# benefits of plant based diet on environment

The benefits of plant based diet on environment are profound and farreaching, impacting everything from greenhouse gas emissions to water
conservation and land use. As global awareness of climate change and
ecological sustainability grows, understanding how our dietary choices
contribute to environmental health becomes increasingly crucial. Shifting
towards a more plant-centric way of eating offers a powerful individual and
collective solution to many of the planet's most pressing environmental
challenges. This article delves deep into the multifaceted advantages of
adopting a plant-based diet, exploring its role in reducing carbon
footprints, preserving biodiversity, mitigating deforestation, and fostering
a more sustainable food system for future generations. We will examine the
scientific basis for these benefits, providing a comprehensive overview of
why plant-based eating is not just a dietary trend, but an essential strategy
for environmental stewardship.

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# Reducing Greenhouse Gas Emissions

One of the most significant environmental benefits of a plant-based diet is its direct impact on reducing greenhouse gas emissions. Animal agriculture is a major contributor to these emissions, accounting for a substantial percentage of global anthropogenic greenhouse gases. This contribution comes from various sources within the livestock industry, including methane produced by ruminant animals during digestion (enteric fermentation), nitrous oxide from manure and fertilizer use, and carbon dioxide from land-use change, particularly deforestation for pasture and feed production.

Plant-based foods, on the other hand, generally have a much lower carbon footprint. Growing crops for direct human consumption requires significantly less energy, water, and land compared to raising livestock. For example, producing a kilogram of beef can generate upwards of 60 kilograms of greenhouse gas emissions, whereas a kilogram of legumes might produce less than 1 kilogram. This stark difference highlights the transformative potential of dietary shifts in combating climate change.

#### Methane Emissions from Livestock

Methane is a potent greenhouse gas, with a warming potential over 25 times that of carbon dioxide over a 100-year period. Ruminant animals like cattle, sheep, and goats produce large quantities of methane through their digestive processes. By reducing demand for meat and dairy products, consumers directly decrease the number of livestock needed, thereby lowering overall methane emissions from this sector.

## Nitrous Oxide from Agriculture

Nitrous oxide is another powerful greenhouse gas, approximately 300 times more potent than carbon dioxide. Its primary sources in agriculture are the use of synthetic nitrogen fertilizers to grow animal feed crops and the management of animal manure. A shift towards plant-based diets can lessen the demand for these feed crops, leading to a reduced need for fertilizers and a decrease in nitrous oxide emissions.

#### Carbon Dioxide from Land Use Change

Deforestation, primarily driven by the need to clear land for cattle ranching and to grow feed for livestock, releases vast amounts of stored carbon dioxide into the atmosphere. Forests act as significant carbon sinks, absorbing CO2 from the air. When these forests are cleared, this absorbed carbon is released, exacerbating climate change. A plant-based food system requires substantially less land, thereby reducing the pressure to convert forests and other natural habitats into agricultural land.

# **Conserving Water Resources**

The environmental benefits of a plant-based diet extend significantly to water conservation. Animal agriculture is incredibly water-intensive, requiring vast amounts of water for drinking, cleaning, and, most notably, for growing the feed crops that sustain livestock. The water footprint of meat and dairy products is considerably higher than that of most plant-based foods.

Producing one kilogram of beef can require thousands of liters of water, encompassing both the water consumed by the animal and the water needed to irrigate its feed. In contrast, producing a kilogram of vegetables or grains typically demands a fraction of that amount. As global freshwater resources face increasing scarcity due to climate change and population growth,

reducing water consumption through dietary choices becomes an essential strategy for sustainability.

# Water Footprint of Animal Products

The "water footprint" is a comprehensive measure of the total amount of fresh water used to produce goods and services. Studies consistently show that the water footprint of animal products is disproportionately high. This is largely due to the "virtual water" embedded in the feed crops. For instance, growing alfalfa or corn for cattle feed requires substantial irrigation.

#### Water Usage for Plant-Based Foods

Plant-based foods, such as fruits, vegetables, legumes, and grains, generally have a much lower water footprint. While they still require water for cultivation, the efficiency is far greater. For example, producing a kilogram of lentils might require only a few hundred liters of water, a significant reduction compared to animal products.

#### Impact on Water Scarcity

In regions already experiencing water stress, the high water demand of livestock farming can exacerbate existing problems. Shifting towards plant-based diets can alleviate this pressure, ensuring that vital freshwater resources are available for human consumption, ecosystems, and other essential needs. This conservation is critical for both environmental health and human well-being.

# Minimizing Land Use and Deforestation

The demand for animal products is a primary driver of land use and a major contributor to deforestation worldwide. Vast tracts of land are cleared for grazing livestock and for cultivating the immense quantities of feed crops required to sustain them. This extensive land use has profound ecological consequences, impacting biodiversity, soil health, and the global climate.

A plant-based food system is far more land-efficient. Growing crops directly for human consumption requires significantly less land than raising animals. This efficiency means that less land needs to be dedicated to agriculture overall, freeing up space for natural habitats and allowing for the regeneration of forests and other ecosystems. The reduction in land clearing

directly combats deforestation, a critical issue for climate regulation and biodiversity preservation.

# Land Required for Livestock Farming

Livestock farming, including grazing land and land for feed production, occupies a disproportionately large percentage of the Earth's agricultural land. Estimates suggest that livestock use up to 80% of global agricultural land, yet they produce less than 20% of the world's calories. This inefficiency highlights the significant environmental burden of meat and dairy production.

## Deforestation for Pasture and Feed Crops

Tropical rainforests, vital for their immense biodiversity and role in carbon sequestration, are frequently cleared for cattle ranching and for planting soybeans and other crops used for animal feed. This deforestation leads to habitat loss for countless species, disrupts local and global weather patterns, and releases stored carbon into the atmosphere.

# **Reclaiming Land for Nature**

By reducing the demand for animal products, a global shift towards plantbased diets could free up substantial amounts of land. This reclaimed land could be reforested, restored to its natural state, or used for more sustainable forms of agriculture. This not only helps mitigate climate change but also provides crucial space for wildlife and supports ecological restoration.

# **Protecting Biodiversity**

Biodiversity, the variety of life on Earth, is under severe threat, and the expansion of agriculture, particularly animal agriculture, is a leading cause. The conversion of natural habitats into pastures and feed crop fields leads to habitat destruction, fragmentation, and ultimately, the extinction of species.

A plant-based diet significantly reduces the pressure on land, which in turn helps protect and preserve natural ecosystems. By requiring less land, it allows existing forests, grasslands, and wetlands to remain intact, providing essential habitats for a wide array of plant and animal species. This

protection is vital for maintaining ecological balance and the health of the planet.

# **Habitat Destruction and Fragmentation**

The clearing of forests and other natural landscapes for livestock and feed production directly destroys the homes of countless species. This fragmentation of habitats isolates animal populations, making them more vulnerable to predators, disease, and genetic decline. Many species cannot adapt to the drastic changes brought about by agricultural expansion.

#### **Impact on Marine Biodiversity**

Beyond terrestrial ecosystems, the environmental impact of animal agriculture also affects marine biodiversity. Runoff from farms containing fertilizers, pesticides, and animal waste can pollute rivers and oceans, leading to eutrophication, dead zones, and harm to aquatic life. Overfishing, often driven by the demand for animal protein, also depletes fish stocks and disrupts marine food webs.

# **Supporting Ecosystem Health**

By demanding less land and reducing pollution, plant-based diets contribute to healthier ecosystems. Intact natural environments are more resilient to climate change, provide essential ecosystem services like pollination and water purification, and support a rich tapestry of life. Choosing plant-based foods is a powerful way to actively protect the planet's biodiversity.

# **Decreasing Pollution**

Pollution from agricultural activities, particularly animal agriculture, poses a significant threat to air, water, and soil quality. Runoff from farms containing animal waste, fertilizers, and pesticides can contaminate waterways, leading to serious environmental and health problems. Air pollution is also a concern, with ammonia emissions from livestock operations contributing to respiratory issues and acid rain.

Adopting a plant-based diet can substantially reduce the overall pollution generated by our food systems. By decreasing the demand for animal products, we lessen the need for large-scale livestock operations, thereby decreasing the volume of waste and chemical inputs associated with them. This leads to

cleaner air, purer water, and healthier soil.

#### Waterway Contamination

Animal waste from concentrated animal feeding operations (CAFOs) contains high levels of nitrogen, phosphorus, and pathogens. When this waste is not properly managed, it can leach into groundwater or be washed into rivers, lakes, and coastal areas during rainfall. This nutrient overload can cause eutrophication, leading to algal blooms that deplete oxygen and create "dead zones" where aquatic life cannot survive.

#### Air Quality Impacts

Livestock operations are a significant source of ammonia emissions, which contribute to the formation of fine particulate matter in the air. This air pollution can have detrimental effects on human respiratory health and also contribute to acid deposition, damaging ecosystems. Methane and nitrous oxide emissions from animal agriculture also contribute to air quality degradation and climate change.

# Reducing Pesticide and Herbicide Use

While some plant-based diets may involve the use of pesticides and herbicides for crop cultivation, the overall demand for these chemicals can be reduced by shifting away from animal agriculture. A significant portion of the world's pesticide use is dedicated to growing feed crops for livestock. By eating plants directly, the need for these chemicals is diminished.

# **Improving Soil Health**

The way we produce food has a direct impact on the health of our soils, which are essential for agriculture, biodiversity, and climate regulation. Intensive animal agriculture practices can degrade soil quality over time, while more sustainable, plant-focused approaches can help to rebuild and maintain healthy soils.

Practices associated with industrial animal farming, such as heavy tilling for feed crops and the application of chemical fertilizers, can lead to soil erosion, nutrient depletion, and a loss of soil organic matter. In contrast, a shift towards plant-based diets can encourage agricultural methods that prioritize soil health. These methods often involve crop rotation, cover

cropping, and reduced tillage, all of which enhance soil structure, water retention, and fertility.

## Soil Degradation from Monoculture Farming

The large-scale cultivation of monocultures for animal feed, such as corn and soy, can deplete specific soil nutrients and make the soil more susceptible to erosion and compaction. Continuous tilling also disrupts soil structure and releases stored carbon dioxide into the atmosphere.

#### Benefits of Crop Rotation and Cover Cropping

Plant-based agriculture that emphasizes diversification, such as crop rotation and cover cropping, can significantly improve soil health. These practices help to replenish soil nutrients, build organic matter, suppress weeds naturally, and prevent erosion. For instance, planting legumes as part of a rotation can fix nitrogen in the soil, reducing the need for synthetic fertilizers.

#### Soil as a Carbon Sink

Healthy soils rich in organic matter are vital carbon sinks, capable of storing significant amounts of atmospheric carbon dioxide. Practices that improve soil health, often associated with more sustainable plant-based food production, can therefore play a role in climate change mitigation by drawing down carbon from the atmosphere and sequestering it in the soil.

# The Role of Sustainable Agriculture

While the benefits of a plant-based diet for the environment are clear, it is important to acknowledge that the way food is produced matters significantly. Sustainable agriculture practices are key to maximizing the environmental advantages of plant-based eating and ensuring a truly resilient food system.

Sustainable agriculture focuses on methods that are environmentally sound, economically viable, and socially responsible. When combined with a shift towards plant-based diets, these practices can amplify the positive environmental impacts. This includes supporting local food systems, choosing organic produce when possible, and advocating for policies that promote ecological farming methods. The goal is to create a food system that nourishes people while regenerating the planet.

# Organic and Regenerative Farming

Organic farming avoids synthetic pesticides and fertilizers, which benefits soil and water quality. Regenerative agriculture goes a step further, focusing on practices that actively improve soil health, increase biodiversity, and enhance carbon sequestration. These methods are ideal for producing plant-based foods.

## **Local and Seasonal Eating**

Choosing locally grown and seasonal produce reduces the carbon footprint associated with transportation and energy-intensive storage. Supporting local farmers who employ sustainable practices further strengthens the connection between dietary choices and environmental well-being.

## Reducing Food Waste

Another critical aspect of a sustainable food system is minimizing food waste. A significant portion of the food produced globally is lost or wasted, leading to unnecessary resource consumption and emissions. By planning meals, storing food properly, and composting, individuals can reduce their environmental impact, regardless of their dietary pattern.

# Individual Impact and Collective Change

The benefits of a plant-based diet on the environment are not merely theoretical; they translate into tangible positive impacts that begin with individual choices but ripple outwards to drive collective change. Every dietary decision made by a consumer contributes to the broader demand for certain types of food production. By opting for plant-based meals, individuals actively reduce their personal environmental footprint.

This shift in demand sends a powerful signal to the food industry, encouraging a move towards more sustainable and environmentally friendly production methods. As more people embrace plant-based eating, the market for these products grows, incentivizing innovation and investment in plant-based agriculture. Governments and policymakers also take notice of these trends, which can influence the development of regulations and incentives that support a more sustainable food system.

# **Empowering Consumers**

Consumers have a remarkable ability to influence global markets through their purchasing power. Choosing plant-based options over animal products directly reduces the demand that drives environmentally damaging practices like deforestation and excessive water usage. This empowers individuals to be agents of change for the planet.

#### **Driving Market Innovation**

The increasing popularity of plant-based diets has spurred significant innovation in the food industry. Companies are investing in developing diverse and delicious plant-based alternatives to traditional meat and dairy products. This not only makes plant-based eating more accessible and appealing but also fosters a competitive market that prioritizes sustainability.

## **Policy and Advocacy**

As individual and collective dietary patterns shift, policymakers are increasingly recognizing the environmental imperative of supporting plant-based food systems. This can lead to policies that promote sustainable agriculture, invest in plant-based research and development, and incentivize healthier, more environmentally conscious food choices for the wider population.

# Frequently Asked Questions

# Q: How significantly does a plant-based diet reduce greenhouse gas emissions compared to a meat-heavy diet?

A: Studies consistently show that transitioning to a plant-based diet can dramatically reduce an individual's carbon footprint. The emissions associated with producing plant-based foods are often a fraction of those for meat and dairy. For example, beef production can generate up to 100 times more greenhouse gases per kilogram than some plant-based protein sources like lentils or beans.

# Q: What specific environmental resources are most conserved by adopting a plant-based diet?

A: The primary environmental resources conserved by a plant-based diet are land and water. Animal agriculture requires vast amounts of land for grazing and feed production, and it is also extremely water-intensive. By choosing plant-based foods, consumers reduce the demand for these resources, freeing up land for reforestation and decreasing the strain on freshwater supplies.

# Q: Does eating plant-based foods completely eliminate environmental impact, or are there still concerns?

A: While plant-based diets offer significant environmental advantages, no food production system is entirely without impact. Concerns can still arise regarding the use of pesticides and herbicides in conventional farming, the energy used in processing and transportation, and land-use changes for certain crops. However, the overall environmental footprint of plant-based diets is substantially lower than that of diets high in animal products.

# Q: How does a plant-based diet contribute to mitigating deforestation?

A: A major driver of deforestation globally is the clearing of land for cattle ranching and for growing feed crops like soy and corn for livestock. By reducing the demand for meat and dairy, a plant-based diet lessens the need to convert forests and other natural habitats into agricultural land, thereby helping to preserve these vital ecosystems.

# Q: What is the water footprint of plant-based foods compared to animal products?

A: The water footprint of plant-based foods is generally much lower than that of animal products. Producing one kilogram of beef, for instance, can require thousands of liters of water, accounting for drinking water for the animal and water for irrigating its feed. Producing a kilogram of vegetables or grains typically requires a significantly smaller volume of water.

# Q: Can adopting a plant-based diet help protect biodiversity?

A: Yes, by reducing the pressure on land resources, plant-based diets play a crucial role in protecting biodiversity. This reduction in land conversion helps preserve natural habitats like forests and grasslands, which are essential for the survival of countless plant and animal species.

# Q: Are there specific types of plant-based diets that are more environmentally beneficial than others?

A: Diets that are rich in whole, unprocessed plant foods like vegetables, fruits, legumes, and whole grains tend to have the lowest environmental impact. Diets that rely heavily on highly processed plant-based alternatives, or on certain crops with high water or land requirements, may have a slightly higher footprint, though still considerably lower than meat-based diets.

# Q: How does the fertilizer and pesticide use in plant-based agriculture compare to animal agriculture?

A: While conventional plant-based agriculture can involve fertilizer and pesticide use, the overall demand for these chemicals is often reduced when compared to animal agriculture. A significant portion of global pesticide use is for growing feed crops for livestock. Furthermore, organic and regenerative farming practices, often associated with plant-based diets, aim to minimize or eliminate the use of synthetic inputs.

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level of food groups - Analyzes the relation between plant-based diet and health at the different nutritional levels, i.e. from dietary patterns to specific nutrients and substances - Provides a balanced evidence-based approach to analyze the positive and negative aspects of vegetarianism - Addresses the different aspects of diets predominantly based on plants, including geographical and cultural variations of vegetarianism

benefits of plant based diet on environment: Veganism: The Power of Plant-Based Eating. Plant Magic Алексей Сабадырь, 2024-01-10 This is a guide to harmony with nature, to understanding the power of plant products and their impact on your health and the world around you. The book will explore the impact of veganism on physical and emotional well-being, providing you with not only knowledge, but also inspiration. Let's open the doors together to a green future for your health and well-being!Ridero and the author of the book are not responsible for the information provided. Please contact your healthcare provider.

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benefits of plant based diet on environment: Jesus and Mary's Plant-based Diet Impacting Climate Change James C. Tibbetts, 2015-11-03 Global warming or Climate Change is the biggest problem human civilization has ever faced. There are three main divisions in Climate change: Industrial pollution, Car pollution and Animal pollution. People are choosing to eat 70 billion animals every year which is at least 30%% of the problem. One study states all the factors add up to 51%% of the problem with animals for food. The obvious solution is a plant-based diet. Jesus and Mary were kosher vegetarians. The biblical, historical and scientific evidence is summarized showing that they were vegetarians. They are models to follow since major change is needed in the area of food people eat which affects climate change.

benefits of plant based diet on environment: <a href="Engineering Plant-Based Food Systems">Engineering Plant-Based Food Systems</a> Sangeeta Prakash, Bhesh Bhandari, Claire Gaiani, 2022-11-16 Engineering Plant-Based Food Systems provides a comprehensive, in-depth understanding on the technologies used to create quality plant-based foods. This title helps researchers and food processors gain an understanding of the diverse aspects of plant-based foods, with a focus to meet the current consumers' demand of alternatives to animal products. This is a one-stop source that provides maximum information related to plant-based foods to food science researchers, food engineers and food processing/manufacturers. This book will enhance their understanding of plant-based protein sources, their application, product manufacturing, and bioavailability. In recent years, the emphasis

on minimizing environmental footprints (climate change, greenhouse gas emissions, deforestation, and loss of biodiversity) and human health issues related to animal source food intakes has shifted the attention of researchers, dietitians and health professionals from animal-based diets to diets rich in plant-based foods (legumes, nuts, seeds). - Explores the plant sources available for extraction of proteins, the various extraction methods and the quality and functionality of the extracted proteins - Describes existing plant-based foods such as beverages, yogurts, spreads, fermented foods and meats - Provides information related to various plant based functional components such as polyphenols, phytosterols, aromatics and essential oils, etc.

benefits of plant based diet on environment: Impact of Meat Consumption on Health and Environmental Sustainability Raphaely, Talia, Marinova, Dora, 2015-10-19 This reference book is an IGI Global Core Reference for 2019 as it one of the best-selling within the Environmental, Agricultural, and Physical Sciences subject area since 2015. Winning the "Best in the World" and "Best Sustainable Food Book" from the Gourmand Awards, this title focuses on high quality research in developing a food culture that mitigates human and environmental damage. Featuring research on trending topics such as limiting meat consumption, trade and the meat industry, ethics of meat production and consumption, and more, this publication contains research that has been contributed by industry-leading experts across Australia, U.S., UK, and more, making it a critical resource for policymakers, academicians, researchers, advanced-level students, technology developers, and government officials. Impact of Meat Consumption on Health and Environmental Sustainability addresses the difficulties, challenges, and opportunities in reducing excessive meat consumption in order to mitigate human and environmental damage. Policymakers, academicians, researchers, advanced-level students, technology developers, and government officials will find this text useful in furthering their research exposure to pertinent topics such as dietary recommendations for limiting meat consumption, trade and the meat industry, ethics of meat production and consumption, and the environmental impacts of meat consumption.

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**benefits of plant based diet on environment:** *Multi-Disciplinary National Seminar* Dr. T.N. Muthe Gowda,

<u>Supply Chain</u> Walter Leal Filho, Ilija Djekic, Sergiy Smetana, Marina Kovaleva, 2022-04-22 This book presents climate change as a global phenomenon which affects the entire food chain. Many studies analyzing environmental impacts of food systems confirm significant effects of food production on climate change. Most of them associate primary production with emission of greenhouse gasses identified as one of the causes resulting in warming the atmosphere and global climate effects. A wider perspective shows that the food chains start at farms with consumers being at the end of the pipeline. This approach emphasizes the role of the entire food chain highlighting different kinds of environmental impacts affecting climate change. On the other side, temperature changes and variations of precipitation patterns, together with extreme weather events and water reduction, are recognized as predictors for producing less food, decreased food quality, new food safety risks, biodiversity losses, and depletion of resources associated with food production in modified circumstances. Last but not least, these effects introduce new threats known as food security where

some assumptions stress that almost one billion of people are hungry not receiving enough food as a result of climate changes. As a result, the UN highlights the need for combating climate change and promotes sustainable (food) consumption and production. Based on the perceived need to promote and disseminate information on climate change related to food system, the "Handbook of Climate change across the food supply chain" is being produced. The publication compiles information, experiences, practical initiatives, and projects around the subject matter and makes it available to a wide audience. It is expected that the "Handbook of Climate change across the food supply chain" makes many benefits of climate service clearer and, inter alia, leads to an increase in the demand for such important services.

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benefits of plant based diet on environment: Handbook of Plant-Based Food and Drinks Design Fatma Boukid, Cristina M. Rosell, Nicola Gasparre, 2024-05-29 Handbook of Plant-Based Food and Drinks Design discusses conventional and emerging technologies for plant-based ingredient improvement (yield, nutritional composition and functional properties) while considering food safety, sustainability, and social impact to explore current and potential markets through research and innovation. Divided in 7 sections, the book covers Plant sources for functional ingredients, Processing plant-based sources, Plant-based food design to replace/mimic animal food, Innovation in plant-based food, The promise of parity, Safety and regulations of plant-based foods, Social, environmental, and economic impact, and more.Written by a team of experts in the field, this book can be a good support for researchers and scientists working with plant-based food, drinks, and market trends. - Brings a critical overview about the health-beneficial compounds of plant-based sources - Offers guidelines on how to formulate plant-based food or a food alternative - Discusses the transition towards more plant-based diets on nutrition, economy climate change, health, and sustainability

benefits of plant based diet on environment: Food Systems Evaluation Methods and Sustainability Assessment Bradley George Ridoutt, Aida Turrini, 2024-03-08 The food system is responsible for some of society's most pressing sustainability challenges. Diets are currently unsustainable in many countries as evidenced by the growing burden of malnutrition, degradation of natural resources, contributions to climate change, and unaffordability of healthy diets. There is an urgent need to address the gaps in understanding of what a sustainable food system means across varying populations and geographies and how we can better measure these systems, while identifying how dietary choices impact on human health and the environment. However, decision makers and experts are questioning whether it is possible to meet environmental, social, and economic goals simultaneously, or whether trade-offs are necessary. Thus, the development of better measurements and indicators to clearly understand the benefits and considerations for healthy and sustainable food systems is needed.

**benefits of plant based diet on environment:** Plant-Based Bioactive Compounds and Food Ingredients Junaid Ahmad Malik, Megh R. Goyal, Preeti Birwal, Ritesh B. Watharkar, 2023-10-13 This new book discusses plant-derived bioactive compounds, covering their sources, biological

effects, health benefits, and potential prevention and treatment properties for multifactorial diseases. It first describes in detail how encapsulation methods and plant-based materials may be used in a variety of ways, covering the concepts, advantages, and techniques for encapsulating bioactives based on cereals, spices, and coffee. The volume also looks at the functional aspects of plant-based foods and nutraceutical-based functional food design. The role of functional foods in food safety and industrial food safety issues and techniques for monitoring food quality and safety are also addressed.

**benefits of plant based diet on environment:** What, How, and Where to Eat is More Than an Individual Choice: New Ways to Achieve Healthy Eating Veronica Ginani, Ana Lúcia De Saccol, Renata Puppin Zandonadi, 2022-11-22

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