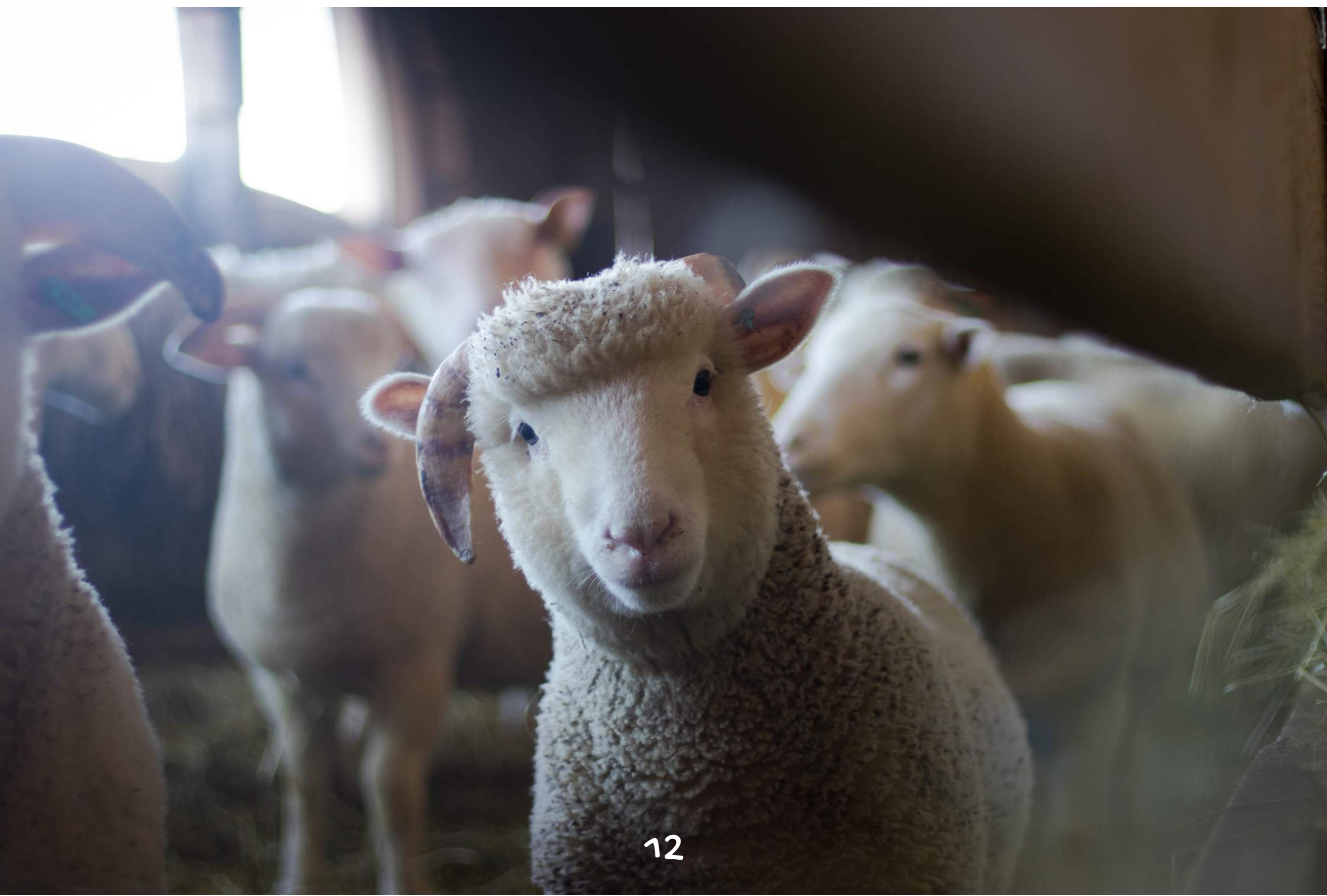
*"We mustn't forget that animal agriculture is an industry. It places profit as a priority, and like any other industry it cuts corners and costs, with scant regard for the animals themselves. They are treated like commodities, products, numbers and money."*

*[Jimmy Pierson, journalist & spokesperson for the Vegan Society UK]*

## [VEGAN]

"A philosophy and way of living which seeks to exclude— as far as is possible and practicable—all forms of exploitation of, and cruelty to, animals for food, clothing or any other purpose; and by extension, promotes the development and use of animal-free alternatives for the benefit of humans, animals and the environment. In dietary terms it denotes the practice of dispensing with all products derived wholly or partly from animals."

[Definition of 'Vegan' by the Vegan Society, first published in their Memorandum and Articles of Association in 1979]



## For Health

All of the above reasons - for humanity, for the environment, and for animals - are compelling enough reasons in themselves to adopt a plant-based diet. But as it turns out, eating plants rather than animal products can be incredibly beneficial to human health.

In a huge study in the United States<sup>18</sup> with almost 100,000 participants, scientists assessed people on five different diets and confirmed that people on a vegan diet had better health: vegans were less likely to be overweight or have diabetes, high blood pressure or high cholesterol than people who ate even small amounts of animal products.

In 2016, systematic reviews<sup>19,20</sup> of the scientific literature looking at the health effects of plant-based diets found that people on plant-based diets tended to be slimmer, had lower cholesterol and were less likely to get heart disease, diabetes and certain types of cancer than people who eat meat and other animal products.



We've worked out that we don't need to eat animals. So why would we?

"Policies in favor of the global adoption of plant-based diets will simultaneously optimize the food supply, health, environmental, and social justice outcomes for the world's population. Implementing such nutrition policy is perhaps one of the most rational and moral paths for a sustainable future of the human race and other living creatures of the biosphere that we share."

[*'Sustainability of Plant-Based Diets: Back to the Future'*, <sup>21</sup>  
Sabate & Soret, *American Journal of Clinical Nutrition*, 2014]





Who can eat  
plant-based?





“It is the position of the Academy of Nutrition and Dietetics that appropriately-planned vegetarian, including vegan, diets are healthful, nutritionally adequate, and may provide health benefits for the prevention and treatment of certain diseases. These diets are appropriate for all stages of the life cycle, including pregnancy, lactation, infancy, childhood, adolescence, older adulthood, and for athletes...

...Vegetarians and vegans are at reduced risk of certain health conditions, including ischemic heart disease, type 2 diabetes, hypertension, certain types of cancer, and obesity.”

[Position of the Academy of Nutrition and Dietetics: Vegetarian Diets, 2016]<sup>22</sup>

## Everybody can eat plant based.

Generally speaking...

Women can eat plant-based.

Men can eat plant-based.

Elderly people can eat plant-based.

Babies can eat plant-based.

Teenagers can eat plant-based.

Pregnant and breastfeeding women can eat plant-based.

Endurance athletes can eat plant-based.

Strength athletes can eat plant-based.

Underweight people can eat plant-based.

Overweight people can eat plant-based.



Patrik Baboumian, vegan strongman

**There is no special group of people who needs to eat animal products to be healthy.**

Everyone CAN eat plant-based, but there's more to plant-based eating than just cutting out other foods.

In order to create a healthy eating pattern, we need to focus on what foods TO eat, not just on what NOT to eat. It's simple when you know how. That's why we wrote this e-book, so that you can understand the basics of healthy plant-based eating and vegan nutrition.

Of course, not everybody can be plant-based, practically. Around 800 million people in the world don't actually have enough to eat, and can't afford to be choosy.

But we're not talking to hungry people who don't have the luxury of picking and choosing their diet. If you're reading this e-book on an electronic device, you probably have the resources to be plant-based. In fact, we believe that choosing to eat a plant-based diet for the sake of those less fortunate is the socially responsible thing to do.

Nobody 'needs' to eat any part of any animal.

There is no essential nutrient that a human traditionally gets from eating an animal product that can't be obtained from an alternative source.

## Plant-based eating for kids

Eating a plant-based diet CAN be a healthy option for children, but bear in mind that children have relatively higher protein and fat needs than adults, which needs to be taken into account when serving their meals.

Infants under 12 months must have either breastmilk or a commercial infant formula rather than home-made or store-bought plant milks.

When feeding children, it's important to emphasise higher-protein plant foods (such as legumes and soy products) and add in more-higher fat foods (such as nut and seed pastes).

It's also vital to ensure that babies and children are properly supplemented with vitamin B12 and that they get enough of all the other essential nutrients, as these are important for proper growth and development. (More on this in our next e-book, "Easy Peasy Plant-Based Eating for Children".)

We recommend that you consult with a registered dietitian who is experienced in plant-based nutrition if you're planning on raising children on a vegan diet.





Does what we eat  
really matter?

## "Poor diet is responsible for over 50% of premature deaths in Australia."

[Australian Institute of Health & Welfare, 2016]<sup>23</sup>

In affluent countries, our diet is making us sick. A 2017 study in the US<sup>24</sup> found that 'suboptimal intake of dietary factors' was associated with almost half of cardiometabolic deaths. In 2016<sup>25</sup> the British Medical Association reported that poor diet had the highest impact on the public health budget, over alcohol, smoking and physical inactivity.

Most of us are getting heavier, type 2 diabetes is on the rise and heart disease is considered normal among older people. These conditions can all be linked to diet. It's not that what we're eating makes us sick straight away, but over time it can destroy our health and have deadly results.

This doesn't mean that you'll automatically be healthier just from cutting out animal products. There are plenty of vegan foods that aren't exactly health foods. And even diets loaded with healthful foods like fruits and vegetables aren't always giving you everything you need.

**There are over 40 essential nutrients needed for human health.** They're called 'essential' nutrients because they're ESSENTIAL for our bodies to function properly. If we don't get enough of even one of these, there can be serious negative health effects, even death.

So it's crucial to focus on what you DO eat, not just on what you don't eat.



## 3 FEATURES OF A HEALTHY EATING PATTERN:

**ENOUGH OF WHAT YOU NEED:** Optimal amounts of ALL essential nutrients.

**NOT MUCH 'BAD' STUFF:** Limited amounts of potentially harmful components like saturated fat and sodium.

**PLENTY OF THE GOOD STUFF:** Rich in potentially beneficial components like antioxidants, phytonutrients and fibre.



Getting started with  
healthy plant-based  
eating

There are 3 simple steps to creating a healthy plant-based diet you'll love to eat:

### 1. Choose the right foods

Base your daily diet on appropriate amounts of foods from each of the six plant food groups and make appropriate choices about discretionary foods and fluids.

### 2. Add fabulous flavour

You're much more likely to sustain healthy plant-based eating habits if you love the taste of your food. The easiest way to add flavour to your meal is with herbs and spices. Many herbs and spices also have health benefits!

### 3. Get enough of certain elusive nutrients

With the best of intentions, some crucial nutrients are still difficult to obtain even through a well-planned, varied diet. Ensure you are covered by including certain foods and supplements.

In the following pages we'll show you what foods and flavours to choose, how to include particularly elusive nutrients, and how to plan this all into a day of meals.





Step 1:  
Choosing the right foods





## Step 1: Choosing the right foods

The type of plant-based eating that we, along with many other dietitians and doctors around the world, advocate is a predominantly WHOLE food plant-based pattern. This type of plant-based diet isn't simply devoid of animal products - it's a diet packed with healthy wholesome plant-based foods that have been minimally processed, if at all. This way of eating can help maximise potential health benefits as well as minimise resource use and environmental impact, having a positive impact on you and the planet. It's a win-win.

**Foods we say "go for!":** To make planning a nutritious diet really simple, we've categorised the basic plant foods into six groups: **Green vegetables, other colourful vegetables, whole grains, legumes, fruit & calcium-rich plant foods.**

**Foods we say "woah!" to:** We think that some foods, even though they are derived from plants, just don't add much value to the diets of most people. These are 'empty calorie foods', which generally aren't a useful source of nutrients compared to their high calorie content. Eating them can easily cause weight gain, which most of us don't want. Even if you don't have a weight problem, we recommend you mostly avoid empty calorie foods and instead choose nutritious plant foods for maximum health benefits. These foods include:

- Refined fats such as oils, butter, margarine, and foods that have been cooked in or have added refined fats, such as deep-fried foods and processed snack foods high in fat.  
Foods high in added sugar, such as lollies/candies and soft drinks/sodas.
- Refined grains, such as white flour, white rice and white pasta.

### What about 'good' fats?

Some whole plant foods are naturally high in fat, such as avocado, nuts, seeds and olives. It's fine to include these in their whole form, because unlike oils they contain fibre and nutrients. However, because they're high in fat they're also high in calories and can easily lead to weight gain if consumed in excess. We recommend you watch your intake of these foods if you're trying to lose weight.

### What about coconut?

While coconuts do come from a plants, they are very high in fat. Unlike most other plants, the fat in coconut is saturated fat. Saturated fat is considered to be a 'bad' fat because our bodies can turn it into cholesterol, which can lead to atherosclerosis, which narrows the arteries and can lead to heart attack and stroke. While it's fine to sprinkle some coconut flakes on your breakfast or drink coconut water, we recommend that you avoid coconut oil and don't overdo coconut milk and coconut yoghurt.

## Tips for making healthier food choices

Where possible, we recommend choosing whole plant foods that are close to their natural form. If buying packaged foods, read the label to check the ingredients. Where possible look for products that don't have any ADDED sugar, salt, oils or other fats.

Although salt doesn't add calories (empty or otherwise), it contains sodium. Too much sodium can potentially be harmful, especially in people who are prone to high blood pressure. When buying canned beans, we recommend you rinse them to remove excess salt. Choosing plain rather than seasoned tofu and tempeh will also reduce salt intake.

Of course, it's not always possible to avoid all added fats, salts and sugars. That's fine, but just be aware that when we eat processed foods the amounts of fat, salt and sugar quickly add up. The trick to reading food labels is to know that fats, sugars and salts can be listed under various names, as listed below.

**Fats:** oil, butter, margarine, shortening, lard, tallow, dripping, copha, monoglycerides, diglycerides. (Cream and milk solids are also forms of fat.)

**Sugars:** raw sugar, brown sugar, molasses, syrup, honey, malt extract, agave syrup, maple syrup, rice malt syrup, golden syrup, malt extract, sucrose, fructose, dextrose, maltose, glucose, lactose, modified carbohydrate.

**Salt:** rock salt, celery or garlic salt, vegetable salt, rock salt, onion salt, celery or garlic salt, vegetable salt, sodium, MSG, yeast extracts, booster, stock, baking soda, sodium bicarbonate.

For example, if looking for a ready-made pasta sauce, here are two options.

Option 1: Tomatoes, vegetable oil, sugar, onion, garlic, herbs, salt.

Option 2: Tomatoes, onion, garlic, herbs.

We recommend you would choose option 2 because it doesn't have added sugar, salt or fats.

### A note on salt:

Many packaged foods have salt-free options (for example: tinned beans, lentils, tinned vegetables, peanut butter etc) and we recommend choosing these wherever possible to keep your sodium intake down. However, for people who are not on a salt-restricted diet we do recommend using a small amount of iodised salt as one possible way of boosting iodine intake. More on this later.

## Group 1: Green Vegetables

Green vegetables are powerhouses of nutrition. We recommend you include a variety of leafy greens and brassica vegetables in your diet each week.

**Leafy greens:** spinach, curly kale, cavolo nero, silverbeet, chard, bok choy, pak choy, choy sum, endive, witlof.

**Brassica vegetables** (also known as cruciferous): cauliflower, broccoli, cabbage, kai lan, Brussels sprouts.



There are lots of other types of green vegetables that are good to include too, such as green peas, green beans, snow peas, edamame, zucchini, green capsicum and any other greens that you enjoy. Fresh is good but frozen is also fine.

## Group 2: Other Colourful Vegetables

By this we mean vegetables that are red, orange, yellow or purple. Colourful vegetables are rich in goodness from beneficial compounds with hard-to-remember names like carotenoids, anthocyanins and betalains. Some carotenoids, like betacarotene, get converted into vitamin A, which is an essential nutrient for healthy vision and normal organ function. Eat a variety of colours:

**Orange:** Carrots, pumpkin, squash, orange capsicum (peppers), sweet potato (kumera)

**Red:** Tomatoes, red capsicum (peppers), radishes

**Yellow:** Yellow capsicum (peppers), yellow squash, yellow zucchini (courgettes), spaghetti squash, sweet corn.

**Purple:** Beetroot, eggplant (aubergine), red cabbage, purple kale, purple carrots.



### Nope, these things don't count as vegetables:

If you can't categorise something in one of the groups above (i.e. if it's not green, red, orange, yellow or purple), it most likely doesn't 'count' as a vegetable even if it technically is. Things in the 'not a vegetable' category include:

**Onions, garlic herbs and spices:** these are great for adding flavour.

**Mushrooms:** these are fungi and are good for adding 'meaty' flavour to meals.

**White potatoes:** these are starchy and can sometimes replace whole grains in your meal.

**Beans:** beans like kidney beans, black beans, borlotti beans and so forth fit into the 'legume' group. Green beans/string beans are included in the green vegetable group.

## Group 3: Whole Grains

Whole grains are great sources of fibre, B vitamins (except Vitamin B12) and minerals like magnesium, iron and zinc. They're much more nutritious than refined grains (like white rice, white pasta and other white flour products). See the chart on the next page for comparison.

Refined grains have had the outer, fibrous part removed, which contains valuable fibre as well as nutrients like iron and zinc. It doesn't make any sense to throw this part away.



It can be helpful to think of whole grains in two categories: minimally processed and lightly processed.

**Minimally processed grains:** These are grains that have come from the field to you. They're the ones that still look like grains. This category includes brown rice, black rice, red rice, barley, quinoa, millet, popping corn.



**Lightly processed grains:** These are whole grains that have undergone a little bit of processing (like grinding) to make them quicker to cook with or ready to eat, without removing any part of the grain or adding extra ingredients (other than water and perhaps salt). Lightly processed grain products include rolled oats/oatmeal, wholemeal/whole wheat flour, brown rice cakes, rye crispbreads, wholemeal bread, wholemeal pasta, wholemeal cous cous, breakfast bix and shredded wheat.



## Why whole grains?

As you can see from the table below, brown rice has a higher nutrient content than white rice, and wholemeal (also known as "whole wheat") flour has a higher nutrient content than white flour.

If you eat refined grains on a regular basis you could struggle to get enough of certain essential nutrients such as magnesium, iron and zinc.

You could also find yourself gaining unwanted weight as, being lower in fibre, refined grains aren't as filling as whole grains, so it can be easier to overeat them.

Nutrient *	Brown rice (1 cup cooked)	White rice (1 cup cooked)	Wholemeal flour (1/2 cup)	White flour (1/2 cup)
Energy (kJ)	1070	1275	1025	1011
Fibre (g)	2.5	1.9	7.84	2.57
Thiamin (B1) (mg)	0.23	0.03	0.29	0.20
Riboflavin (B2) (mg)	0.03	0.04	0.08	0.05
Niacin (B3) (mg)	3.94	1.46	5.30	2.66
Vitamin B6 (mg)	0.28	0.02	0.29	0.08
Folate (mcg)	26.8	13.3	32.9	11.48
Vitamin E (mg)	1.37	0.0	0.56	0.42
Iron (mg)	0.84	0.11	2.1	1.01
Magnesium (mg)	82.1	22.8	71.4	23.0
Potassium (mg)	125.6	58.9	220.5	109.4
Zinc (mg)	1.51	0.87	0.91	0.34

\*Analysed using Foodworks™ nutrient analysis software

## Group 4: Legumes

Legumes are great sources of protein, vitamins and minerals, plus they're packed with fibre. This means they fill you up without weighing you down.



Here's what counts as a legume:

**Peas & Lentils:** red lentils, brown lentils, green lentils, puy lentils (french lentils), yellow split peas, green split peas, toor dhal, urid dhal, chickpeas (garbanzo beans).

**Beans:** Red kidney beans, black beans, blackeyed beans, black turtle beans, navy beans, cannellini beans, lima beans, broad beans, pinto beans, borlotti beans, soy beans (including edamame), adzuki beans.

**Soy products:** Soy beans are the richest in high-quality protein of all the beans. Nutritious foods made from soybeans include tofu and tempeh.

Strictly speaking, peanuts are also legumes. Since they're higher in fat (and usually eaten like nuts) they tend to be grouped with nuts and so they're not included in the legume group.

Sugar snap peas, snow peas and ordinary green peas (like the ones you buy frozen) aren't counted as legumes - these are classed as green vegetables.

## Group 5: Fruit

Fresh fruit adds beautiful colour, sweetness and juiciness to our daily diet. Many are a great source of vitamin C and are rich in other antioxidants too.

Fruits rich in vitamin C include citrus fruit (e.g. oranges, lemons, grapefruit, mandarins), strawberries, kiwifruit, and paw paws.

Different fruits have been found to have different benefits, so be sure to include a wide variety.

Eat fresh fruit if possible, but frozen fruit is okay too. It's best to eat fruit in its whole form, rather than as a juice, because juicing results in fibre loss and it's easy to over-consume fruit juice.



## Group 6: Calcium-rich Foods

Luckily for plant-based eaters, there is absolutely no need to consume the milk of another animal to get enough calcium. But it's an important nutrient and a lot of people worry about it, so we've given it a group all of its own.



Western diets tend to rely heavily on cow's milk for calcium. It's an easy swap to have a calcium-fortified plant based milk instead. Check the label and look for at least 120 mg calcium per 100 ml, or around 35% of the recommended daily intake per cup of milk. Calcium-fortified soy milk is the most nutritious plant milk option overall. (If you're watching your weight, we recommend choosing a low-fat soy milk.) As coconut milk is high in saturated fat, we recommend you avoid using it as your daily milk.

Other foods that can provide useful amounts of calcium in a plant-based diet include:

- kale
- rocket (arugula)
- parsley
- 'Asian' leafy greens - including bok choy, kai lan, choy sum, pak choy, tat soi, gai choy.
- tofu that has been set with a calcium salt, such as calcium sulphate (e516) or calcium chloride (e509). Check the label.
- plant based yoghurts with added calcium (once again, check the label for calcium content and avoid coconut based yoghurts.)

### The formula for strong bones

Just about everyone knows that we need calcium for strong bones, but did you know that we need more than that? Simply consuming plenty of calcium will not guarantee strong bones. For strong bones it essential to get enough vitamin D (more on that later) and do some weight-bearing exercise as well.

Exercise that is especially good for your bones includes activities like walking, running, dancing and skipping (as these are all "weight-bearing") but not cycling or swimming, as these are not. (Cycling and swimming are great exercise, but as they are not weight-bearing we need to do other types of exercise for our bones.)

## What about whole plant foods that aren't in the six plant food groups?

There are some other foods which are fine to add to your eating pattern (if you want) which aren't included in the basic plant food groups. The reason we haven't included them as foods to base your daily eating plan on is because they are higher in calories, and most of us get more than enough calories without them.

These foods include:

- Avocado
- Olives
- Nuts - almonds, cashews, hazelnuts, macadamias, peanuts
- Seeds - sunflower seeds, sesame seeds, pumpkin seeds (pepitas)
- Tahini, peanut butter and other nut pastes
- Dried fruit and fruit juices

These high calorie foods are great for people wanting to gain weight and people with higher calorie needs (like athletes), but limit how much you have if you're watching your weight. If you would like to LOSE weight, avoid these foods or use them VERY SPARINGLY. If you are trying to GAIN weight, eat them freely BUT do not let them displace the "basic foods".

## What about fluids?

Fluid needs will vary depending on your size, diet, the climate and your activity level. We recommend you drink according to your thirst, which for most adults will be at least 1.5-2 litres per day.

Good thirst quenchers are:

- water (Add some lemon or lime juice if you like)
- coconut water
- teas (green, black, red or white) and herbal 'teas'



You might also enjoy a cup of cocoa or cacao (made with plant-based milk), and for most people a couple of cups of coffee per day is fine, but avoid it if makes your heart race or keeps you awake at night.

Some fluids are generally best not consumed every day, but are alright for most people to have occasionally (in moderation), such as:

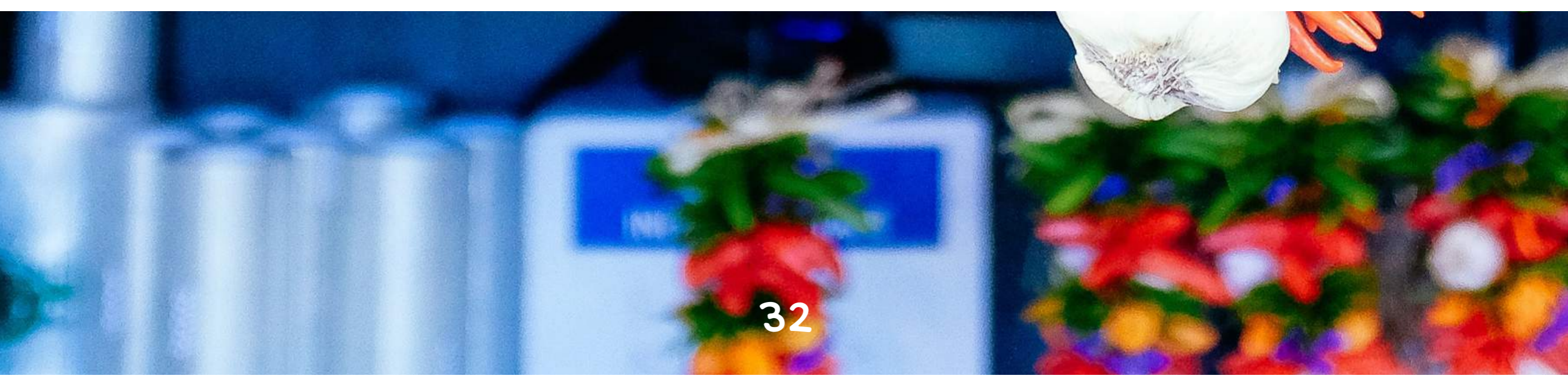
- fruit juice
- wine, beer, cider and other alcoholic drinks

Sugar-sweetened sodas, soft drinks and energy drinks are really just empty calories that we don't need. Consume them infrequently, if at all.





Step 2:  
Adding fabulous flavour



## Step 2: Adding fabulous flavour

Plant foods can taste great just as they are, but we can make them even tastier by adding fabulous flavour with herbs, spices and other flavourful plant-based ingredients.

A great thing about ingredients like herbs and spices is they have their own intrinsic health benefits, so try to include some at every meal.

**Herbs** - fresh or dried basil, parsley, sage, thyme, coriander, dill, oregano, kaffir lime, lemongrass etc

**Spices** - turmeric, chili, paprika, pepper, cumin, cloves, cinnamon, ginger, pepper etc

**Other flavourful additions** - onion, garlic, mushrooms, seaweed, lemon juice, lime juice, tomato paste/puree, vinegar, soy sauce (in moderation), cacao / cocoa, etc

As a rough guide, use about a teaspoon of dried herbs or about a tablespoon of chopped fresh herbs per person in a dish, But if you'd like more, use more!

If your spices are dried, a small pinch per person is often enough. If they're fresh, try using about half a tablespoon or so per person. But be careful with chilli!

*The trick is to use healthful ingredients like herbs and spices for added flavour, rather than using oils, salt and added sugars.*



## A world of flavour

Not sure where to start with adding flavour? Here are some ideas based on different world cuisines:

**Italian:** Onions, garlic, basil & oregano

**Greek:** Garlic, lemon, rosemary & parsley

**Mexican:** Red onion, paprika, liquid smoke & coriander (cilantro)

**Indian:** Cumin, cardamom, mustard seeds, tumeric & chilli

**Thai:** Onion, thai basil, chili & ginger

**Japanese:** Seaweed flakes, wasabi, rice vinegar & pickled ginger

**Vietnamese:** Lemongrass, fresh mint, shallots (green onions) & coriander (cilantro)



**Experiment - use your imagination - browse recipe books  
- notice seasonings used in restaurants - explore markets -  
learn from other cultures!**



Step 3:  
Getting elusive nutrients

## Step 3: Getting enough of certain elusive nutrients

While whole plant foods are packed with essential nutrients, some nutrients are tricky to get and so deserve special attention.

**Vitamin B12** is an essential nutrient that is rarely, if ever, found naturally in plants, and humans have traditionally obtained vitamin B12 from eating animal products. Vitamin B12 is actually produced by certain bacteria which naturally occur in soil and pond water. Previously it was believed that foods like mushrooms, spirulina, tempeh and other fermented foods could provide us with our vitamin B12. However, it's since been found that most, if not all of the 'vitamin B12' found in these foods is inactive and of no use to us. Eating dirt or unwashed vegetables is definitely NOT recommended, and will not provide adequate vitamin B12.

Vitamin B12 is essential for a healthy brain and nervous system, as well as being important for red blood cells and energy production. Because it's such an important nutrient, it's essential to make sure you get a reliable source.

Although some processed plant-based foods have had Vitamin B12 added, the amount is small and eating the number of serves required every day to obtain enough B12 can be problematic. A simpler, cheaper and more reliable way to ensure you get enough B12 is to take a supplement. Liquid, lozenge and tablet forms of vitamin B12 have all been found to be effective in preventing deficiency (unless there's an underlying health problem).

You can get your blood tested for B12, but it's not a very reliable test and by the time you're found to be deficient irreversible damage could already be done. So it's always best to be proactive and supplement with B12 every day. The cyanocobalamin form of B12 has been well-proven to prevent and reverse vitamin B12 deficiency and the recommended supplement dose is generally at least 50-500 micrograms per day. Higher doses are required if the B12 is in a multivitamin and for people over 50. For smokers, other forms of B12 are recommended such as hydroxocobalamin or a combination of methylcobalamin and adenosylcobalamin in a higher dose. Supplementing with methylcobalamin alone may not be adequate and is not recommended for people on a plant-based diet.

If pregnant or breastfeeding mothers don't get enough B12, it can cause serious harm to their baby. If you're planning to parent plant-based children, it's really important to take care with their diet AND make sure they're supplemented with vitamin B12. It is recommended that babies of vegan mothers are supplemented with B12 by six months of age.

**Vitamin D** is an essential vitamin that we can naturally obtain from the action of sunlight on bare skin. However, with our modern lifestyles many of us tend to spend a lot of time indoors and not get enough sun exposure and vitamin D deficiency is becoming more common in many countries. Wearing sunscreen and covering our skin when outdoors will also inhibit vitamin D production in the skin. The amount of sun required to ensure you get adequate vitamin D varies depending on your skin tone, where you live and the time of day you go out in the sun. People who don't get regular exposure to sun (e.g. 15-20 minutes per day) might need to consider supplementing with vitamin D.

**Iodine** is essential for healthy thyroid function, and also for brain development in infants and children. Unfortunately, in many parts of the world the soil is depleted in iodine so our plant foods aren't as rich in this important nutrient as they once were. We can get iodine from iodised salt and some seaweeds, but for many people (especially women of childbearing age) a supplement is recommended. (Although kelp is rich in iodine, it is NOT recommended because it actually contains too much iodine and excess can be harmful.) As a high sodium intake is not recommended, it's a good idea for everyone to avoid processed foods that are high in salt. Iodised salt is a way of adding iodine to your diet, but if you're on a salt-restricted diet adding salt is not recommended.

Most multi-vitamins contain iodine and for people on a plant-based diet supplementing with 100-150 micrograms per day will meet recommended iodine intakes. Women who are pregnant or lactating may require a slightly higher dose, and it's best to check this with a plant-based dietitian for tailored advice.

**Selenium** also assists with thyroid function, and has a role in heart health. In many places, soils are depleted of selenium, meaning that the foods grown in them are low in selenium. For this reason we need to take special care to get enough. One to two brazil nuts a day will help us meet requirements, or once again it's in most multivitamins. The recommended intake for adults is generally 55-70 micrograms per day.

**Omega-3 fatty acids** are considered important for the health of our brain, heart and eyes. There are several forms of omega-3 fatty acids, with DHA and EPA being the forms that our body uses. We can convert the omega-3 ALA into DHA and EPA, but it's been found that this is often not done very efficiently. Flaxseeds, chia seeds and walnuts are good sources of ALA so eating these daily is often recommended. Another option is to get DHA direct from algae, which is where fish get it from. We don't expect you to dive into the ocean and eat algae, but you can buy algal-derived DHA in capsule form. For most people the suggested daily dose is 200-300 milligrams of DHA.

## Why would I need supplements if I'm on a healthy diet?!

Supplements help us to get enough of the essential nutrients that we don't always get enough of from food. You might think your plant based diet isn't lacking in nutrients, but the truth is that it's practically impossible to get enough nutrients from diet alone. Here's why:

### 1. Some nutrients are trickier to get from a plant-based diet.

We've already talked about these above - vitamin B12, vitamin D, iodine, selenium and some omega-3 fatty acids. For some people (depending on the specifics of their plant-based diet) also supplementing with other nutrients might be recommended for optimal health.

### 2. Our food supply isn't as good as it could be.

Even though many of us are lucky enough to be surrounded by beautiful fruits and vegetables, sometimes they look better than they really are. Because we've been farming the same soil for decades, in some areas it's getting depleted of important nutrients and so the food grown in that soil isn't as nutrient-rich as it could be. This will vary depending on where the food is grown, but in many parts of the world they plant foods tend to be low in minerals such as iodine and/or selenium because the soils are lacking in these nutrients.

### 3. We want you to thrive, not just survive.

We want you to be bounding with good health, not just surviving. While taking some supplements (such as vitamin B12) is absolutely essential, taking some other supplements is like an insurance plan to help you thrive, not just survive.





How much to eat





# How much should you eat?

Once you've started eating from the six plant-based food groups, you might start to wonder how much to aim to eat from each of the groups.

Amanda has developed a food guide system based on providing a good range of the essential nutrients (with some exceptions) that we need to be healthy. It's designed to provide a good balance of most essential nutrients and tends to work well with common eating patterns. To keep it simple, it's based on eating about the same volume from each of the six groups every day.

## The Six Basic Plant Food Groups

A good start for most people is to aim to eat at least 1½-2 cups from each of the six plant food groups per day. (When we say 'cup', we mean a standard measuring cup. This might vary depending on where you live, but the variations are small enough not to matter.)

This means at least:

**1½-2 cups of green vegetables**

**1½-2 cups of other colourful vegetables**

**1½-2 cups of cooked legumes (lentils/chickpeas/beans) or tofu/tempeh**

**1½-2 cups of cooked whole grains (e.g. brown rice, oats, wholewheat/wholegrain pasta, wholewheat/wholegrain bread, quinoa, cornmeal/polenta, barley, rye)**

(For the purpose of measuring, count a slice of bread as ½ cup of cooked grains.

Also, ½ cup flour equates to one cup of cooked grains.)

**1½-2 cups of fresh fruit**

**1½-2 cups of calcium-rich foods (e.g. calcium-fortified soy or other plant milk, cooked Asian greens or kale, calcium-set tofu)**

Some people like to measure out their food for a while, but long-term this isn't necessary. Once you get into the habit of eating from the six plant food groups every day, we recommend eating amounts according to your appetite, rather than slavishly following a strict plan.

Most adults will need more calories than the above supplies. This can be achieved by eating more from all or any of the food groups, eating more higher fat plant foods (such as nuts, seeds, nut butters, tahini, avocado, olives etc) or occasionally including "discretionary" food choices.

If for some reason you choose to avoid one or more of the plant-based food groups we recommend that you consult with a plant-based dietitian to make sure you know how to avoid missing out on essential nutrients.

In addition to basing your diet on the plant food groups, there are a couple of other foods that you might like to eat every day:

**2-4 teaspoons of flaxseeds (also known as linseeds) or chia seeds, or 5 walnuts**

These are included because they are rich in the essential fatty acid alphanoleic acid (ALA) as well as being rich in some other beneficial nutrients. If you're supplementing with DHA (which we recommend you consider) it's not absolutely essential to add these to your daily diet, but we still recommend you do.

**One or two (but not more) brazil nuts**

These are included because they are rich in selenium. However, too much selenium can be harmful so DO NOT have more than two brazil nuts per day. If you're taking a daily multivitamin with at least 40 mcg of selenium in it you don't need to add a daily brazil nut, but it won't hurt if you do still have ONE per day.

**Other nuts and seeds**

Nuts and seeds (and their pastes) can add extra variety, nutrients and calories to your daily diet. They are high in fat and calories, so people who are watching their weight may benefit from restricting them. However, for most people a handful or so per day is fine.

**Iodised salt**

In many areas of the world, plant foods can be lower in iodine. We recommend that if you use salt that you always choose iodised salt to help boost your iodine intake, or you may need to supplement as already discussed.

If you're curious about the nutrients contained in the above plan, take a look at the nutrient analysis of our suggested meal plan at the end of this book.



## A basic daily eating pattern

Let's say you want to plan a day of meals based on two cups from each of the plant-based food groups. It might help you to plan out a basic eating pattern for the day. For example, it could look like this:

Breakfast: 1 cup wholegrain + 1 cup calcium-rich food + 1 cup fruit

Lunch: 1 cup green vegetables + 1 cup colourful vegetables + 1 cup legume (or soy product) + 1/2 cup wholegrain

Dinner: 1 cup green vegetables + 1 cup colourful vegetables + 1 cup legume (or soy product) + 1/2 cup wholegrain

Snacks: 1 cup fruit + 1 cup calcium-rich food

In real food, the pattern above could translate to:

Breakfast: 1 cup cooked oats + 1 cup plant-based milk + 1 cup fresh berries

Lunch: Salad of 1 cup mixed kale and baby spinach + 1/2 cup chopped tomato plus 1/2 cup corn kernels + 1 cup cooked chickpeas + 1/2 cup wholegrain cous cous (with extras like lemon juice and fresh herbs for flavour)

Dinner: Stir-fry of 1/2 cup pak choi plus 1/2 cup broccoli + 1/2 cup carrot plus 1/2 cup red capsicum + 1 cup diced firm tofu + 1/2 cup brown rice (with extras like soy sauce, ginger and garlic for flavour)

Snacks: 1 cup fruit salad + 1 cup calcium-fortified soy yoghurt

In the above example we made lunch and dinner the same pattern. Of course this can be adjusted to suit your lifestyle and preferences. And don't forget, depending on your gender, age and activity level you might need to eat more than this to meet your energy (calorie) requirements. The above is just a basic generic plan.

Don't worry if this is confusing at first - you'll get the hang of it!

To get you started, we've put together a sample 3-day meal plan with recipes based on this principle.

For each sample day, see if you can identify and tick off at least 2 cups from each plant food group using the **daily checklist** on page 52.



# 3-day meal plan



# Three days of healthy plant-based eating

## DAY ONE

Breakfast: Banana Berry Overnight Oats

Lunch: Mexican Bean Burrito

Dinner: Basil Ginger Stir-fry

Snacks: Chai latte, orange & 2 Brazil Nuts



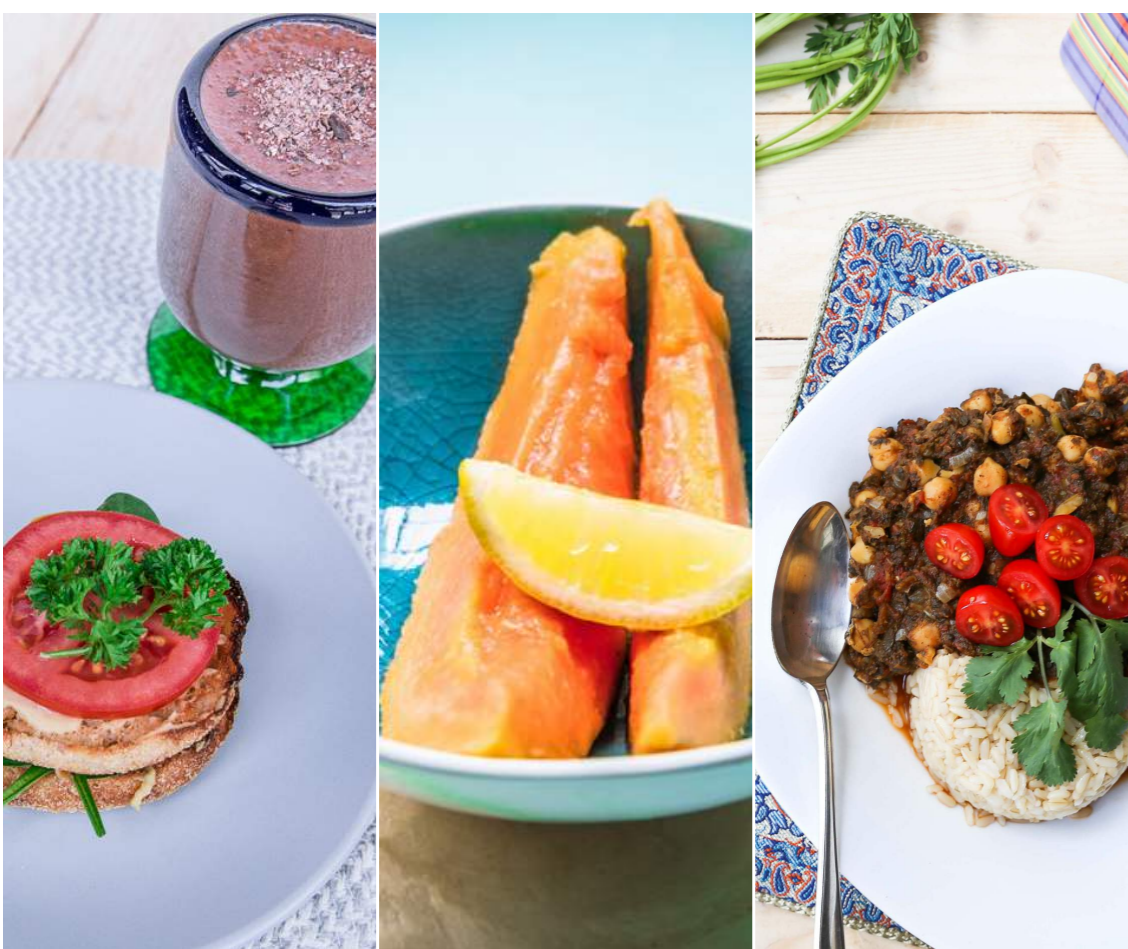
## DAY TWO

Breakfast: Choc-Berry Smoothie & English Muffin with Tomato

Lunch: Italian Bean Soup

Dinner: Chickpea Curry

Snacks: Beetroot latte, Red Paw Paw



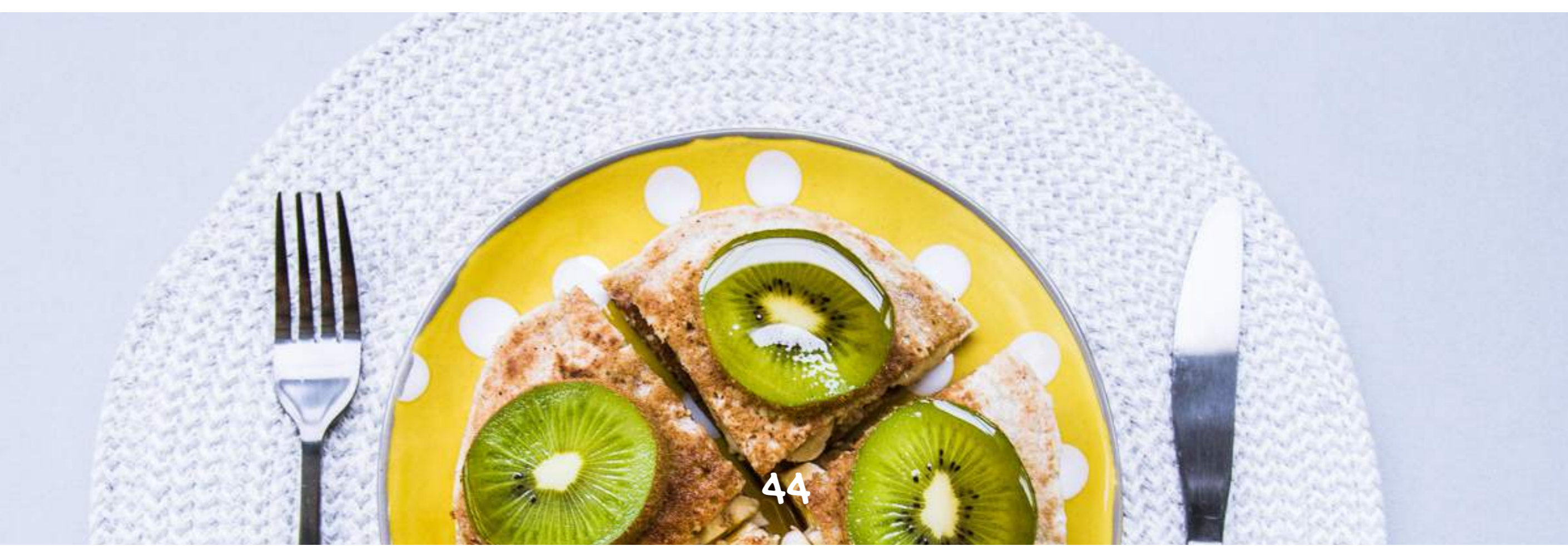
## DAY THREE

Breakfast: Banana Pancakes with Kiwifruit

Lunch: Caribbean Mango Cous Cous Salad

Dinner: Lentil & Veggie Penne Pasta

Snacks: Spicy Hot Chocolate, handful pepitas & 1 brazil nut



# DAY ONE



## Banana Berry Overnight Oats

- ½ cup quick-cooking oats
- 1 cup calcium-fortified soy milk
- ½ sliced banana
- ½ cup sliced strawberries
- 1 handful pepitas
- 2 tsp ground flaxseeds
- ¼ tsp cinnamon

Mix together all ingredients and place into an airtight container. Refrigerate overnight.

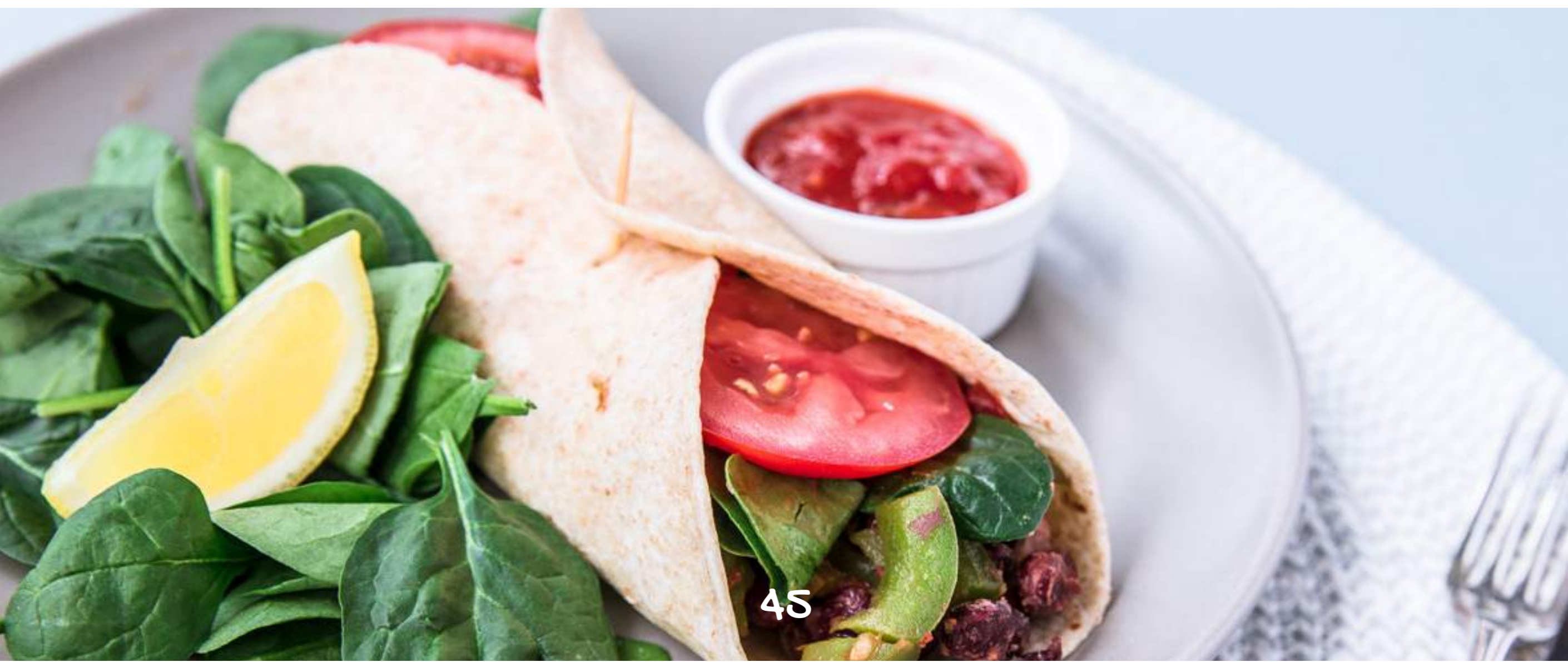
## Mexican Bean Burrito

- ¼ cup diced brown onion
- 1 garlic clove, finely chopped
- 1 cup cooked red kidney beans
- ½ cup diced red capsicum
- ½ cup diced green capsicum
- ¼ tsp smoked paprika
- ½ tsp ground cumin
- ¼ tsp iodised salt
- Pinch of chili flakes (optional)
- ½ cup sliced tomato
- ½ cup baby spinach leaves
- 1 wholemeal pita/flat bread

Add the onion and garlic to a non-stick pan. Cook, stirring, until beginning to brown (add a dash of water to prevent sticking).

Add the diced capsicum, kidney beans, salt and spices. Cook until the capsicum is tender and the beans are warmed through.

Serve rolled in a wholemeal wrap with spinach, tomato and a dollop of salsa (optional).



## Basil Ginger Stir-fry

150g firm tofu or tempeh, cut into cubes

½ cup sliced carrot

½ cup sliced yellow (button) squash

½ cup broccoli florets

1-2 heads pak choy or bok choy, ends cut off, rinsed (equivalent to at least 1 cup)

2 tsp salt-reduced soy sauce

2 shallots, sliced

2 cloves garlic, sliced

1 tsp grated ginger

1 red chilli, sliced (optional)

4-6 basil leaves, plus extra for garnish

½ cup cooked brown rice or brown rice noodles, to serve

Heat a non-stick pan over a high heat. Add the cubed tofu or tempeh, soy sauce and the ginger. Stir-fry until the tofu or tempeh is browned on the outside and hot through, then remove from pan and set aside.

Add the carrots and squash to the pan and stir-fry for 2 minutes, then add the broccoli florets, shallots, garlic and a further 1 tbsp soy sauce. Stir-fry for a few minutes until almost done to your liking. Add the pak choy, basil and cooked tofu or tempeh. Reduce heat to medium and cover with a lid for approximately 2 minutes, until pak choy is tender.

Serve over brown rice or noodles, garnished with extra fresh basil.

## SNACKS

### Chai latte

In a small saucepan combine 1 cup fortified soy milk, 1 black tea bag, 1/4 tsp cinnamon, a pinch of ground nutmeg, a pinch of ground cloves, 1/4 tsp powdered ginger (or a piece of fresh ginger root) and a grind of black pepper. Bring to a gentle boil and brew for 2-3 minutes. Drain into a glass and top with more cinnamon.

### One medium orange



# DAY TWO

## Choc-Berry Smoothie & English Muffin with Tomato



1 cup calcium-fortified soymilk

½ cup sliced banana

½ cup frozen blueberries

1 tbsp cacao powder

2 tsp chia seeds

1 tsp cacao nibs

1 wholemeal English muffin

2 tsp peanut butter (no added salt)

2 slices tomato

Combine the soymilk, banana, blueberries, cacao powder and chia seeds in a blender and blend until smooth. Pour into a glass and top with cacao nibs.

Serve with a toasted English muffin, spread with peanut butter and topped with tomato.

## Italian Bean Soup

1 cup cooked cannellini beans

½ cup chopped kale

½ cup cauliflower florets

½ cup tinned diced tomato (no added salt)

½ cup diced carrot

¼ cup chopped celery

1 tsp minced garlic

¼ tsp iodised salt

½ tsp dried mixed italian herbs

1 tbsp fresh chopped oregano or basil, plus extra for garnish



Add all ingredients except bread to a small saucepan with 2 cups of water. Bring to the boil and simmer gently for 5-6 minutes, until carrots are tender.

Serve the soup garnished with fresh herbs.



## Chickpea Curry

- ¼ cup sliced brown onion
- 1 cup cooked chickpeas
- 1 cup frozen spinach
- ½ cup diced tinned tomatoes (no added salt)
- 2 tsp finely chopped garlic
- 1 tsp garam masala
- 1 tsp grated fresh ginger
- ¼ tsp powdered turmeric
- 1 tbsp chopped fresh coriander, plus extra to serve
- ½ cup water
- pinch iodised salt
- ½ cup chopped fresh tomato or cherry tomatoes
- 1 cup cooked brown rice

In a medium saucepan, saute the onions with a splash of water (to prevent sticking) until they begin to brown.

Add chickpeas, spinach, tinned tomatoes, garlic, garam masala, ginger, turmeric, coriander, stock cube and water. Bring to the boil, then reduce heat and simmer gently, stirring occasionally, for approximately 10-12 minutes, until spinach has cooked and water has reduced. Serve over brown rice, garnished with fresh tomato and coriander.



## SNACKS

1 cup chopped red paw paw

### Beetroot Latte

In a mini blender, blend up ¼ cup grated beetroot, 1 cup of fortified soy milk and 2 dates. Serve over ice or heated, according to your preference!

# DAY THREE

## Banana Pancakes with Kiwifruit

¼ cup chickpea flour (besan)

¼ cup buckwheat flour

1 tbsp ground flaxseeds

½ tsp baking powder

1 cup fortified soy milk

½ tsp vanilla essence

¾ cup sliced banana

¾ cup sliced kiwi fruit, to serve

Mix together the flours, baking powder and flaxseeds, then add the soymilk and vanilla essence and mix to combine. Stir the sliced banana through the mixture.

Heat a non-stick pan over medium heat. Pour the batter into the pan. You can make 1 large pancake or 2 small pancakes according to your preference.

Heat pancake on one side until it bubbles on top, then flip. Cook on the other side until both sides are sealed and the pancake is cooked through. Serve with sliced kiwi fruit.





## Caribbean Mango Cous Cous Salad

- 1 cup cooked black-eyed beans
- ¼ cup diced Lebanese or baby cucumber
- ¼ cup diced green capsicum
- ½ cup corn kernels (off the cob)
- ½ cup cooked wholemeal cous cous
- 1 mango cheek, cubed
- ½ cup coriander, chopped
- ¼ red chilli, seeds removed, finely sliced
- 1 tbsp lime juice
- Pinch cumin powder

Char the corn kernels by tossing them in a hot frying pan until they start to blacken.

Toss together the black-eyed beans, cucumber, capsicum, charred corn, mango, coriander and red chilli. Whisk together the lime juice and cumin powder and drizzle over the salad.

## Lentil & Veggie Penne Pasta

- ¼ cup diced red onion
- 1 clove garlic, sliced
- ½ cup cooked brown lentils
- ½ cup diced tomato
- 1 tbsp tomato paste
- ¼ tsp iodised salt
- ½ cup diced pumpkin
- ¼ cup chopped fresh basil
- 1 cup broccoli florets, steamed
- 1 cup cooked wholegrain penne or other wholegrain pasta

In a medium saucepan, saute the onion and garlic (with a splash of water to prevent sticking) until translucent.

Add the pumpkin and ¼ cup of water and cook until the pumpkin begins to soften.

Add the lentils, tomato, tomato paste, salt and fresh basil along with a further ¼ cup water.

Simmer until the pumpkin is tender and the liquid has reduced. Mash the pumpkin gently to create a thick sauce.

Serve over cooked pasta with steamed broccoli on the side.

## SNACKS

### Spicy Hot Chocolate

Stir together 1 cup fortified soymilk, 1 tbsp cacao powder, ¼ tsp cinnamon, ¼ tsp powdered ginger and a pinch of chilli flakes. Heat and add sweetener to taste.

Handful of pepitas & 1 brazil nut



# Daily checklist

Use this checklist to make sure you're eating enough from the basic plant food groups & including elusive essentials every day.

Soon it will become second nature!

Green Vegetables

2 cups

Colourful Vegetables

2 cups

Wholegrains

2 cups

Legumes

2 cups

Fruit

2 cups

Calcium-rich foods

2 cups

Flax seeds, chia seeds or walnuts

2-4 tsp or 5 walnuts

Brazil nut

1-2 nuts

B12 supplement

Vitamin D

Iodine

# Basic weekly shopping list

## Stocking your pantry

- whole grains - eg brown rice, oats, wholemeal pasta, wholemeal flour
- legumes (dried or canned) - eg lentils, chick peas, kidney beans, black beans
- dried herbs
- spices - pepper, turmeric, cinnamon, cloves, paprika etc
- iodised salt
- vinegar, soy sauce and tomato paste
- tahini, peanut butter and/or other nut butters (if you like)
- brazil nuts
- other raw nuts e.g. almonds, cashews, walnuts
- flaxseeds and/or chia seeds
- other seeds - sunflower, pumpkin/pepitas, sesame

## Stocking your refrigerator

- fresh green vegetables (try to pick at least 4 or 5 different ones, about 2.5 kg/5.5 lb per person or more in total – this allows for the fact that not every part of every vegetable is edible)
- fresh red/orange/yellow/vegetables (try to pick at least 4 different ones, about 2.5 kg/5.5 lb per person in total)
- fresh fruit (try to pick at least 4 or 5 different ones, about 2.5 kg/5.5 lb per person in total)
- frozen green beans and/or frozen green peas (these can be used in place of fresh)
- frozen fruit e.g. berries (these can be used in place of fresh)
- calcium-fortified plant milk
- tofu (calcium-set with additive 509 or 516)
- fresh ginger, onions, garlic, chillies, herbs
- lemons and limes
- mushrooms





## NUTRITION FAQs

## Where can I get protein on a plant-based diet?

Protein is an important nutrient for growth and has many functions throughout the body, including being a major component of muscles. Protein is composed of substances called amino acids. There are 20 different amino acids we require for protein synthesis but only 9 of these are considered essential as our bodies cannot make these and so these need to be provided in our diet.

**Nearly all foods contain protein** and we can get plenty of protein by basing our daily diet on plant foods such as lentils, beans, chickpeas, tofu, tempeh, grains, nuts, seeds and vegetables. Although plant proteins are sometimes referred to as 'incomplete', this isn't strictly true. Soybeans provide very high-quality protein comparable to animal products, providing optimal amounts of all the essential amino acids. Eating a variety of foods from the six plant food groups (as recommended) will also provide adequate amounts of all the essential amino acids. Limiting your intake of “empty calorie” foods like soft drinks, oils, margarine and other high fat/ high sugar processed foods and eating more whole plant foods will increase the protein density of your daily diet. People who are doing strength training to increase their muscle mass often use protein powders to boost their protein intake in a convenient way. Plant-based protein powders (e.g. based on soy, rice or peas) are readily available.

## What about vitamins?

Vitamins are essential nutrients that humans need to obtain in order to be healthy. **The only vitamins that are not readily obtainable from unprocessed plant foods are Vitamin B12 and Vitamin D. All the other essential vitamins are readily obtainable from eating a range of plant foods**, including vegetables, fruit, legumes, nuts, seeds and whole grains. It is important for anyone eating a plant-based diet to know about vitamin B12 and vitamin D and where to get them - so read on!

**Vitamin B12** is produced by bacteria and is found in soil but is scarce in plant foods. (Eating soil or unwashed vegetables is unsafe so not recommended!)

People on plant-based diets can obtain vitamin B12 by eating fortified foods (i.e. foods that have had vitamin B12 added, such as some soymilks, Marmite and some meat analogues) – check the label. However, as at least three serves of vitamin B12-fortified foods are required to meet the minimum recommended intake, the safest, easiest and cheapest way to ensure that you get adequate vitamin B12 is to take a vitamin B12 supplement.



The cyanocobalamin form of B12 has been well-proven to prevent and reverse vitamin B12 deficiency and the recommended supplement dose is generally at least 50-500 micrograms per day (in liquid, lozenge or tablet form). The higher dose is required if the B12 is in a multivitamin and for people over 50. Some people find it more convenient to supplement 2000 micrograms twice a week but this can be easily forgotten, so for this reason we generally recommend daily supplementation.

For smokers, other forms of B12 are recommended such as hydroxocobalamin or a combination of methylcobalamin and adenosylcobalamin in a higher dose. Supplementing with methylcobalamin alone may not be adequate and is not recommended for people on a plant-based diet.

It is especially important that women of reproductive age, infants and children obtain enough vitamin B12 each day as it is essential for brain development and growth.

For tailored advice on vitamin B12 supplementation you should consult with a plant-based dietitian.

**Vitamin D** is an essential vitamin that we can naturally obtain from the action of sunlight on bare skin. However, with our modern lifestyles many of us tend to spend a lot of time indoors and not get enough sun exposure and vitamin D deficiency is becoming more common in many countries. Wearing sunscreen and covering our skin when outdoors will also inhibit vitamin D production in the skin. The amount of sun required to ensure you get adequate vitamin D varies depending on your skin tone, where you live and the time of day you go out in the sun. People who don't get regular exposure to sun (e.g. 15-20 minutes per day) might need to consider supplementing with vitamin D.

The recommended daily intake of vitamin D ranges from 10-20 micrograms (i.e. 400-800 iu) and higher doses are often recommended to reverse deficiency. Supplementing on days when you get little or no exposure to sunlight on bare skin can be a good strategy to prevent vitamin D deficiency. Vitamin D is available in two forms: D2 and D3. Vitamin D3 is commonly derived from lanolin (a substance from sheep's wool) and is therefore not vegan-friendly, whereas vitamin D2 is normally suitable for vegans. However, vitamin D3 obtained from plant sources (such as lichen) is also now available.

## What about minerals?

There are several minerals that are essential for humans to obtain in order to be healthy. Minerals are chemical elements and cannot be synthesized by plants or animals. All minerals are ultimately obtained from the earth, and the content of minerals in plants varies dependent on the soil they are grown in. **Iron**, **zinc** and **calcium** are important minerals that humans need to ensure they obtain adequate amounts of.

**Iron** is important for our red blood cells and is also important for brain development in infants and children. Good sources include legumes (such as chickpeas, lentils, navy beans, pinto beans, kidney beans, soybeans) tofu, tempeh, whole grains, fortified vegan meat analogues, breakfast cereals, pepitas and green vegetables.

Vitamin-C rich foods (like orange juice, tomatoes, capsicum and raw green vegetables) help to INCREASE the amount of iron we absorb so try eating these foods in the same meal as iron-rich foods. Tea and coffee can INTERFERE with iron absorption so it's best to have these between meals rather than with them.

Some women of reproductive age will experience low iron levels no matter what their diet, and may need to supplement. As excessive iron can be damaging to health, it's always best to check with your doctor or dietitian before taking a high-dose iron supplement. Blood tests are available to check your iron levels.

**Zinc** has many functions throughout the body and sources include soy products, legumes, nut, seeds, wholegrains, pepitas and green vegetables. Men have higher zinc requirements than women, but can easily boost their zinc intake by focusing on zinc rich foods, eating a couple of handfuls of pepitas each day or supplementing with zinc.

**Calcium** (along with exercise and vitamin D) is important for our bones. The best plant sources include kale, leafy Asian vegetables, rocket, calcium-set tofu and fortified plant milks. (Check the label and look for plant milks that have at least 120 mg calcium per 100 ml, or around 35% of the recommended daily intake per cup of milk.) Other plant foods that contain moderate amounts of absorbable calcium are white beans, almonds, figs, and oranges.



## What about omega-3 fatty acids?

Omega-3s are considered important for the health of our brain, heart and eyes.

While it's commonly thought that we need to eat fish to obtain our omega-3 fatty acids, this isn't actually correct. There are several forms of omega-3 fatty acids, including DHA, EPA and ALA. While ALA is considered an essential fatty acid it actually needs to be converted into DHA and EPA within our bodies.

Fish contain the omega-3s DHA and EPA but they don't actually produce these themselves: they obtain them from eating algae (or from eating other fish that have eaten algae). Some plant foods such as flaxseeds, chia seeds and walnuts are rich sources of ALA, which is why we've encouraged the daily consumption of these.

However, we don't always efficiently convert ALA into DHA and EPA in the body, resulting in plant-based eaters tending to have lower levels of omega-3s in their bloodstreams. For this reason it's sometimes recommended that people on plant-based diets take algal-derived DHA supplements. For most people the suggested daily dose is 200-300 milligrams of DHA.

By obtaining our omega-3s directly from algae rather than second-hand from fish, plant-based eaters can avoid the potential problems of mercury consumption associated with eating fish and other seafood.

## What about trace elements?

Trace elements are mineral elements that are needed in small amounts in human nutrition. They are derived from soil and the amount of a particular trace element in a food will depend on the soil the food was grown in. Unfortunately, modern farming methods tend to deplete the soil of trace elements, resulting in low amounts in the foods grown on those soils. In many countries, the levels of trace elements iodine and selenium in soil tend to be low.

**Iodine** is essential for healthy thyroid function. It's also important for brain development in infants and children; iodine deficiency is a leading cause of intellectual impairment worldwide. Therefore it's very important that pregnant and lactating women have an adequate intake, which is normally via supplementation.

Although seaweed (e.g. nori) contains iodine, the amounts can be very variable and so it is generally not a reliable source. Kelp (kombu) is not recommended because it can actually provide **too much** iodine, which could result in damaging the thyroid gland. A more reliable source of iodine is iodised salt, which is salt that has iodine added. (This will be stated on the packet.) About 1/3 tsp per day of iodised salt will help meet iodine requirements, but people on a sodium-restricted diet are advised against adding salt to their food.

Another alternative source of iodine is supplementation: multivitamin tablets containing about 100-150 micrograms of iodine (for adults) will help ensure an adequate iodine intake. Slightly higher doses are recommended during pregnancy and lactation, and it's recommended you consult with a plant-based dietitian for individualised advice.

**Selenium** also assists with thyroid function, and has a role in heart health. Brazil nuts are a rich source of selenium, and just one or two brazil nuts a day will generally meet requirements. (Avoid having more than this as too much selenium can be harmful.) Alternatively, most multivitamin supplements contain selenium. The recommended intake for adults is generally 55-70 micrograms per day.



## Nutritional Analysis of our Three-Day Meal Plan

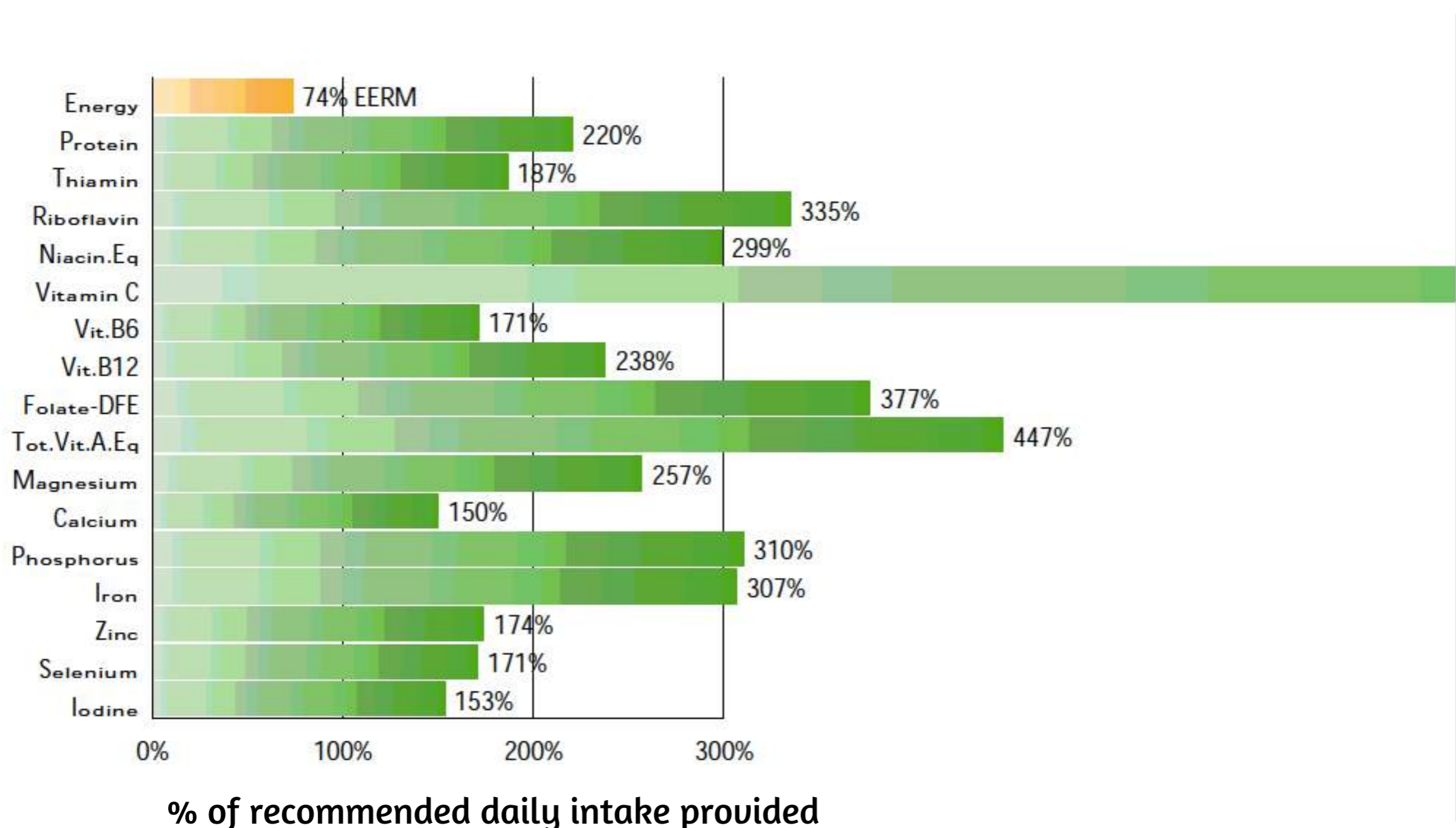
A nutritionally-balanced meal plan isn't just meal ideas and recipes – it needs to contain enough of all the essential nutrients needed to maintain good health.

We've analysed the our 3-day meal plan (which is based on our eating guide) using the nutrient analysis software Foodworks™.

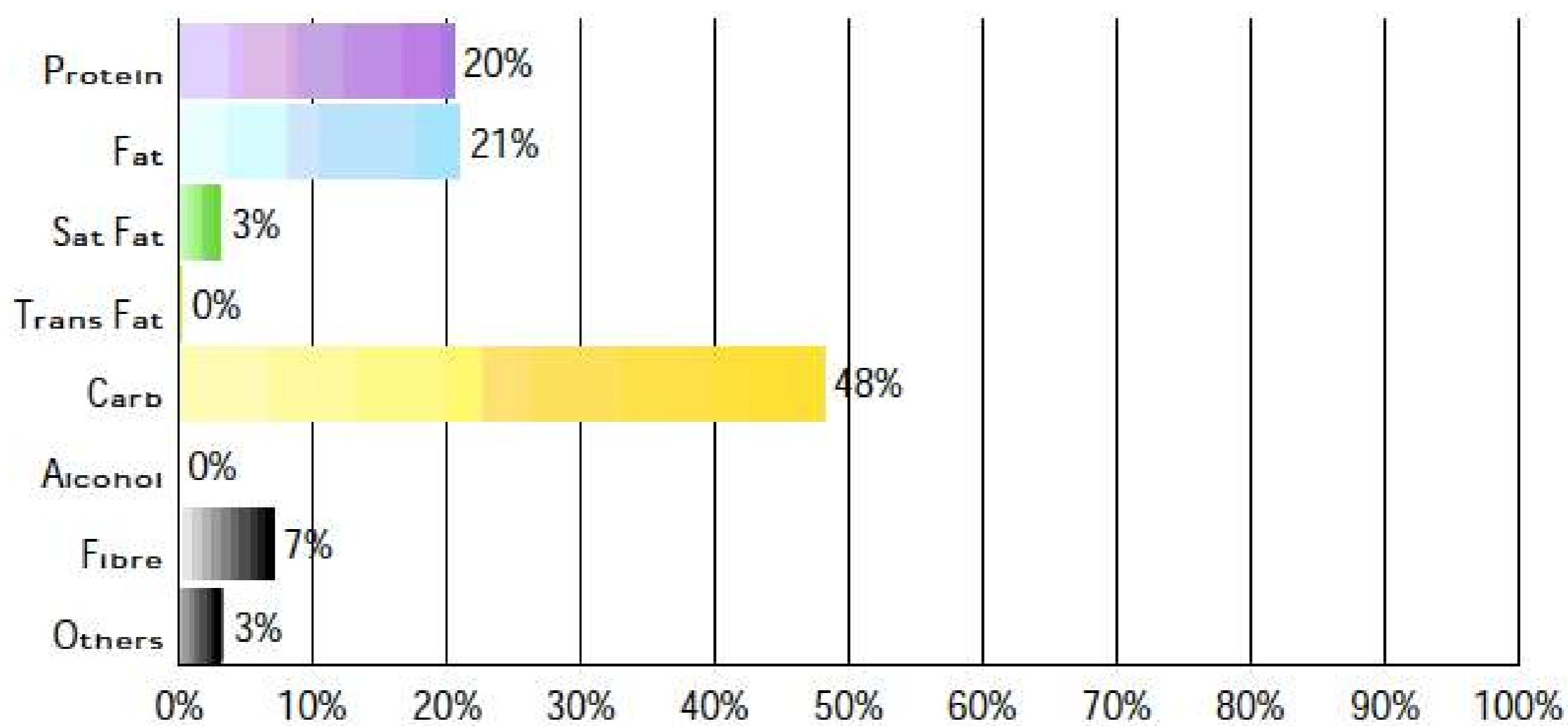
This is a breakdown showing the amounts of important nutrients that it contains:

	Avg/Day		Avg/Day
Energy (kJ)	7138	- Monounsaturated fat (g)	11
Protein (g)	86	Cholesterol (mg)	0
Total fat (g)	41	Carbohydrate (g)	213
- Saturated fat (g)	6	Sugars (g)	72
- Trans Fatty Acids (g)	0	Starch (g)	134
- Polyunsaturated fat (g)	19	Water (g)	2881

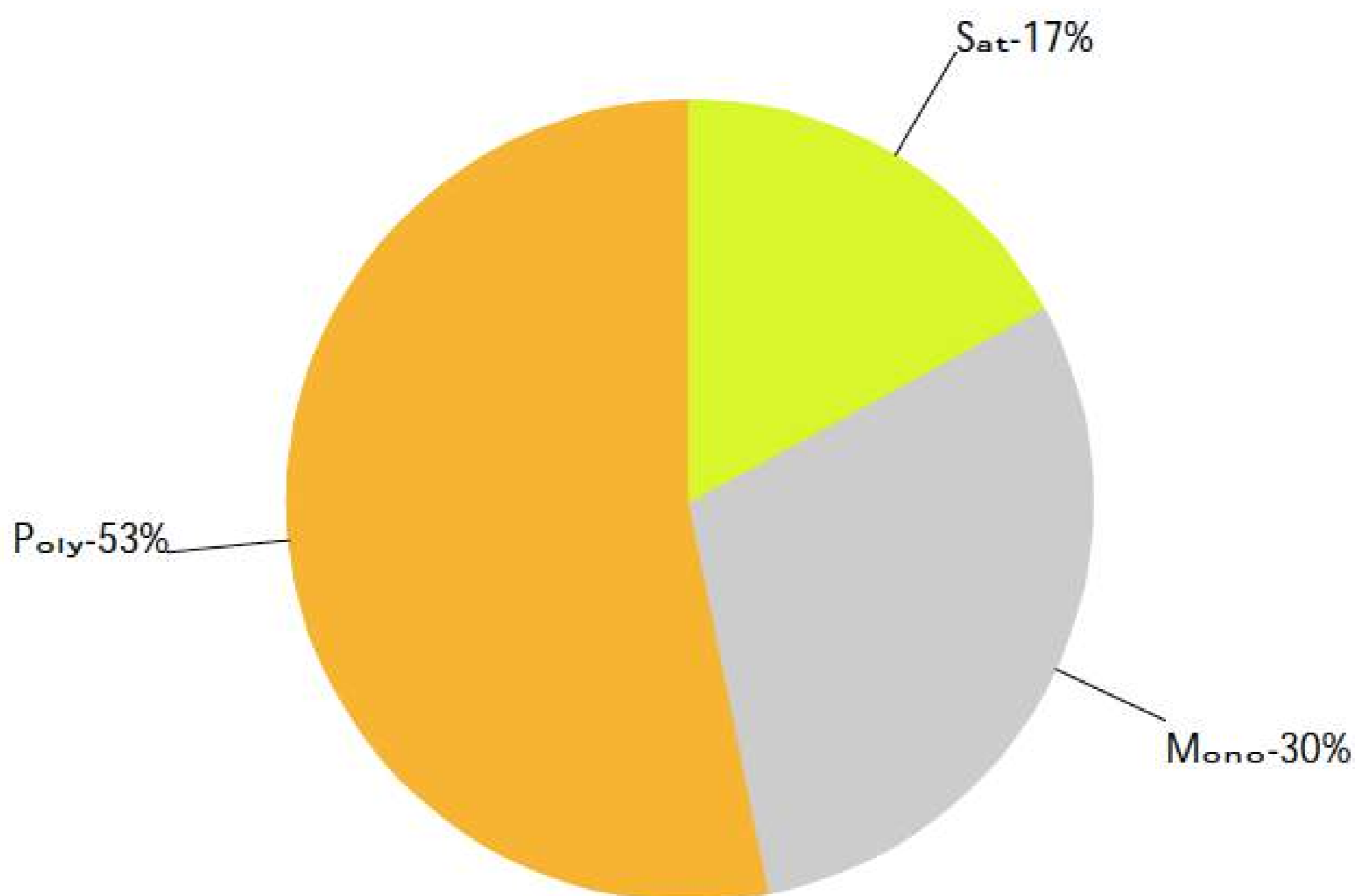
Below is a graph showing how the nutrient content of our 3-day meal plan compares to recommended intakes. (Note: We have used the recommended intakes of nutrients for a female aged 19-54 who is fairly sedentary. The energy (calorie/kilojoule) intake is deliberately below the estimated requirement, allowing the addition of some extra foods/ snacks without exceeding the recommended daily limit.)



The graph below shows the breakdown of the macronutrients - i.e. where the energy (calories/ kilojoules) are coming from in the 3 day meal plan.



The pie chart below shows the breakdown of the different types of fat in the 3 day meal plan. (Note that the relative amount of saturated fat is low, and well within current recommendations.)





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Further reading

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## Further reading and resources

[www.humanherbivore.com](http://www.humanherbivore.com)

[www.lifelongvegan.com](http://www.lifelongvegan.com)

[www.veganhealth.org](http://www.veganhealth.org)

[www.nutritionfacts.org](http://www.nutritionfacts.org)

[www.vegansociety.org](http://www.vegansociety.org)

# About the Authors

## Amanda

I've always loved animals and been interested in healthy living. My mum sent me to yoga classes when I was eight, and back in the '70s I loved helping her mix up our own muesli.

I dreamt of being a vet and that was my first field of study. But eventually I realised the best way for me to help animals was to go vegan. Because so many people asked me where I got my protein from, I studied nutrition and have been an Accredited Practising Dietitian and Accredited Nutritionist since 1992.

I raised my own two (now adult) children on a vegan diet and have helped many families confidently raise healthy plant-based kids. I also really enjoy helping people achieve their health goals on a plant-based diet.

I live in a tiny house off the grid just outside of Brisbane, Australia with three elderly horses and two old dogs. In my spare time I love doing yoga and going to the gym.

## Kamina

I've been a vegan since I was born. I've always loved food, so from a young age I was motivated to learn how to cook! By watching my parents I learned how to make a healthy meal out of whatever I had without needing to follow a recipe.

In my early twenties I managed Brisbane's first all-vegan grocery store, where I started making all the cakes for our little in-store cafe. Lots of my customers were new vegans, and so many of them asked me to cater their special events or even to teach them how to cook vegan food for themselves. That was the seed of Lifelong Vegan, a service I now run on the side to help people adopt healthy vegan eating habits.

I work mainly as a freelance writer and like to turn my hand to anything creative, especially music and all kinds of dancing. I also love yoga and travelling the world.

I live in inner-city Brisbane with my husband (who is also a vegan).



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