



Dispelling the Myths Around Plant-based Eating

By Dee Panes MBPsS

Introduction

In this booklet, we will delve into common myths surrounding plant-based eating, offering insights into why these myths are misleading and how to navigate them in practice. Each myth will be carefully examined, providing evidence-based rebuttals and practical strategies to combat misinformation and disinformation. It's not just about dispelling myths in theory; it's about empowering individuals with actionable steps to make informed choices about their dietary habits. By addressing these misconceptions head-on, we aim to promote a better understanding of plant-based nutrition and support individuals in embracing a healthful and sustainable approach to eating.

Table of Contents

Understanding Disinformation and Misinformation	2
Myth 1: Plant-Based Diets Lack Sufficient Protein	2
Myth 2: Plant-Based Diets Are Nutritionally Deficient.....	4
Myth 3: Plant-Based Diets Are Expensive.....	7
Myth 4: Plant-Based Diets Are Bland and Boring.....	8
Myth 5: Plant-Based Diets Are Inconvenient	9
Myth 6: Plant-Based Diets Are Only for Vegans	11
Myth 7: Plant-Based Diets Are Devoid of Calcium	13
Myth 9: Plant-Based Diets Are Not Suitable for Children.....	15
Myth No. 10 Plant-Based Diets Are Too Ultra Processed	17
APPENDICES:.....	20
A) Are Plant Proteins Complete Proteins?	21
B) Animal-Based Foods & Potential Harmful Components	21
C) Meal Planning & Useful Pictorial Guides	23
D) Diversity of Plant Based Ingredients from Around the World.....	24
E) Resources & Transitioning to Plant Based Diet	28
F) The Benefits of Eating At Least 85% Plant Based.	29
G) Organisations Promoting Plant-Based Nutrition for Health	30
H) Magnesium's Role in Calcium Absorption	30
REFERENCES.....	32

Written by on behalf of Alton Climate Action Network (ACAN)

Dee Panes MBPsS -BSc Health Sciences & Psychology, Certification: Plant Based Nutrition – eCornell, University USA, Certification: Plant-Based Nutrition, A Sustainable Diet for Optimal Health – University Winchester UK, Certification: Lifestyle Medicine for Cancer Prevention & Survivorship, Affiliate Member of Plant Based Professionals UK, Member British School of Lifestyle Medicine



Understanding Disinformation and Misinformation

In today's world, misinformation and disinformation about various topics are widespread, including in the realm of nutrition and dietary choices. Before delving into the myths surrounding plant-based eating, let's clarify what these terms mean:

- Misinformation: False or inaccurate information spread unintentionally.
- Disinformation: False information deliberately spread with the intention to deceive or manipulate.

In this booklet, we'll address common myths surrounding plant-based diets and provide evidence-based rebuttals to combat them. To supplement and support the information provided in this guide, there are appendices and references.

Myth 1: Plant-Based Diets Lack Sufficient Protein

Why It's Wrong: Many of us have heard the claim that plant-based diets don't provide enough protein, but this misconception overlooks the fact that numerous plant foods are rich sources of protein. Foods like beans, lentils, tofu, nuts, seeds, and certain grains like quinoa are all excellent sources of protein. Additionally, ACAN have produced a [“Simple Swaps guide”](#) which is available to you via the ACAN website or can be emailed to you upon request.

What to Do:

List of examples of plant-based sources of protein:

1. **Legumes:**
 - Lentils, chickpeas (garbanzo beans), black beans, kidney beans, pas (green peas, split peas), soybeans (edamame), peanuts
2. **Nuts and Seeds:**
 - Almonds, walnuts, cashews, pistachios, chia seeds, flaxseeds, hemp seeds, pumpkin seeds, sunflower seeds
3. **Grains:**
 - Quinoa, brown rice, oats, barley, buckwheat. Bulgur, amaranth, farro, millet
4. **Soy Products:**
 - Tofu (firm, silken), tempeh. edamame (young soybeans), soy milk, soy yogurt
5. **Seitan (Wheat Gluten):**



- Seitan is made from gluten, the protein found in wheat. It's commonly used as a meat substitute in vegan and vegetarian cooking. Seitan has been consumed for centuries in various cultures, particularly in East Asian cuisines.
6. **Vegetables:**
 - Spinach, broccoli, brussels sprouts, asparagus, artichokes, kale, peas, corn
 7. **Pseudocereals:**
 - Buckwheat, amaranth, quinoa
 8. **Legume-Based Products:**
 - Lentil pasta, chickpea pasta, black bean pasta, pea protein powder
 9. **Plant-Based Meat Substitutes:**
 - Veggie burgers, meatless sausages, plant-based deli slices, meatless meatballs, plant-based chicken strips, textured vegetable protein (TVP)
 10. **Dairy Alternatives:**
 - Almond milk, soy milk, oat milk, coconut milk, hemp milk, cashew milk, rice milk.

Incorporating a variety of these plant-based protein sources into your diet can help ensure that you're meeting your protein needs while enjoying a diverse and nutritious range of foods. Plant proteins offer several health benefits over animal proteins, making them an excellent choice for individuals looking to improve their overall well-being. Here are some of the key advantages (see references for supporting evidence):

1. **Lower in Saturated Fat and Cholesterol:** Plant proteins tend to be lower in saturated fat and cholesterol compared to many animal-based protein sources. A diet high in saturated fat and cholesterol is associated with an increased risk of heart disease, stroke, and other cardiovascular conditions. By choosing plant proteins, individuals can help lower their intake of these harmful substances, promoting heart health.
2. **Higher in Fibre:** Plant-based foods are rich in dietary fibre, which is important for digestive health, weight management, and reducing the risk of chronic diseases such as type 2 diabetes and colorectal cancer. Animal proteins, on the other hand, typically contain little to no fibre. By incorporating more plant proteins into their diet, individuals can increase their fibre intake and enjoy the associated health benefits.
3. **Rich in Antioxidants and Phytonutrients:** Many plant foods contain antioxidants and phytonutrients, which have been shown to have various health-promoting effects, including reducing inflammation, supporting immune function, and protecting against chronic diseases such as cancer and neurodegenerative disorders. These beneficial compounds are often lacking in animal-based protein sources.
4. **Alkaline forming:** Plant proteins have an alkalizing effect on the body, helping to maintain a healthy pH balance. Diets high in animal proteins, particularly red and processed meats, have been linked to increased acidity in the body, which can contribute to bone loss, kidney stones, and other health problems. Choosing plant proteins can help counteract this acidity and promote better overall health.
5. **Reduced Risk of Chronic Diseases:** Numerous studies have linked plant-based diets to a lower risk of chronic diseases, including heart disease, type 2 diabetes, certain



cancers, and obesity. By replacing some or all animal proteins with plant proteins, individuals can reduce their intake of harmful substances like saturated fat, cholesterol, and haem iron, while increasing their consumption of beneficial nutrients found in plant foods.

Overall, incorporating more plant proteins into your diet can offer numerous health benefits and contribute to a well-balanced and nutritious eating pattern. What is also helpful is that instead of focusing solely on animal sources for protein, we can educate ourselves and others about the benefits of plant-based proteins, such as their lower saturated fat and cholesterol content. Sharing examples of successful athletes and bodybuilders who follow plant-based diets can also help change perceptions.

[See Appendix A – Are Plant Proteins Complete Proteins?](#)

Myth 2: Plant-Based Diets Are Nutritionally Deficient

Why It's Wrong: Another common misconception is that plant-based diets are lacking in essential nutrients. However, research indicates that a well-planned plant-based diet can provide all the nutrients necessary for optimal health and may even lower the risk of chronic diseases like heart disease and diabetes.

What to Do: Creating a balanced plant-based diet that meets nutritional needs involves incorporating a variety of nutrient-rich plant foods into meals and snacks. Here are some suggestions to help you achieve a balanced plant-based diet:

- 1. Include a Variety of Whole Plant Foods:**
 - Base your meals around whole plant foods such as fruits, vegetables, whole grains, legumes, nuts, and seeds. Aim to include a variety of colours, textures, and flavours to ensure you're getting a wide range of nutrients.
- 2. Focus on Protein-Rich Plant Foods:**
 - Incorporate protein-rich plant foods into your meals, such as beans, lentils, chickpeas, tofu, tempeh, edamame, quinoa, nuts, and seeds. These foods provide essential amino acids necessary for building and repairing tissues.
- 3. Don't Forget Healthy Fats:**
 - Include sources of healthy fats in your diet, such as avocados, nuts, seeds, and plant-based oils like olive oil, flaxseed oil, and coconut oil. These fats are important for brain health, hormone production, and nutrient absorption.
- 4. Prioritise Calcium-Rich Foods:**
 - Choose calcium-rich plant foods to support bone health, such as leafy greens (kale, spinach, pak choy), fortified plant milks (soy, almond, oat), tofu, tempeh, almonds, sesame seeds, and figs.
- 5. Ensure Sufficient Iron Intake:**



- Consume iron-rich plant foods along with vitamin C-rich foods to enhance iron absorption. Good sources of iron include lentils, beans, chickpeas, tofu, tempeh, fortified cereals, spinach, kale, and pumpkin seeds.
6. **Incorporate Zinc-Rich Foods:**
 - Include plant-based sources of zinc in your diet such as legumes (beans, lentils, chickpeas), nuts (cashews, almonds, peanuts), seeds (pumpkin seeds, hemp seeds, sesame seeds), whole grains (quinoa, oats, brown rice), and fortified foods. Zinc absorption from plant foods may be enhanced by soaking, sprouting, fermenting, or cooking.
 7. **Opt for Fortified Foods:**

Choose fortified plant-based milk alternatives (such as almond, soy, or oat milk) and cereals to ensure adequate intake of nutrients like calcium, vitamin D, vitamin B12, and iron. Check food labels to verify the nutrient content and choose products fortified with these essential nutrients.
 8. **Get Enough Vitamin B12:**
 - Since vitamin B12 is primarily found in animal products, consider fortified foods such as plant-based milk, nutritional yeast, fortified cereals, or take a B12 supplement to ensure adequate intake.
 9. **Incorporate Omega-3 Fats:**
 - Include plant-based sources of omega-3 fatty acids, such as flaxseeds, chia seeds, hemp seeds, walnuts, and algae-based supplements. These fats are important for heart health and brain function.
 10. **Mindful Meal Planning:**
 - Plan your meals ahead of time to ensure you're meeting your nutritional needs. Include a balance of carbohydrates, proteins, fats, and micronutrients in each meal.
 11. **Stay Hydrated:**
 - Drink plenty of water throughout the day to stay hydrated. Herbal teas, coconut water, and infused water can also be refreshing options.
 12. **Listen to Your Body:**
 - Pay attention to your body's hunger and fullness cues and adjust your portion sizes and food choices accordingly. If you have specific dietary needs or health concerns, consider consulting a registered dietitian for personalised guidance.

Plant-based diets are nutritionally superior because they are rich in vitamins, minerals, fibre, and phytonutrients, providing essential nutrients for optimal health without the harmful components found in animal-based foods. Harmful components that can be problematic such as saturated fat, dietary cholesterol, trans-fats, hormones, antibiotics, heme iron, advanced glycation end products (AGEs), environmental contaminants.

[See Appendix B – Animal Based Foods & Potential Harmful Components](#)



"Plant-based foods are packed with nutrients and antioxidants that are vital for health and disease prevention. By focusing on whole, plant foods, we can nourish our bodies with the vitamins and minerals they need to thrive, without the excess saturated fat, cholesterol, and hormones found in animal products." - Dr. Michael Greger, M.D., FACLM, author of "How Not to Die" and nutritionfacts.org

[The British Dietetic Association](#) state, "diets centred on a wide variety of plant foods offer affordable, tasty and nutritious options. Plant-based diets rich in beans, nuts, seeds, fruit and vegetables, wholegrains (such as oats, barley and quinoa) and minimally processed foods can provide all the nutrients needed for good health."

[The British Nutrition Foundation](#) states.... "A well-planned vegetarian or vegan diet can provide the nutrients we need [...] vegetarian dietary patterns may have a health benefit when compared to more traditional dietary patterns. Vegetarian or more plant-based diets are typically higher in fruit and vegetables, whole grains and dietary fibre while being lower in saturated fat, sweets and non-water beverages (such as sugar-sweetened beverages and alcohol)."

[The Academy of Nutrition and Dietetics](#) states... "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. Low intake of saturated fat and high intakes of vegetables, fruits, whole grains, legumes, soy products, nuts, and seeds (all rich in fibre and phytochemicals) are characteristics of vegetarian and vegan diets that produce lower total and low-density lipoprotein cholesterol levels and better serum glucose control. These factors contribute to reduction of chronic disease."

Other organisations that endorse vegan and plant based diets include:

[Food and Agriculture Organisation & World Health Organisation](#)

[British National Health Service](#)

[John Hopkins Centre for a Liveable Future](#)

[Dietitians Association of Australia](#)

[The National Health and Medical Research Council of Australia](#)

[Dietitians of Canada](#)

[See Appendix C - Meal Planning \(e.g. useful pictorial guides\)](#)



Myth 3: Plant-Based Diets Are Expensive

Why It's Wrong: Many people believe that adopting a plant-based diet is expensive, but this myth overlooks the affordability of staple plant-based foods like beans, lentils, rice, and seasonal produce.

What to Do: Here's a list of budget-friendly plant-based shopping strategies, along with explanations of why whole, minimally processed foods are more affordable and nutritious:

- 1. Plan Meals and Make a Shopping List:**
 - Plan your meals for the week before going shopping and create a list of the ingredients you'll need. This helps prevent impulse purchases and ensures you only buy what you need.
- 2. Buy in Bulk:**
 - Purchase staples like grains, legumes, nuts, seeds, and dried fruits in bulk. Buying larger quantities often comes with a lower unit price, saving you money in the long run.
- 3. Shop Seasonal and Local Produce:**
 - Choose fruits and vegetables that are in season and grown locally when possible. Seasonal produce is typically more abundant and less expensive due to lower transportation costs.
- 4. Explore Discount Stores and Farmers' Markets:**
 - Visit discount grocery stores, ethnic markets, and farmers' markets for affordable produce, grains, and spices. These locations often offer lower prices compared to conventional supermarkets.
- 5. Opt for Frozen and Canned Produce:**
 - Purchase frozen or canned fruits and vegetables, which are often more budget-friendly than fresh produce and have a longer shelf life. These options are convenient and retain their nutritional value.
- 6. Choose Store Brands and Generic Products:**
 - Select store brands or generic products instead of name brands. These alternatives are typically more affordable and often comparable in quality.
- 7. Cook in Bulk and Freeze Portions:**
 - Prepare meals in large batches and freeze individual portions for later use. This reduces food waste and saves time and money on future meals.
- 8. Use Plant-Based Protein Alternatives:**
 - Incorporate affordable plant-based protein sources like beans, lentils, tofu, tempeh, and chickpeas into your meals. These options are cost-effective and versatile.
- 9. Minimise Processed and Convenience Foods:**
 - Limit purchases of processed and convenience foods, which tend to be more expensive than whole, minimally processed alternatives. Focus on purchasing ingredients to cook from scratch.
- 10. Compare Prices and Look for Deals:**

Written by on behalf of Alton Climate Action Network (ACAN)

Dee Panes MBPS - BSc Health Sciences & Psychology, Certification: Plant Based Nutrition – eCornell, University USA, Certification: Plant-Based Nutrition, A Sustainable Diet for Optimal Health – University Winchester UK, Certification: Lifestyle Medicine for Cancer Prevention & Survivorship, Affiliate Member of Plant Based Professionals UK, Member British School of Lifestyle Medicine



- Compare prices between different brands and package sizes to find the best value. Keep an eye out for sales, discounts, and coupons to save money on groceries.

Why Are Minimally Processed Foods More Affordable & Nutritious?

Affordability: Whole, minimally processed foods, such as grains, legumes, fruits, vegetables, and bulk items, are often more affordable because they undergo minimal processing and packaging. They typically have lower production and distribution costs compared to processed and convenience foods, which require additional processing, packaging, and marketing.

Nutritional Value: Whole, minimally processed foods are more nutritious because they retain their natural nutrients, including vitamins, minerals, fibre, and phytonutrients. Processing can strip foods of their nutrients and may involve the addition of unhealthy ingredients like refined sugars, unhealthy fats, and sodium. By choosing whole foods, you're maximizing your nutrient intake and supporting overall health and well-being. Additionally, whole foods are often more filling and satisfying than processed alternatives, leading to better appetite control and potentially reduced overall food costs.

Myth 4: Plant-Based Diets Are Bland and Boring

Why It's Wrong: Some people believe that plant-based diets lack flavour and variety, but this myth disregards the countless delicious and diverse plant-based recipes available.

What to Do: There is a huge and diverse range of plant-based ingredients on offering a wide range of flavours, textures, and culinary traditions from around the world, making plant-based eating both exciting and satisfying. [See Appendix D for inspiration.](#)

Here are three examples of recipe exchanges from meat-based to plant-based that are commonly eaten in the United Kingdom:

Traditional Shepherd's Pie to Lentil Shepherd's Pie: Instead of using ground meat, such as lamb or beef, in the filling, swap it out for cooked lentils or a mix of lentils and mushrooms. Season the lentil filling with onions, garlic, carrots, peas, tomato paste, vegetable broth, and herbs like thyme and rosemary. Top the filling with mashed potatoes made with plant-based milk and dairy-free butter, then bake until golden and bubbly.

Example recipes:

Vegan Shepherd's Pie | Plant-Based Cooking Class | Wicked Healthy Kids
<https://youtu.be/cQlql7Nt0-A?si=0dSB9lkvTn4ha8Y3>

Written by on behalf of Alton Climate Action Network (ACAN)

Dee Panes MBPS - BSc Health Sciences & Psychology, Certification: Plant Based Nutrition – eCornell, University USA, Certification: Plant-Based Nutrition, A Sustainable Diet for Optimal Health – University Winchester UK, Certification: Lifestyle Medicine for Cancer Prevention & Survivorship, Affiliate Member of Plant Based Professionals UK, Member British School of Lifestyle Medicine



Protein Packed Lentil Shepherd's Pie

<https://youtu.be/TBQ06wXxFOU?si=Eo8mmwi9RExfZI4Q>

Classic Fish and Chips to Tofish and Chips: Replace the fish with tofu slices or tempeh strips marinated in a mixture of nori seaweed flakes (for a fishy flavour), lemon juice, soy sauce, and Old Bay seasoning. Coat the tofu or tempeh in a light batter made with flour, baking powder, salt, and sparkling water, then fry until crispy. Serve with thick-cut oven-baked potato wedges, mushy peas, and vegan tartar sauce or malt vinegar.

Example recipes:

Gaz Oakley Filet-O-Fish Burger (GF) <https://youtu.be/o2p9cTVKcyE?si=HJ8RtRXWp612OR5D>

Gaz Oakley – “The Most Incredible Vegan Fish & Chips. Volume 2”:

<https://youtu.be/N96zmFLQfpQ?si=s8i7yutyllOPJTpf>

Beef Wellington to Mushroom Wellington:

Instead of using beef tenderloin, create a savoury mushroom filling using a variety of mushrooms such as portobello, cremini, and shiitake. Sauté the mushrooms with onions, garlic, thyme, and a splash of red wine until tender and flavourful. Spread Dijon mustard on a sheet of puff pastry, layer with the mushroom mixture, then wrap and bake until the pastry is golden and crisp. Serve slices with vegan gravy or mushroom sauce.

Example recipes:

VEGAN COTTAGE PIE WITH COLCANNON MASH

<https://www.thevegspace.co.uk/recipe-vegan-shepherds-pie/>

No Meat Disco

<https://www.instagram.com/p/CmZen9dqXPx/>

These plant-based versions of classic British recipes offer delicious alternatives that capture the flavours and textures of traditional dishes while being entirely meat-free. They're perfect for anyone looking to enjoy familiar favourites with a plant-based twist.

Myth 5: Plant-Based Diets Are Inconvenient

Why It's Wrong: Some individuals believe that following a plant-based diet requires extensive meal preparation and is too time-consuming, this may be true when starting up but familiarity makes meal planning no harder than for traditional diets.

What to Do:

1. Prep Meal Kits in Advance:

- Instead of prepping entire meals ahead of time, consider assembling "meal kits" with pre-measured ingredients for specific recipes. Store ingredients for



each meal in separate containers or bags, making it quick and easy to cook when needed.,

[See Appendix C - Meal Kit Ideas/Examples](#)

2. Utilise Multi-Functional Appliances:

- Invest in multi-functional kitchen appliances like pressure cookers, slow cookers, or air fryers that can perform various cooking tasks. These appliances can help save time and reduce the need for multiple pots and pans.

3. Batch Cooking Ingredients, Not Just Meals:

- Instead of batch cooking entire meals, focus on batch cooking individual components like grains, beans, roasted vegetables, and sauces. These pre-cooked ingredients can be mixed and matched to create different meals throughout the week.

4. Pre-Cut and Pre-Portion Ingredients:

- Pre-cut vegetables, fruits, and other ingredients in advance and store them in portioned containers or bags. This makes it easier to grab ingredients quickly when cooking and reduces the time spent on meal prep.

5. Create a "Cooking Playlist" or Podcast Queue:

- Make meal preparation more enjoyable by creating a playlist of your favourite music or podcasts to listen to while cooking. This can help pass the time and make the process feel more enjoyable and productive.

6. Use Silicone Muffin Trays for Freezing:

- Freeze individual portions of sauces, soups, or smoothie ingredients in silicone muffin trays. Once frozen, transfer the portions to a freezer bag for easy storage. This method prevents ingredients from sticking together and allows for quick portioning when needed.

7. Label and Date Everything:

- Label and date all prepped ingredients and meals to ensure freshness and prevent food waste. Use masking tape and a permanent marker or invest in reusable labels for easy identification.

8. Create a "Leftover Remix" Night:

- Designate one night per week as a "Leftover Remix" night where you can get creative with repurposing leftover ingredients into new dishes. This reduces food waste and saves time on meal preparation.

9. Invest in Quality Storage Containers:

- Use high-quality, stackable storage containers to organise prepped ingredients and leftovers in the fridge. Clear containers with tight-fitting lids make it easy to see what's inside and prevent spills or leaks.

10. Keep a Running Inventory List:

- Maintain a running inventory list of pantry staples and freezer items to keep track of what you have on hand. This helps prevent overbuying and ensures you always have essential ingredients available for meal preparation.



By prioritising our health and well-being through dedicating time each week to meal planning and preparation, we can experience significant time-saving benefits and quicker cooking times. Allocating time to plan meals in advance allows for efficient grocery shopping and ensures that ingredients are readily available when needed. Preparing meals ahead of time streamlines the cooking process, reducing the need for last-minute decisions and minimising time spent in the kitchen during busy weekdays. Additionally, batch cooking and pre-portioning meals can save valuable time throughout the week, as ready-made dishes can be quickly reheated or assembled. These time-saving strategies not only make healthy eating more convenient but also help individuals avoid the temptation of resorting to animal-based products or processed convenience foods, which are often less nutritious and may contribute to adverse health outcomes. By investing time in meal planning and preparation, we can prioritise our health, enjoy nourishing plant-based meals, and reap the benefits of improved well-being and vitality.

Myth 6: Plant-Based Diets Are Only for Vegans

Why It's Wrong: While plant-based diets are commonly associated with veganism, they are not exclusive to vegans. Many people choose to incorporate more plant-based foods into their diet for health, environmental, or ethical reasons without completely eliminating animal products.

Plant-based diets are not exclusive to vegans because they offer a flexible and inclusive approach to eating that focuses on incorporating more plant foods while reducing or eliminating animal products. Whether someone is fully committed to veganism or simply looking to incorporate more plant-based meals into their diet, the principles of plant-based eating can be adapted to individual preferences and dietary needs. By emphasizing whole, minimally processed plant foods and reducing reliance on animal products, plant-based diets can benefit everyone, regardless of their dietary preferences or lifestyle choices.

What to Do:

1. **Start Small:** Begin by incorporating one or two plant-based meals or snacks into your weekly routine. Experiment with new recipes and gradually increase the proportion of plant-based foods on your plate.
2. **Focus on Whole Foods:** Choose whole, minimally processed plant foods such as fruits, vegetables, whole grains, legumes, nuts, and seeds. These foods offer the most nutrients and health benefits.
3. **Swap Ingredients:** Replace animal-based ingredients with plant-based alternatives in your favourite recipes. For example, use tofu or tempeh instead of meat in stir-fries, or try cashew cream instead of dairy cream in sauces.
4. **Embrace Meatless Mondays:** Dedicate one day a week to preparing meatless meals. Explore vegetarian or vegan recipes and use this day as an opportunity to try new plant-based ingredients and flavours.



5. **Snack Smart:** Choose plant-based snacks like fresh fruit, raw vegetables with hummus, nuts, seeds, or whole grain crackers with avocado. Keep these options readily available for convenient and nutritious snacking.
6. **Get Creative with Salads:** Experiment with different combinations of vegetables, fruits, grains, legumes, nuts, and seeds to create satisfying and flavourful salads. Try adding roasted vegetables, fresh herbs, or a homemade vinaigrette for extra flavour.
7. **Explore Global Cuisine:** Discover plant-based dishes from around the world, such as Mediterranean, Asian, Latin American, and Middle Eastern cuisines. These culinary traditions often feature a variety of plant-based ingredients and flavours.
8. **Educate Yourself:** Learn about the health benefits of plant-based eating and the environmental and ethical reasons for reducing reliance on animal products. Understanding the reasons behind plant-based eating can help motivate and inspire positive dietary changes.

[See Appendix E – Resources & Transitioning to a Plant Based Diet](#)

What are the Advantages of Eating a Diet Primarily Plant-Based: Eating a diet that is primarily plant-based, comprising approximately 85% plant foods, offers significant health and environmental benefits. Plant-based diets are rich in fruits, vegetables, whole grains, legumes, nuts, and seeds, which provide essential nutrients, including vitamins, minerals, antioxidants, and fibre. By prioritising plant foods, individuals can experience improved overall health, reduced risk of chronic diseases such as heart disease, type 2 diabetes, and certain cancers, and better weight management.

Additionally, transitioning to a predominantly plant-based diet has a positive impact on the environment. Plant-based diets typically have a lower carbon footprint and require fewer natural resources compared to diets high in animal products. Producing plant foods generally requires less land, water, and energy, and generates fewer greenhouse gas emissions than animal agriculture. By choosing plant-based foods more frequently, individuals can contribute to mitigating climate change, conserving natural resources, and promoting sustainability.

Therefore, adopting a diet that is 85% plant-based can offer numerous health benefits while also supporting environmental preservation and sustainability efforts. It represents a balanced approach that prioritises plant foods while allowing for flexibility and individual preferences.

The diet of the Blue Zones, five regions of the world where people live the longest, healthiest lives is at least 85% plant based. The EAT-Lancet Commission brought together 37 scientists from 16 countries to come up with a diet pattern that would not only sustain human health but sustain planetary health for a population of 10 billion people by 2050. It came up with the Planetary Health Plate, an eating pattern where only 13% of calories are derived from animal foods., with the vast majority of calories and nutrients obtained from plant sources. If this diet pattern was adopted globally, the report predicts that 11 million



lives could be saved from diet-related illnesses each year. The report is clear that animal foods are NOT required in the diet and, if consumed, should be minimised.

[See Appendix F - The Benefits of Eating At Least 85% Plant Based](#)

Myth 7: Plant-Based Diets Are Devoid of Calcium

Why It's Wrong: Before the widespread consumption of dairy products i.e., around 10,000 BCE – see references), people obtained calcium from various plant-based sources and other non-dairy foods. Here are some examples:

1. **Leafy Green Vegetables:** Leafy greens such as kale, greens, pak choy, turnip greens, and broccoli are rich sources of calcium. These vegetables were commonly consumed in traditional diets and provided significant amounts of calcium.
2. **Legumes:** Beans, lentils, and chickpeas are good sources of calcium. These legumes were staple foods in many cultures and contributed to calcium intake.
3. **Nuts and Seeds:** Almonds, sesame seeds, chia seeds, and tahini (sesame seed paste) are examples of nuts and seeds that contain calcium. These foods were often consumed in various forms and added to dishes for flavour and nutrition.
4. **Whole Grains:** Some whole grains, such as amaranth, quinoa, and oats, contain small amounts of calcium. While not as rich in calcium as other sources, whole grains contributed to overall calcium intake in traditional diets.
5. **Certain Fruits:** Some fruits, such as oranges, figs, and dried apricots, contain modest amounts of calcium. While fruits were not significant sources of calcium compared to other foods, they contributed to overall nutrient intake in traditional diets.
6. **Sea Vegetables:** Seaweeds such as kelp, wakame, and hijiki are rich sources of calcium and other minerals. In coastal regions, sea vegetables were harvested and incorporated into traditional diets, providing valuable nutrients including calcium.

Additionally, many calcium-rich plant foods are also abundant in other beneficial nutrients like fibre, vitamins, and antioxidants, contributing to a well-rounded and nutritious diet. Focus daily on incorporating these calcium rich foods daily into your meals.

Overall, traditional diets based on whole, minimally processed plant foods provided ample calcium from a variety of sources. Additionally, physical activity, exposure to sunlight (which stimulates vitamin D synthesis), and cooking practices (such as using calcium-rich water for cooking) also contributed to calcium intake and overall bone health in populations before the widespread consumption of dairy products.

Additionally, magnesium also plays a role in calcium absorption, and their relationship is intertwined in several ways.

[See Appendix H – Magnesium Role in Calcium Absorption](#)



What to Do: Here are some plant-based recipes to try that are calcium rich.

Cozy White Bean Mushroom Stew

<https://minimalistbaker.com/cozy-white-bean-mushroom-stew-vegan/>

Kale, White Bean and Orzo Soup

<https://www.gimmesomeoven.com/kale-white-bean-and-orzo-soup/>

Almond Butter Grain Free Granola

<https://www.erinliveswhole.com/almond-butter-grain-free-granola/>

Sticky Ginger Sesame Tofu and Veggies 1 Pot

<https://www.veganricha.com/sticky-ginger-sesame-tofu-veggies/#recipe>

Myth 8: Plant-Based Diets Are Difficult to Follow During Travel & Eating Out

Why It's Wrong: While it may require some additional planning and flexibility, following a plant-based diet is entirely feasible during travel. Many restaurants and grocery stores offer plant-based options, and with a little creativity, travellers can enjoy delicious plant-based meals on the go.

What to Do: Try the following strategies to help you eat plant-based in a way that compliments and enhances your travelling and eating out experiences:

1. Research Ahead: Before dining out, take some time to research the restaurant or cafe's menu online. Many establishments now provide their menus on their websites, and some may even indicate vegetarian or vegan options. Look for dishes that are already plant-based or can be easily modified to be plant-based by removing or substituting animal products.

2. Ask Questions: Don't hesitate to ask questions about menu items and how they are prepared. Restaurant staff are usually happy to accommodate dietary preferences and can provide information about ingredients and cooking methods. Inquire about plant-based options and ask if dishes can be customised to suit your needs. For example, you can ask for dairy-free options, request to substitute tofu or beans for meat, or ask for dressings and sauces on the side.

3. Be Flexible and Creative: Sometimes, restaurant menus may not offer specific plant-based options, but that doesn't mean you can't enjoy a delicious meal. Be flexible and creative by looking for components of dishes that can be combined to create a satisfying plant-based meal. For example, you can ask for a salad without cheese or meat and add extra vegetables, nuts, seeds, or avocado for protein and flavour. You can also consider ordering sides or appetisers as your main meal, or even ask the chef to create a custom plant-based dish based on available ingredients.

4. Pack Snacks: Before setting off on your journey, pack plenty of portable plant-based snacks to keep you fuelled throughout the day. Nuts, seeds, dried fruits, granola bars, energy

Written by on behalf of Alton Climate Action Network (ACAN)

Dee Panes MBPSS -BSc Health Sciences & Psychology, Certification: Plant Based Nutrition – eCornell, University USA, Certification: Plant-Based Nutrition, A Sustainable Diet for Optimal Health – University Winchester UK, Certification: Lifestyle Medicine for Cancer Prevention & Survivorship, Affiliate Member of Plant Based Professionals UK, Member British School of Lifestyle Medicine



bars and veggie sticks with hummus or nut butter are convenient options that don't require refrigeration and can be easily carried in your bag.

5. Research Dining Options: Before arriving at your destination, research local restaurants, cafes, and grocery stores that offer plant-based options. Websites and apps like [Happy Cow](#), [Yelp](#), and [Google Maps](#) can help you find vegan and vegetarian-friendly eateries nearby. Additionally, consider booking accommodations with kitchen facilities to prepare your own meals using fresh, local ingredients.

6. Portable Meals: [Create a Buddha bowl](#). A Buddha bowl is a balanced and customisable meal consisting of a variety of whole grains, vegetables, plant-based proteins, and toppings, typically served in a bowl for a nourishing and visually appealing dish.

Travel can open opportunities to explore new cuisines and new flavours. There are organisations that organise vegan friendly retreats, hotels, B&Bs and experiences.

Myth 9: Plant-Based Diets Are Not Suitable for Children

Why It's Wrong: Some parents worry that plant-based diets may not provide adequate nutrition for their children's growth and development, but when well-planned, plant-based diets can meet all a child's nutritional needs.

What to Do: Here are some helpful tips for parents wishing to transition their children to a healthy plant-based diet, along with information on how to ensure all nutritional needs are met:

- 1. Educate Yourself:** Start by educating yourself about the principles of a healthy plant-based diet for children. Familiarise yourself with key nutrients, food sources, and meal planning strategies to ensure your child receives all the nutrients they need for optimal growth and development.
An excellent book recommendation for anyone wishing to start a family with a plant based diet and addresses concerns and offers practical guidance is "[Feeding Your Vegan Child – A Practical Guide to Plant-Based Nutrition by Sandra Hood RD.](#)"
- 2. Consult with a Healthcare Professional:** Before making any significant dietary changes, consult with a paediatrician or registered dietitian who is knowledgeable about plant-based nutrition. They can provide personalised guidance, address any concerns, and help ensure your child's nutritional needs are met.
- 3. Gradual Transition:** Consider making the transition to a plant-based diet gradually, especially if your child is accustomed to eating animal products. Start by gradually incorporating more plant-based meals and snacks into their diet while gradually reducing or eliminating animal products over time.
- 4. Include a Variety of Foods:** Ensure your child's diet includes a wide variety of nutrient-dense plant foods to meet their nutritional needs. Include plenty of fruits,



vegetables, whole grains, legumes, nuts, and seeds in their meals and snacks to provide essential vitamins, minerals, protein, fibre, and other nutrients.

5. **Focus on Nutrient-Rich Foods:** Pay attention to including foods rich in key nutrients that may be of concern in a plant-based diet, such as protein, calcium, iron, vitamin B12, vitamin D, and omega-3 fatty acids. Incorporate foods like tofu, tempeh, lentils, beans, fortified plant milks, leafy greens, fortified cereals, nuts, seeds, and algae-based supplements as needed to meet nutrient requirements.
6. **Plan Balanced Meals:** Plan balanced meals that include a variety of food groups to ensure your child receives all essential nutrients. Aim to include a source of protein (e.g., beans, lentils, tofu), carbohydrates (e.g., whole grains, fruits, starchy vegetables), healthy fats (e.g., nuts, seeds, avocado), and plenty of vegetables in each meal.
7. **Offer Age-Appropriate Portions:** Ensure your child receives age-appropriate portions of food to support their growth and energy needs. Offer regular meals and snacks throughout the day to keep them satisfied and energised.
8. **Supplement as Needed:** Consider supplementing with vitamin B12, vitamin D, and omega-3 fatty acids, as these nutrients may be lacking in a plant-based diet. That said, supplementation is accessible. Many people who are not eating plant-based supplement with B12 for a variety of health reasons. Vitamin D can be beneficial to numerous people as a supplement, not just plant-based folks. Omega 3 supplementation can also be super helpful to folks who do not wish to consume fish for environmental reasons and/or for allergies or intolerances or simply because they do not like the taste of fish. Algae based Omega 3 supplements are available to purchase. Supplementing with iodine may be a solution for those who do not wish to consume different types of seaweed or use iodised salt. Consult with a suitably qualified healthcare professional to determine if supplements are necessary and appropriate for your child. www.vegansociety.com , www.firststepsnutrition.org, www.pcrm.org, www.nutrition.org.uk, www.bda.uk.com and www.plantbasedprofessionals.com have a huge variety of free factsheets from feeding your baby in the first year and second year, and nutritional considerations and more.
9. **Lead by Example:** Be a positive role model by following a healthy plant-based diet yourself. Involve your child in meal planning, grocery shopping, and cooking to foster their interest in plant-based foods and encourage healthy eating habits from an early age.

With careful planning and attention to nutritional needs, it is entirely possible to ensure that children receive all essential nutrients on a plant-based diet. By incorporating a variety of nutrient-dense plant foods such as fruits, vegetables, whole grains, legumes, nuts, and seeds into their meals and snacks, children can obtain the necessary vitamins, minerals, protein, fibre, and other nutrients needed for growth and development. Additionally, fortified plant-based foods and supplements can help address any potential nutrient gaps, such as vitamin B12, iron, calcium, and omega-3 fatty acids. By focusing on a well-balanced and diverse



plant-based diet, along with guidance from healthcare professionals, parents can support their children's health and well-being on a plant-based journey.

The Academy of Nutrition and Dietetics states...

“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.”

Myth No. 10 Plant-Based Diets Are Too Ultra Processed

What are ultra-processed foods (UPF)? UPFs are defined by the [NOVA classification](#) as foods produced primarily from substances extracted from whole foods such as sugar, salt, oil, and protein. UPFs can also be made using ingredients synthesised in a lab, such as flavour enhancers and artificial colouring. Examples include chips, fruit-flavoured yogurts, breakfast cereals, mass-produced bread, ham, sausages, ice cream, and many more. With this definition, a variety of foods that lead to different health effects can be classified as UPFs. While some UPFs seem worse than others, automatically labelling any food under this umbrella of UPFs as ‘unhealthy’ is not supported by the evidence.

Consuming these foods regularly has been linked to an increased risk of obesity, type 2 diabetes, heart disease, and other chronic health conditions. The general rule of thumb is to limit the consumption of UPF, not all UPF should be treated the same as there are some UPFs that are healthy. There are exceptions where UPF may still provide health benefits such as fortified breakfast cereals, plant-based meat alternatives, meal replacement shakes, protein bars and wholegrain bread.

What to Do: Ultra-processed foods are typically low in essential nutrients and offer little nutritional value. In contrast, whole, minimally processed foods such as fruits, vegetables, whole grains, legumes, nuts, and seeds are rich in vitamins, minerals, antioxidants, and fibre, which are essential for optimal health.

The following points about ultra-processed foods are worth emphasising:

1. **Impact on Health:** Regular consumption of UPFs has been associated with a higher risk of obesity, metabolic syndrome, cardiovascular disease, and certain cancers. Choosing whole foods supports overall health and reduces the risk of chronic diseases.



2. **Influence on Eating Behaviour:** UPFs often contain additives and flavour enhancers designed to increase palatability and encourage overconsumption. [Dr. Matthew Nagra](#), known for his work in advocating for plant-based nutrition discusses [how these foods can disrupt hunger and satiety signals, leading to overeating and weight gain](#).

3. **The NOVA system:** The NOVA system is a food classification system developed by researchers at the University of São Paulo in Brazil. It categorises foods and food products based on the extent and purpose of their processing, aiming to provide insights into the nutritional quality and health implications of different food groups. The NOVA system classifies foods into four main categories:

Unprocessed or minimally processed foods: This category includes foods that have undergone minimal processing or alteration from their natural state. Examples include fresh fruits and vegetables, nuts, seeds, whole grains, legumes, and lean meats or fish.

Processed culinary ingredients: These are substances derived from unprocessed or minimally processed foods that are used in cooking and food preparation to enhance flavour, texture, or appearance. Examples include oils, fats, sugars, salt, and vinegar.

Processed foods: This category includes foods that have undergone deliberate processing to enhance their flavour, texture, or shelf life. Processing methods may include milling, refining, or adding ingredients such as sugar, salt, or preservatives. Examples include canned fruits and vegetables, packaged bread, cheese, and cured meats.

Ultra-processed food and drink products: This category includes foods that are heavily processed and formulated with numerous additives, flavourings, preservatives, and other artificial ingredients. Ultra-processed foods often contain little to no whole food ingredients and are designed to be convenient, palatable, and highly profitable. Examples include packaged snacks, sugary beverages, frozen meals, and fast-food items.

The NOVA system aims to raise awareness about the health implications of consuming ultra-processed foods and promote the consumption of whole, minimally processed foods as part of a healthy diet. It has been widely used in research studies, public health campaigns, and dietary guidelines to inform food policy and promote healthier eating habits.



In conclusion, debunking myths surrounding plant-based eating is crucial for promoting informed decision-making and fostering a culture of health and wellness. By addressing misconceptions about protein, calcium, and other nutrients, we empower individuals to embrace the numerous benefits of plant-based diets confidently. Remember, plant-based foods offer a wealth of nutrients, and with proper planning, they can meet all our dietary needs while promoting optimal health and well-being. However, if you have any uncertainties about your health or nutritional requirements, it's essential to seek guidance from qualified healthcare professionals, such as your general practitioner (GP) or a registered dietitian/nutritionist. These experts can provide personalised advice and support to ensure you thrive on your plant-based journey while prioritizing your overall health and vitality.



APPENDICES:

- A) Are Plant Proteins Complete Proteins?
- B) Animal-Based Foods & Potential Harmful Components
- C) Meal Planning (e.g. useful pictorial guides)
- D) Diversity of Plant Based Ingredients from Around the World.
- E) Resources & Transitioning to a Plant Based Diet
- F) The Benefits of Eating At Least 85% Plant-Based
- G) Organisations Promoting Plant-Based Nutrition for Health
- H) Magnesium's Role in Calcium Absorption



A) Are Plant Proteins Complete Proteins?

All amino acids (the building blocks of protein) are present in every whole plant food, and eating a variety of healthful plant based foods every day usually provides all the amino acids.

✦ What is worth everyone knowing is this; different foods and food groups contain different amounts of amino acids. Most legumes and seeds provide abundant lysine (an amino acid) but are low in methionine (another amino acid), whereas grains tend to be good sources of methionine but low on lysine.

Amino acids, often referred to as the building blocks of proteins, are compounds that play many critical roles in your body. You need them for vital processes such as building proteins, hormones, and neurotransmitters. There are 2 classes of amino acids:

🧱 1. Essential amino acids (EAA) - cannot be produced by our bodies, so we must obtain them in the food we eat. There are 9 of them.

🧱 2. Non-essential amino acids (NAA- are those our bodies can manufacture on their own and we do not require them in our diet. There are 11 of them.

😊 If we supply our body with sufficient EAAs, they will work together with the NEAAs to manufacture ALL the protein molecules we require.

People think that plant foods are missing certain EAAs, but that's not true - all plants contain all 9 EAAs.

The term "incomplete" sometimes linked with plant proteins only means that the quantity of one or more of the EAAs in a particular plant food is lower than what is considered optimal. The problem with this narrow view of protein consumption is that, instead of looking at the overall dietary pattern, it judges a single food in isolation. The only way this could ever be a problem is if you ate a single source of protein, such as only rice, or only nuts as your sole sources of calories. By contrast eating a mixed diet that includes legumes, seeds, grains and vegetables within a 24-hour period easily provides adequate amounts of every amino acids that we require.

B) Animal-Based Foods & Potential Harmful Components

Animal products contain various components that may have adverse effects on health when consumed in excessive amounts or as part of an unbalanced diet. Some harmful components found in animal products include:

1. **Saturated Fat:** Animal products such as red meat, poultry, dairy, and eggs are often high in saturated fat. Consuming excessive saturated fat has been linked to an increased risk of heart disease, stroke, and other cardiovascular conditions.
2. **Cholesterol:** Animal-based foods, particularly meat, eggs, and dairy products, contain dietary cholesterol. High intake of dietary cholesterol has been associated with



elevated blood cholesterol levels, which may contribute to atherosclerosis and cardiovascular disease.

3. **Trans Fats:** Some animal products, particularly processed meats and commercially prepared baked goods may contain trans fats formed during hydrogenation processes. Trans fats have been shown to raise LDL (bad) cholesterol levels and increase the risk of heart disease.
4. **Hormones and Antibiotics:** Conventionally produced animal products may contain residues of hormones and antibiotics used in livestock farming. Prolonged exposure to these substances, particularly through frequent consumption of animal products, may contribute to antibiotic resistance and disrupt hormone balance in humans.
5. **Heme Iron:** Red meat and other animal-based foods contain heme iron, a form of iron that is more readily absorbed by the body than non-heme iron found in plant foods. Excessive intake of heme iron has been linked to oxidative stress and inflammation, which may increase the risk of chronic diseases such as cancer and cardiovascular disease.
6. **Advanced Glycation End Products (AGEs):** Cooking methods such as grilling, frying, and broiling can produce advanced glycation end products (AGEs) in animal products. High intake of AGEs has been associated with inflammation, oxidative stress, and insulin resistance, which may contribute to the development of chronic diseases like diabetes and Alzheimer's disease.
7. **Environmental Contaminants:** Animal products, particularly fish and seafood, may contain environmental contaminants such as heavy metals (e.g., mercury, lead) and persistent organic pollutants (e.g., polychlorinated biphenyls, dioxins) from polluted water sources. Prolonged exposure to these contaminants through the consumption of animal products may pose health risks, including neurotoxicity and carcinogenicity.

Overall, while animal products can provide essential nutrients, they also contain harmful components that may have adverse effects on health, particularly when consumed in excess or as part of an unbalanced diet.



C) Meal Planning & Useful Pictorial Guides

1. **Forks Over Knives Meal Planner:** Forks Over Knives offers a subscription-based meal planning service that provides weekly meal plans, recipes, and grocery lists tailored to a plant-based diet. Their meal plans focus on whole, minimally processed plant foods and can help streamline meal preparation and grocery shopping. Website: [Forks Over Knives Meal Planner](#)
2. **Oh She Glows:** Oh She Glows is a popular plant-based food blog run by author and recipe developer Angela Liddon. The blog features hundreds of delicious and nutritious plant-based recipes, along with meal planning tips and resources to help you create balanced and satisfying meals. Website: [Oh She Glows](#)
3. **Minimalist Baker:** Minimalist Baker is a food blog known for its simple and approachable plant-based recipes that require 10 ingredients or less, one bowl, or 30 minutes or less to prepare. The blog offers a wide variety of recipes, including breakfasts, mains, snacks, and desserts, along with helpful meal planning guides and tips. Website: [Minimalist Baker](#)
4. **Plant-Based on a Budget:** Plant-Based on a Budget is a website dedicated to providing affordable and accessible plant-based meal ideas and resources. The website offers meal plans, recipes, shopping lists, and budgeting tips to help individuals adopt a plant-based diet without breaking the bank. Website: [Plant-Based on a Budget](#)
5. **The Physicians Committee for Responsible Medicine (PCRM):** PCRM offers a variety of resources for plant-based meal planning, including meal plans, recipes, cooking tips, and educational materials. Their website features a collection of plant-based recipes developed by nutrition experts and chefs, along with resources for transitioning to a plant-based diet and maintaining optimal health. Website: [PCRM](#)

The following resources will give you a pictorial representation of how to build a healthy plant-based plate:

[Plant Based Health Professionals Eat Well Guide](#)

[The Vegan Eat Well Guide](#)

[ProVeg International Guide](#)

[The Planetary Health Diet – EAT Forum](#)



D) Diversity of Plant Based Ingredients from Around the World.

The list below can help you produce a variety of recipes using a wide range of flavours, textures, and culinary traditions from around the world, making plant-based eating both exciting and satisfying.

1. Spices and Herbs:

- Cumin (Middle East, India)
- Turmeric (India)
- Coriander (Global)
- Paprika (Spain, Hungary)
- Garam Masala (India)
- Za'atar (Middle East)
- Saffron (Middle East, Spain)
- Thai Basil (Thailand)
- Lemongrass (Southeast Asia)
- Sumac (Middle East)

2. Condiments and Sauces:

- Soy sauce (East Asia)
- Miso paste (Japan)
- Harissa paste (North Africa)
- Sambal Oelek (Indonesia)
- Sriracha (Thailand)
- Tahini (Middle East)
- Chimichurri sauce (Argentina)
- Curry paste (India, Southeast Asia)
- Pesto (Italy)
- Gochujang (Korea)

3. Grains and Legumes:

- Quinoa (Andes region)
- Couscous (North Africa)
- Bulgur (Middle East)
- Farro (Italy)
- Lentils (Global)
- Chickpeas (Global)
- Black beans (Latin America)
- Adzuki beans (East Asia)
- Black-eyed peas (Global)
- Mung beans (South Asia)

4. Fruits and Vegetables:

- Avocado (Central America)
- Mango (South Asia)
- Plantains (Tropical regions)
- Okra (Africa, Middle East)

Written by on behalf of Alton Climate Action Network (ACAN)

Dee Panes MBPS -BSc Health Sciences & Psychology, Certification: Plant Based Nutrition – eCornell, University USA, Certification: Plant-Based Nutrition, A Sustainable Diet for Optimal Health – University Winchester UK, Certification: Lifestyle Medicine for Cancer Prevention & Survivorship, Affiliate Member of Plant Based Professionals UK, Member British School of Lifestyle Medicine



- Jackfruit (Southeast Asia)
 - Aubergine/Eggplant (Global)
 - Plantains (Tropical regions)
 - Tomatillos (Mexico)
 - Jicama (Mexico)
 - Dragonfruit (Southeast Asia)
- 5. Nuts and Seeds:**
- Pistachios (Middle East)
 - Pine nuts (Mediterranean)
 - Cashews (Global)
 - Pepitas (Pumpkin seeds) (Mexico)
 - Sesame seeds (Global)
 - Flaxseeds/Linseeds (Global)
 - Hemp seeds (Global)
 - Chia seeds (Central America)
 - Sunflower seeds (Global)
 - Macadamia nuts (Australia)
- 6. Cereals and Bread:**
- Naan bread (India)
 - Injera (Ethiopia)
 - Roti (India)
 - Pita bread (Middle East)
 - Sourdough bread (Global)
 - Arepas (Latin America)
 - Tortillas (Mexico)
 - Focaccia (Italy)
 - Rice paper (Southeast Asia)
 - Rice noodles (East Asia)
- 7. Dairy Alternatives:**
- Coconut milk (Tropical regions)
 - Almond milk (Global)
 - Soy milk (Global)
 - Oat milk (Global)
 - Cashew cheese (Global)
 - Coconut yogurt (Tropical regions)
 - Almond yogurt (Global)
 - Soy yogurt (Global)
 - Cashew cream (Global)
 - Tofu (East Asia)



Meal Kit Ideas:

Mediterranean Chickpea Salad Meal Kit:

Meal Kit Components:

1. Cooked quinoa or couscous
2. Pre-chopped vegetables (cucumber, cherry tomatoes, red onion, bell peppers)
3. Canned chickpeas, drained and rinsed
4. Crumbled feta cheese or dairy-free alternative (optional)
5. Kalamata olives
6. Fresh herbs (parsley, mint)
7. Lemon wedges
8. Greek vinaigrette dressing (olive oil, lemon juice, garlic, oregano, salt, and pepper)

Instructions: In separate containers, portion out cooked quinoa or couscous, chopped vegetables, chickpeas, feta cheese (if using), olives, and fresh herbs. Store lemon wedges separately. When ready to eat, assemble the salad by combining the ingredients in a bowl, drizzle with Greek vinaigrette dressing, and serve with lemon wedges on the side.

Asian Stir-Fry Meal Kit:

Meal Kit Components:

1. Pre-cut stir-fry vegetables (bell peppers, broccoli, snap peas, carrots, mushrooms)
2. Tofu or tempeh, cubed or sliced
3. Cooked rice or noodles
4. Stir-fry sauce (soy sauce, sesame oil, garlic, ginger, cornstarch)
5. Optional toppings: chopped green onions, sesame seeds, sriracha

Instructions: Portion out pre-cut vegetables and tofu or tempeh into separate containers. Cook rice or noodles according to package instructions and let cool before storing. Mix together ingredients for stir-fry sauce and store in a small jar. When ready to cook, heat a skillet or wok over medium-high heat, add a bit of oil, and stir-fry the vegetables and tofu or tempeh until tender. Add the cooked rice or noodles and stir in the sauce until everything is heated through and well-coated. Serve hot, garnished with optional toppings if desired.

These meal kits can be prepped in advance and stored in the fridge until ready to use, making it convenient to whip up a delicious and nutritious meal in no time! Adjust the ingredients and flavours based on your preferences and dietary restrictions.

Traditional Sunday Roast:

Meal Kit Components:

1. Pre-cut and seasoned root vegetables (potatoes, carrots, parsnips)
2. Vegan gravy mixes or homemade gravy
3. Seitan or tofu roast (pre-marinated or seasoned)
4. Frozen Yorkshire puddings (store-bought or homemade)
5. Fresh or frozen green peas



6. Fresh herbs (rosemary, thyme) for garnish

Instructions:

Preheat the oven and roast the seasoned root vegetables on a baking tray until tender and golden.

Cook the Yorkshire puddings according to package instructions or prepare them from scratch.

Roast the seitan or tofu roast in the oven until heated through and crispy on the outside.

Prepare the vegan gravy according to package instructions or make it from scratch using vegetable broth, flour, and seasonings.

Steam or boil the green peas until tender.

Assemble the Sunday roast plates with a portion of roasted vegetables, seitan or tofu roast, Yorkshire pudding, green peas, and gravy. Garnish with fresh herbs if desired.

Mexican-Inspired Meal Kit:

Build-Your-Own Tacos:

1. Cooked and seasoned black beans or lentils
2. Pre-cut and seasoned bell peppers and onions
3. Corn or flour tortillas
4. Guacamole or sliced avocado
5. Salsa (store-bought or homemade)
6. Vegan sour cream or yogurt
7. Shredded lettuce or cabbage
8. Lime wedges for garnish

Instructions:

Reheat the seasoned black beans or lentils in a pan until warmed through.

Sauté the pre-cut bell peppers and onions in a separate pan until tender.

Warm the tortillas in a dry frying pan or in the oven until soft and pliable.

Set up a taco bar with all the ingredients arranged in separate bowls or containers.

Allow each person to assemble their own tacos by layering beans or lentils, sautéed peppers and onions, guacamole or avocado, salsa, vegan sour cream or yogurt, and shredded lettuce or cabbage onto the warm tortillas.

Serve with lime wedges for squeezing over the tacos before eating.

These meal kit ideas provide convenient and customisable options for creating delicious plant-based meals at home, whether you're craving a British-inspired Sunday roast or a Mexican-inspired taco night.



E) Resources & Transitioning to Plant Based Diet

1. **Meatless Monday** is a global movement that encourages people to go meat-free one day a week for their health and the health of the planet. Their website offers recipes, meal plans, cooking tips, and educational resources to help people incorporate more plant-based meals into their diet. Website: [Meatless Monday](#)
2. **The Vegan Society** is a nonprofit organisation dedicated to promoting veganism and supporting individuals in adopting a plant-based lifestyle. Their website offers a wealth of resources, including beginner's guides, recipe ideas, nutritional information, and tips for transitioning to a vegan diet. Website: [The Vegan Society](#)
3. **Plant-Based Health Professionals UK** is a group of healthcare professionals dedicated to promoting plant-based nutrition for optimal health and well-being. Their website offers evidence-based resources, educational materials, webinars, and support for individuals interested in plant-based eating. Website: [Plant-Based Health Professionals UK](#)
4. **Forks Over Knives** is a popular website, documentary, and cookbook series that promotes a whole-food, plant-based diet for health and longevity. Their website offers recipes, meal plans, cooking videos, success stories, and educational articles to support individuals in adopting a plant-based lifestyle. Website: [Forks Over Knives](#)
5. **Grubby** is a meal kit delivery service that specialises in plant-based recipe kits. They offer convenient meal plans with pre-portioned ingredients and step-by-step recipes to help people cook delicious plant-based meals at home. Website: [Grubby](#). You also have [Planthood](#), [Planty](#), [Soulful](#), [Green Chef Vegan Meal Plan](#).
6. **Happy Cow** is a popular online resource for finding vegan and vegetarian restaurants, cafes, and stores worldwide. Their website and mobile app allow users to search for plant-based dining options in their area, read reviews, and discover new vegan-friendly establishments. Website: [Happy Cow](#)
7. **Plant-Based on a Budget** is a website dedicated to providing affordable plant-based meal ideas and resources. Their website features budget-friendly recipes, meal plans, shopping lists, and tips for eating plant-based on a budget. Website: [Plant-Based on a Budget](#)



F) The Benefits of Eating At Least 85% Plant Based.

The EAT-Lancet Commission presents a global planetary health diet that is healthy for both people and planet. Discover the report's key takeaways and specific actions that we all can take to contribute to the Great Food Transformation.

<https://openaccess.city.ac.uk/id/eprint/21633/8/>

For a picture of the Planetary Health Plate

<https://eatforum.org/eat-lancet-commission/the-planetary-health-diet-and-you/>

Blue zones

<https://www.bluezones.com/>

<https://www.bluezones.com/recipes/food-guidelines/>

The Royal College of Pathologists – Plant-based diets – an underutilised way to tackle our health and climate crisis

<https://tinyurl.com/7p7cwujr>

How To Put a Buddha Bowl Together

A great way to pack a portable plant-based meal is to create a nourishing and balanced Buddha bowl. Here's how to do it:

1. **Choose a Base:** Start with a base of whole grains or leafy greens. Brown rice, quinoa, couscous, or mixed greens are excellent options. Cook the grains according to package instructions and let them cool before packing.
2. **Add Protein:** Include a source of plant-based protein to make your meal satisfying and nutritious. Options include cooked beans (such as chickpeas, black beans, or lentils), tofu, tempeh, or cooked edamame beans. You can season the protein with herbs, spices, or a flavourful marinade for extra taste.
3. **Load Up on Vegetables:** Fill your bowl with a variety of colourful vegetables for added nutrients and flavour. Choose a mix of raw, roasted, or steamed vegetables such as cherry tomatoes, cucumber, bell peppers, carrots, broccoli, cauliflower, or avocado. You can also add some leafy greens like spinach or kale.
4. **Top with Extras:** Enhance your Buddha bowl with extra toppings for texture and taste. Consider adding sliced nuts or seeds (such as almonds, pumpkin seeds, or sunflower seeds), dried fruits (like cranberries or raisins), fresh herbs (such as coriander or parsley), or a drizzle of your favourite dressing or sauce.
5. **Pack in a Portable Container:** Assemble your Buddha bowl in a portable container with a secure lid to keep the ingredients fresh and prevent spillage during transportation. Mason jars, or reusable meal prep containers with compartments are excellent options for packing Buddha bowls on the go.
6. **Keep Cool:** If your Buddha bowl contains perishable ingredients like avocado or tofu, be sure to keep it refrigerated or in a cooler bag with ice packs until you're ready to eat.

Buddha bowls are customisable, versatile, and easy to pack, making them an ideal choice for a portable plant-based meal that's both delicious and nutritious.

Written by on behalf of Alton Climate Action Network (ACAN)

Dee Panes MBPS - BSc Health Sciences & Psychology, Certification: Plant Based Nutrition – eCornell, University USA, Certification: Plant-Based Nutrition, A Sustainable Diet for Optimal Health – University Winchester UK, Certification: Lifestyle Medicine for Cancer Prevention & Survivorship, Affiliate Member of Plant Based Professionals UK, Member British School of Lifestyle Medicine



G) Organisations Promoting Plant-Based Nutrition for Health

1. [The Vegan Society](#) is one of the oldest vegan organizations in the world and is based in the UK. They provide information, resources, and support for people interested in veganism, including information on the health benefits of a vegan diet.
2. [Plant-Based Health Professionals UK](#) is a group of healthcare professionals who promote plant-based nutrition for optimal health. They provide evidence-based information, resources, and support for healthcare professionals and the public interested in plant-based diets.
3. [British Dietetic Association \(BDA\)](#) is the professional association for dietitians in the UK. While they do not promote any specific diet, they recognise that well-planned plant-based diets can be healthy and nutritionally adequate for all stages of life, including infancy, childhood, adolescence, pregnancy, and lactation.
4. [NHS \(National Health Service\)](#): While the NHS does not specifically promote veganism, they provide information on plant-based diets as part of their guidance on healthy eating. They acknowledge that well-planned vegan diets can provide all the nutrients needed for good health, including protein, iron, calcium, and vitamin B12.
5. [The Physicians Committee for Responsible Medicine \(PCRM\)](#) is a nonprofit organization that promotes preventive medicine, conducts clinical research, and health benefits of plant-based diets for disease prevention and management.
6. [American College of Lifestyle Medicine \(ACLM\)](#) is a professional medical association that promotes lifestyle medicine approaches, including plant-based nutrition, for preventing and treating chronic diseases. They provide education, resources, and support for healthcare professionals and the public interested in adopting healthier lifestyles.
7. [T. Colin Campbell Centre for Nutrition Studies](#) promotes plant-based nutrition for health and well-being. They offer online courses, educational resources, and research on plant-based diets and lifestyle medicine.

H) Magnesium's Role in Calcium Absorption

Magnesium does play a role in calcium absorption, and their relationship is intertwined in several ways:

1. **Calcium Absorption:** Magnesium assists in the absorption of calcium in the intestines. Without sufficient magnesium levels, the body may struggle to absorb calcium effectively, even if calcium intake is adequate.
2. **Bone Health:** Both calcium and magnesium are essential for bone health. While calcium is a major component of bone tissue, magnesium helps regulate calcium levels within bone tissue. Adequate magnesium levels are necessary for the proper utilization of calcium in bone formation and maintenance.
3. **Muscle Function:** Magnesium is involved in muscle function, including muscle contraction and relaxation. Calcium triggers muscle contraction, while magnesium helps muscles relax after contraction. Imbalances in calcium and magnesium levels can lead to muscle cramps and spasms.



4. **Hormonal Regulation:** Magnesium is involved in the regulation of hormones that influence calcium metabolism, such as parathyroid hormone (PTH) and calcitonin. These hormones help regulate calcium levels in the blood and bone tissue.
 5. **Vitamin D Activation:** Magnesium is required for the activation of vitamin D, which plays a crucial role in calcium absorption. Vitamin D helps facilitate the absorption of calcium from the intestines into the bloodstream, where it can be utilised by the body.
- Overall, magnesium works synergistically with calcium to support bone health, muscle function, and overall calcium metabolism. Ensuring adequate intake of both calcium and magnesium is essential for optimal health and well-being.



REFERENCES

Lower in Saturated Fat and Cholesterol:

Satija, A., Bhupathiraju, S. N., Spiegelman, D., Chiuve, S. E., Manson, J. E., Willett, W., Rexrode, K. M., Rimm, E. B., & Hu, F. B. (2017). Healthful and Unhealthful Plant-Based Diets and the Risk of Coronary Heart Disease in U.S. Adults. *Journal of the American College of Cardiology*, 70(4), 411–422. <https://doi.org/10.1016/j.jacc.2017.05.047>

This study, published in the *Journal of the American College of Cardiology*, investigates the association between plant-based diets and the risk of coronary heart disease (CHD) in U.S. adults. It found that adherence to a healthful plant-based diet, characterised by higher intakes of fruits, vegetables, whole grains, nuts, and legumes, was associated with a significantly lower risk of CHD. One of the key factors contributing to this reduced risk is likely the lower intake of saturated fat and cholesterol inherent in plant-based diets.

Craig, W. J., & Mangels, A. R. (2009). Position of the American Dietetic Association: Vegetarian Diets. *Journal of the American Dietetic Association*, 109(7), 1266–1282. <https://doi.org/10.1016/j.jada.2009.05.027>

This position paper from the American Dietetic Association (now known as the Academy of Nutrition and Dietetics) provides an evidence-based review of vegetarian diets and their potential health benefits. It concludes that well-planned vegetarian diets, including vegan diets, are nutritionally adequate and may provide health benefits in the prevention and treatment of certain diseases, including heart disease. One of the reasons for these health benefits is the lower intake of saturated fat and cholesterol typically associated with plant-based diets.

Higher in Fibre:

Type 2 Diabetes:

Barnard, N. D., Cohen, J., Jenkins, D. J. A., Turner-McGrievy, G., Gloede, L., Green, A., & Ferdowsian, H. (2009). A low-fat vegan diet and a conventional diabetes diet in the treatment of type 2 diabetes: a randomised, controlled, 74-wk clinical trial. *The American Journal of Clinical Nutrition*, 89(5), 1588S–1596S. <https://doi.org/10.3945/ajcn.2009.26736H>

This randomised controlled clinical trial compared the effects of a low-fat vegan diet to a conventional diabetes diet in the treatment of type 2 diabetes. The study found that participants following the low-fat vegan diet experienced greater improvements in glycemic control, weight loss, and cardiovascular risk factors compared to those following the conventional diabetes diet. These findings suggest that a plant-based diet can be an effective dietary approach for managing type 2 diabetes and improving overall health.



Colorectal Cancer:

Lee, J., Shin, A., Oh, J. H., Kim, J. (2014). The relationship between nut intake and risk of colorectal cancer: a case control study. *Nutrition Journal*, 13(1), 13.

<https://doi.org/10.1186/1475-2891-13-13>

This case-control study investigated the relationship between nut intake and the risk of colorectal cancer. Nuts are a prominent component of plant-based diets and are rich in various nutrients, including fibre, vitamins, minerals, and phytochemicals. The study found that higher nut intake was associated with a significantly reduced risk of colorectal cancer, suggesting that incorporating nuts as part of a plant-based diet may offer protective benefits against this type of cancer.

Rich in Antioxidants and Phytonutrients:

Antioxidants:

Higdon, J. V., Delage, B., Williams, D. E., & Dashwood, R. H. (2007). Cruciferous vegetables and human cancer risk: epidemiologic evidence and mechanistic basis. *Pharmacological Research*, 55(3), 224–236. <https://doi.org/10.1016/j.phrs.2007.01.009>

This comprehensive review article examines the epidemiological evidence and mechanistic basis behind the protective effects of cruciferous vegetables against various types of cancer. Cruciferous vegetables, such as broccoli, kale, cabbage, and Brussels sprouts, are rich sources of antioxidants, including glucosinolates, as well as other phytochemicals with potential anticancer properties. The study highlights the importance of consuming a diet high in cruciferous vegetables and other plant foods to reduce the risk of cancer development.

Phytonutrients:

Liu, R. H. (2004). Potential synergy of phytochemicals in cancer prevention: Mechanism of action. *The Journal of Nutrition*, 134(12), 3479S–3485S

<https://doi.org/10.1093/jn/134.12.3479S>

This review article explores the potential synergistic interactions among phytochemicals in plant foods and their mechanisms of action in cancer prevention. Phytochemicals are bioactive compounds found in plant-based foods that possess antioxidant, anti-inflammatory, and other health-promoting properties. The study discusses how combinations of phytochemicals from different plant sources may work together to exert greater protective effects against cancer development than individual compounds alone. The findings underscore the importance of consuming a diverse array of plant-based foods to maximise the health benefits of phytonutrients.



Alkaline Forming:

Fenton, T. R., Huang, T., & Neufeld, H. T. (2019). Phosphate Balance and Acid-Base Physiology. *Advances in Chronic Kidney Disease*, 26(5), 404–411.

<https://doi.org/10.1053/j.ackd.2019.07.002>

This review article discusses the role of phosphate balance and acid-base physiology in kidney health. It explains how certain dietary patterns, including plant-based diets rich in fruits and vegetables, can have an alkalizing effect on the body, helping to maintain a healthy acid-base balance. While the specific focus of the article is on kidney function, it provides valuable insights into the broader implications of dietary acidity and alkalinity on overall health.

Fenton, T. R., Eliasziw, M., Lyon, A. W., Tough, S. C., & Hanley, D. A. (2008). Meta-analysis of the effect of the acid-ash hypothesis of osteoporosis on calcium balance. *Journal of Bone and Mineral Research*, 23(5), 1185–1195. <https://doi.org/10.1359/jbmr.080301>

This meta-analysis examines the acid-ash hypothesis of osteoporosis, which suggests that diets high in acid-forming foods may lead to bone loss due to the body's need to buffer excess acidity by releasing calcium from bones. The study investigates the impact of dietary acid load on calcium balance and bone health. While not specifically focused on plant-based diets, the findings suggest that diets rich in alkaline-forming foods, such as fruits and vegetables, may help maintain calcium balance and mitigate the risk of osteoporosis by reducing the need for bone calcium buffering. This supports the idea that plant-based foods, which are typically alkaline-forming, can have beneficial effects on bone health.

Reduced Risk of Chronic Diseases:

Heart Disease:

Satija, A., Bhupathiraju, S. N., Rimm, E. B., Spiegelman, D., Chiuve, S. E., Borgi, L., Willett, W. C., Manson, J. E., & Hu, F. B. (2017). Plant-Based Dietary Patterns and Incidence of Type 2 Diabetes in US Men and Women: Results from Three Prospective Cohort Studies. *PLOS Medicine*, 14(7), e1002039. <https://doi.org/10.1371/journal.pmed.1002039>

This study, published in *PLOS Medicine*, investigates the association between plant-based dietary patterns and the incidence of type 2 diabetes. It analyses data from three large prospective cohort studies and finds that adherence to plant-based dietary patterns is associated with a significantly lower risk of developing type 2 diabetes. These findings suggest that plant-based diets may offer protective benefits against this major risk factor for heart disease.

Other Cancers:

Song, M., Chan, A. T., Fuchs, C. S., Ogino, S., Hu, F. B., Mozaffarian, D., Ma, J., Willett, W. C., Giovannucci, E. L., & Wu, K. (2020). Dietary intake of fish, ω -3 and ω -6 fatty acids and risk of



colorectal cancer: A prospective study in U.S. men and women. *International Journal of Cancer*, 146(9), 2368–2379. <https://doi.org/10.1002/ijc.32597>

This prospective study, published in the *International Journal of Cancer*, examines the association between dietary intake of fish and omega-3 and omega-6 fatty acids and the risk of colorectal cancer. While the primary focus is on fish consumption, the study also investigates the broader dietary patterns associated with these nutrients. The findings suggest that plant-based foods rich in omega-3 fatty acids may offer protective benefits against colorectal cancer, highlighting the potential role of plant-based foods in cancer prevention.

Obesity:

Turner-McGrievy, G. M., Davidson, C. R., Wingard, E. E., Wilcox, S., & Frongillo, E. A. (2015). Comparative effectiveness of plant-based diets for weight loss: A randomised controlled trial of five different diets. *Nutrition*, 31(2), 350–358. <https://doi.org/10.1016/j.nut.2014.09.002>

This randomised controlled trial, published in *Nutrition*, compares the effectiveness of five different plant-based diets for weight loss. It evaluates the impact of various plant-based dietary patterns, including vegan, vegetarian, and semi-vegetarian diets, on weight loss outcomes. The study finds that participants following plant-based diets experience significant reductions in body weight and improvements in metabolic health markers, suggesting that plant-based diets may be effective for weight management and obesity prevention.

Alzheimer's Disease:

Morris, M. C., Tangney, C. C., Wang, Y., Sacks, F. M., Bennett, D. A., & Aggarwal, N. T. (2015). MIND diet associated with reduced incidence of Alzheimer's disease. *Alzheimer's & Dementia*, 11(9), 1007–1014. <https://doi.org/10.1016/j.jalz.2014.11.009>

This prospective study, published in *Alzheimer's & Dementia*, investigates the association between adherence to the MIND diet (a dietary pattern emphasizing plant-based foods, particularly vegetables, berries, nuts, and whole grains) and the incidence of Alzheimer's disease. The findings suggest that adherence to the MIND diet is associated with a reduced risk of developing Alzheimer's disease, highlighting the potential protective effects of plant-based dietary patterns against cognitive decline and neurodegenerative diseases.

Haem Iron:

Kaluza, J., Wolk, A., & Larsson, S. C. (2013). Red meat consumption and risk of stroke: a meta-analysis of prospective studies. *Stroke*, 44(2), 382-389. <https://doi.org/10.1161/STROKEAHA.111.000375>

This meta-analysis investigates the association between red meat consumption, a significant source of heme iron, and the risk of stroke by analysing data from prospective cohort



studies. The study found that higher intake of red meat was associated with an increased risk of stroke, particularly ischemic stroke. In contrast, consuming plant-based sources of iron, which are non-heme and typically found in plant foods, was not associated with an elevated risk of stroke. These findings suggest that reducing the intake of heme iron from red meat and replacing it with plant-based sources of iron may offer cardiovascular benefits, including a reduced risk of stroke.

This study provides compelling evidence for the health benefits of reducing heme iron intake, which supports the adoption of a plant-based diet rich in iron from plant sources to promote cardiovascular health.

Key, T. J., Appleby, P. N., Crowe, F. L., Bradbury, K. E., Schmidt, J. A., Travis, R. C., & Allen, N. E. (2016). Cancer incidence in vegetarians: results from the European Prospective Investigation into Cancer and Nutrition (EPIC-Oxford). *International Journal of Cancer*, 137(5), 1145–1153. <https://doi.org/10.1002/ijc.29480>

This large-scale prospective study, part of the European Prospective Investigation into Cancer and Nutrition (EPIC-Oxford), examines cancer incidence among vegetarians compared to non-vegetarians. The study includes data from over 60,000 participants in the United Kingdom and investigates the association between dietary factors, including heme iron intake, and cancer risk. The findings indicate that vegetarians have a lower overall cancer incidence compared to non-vegetarians, particularly for certain types of cancer, such as colorectal cancer. Furthermore, the study suggests that the reduced risk of cancer among vegetarians may be partly attributed to their lower intake of heme iron, which is primarily found in animal products. These results highlight the potential benefits of adopting a plant-based diet, which naturally reduces exposure to heme iron and may help lower the risk of cancer development.

Animal-Based Products & Cholesterol Harmful Effects of Dietary Cholesterol:

Mente, A., Dehghan, M., Rangarajan, S., McQueen, M., Dagenais, G., Wielgosz, A., ... & Yusuf, S. (2016). Association of dietary nutrients with blood lipids and blood pressure in 18 countries: a cross-sectional analysis from the PURE study. *The Lancet Diabetes & Endocrinology*, 4(10), 774-787. [https://doi.org/10.1016/S2213-8587\(16\)30113-5](https://doi.org/10.1016/S2213-8587(16)30113-5)

This large-scale cross-sectional analysis from the PURE study examines the association between dietary nutrients and blood lipids (including cholesterol) and blood pressure across 18 countries. The study found that higher dietary cholesterol intake was positively associated with elevated levels of blood cholesterol, including LDL cholesterol ("bad" cholesterol), which is a key risk factor for cardiovascular disease. These findings suggest that dietary cholesterol from animal-based products can contribute to adverse changes in blood lipid profiles and increase the risk of cardiovascular disease.



Endogenous Cholesterol Production:

Grundy, S. M. (1997). Influence of cholesterol-lowering therapies on the endogenous cholesterol synthesis and absorption and plasma lipid response. *Journal of Lipid Research*, 38(12), 2543-2552. <https://pubmed.ncbi.nlm.nih.gov/9458261/>

This review article discusses the influence of cholesterol-lowering therapies on endogenous cholesterol synthesis and absorption, as well as the plasma lipid response. It highlights the importance of understanding the regulation of cholesterol metabolism in the body, including the synthesis of cholesterol in the liver. While dietary cholesterol intake can influence blood cholesterol levels, the body also produces its own cholesterol through endogenous synthesis. This study provides insights into the complex mechanisms involved in cholesterol metabolism and its regulation by both dietary and endogenous factors.

Information on the early origins of dairy consumption during the Neolithic period:

Reference: Salque, M., Bogucki, P. I., Pyzel, J., Sobkowiak-Tabaka, I., Grygiel, R., Szmyt, M., ... & Evershed, R. P. (2013). Earliest evidence for cheese making in the sixth millennium BC in northern Europe. *Nature*, 493(7433), 522-525.

This study, published in the journal *Nature*, presents archaeological and chemical evidence for the early production of cheese in Neolithic Europe. The researchers conducted lipid residue analysis of pottery vessels from sites in Poland dating back to the sixth millennium BCE. They identified biomarkers indicative of milk processing and cheese making, providing direct evidence of early dairy production practices. The findings shed light on the antiquity of dairy consumption and the development of dairy products in prehistoric societies. You can access the article through academic databases or libraries with journal subscriptions.