

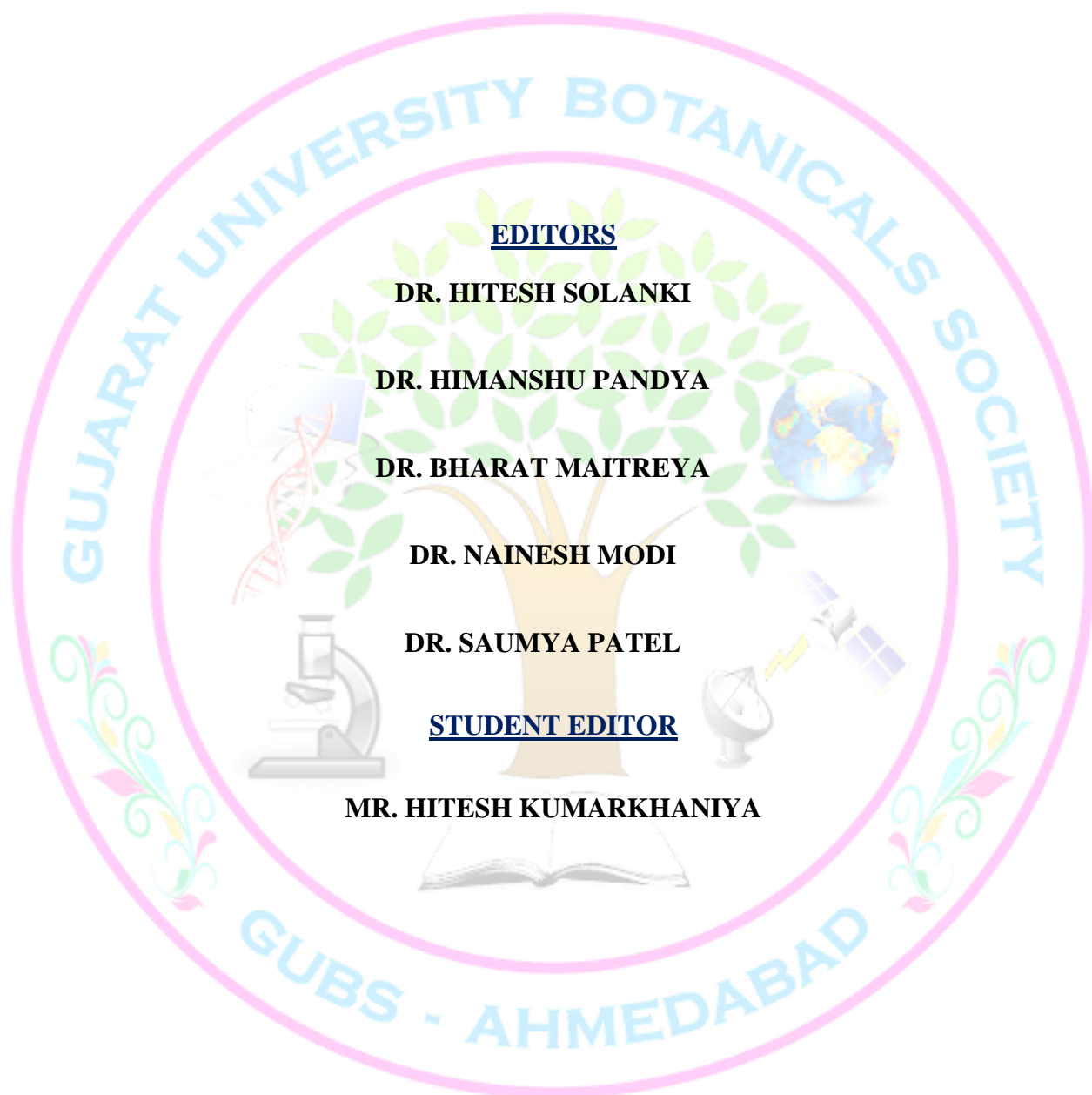
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SR. NO.	INSIDE THIS ISSUE
1.	PREFACE: ANKUR
2.	FROM THE EDITOR'S DESK
3.	PATRON'S MESSAGE Dr. Hitesh Solanki
4.	Dr. Hitesh Solanki
5.	Dr. Himanshu Pandya
6.	Dr. Bharat Maitreya
7.	Dr. Nainesh Modi
8.	Vegan Food- Nutritional impact on child growth Mr. Hitesh Kumarkhaniya
9.	Vegan Food: Nutritionally Reach and Sustainable Food Km Bhavna Singh
10.	Embracing A Plant-Based Journey Ms. Minal Patel
11.	November 2023 For Vegan Vitality Ms. Bhavyaben Radadiya
12.	Vegan Food: A History and Global Sinario Mr. Ganapat Bavaliya
13.	Vegan foods and their source Ms. Aanal Maitreya
14.	Vegan delights: where flavor meets sustainability Mr. Mohitigiri Goswami
15.	Super Foods: Algae And Fungi as Vegan Food Ms. Dhruva Janil
16.	Vegan – The Health Benefits of A Plant Based Diet Mr. Trupesh Revad
17.	GLIMPSES OF GUBS ACTIVITIES



ANKUR

.....*Sprouting of thoughts*

Ankur is symbol of new beginning towards growth. And Ankur is here to introduce budding writers. It would represent interesting articles in Botany, Bioinformatics and Climate Change Impacts Management. Each seed has the innate potential to grow - blossom, and display its magnificence after its dormancy has been broken. Same way this Newsletter would provide a platform to young researchers to share news and views, promote awareness about the subjects and generate interest in related issues. Ankur would be taken care of by a team of dedicated Student Editors who would select and edit articles for online publication.

We wish Team Ankur all the best for this endeavour.





FROM EDITOR'S DESK....

Ankur is now eight years old. This newsletter is intended to be published twice in a year. The growth and development of Ankur is a reflection of the growth and progress of the students of the Department. This newsletter will serve to reinforce and allow increased awareness, improved interaction and integration among all of us. *The journey began seven years ago and now Ankur has blossomed and is spreading the fragrance to everyone around with the message that plants are significant and valuable.*

In this issue, we focus on Urban Forestry.

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Dr. Nainesh Modi

Dr. Saumya Patel

Mr. Hitesh Kumarkhaniya

PATRON'S MESSAGE

Embracing the Future of Food

As we stand at the crossroads of a rapidly changing world, one of the most powerful actions we can take is in what we choose to eat. The growing popularity of vegan food is not just a trend; it's a reflection of our collective consciousness shifting towards more sustainable, ethical, and health-conscious decisions.

In this edition of our newsletter, we explore the many reasons why veganism is gaining momentum. From reducing our carbon footprint and promoting animal welfare to improving our health, the plant-based movement offers solutions to some of the most pressing challenges of our time. But it's not just about what we leave behind; it's about the delicious, nutritious, and innovative foods that are emerging to replace traditional animal-based products.

The change is happening, and it's exciting. Whether you're already on the path of plant-based eating or simply curious, the diversity and creativity of vegan food offer something for everyone. With so many options now available, we no longer have to compromise on taste or convenience, making it easier to incorporate more plant-based meals into our lives.

As you read this issue, I encourage you to consider how small changes in your diet can have a big impact on the world around us. The future of food is here—and it's vibrant, compassionate, and sustainable.

Here's to a future where we all thrive—together. This issue of Ankur focuses on **VEGAN FOOD** and shares the expanse of knowledge in this global priority.

Warm Regards,

Dr. Hitesh Solanki
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VEGAN FOOD: A STEP TOWARDS A SUSTAINABLE AND COMPASSIONATE FUTURE

Prof. Dr. Hiteshkumar Solanki

In recent years, veganism has emerged as more than just a dietary choice—it has become a lifestyle and a movement toward a more sustainable, ethical, and health-conscious world. As awareness grows about the environmental and ethical consequences of animal agriculture, many are turning to plant-based diets to reduce their carbon footprint, promote animal welfare, and improve their personal well-being.

Vegan food is not just for those following a specific diet; it is for anyone who cares about the planet, their health, and the future. The benefits of a vegan diet are manifold. From an environmental standpoint, plant-based food production has a significantly lower impact on the earth compared to animal farming. It uses fewer natural resources like water and land, while also contributing less to greenhouse gas emissions.

Healthwise, a well-planned vegan diet can be rich in essential nutrients, offering a wide variety of fruits, vegetables, legumes, grains, nuts, and seeds. Many studies suggest that vegan diets are associated with a reduced risk of chronic diseases such as heart disease, type 2 diabetes, and certain cancers. Moreover, plant-based foods are often lower in saturated fat, which is linked to improved cardiovascular health.

Ethically, veganism is grounded in the idea of compassion. By choosing plant-based alternatives, people can avoid supporting industries that involve animal suffering, from factory farming to the exploitation of animals in the food production process. With an increasing variety of delicious plant-based substitutes for meat, dairy, and eggs, those new to veganism find it easier to adopt without sacrificing taste or variety.



The growing availability and creativity in vegan food options are helping to challenge the myth that veganism is restrictive or bland. From hearty plant-based burgers to dairy-free cheeses and decadent desserts, vegan cuisine is no longer confined to salads and tofu. Restaurants and food manufacturers are innovating, creating satisfying and flavorful meals that appeal to a broad range of tastes and dietary preferences.

Furthermore, the rise of vegan food has a ripple effect, encouraging more sustainable practices in the food industry. As demand increases for plant-based products, more companies are investing in research and development to create innovative food options that reduce the environmental toll of traditional animal-based foods.

In conclusion, vegan food is a powerful tool in creating a better world. Whether motivated by ethical concerns, health reasons, or environmental impact, making the shift to plant-based eating is a step towards a more compassionate, sustainable future. As more individuals explore the many benefits of vegan food, we are witnessing a transformation in the way we think about food, farming, and the world around us. Let's embrace the change, one plant-based meal at a time. By making mindful food choices today, we shape a healthier, kinder tomorrow.

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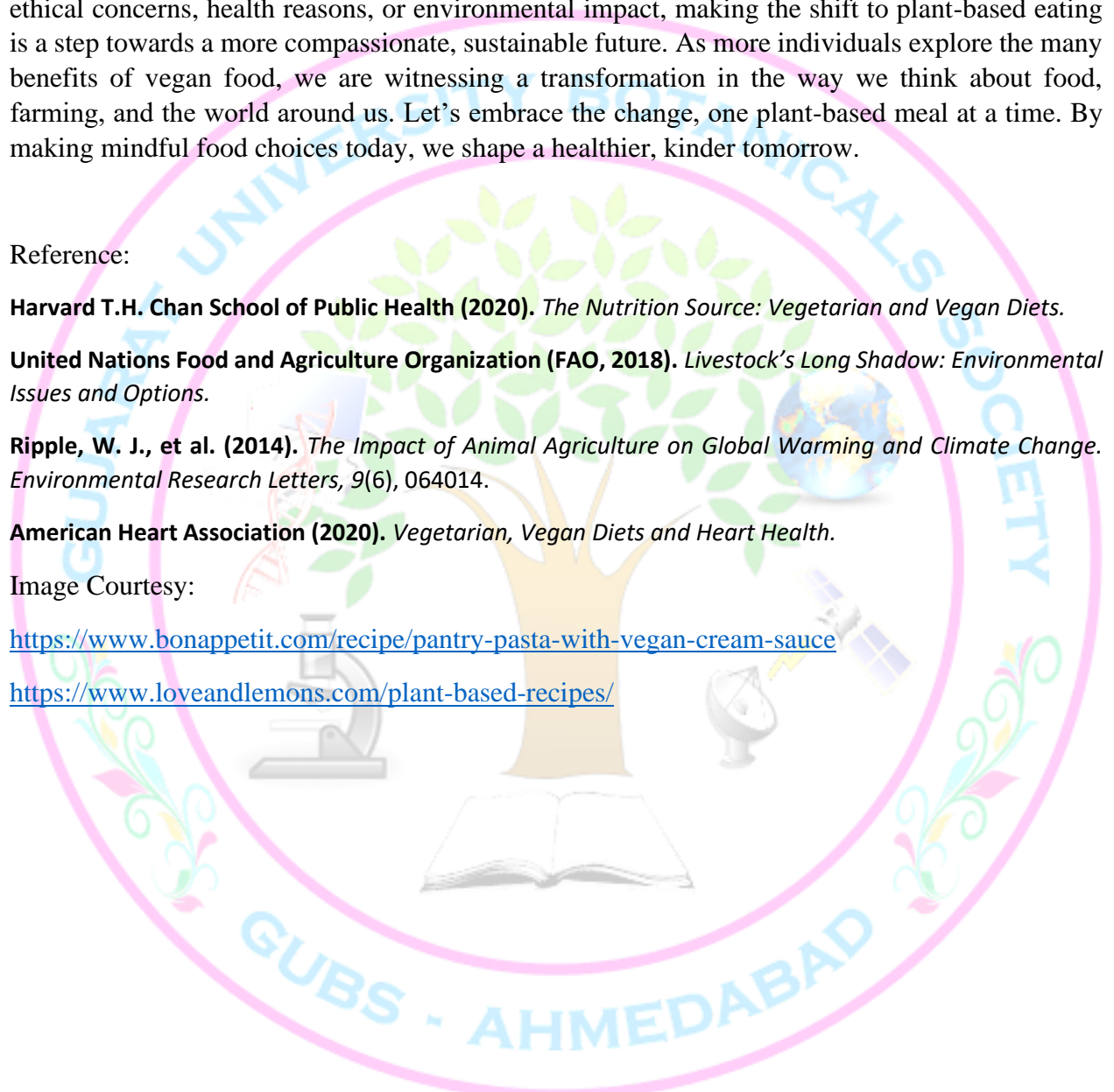
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Image Courtesy:

<https://www.bonappetit.com/recipe/pantry-pasta-with-vegan-cream-sauce>

<https://www.loveandlemons.com/plant-based-recipes/>



HUMAN AND VEGAN FOOD

Prof. Dr. Himanshu Pandya

Humans have increasingly embraced vegan food for its numerous health, environmental, and ethical benefits. Research shows that plant-based diets can lower the risk of chronic diseases such as heart disease, diabetes, and certain cancers, while providing essential nutrients from fruits, vegetables, legumes, and whole grains (Le & Sabaté, 2014). Additionally, the environmental impact of veganism is significant, as animal agriculture contributes to deforestation, greenhouse gas emissions, and excessive water use, whereas plant-based food production has a smaller ecological footprint (Ripple et al., 2014). Ethically, veganism aligns with a growing awareness of animal welfare, reducing the demand for industries that involve animal exploitation and suffering (PETA, 2020). As more people adopt vegan diets, these benefits continue to shape the future of food consumption, encouraging a more sustainable, compassionate, and health-conscious society.



Image Courtesy:

<https://www.transparentlabs.com/blogs/all/plant-based-diet-vs-vegan-bodybuilding-diet-plan>

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VEGAN FOOD : WHOLE GRAINS FLOUR FOOD

Prof. Dr. Bharat Maitreya



Vegans avoid eating animal foods for environmental, ethical, or health reasons. Nutrient-rich plant-based foods, like tofu, whole grains, and legumes provide essential nutrients in a vegan diet. While a diet based exclusively on plants may have some health benefits, it may put some people at a higher risk of nutrient deficiencies. This is especially true when vegan diets are not well planned. For vegans who want to stay healthy, consuming a nutrient-rich diet with whole and fortified foods is very important.

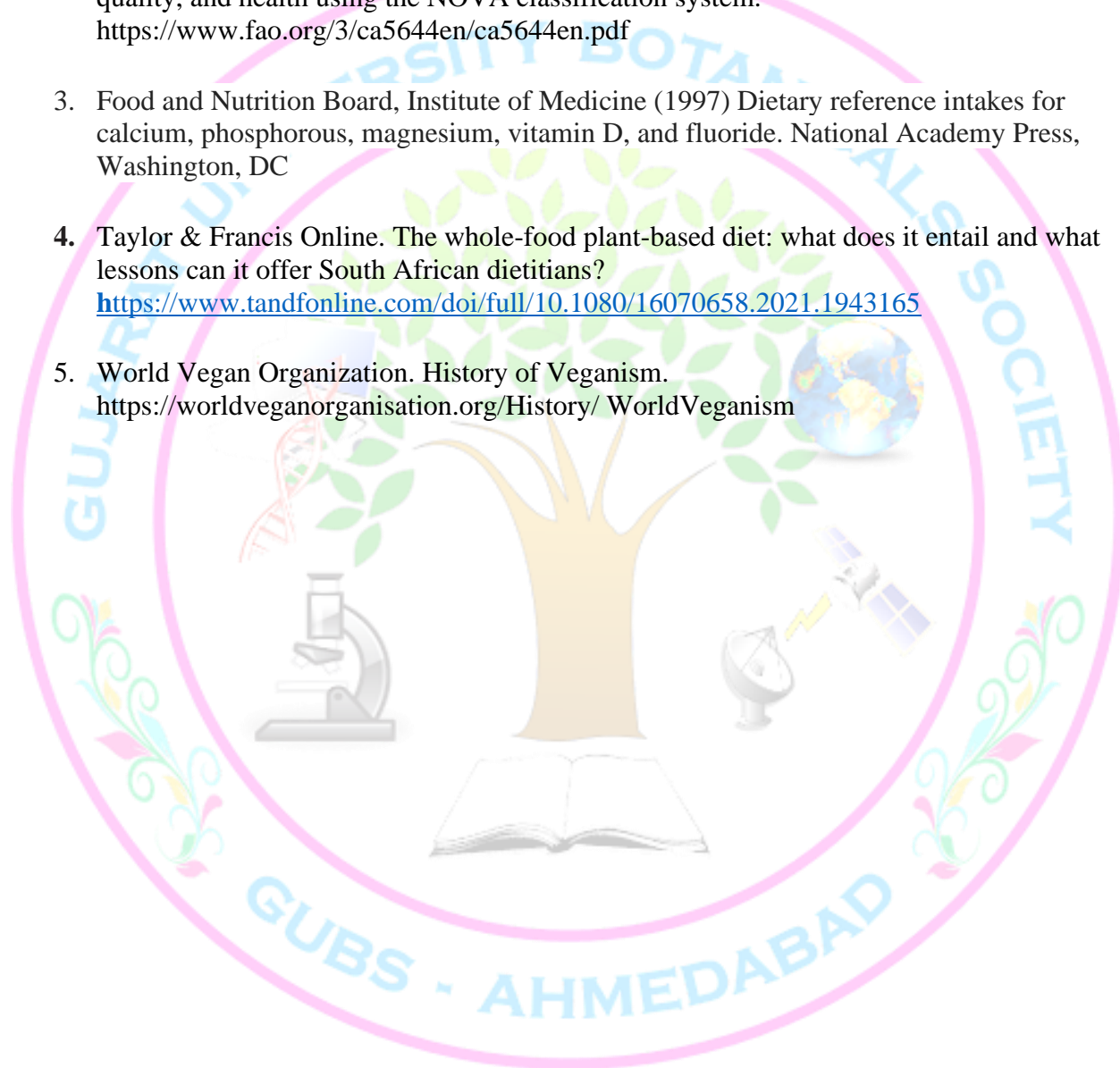
Whole grains, cereals, and pseudocereals

Whole grains, cereals, and pseudocereals are good sources of complex carbohydrates, fiber, and iron, as well as B vitamins, magnesium, phosphorus, zinc, and selenium. However, some varieties are more nutritious than others, especially when it comes to protein.

Jowar Bajra Garlic Roti recipe Prep time: 10 minutes Cooking time: 15 minutes Total time: 25 minutes Makes 6 rotis **Ingredients:** 1/2 cup sorghum flour, 1/2 cup millet flour, 1 tsp garlic paste, 1/2 tsp green chili paste, 1/2 tbsp sesame seeds, Salt, to taste. **Method:** 1. In a deep bowl, combine all the ingredients and add the required lukewarm water to make a soft dough. 2. Divide the dough into 6 equal parts. 3. Roll each part into a 150 mm (6”) round using some dry sorghum flour. 4. Heat a non-stick pan and place the roti on it and cook for a few seconds. 5. Then flip it over and cook the other side for a few more seconds. 6. Hold the roti thus prepared with a tong and cook it over an open flame until both sides of the roti turn golden brown. Hold the prepared roti with a tong and fry it on open flame till both sides of the roti turn golden brown. and Spread ghee on the hot roti and serve immediately.

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VEGAN FOOD PRACTICES

Prof. Dr. Nainesh Modi

Vegan food habits focus on eliminating animal products from one's diet and lifestyle, motivated by ethical, environmental, and health concerns. Veganism, which emphasizes plant-based diets such as fruits, vegetables, legumes, and grains, has benefits such as enhanced heart health, less environmental impact, and a compassionate way of living. It addresses urgent challenges such as greenhouse gas emissions, deforestation, and water scarcity, while also providing novel plant-based alternatives to traditional animal-based diets. However, issues like accessibility, cultural opposition, and disinformation remain, necessitating education, policy assistance, and cultural adaptation. Veganism, as a sustainable, ethical, and nutritious lifestyle, has the ability to revolutionize food systems and the environment.

Vegetarianism, veganism, and the adoption of a plant-based diet are all emerging trends in Western countries. Although plant-based diets are frequently confused with vegetarian diets, they consist of distinct eating habits. The term "plant-based" is broader because it refers to the consumption of foods largely derived from plants (fruit, vegetables, nuts, oil, whole grains, and legumes), but it can also contain limited amounts of animal products such as milk, eggs, meat, and fish. Those who adopt a plant-based diet may choose to exchange animal items for vegetable ones, with no permanent restriction on animal goods. In addition, some authors believe that the Mediterranean Diet is primarily plant-based. Commonly claimed reasons to adopt a plant-based diet include concerns for health, the environment, animal welfare, rejection of meat, and religious beliefs. According to various reports, ruminant meat has a bigger environmental impact than cereals, fruits, and vegetables. Young individuals and women are more likely to adopt plant-based diets compared to other demographics.

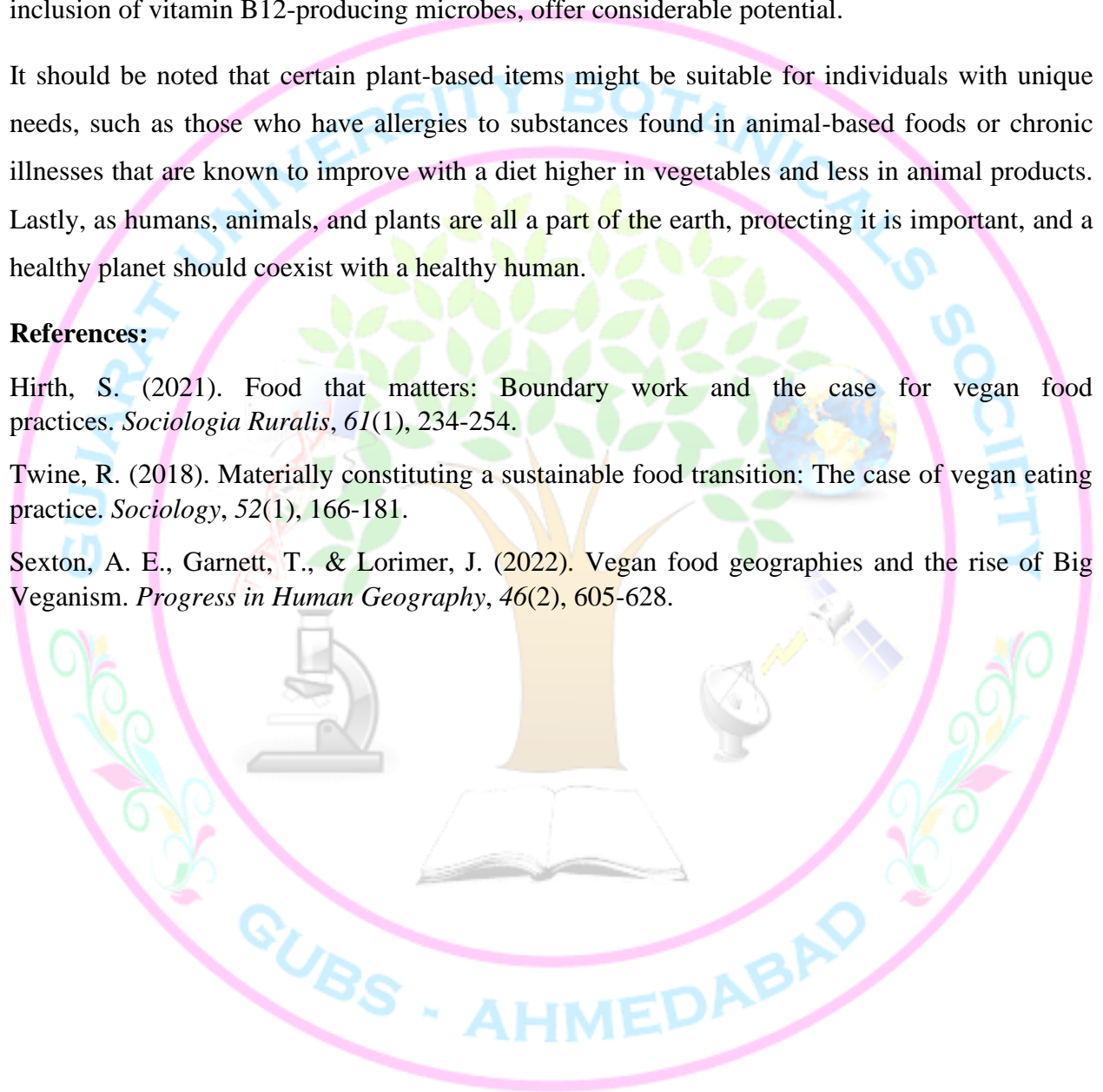
According to many vegan societies and consulting firms, the number of people adopting plant-based diets is rapidly increasing. Vegans in America surged by 500%, from almost four million in 2014 to 19.6 million in 2017. According to a 2018 nationwide study in the United States, two-thirds of participants cut back on meat eating in the previous three years. In the United Kingdom, 21% of the population is vegetarian and eats animal products on occasion, with one in every eight declaring themselves to be vegetarian or vegan. Consumers worldwide are reducing their consumption of animal-derived foods for various reasons, leading to a growing market for plant-

based alternatives. Customers need products that are sustainable, palatable, safe and nutritional, available and inexpensive. Planning for new sources and ingredients requires careful consideration of numerous factors. Cultured meat is a promising replacement to meat, but requires further improvement. Other biotechnology methods, such as microalgae culture, fermentation, and the inclusion of vitamin B12-producing microbes, offer considerable potential.

It should be noted that certain plant-based items might be suitable for individuals with unique needs, such as those who have allergies to substances found in animal-based foods or chronic illnesses that are known to improve with a diet higher in vegetables and less in animal products. Lastly, as humans, animals, and plants are all a part of the earth, protecting it is important, and a healthy planet should coexist with a healthy human.

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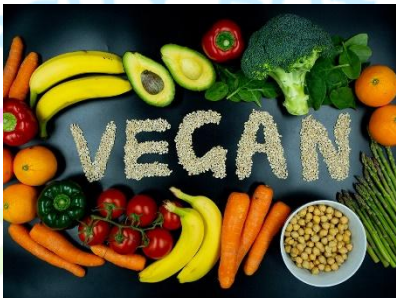
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VEGAN FOOD – NUTRITIONAL IMPACT ON CHILD GROWTH

Hitesh Kumarkhaniya

Food is our primary requirement for the healthy life. Different types of food provide the different nutritional component. Our diet should be diverse because we need all the types of nutrients such vitamins, minerals, protein, carbohydrate and lipid also. This short article focused on vegan food for child health, growth and development. Vegan diet excluded product arising from animal such as milk, meat, fish, chicken, egg and honey.



Plant produces the different types of compounds which is helpful for making building blocks of cell known as biomolecules. Leafy vegetable provides the sufficient calcium and iron for child bone growth. Flexed seed provide the omega 3 fatty acid. Well planed vegan diet sufficient for child growth. Vegan food provides the cobalamin, folate, Vitamin D, iron and calcium. Where zinc, iodine and selenium needed for vegan diet child. Many reviews article available which are focused on vegan food benefits and deficiency in child growth.

Vegan children lighter but are not underweight. This could be caused by vegan diet. Many studies show the vegan diet associated with bone mass density (BMD). Milk stimulates the IGF-1 axis which is responsible for longitudinal growth in children. Lactose intolerant children who avoid milk, no difference in bone mass but fracture ratio 1- 4% more in these children.

Recently discover the plant-based ferritin which is highly present in legumes contain significant amount of iron. Vegan diet has more vitamin C than other food. Vegan food also works as medicine in human body. Plant has many active bio-constitute which is play vital role in different physiological process of human body.

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VEGAN FOOD: NUTRITIONALLY RICH AND SUSTAINABLE FOOD

KM Bhavna Singh

Vegan foods are rich in nutrients, vitamins, fat, fiber and ions. Vegan food more easily available than animal products. Beyond the nutritional benefits, vegan diet is also a powerful ethical choice. The animal agriculture industry is responsible for significant animal suffering, environmental degradation, and human rights abuses. By choosing a vegan diet, individuals can help reduce the demand for animal products and contribute to a more compassionate and just world [1].

The environmental impact of animal agriculture is also a major concern. Livestock production is a significant contributor to greenhouse gas emissions, deforestation, water pollution, and biodiversity loss. By reducing their consumption of animal products, vegans can help mitigate these negative effects and promote a more sustainable planet. Additionally, vegan diets often have a lower carbon footprint than diets that include meat and dairy, as plant-based agriculture generally requires fewer resources and produces less waste [2,3].



In conclusion, vegan food offers numerous benefits, from improved health to ethical considerations and environmental sustainability. By embracing a vegan lifestyle, individuals can make a positive impact on their own well-being, the welfare of animals, and the health of the planet. As the popularity of veganism continues to grow, it is clear that this dietary and lifestyle choice is becoming an increasingly viable and desirable option for many people [4].

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EMBRACING A PLANT-BASED JOURNEY

Ms. Minal Patel

Veganism, a dietary and lifestyle choice that excludes all animal products, has gained significant popularity in recent years. This growing trend is driven by various motivations, including ethical concerns about animal welfare, environmental sustainability, and health benefits. One of the primary reasons people adopt a vegan diet is their ethical opposition to animal exploitation.¹ The meat and dairy industries often involve inhumane practices, such as intensive farming and slaughter.² By choosing a vegan lifestyle, individuals can contribute to reducing the demand for these products and promoting more compassionate treatment of animals.

According to a 2023 analysis, compared to a diet comprising 100 grams (approximately 3.5 ounces) or more of meat per day, a vegan diet produced 75% fewer greenhouse gas emissions overall. Additionally, a vegan diet used 50% less water and land. Given that large tracts of land must be destroyed in order to accommodate grazing animals and the growth of feed crops, animal agriculture is one of the main causes of habitat degradation and deforestation. Approximately 80% of the Amazon's deforested area is used for cattle farms.

Vegan diets typically emphasize whole, plant-based foods, including fruits, vegetables, grains, legumes, and nuts, which are rich in fiber, vitamins, minerals, and antioxidants. Embracing a vegan lifestyle often involves overcoming challenges related to social norms, limited food choices, and misconceptions about the nutritional adequacy of plant-based diets. However, with proper planning and education, it is possible to maintain a healthy and fulfilling vegan lifestyle.

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NOVEMBER 2023 FOR VEGAN VITALITY

Ms. Bhavyaben Radadiya

On November 1st of each year, the world celebrates World Vegan Day. The Vegan Society's then-Chair Louise Wallis created the day in 1994 to mark the 50th anniversary of the organization's establishment.

According to Louise Wallis in a 2011 interview with Animal Rights Zone, she chose November 1st because she liked the idea of it coinciding with Samhain/Halloween and the Day of the Dead, traditional times for feasting and celebration, both apt and auspicious. Wallis said she knew the Vegan Society was founded in November 1944 but wasn't sure exactly when it was. In the advocacy and promotion of a vegan diet and veganism overall, World Vegan Day is very important.

The day promotes veganism by emphasizing ethical, environmental, and health advantages of this eating option. All types of animal abuse for food, products, or any other reason are prohibited by the vegan lifestyle. The fundamental "rule" of veganism is to follow a plant-based diet, while there are various variations on this lifestyle. Going further just staying away from meat, vegans also avoid dairy, eggs, fish, honey, and fur and leather items.

Recently, the vegan diet has become more and more popular around the world as a result of concerns about environmental sustainability, animal rights and welfare, and health difficulties. Plant foods are rich sources of minerals, vitamins, calcium, magnesium, potassium, and other nutrients. They also contain bioactive substances including dietary fiber, carotenoids, and polyphenols (Luszczki et al., 2023).

According to a study published in the Nutrition Journal titled "Vegetarian Diets Are Associated with Healthy Mood States," "when compared to fish and meat eaters, vegetarians reported less negative emotion than omnivores and had lower scores on depression tests and mood profiles" (Salaman, 2023). A vegan diet may help you reduce extra weight, reduce your chance of developing diabetes, enhance kidney function, and lower your blood sugar levels, among other advantages.

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VEGAN FOOD: A HISTORY AND GLOBAL SINARIO

Mr. Ganapat Bavaliya

To mark the advancement of the philosophy, World Vegan Month was founded in 1994. In November 1944, 50 years earlier, The Vegan Society was founded in the UK, and this was also commemorated with it. It was decided to celebrate the creatures that had already died for the needless purpose of sustaining human existence, by choosing a day that coincided with Halloween and the Day of the Dead, in light of the large number of animals that had given their lives for food. Plant-based diets are becoming more and more popular due to their many health and environmental benefits as well as their social and economic advantages.

Plant-based diets come in a variety of forms. They include flexitarian diets, which allow for occasional consumption of meat and fish, pescetarian diet that avoid meat products, Vegetarian diets, which avoid meat products entirely, and vegan diets, which avoid all animal products (a type of vegetarian diet) (Dittman et al., 2023).

Modern agriculture and food production produce 17.3 billion metric tons of carbon dioxide annually, of which 57% comes from the production of food derived from animals. These statistics highlight the need for a holistic food system that prioritizes protecting the environment, reducing non-communicable diseases, providing food safety, guaranteeing nutritional sufficiency, and promoting techniques for producing food sustainably.

Diets centered on plants are thought to be the answer to all of these issues, and with celebrities' recent support, plant-based eating has become overly popular on social media. Given their lower resource requirements and lack of environmental impact, plant-based diets undoubtedly have a bright future ahead of them. Furthermore, plant-based diets have been shown to prevent and manage non-communicable diseases (Suri and Ray, 2023).

The British Dietetic Association (BDA) and other international institutions increasingly recognize that well-planned vegan diets can be beneficial for enhancing health and slowing the advancement of chronic disease states. They also provide a generally adequate supply of nutrients (Eveleigh et al., 2023).

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VEGAN FOOD AND THEIR SOURCES

Ms. Aanal Maitreya

A vegan diet is entirely based on plants, such as; vegetables, fruits, grains, nuts and dry-fruits and foods that are made from plants. Vegetarian diets have been more popular in recent times. These diets are higher in fiber, folic acid, vitamin C & E, potassium, magnesium, and other phytochemicals, as well as having a larger proportion of unsaturated fat, they are linked to numerous health benefits. Vegan diets typically have higher levels of dietary fiber and lower levels of cholesterol and saturated fat when compared to other vegetarian diets. Vegans are less likely to develop heart disease since they often have lower blood pressure, serum cholesterol, and body weight. On the other hand, the risk of some nutritional inadequacies increases if one excludes all animal products from their diet.

A balanced vegan diet plan is essential for not getting nutrient deficient, as many plant-based foods naturally and individually cannot help with getting all the required macro and micro nutrients. If one is not able to plant his diet well, he could be missing out on important nutrients like calcium, iron, vitamin B12, iodine and selenium.

Vegan sources of protein:

- Pulses, Beans, Lentils, Seeds, Tofu

Vegan source of Calcium and Vitamin D:

- Green leafy vegetables like broccoli, okra, cabbage and peas
- Soya, oats, tofu, sesame seeds, pulses,
- Dried fruits such as apricots, raisins, prunes, figs

Vegan source of Iron:

- Pulses, Dark & green vegetables like watercress, spring greens and broccoli
- Nuts and dried fruits

Vegan sources of Vitamin B12:

- Processed foods like cereals and milk fortified with Vitamin B12
- Marmite and nutritional yeast fortified with Vitamin B12

Vegan source of omega 3 fatty acid:

- Ground linseed oil, Vegetable oil, Chia seeds, Walnuts, Hemp seeds, Seaweed

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VEGAN DELIGHTS: WHERE FLAVOR MEETS SUSTAINABILITY

Mr. Mohitgiri Goswami

Veganism has gone beyond a diet and become a lifestyle for countless individuals, impacting several aspects of their lives, from meals to non-essential daily choices about clothing, cosmetics and even medicine. The lifestyle has gone mainstream to such an extent that globally November 1 is observed as World Vegan Day. One of the prime driving forces behind the popularity of veganism is its positive environmental impact. A 2018 study by the University of Oxford and Agroscope, the Swiss research institute found that switching to a vegan diet could reduce a person's carbon footprint by around 73%. The research highlighted that veganism significantly reduces land use, water consumption, and pollution, offering a means to oppose climate change along with alternative diet [1]. However, although vegan diet is regarded as the better alternative, there are some thorns around this rose as well. Apart from the predictable problem of potential for micro- and macronutrient deficits, consumers need to be conscious about a non-obvious tendency to accept the notion that all vegan animal cruelty-free food is healthy. For example, a pack of chips / fries which are fried in plant-based oil can be marketed as vegan but is it really healthy?. Thus, the question we should really ask is whether this food is environment friendly, animal-cruelty-free and likewise, good for my health or not. Given the growing interest in diets without animal products in the general population, it is crucial, now more than ever, to have a clear understanding of both the risks and benefits of such diets among clinicians, policymakers, and the public [2]. Public information and guidelines about long-term usage of Ultra-processed foods (e.g. dairy and meat substitutes) in vegetarian and vegan diets are needed, as well as information about their possible impact on health and sustainability [3]. While veganism offers several benefits, it may not be suitable for everyone due to cultural, geographical, dietary, and individual health considerations [4]. This article aims to serve as a reminder to consider the impact of our dietary and lifestyle choices on animal welfare, the environment, and our health. Whether through adopting a fully vegan way of life or simply cutting back on animal-origin product consumption, each small change can contribute to a more empathic and sustainable world.

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SUPER FOODS: ALGAE AND FUNGI AS VEGAN FOOD

Ms. Dhruva Jani

Vegan food is made up entirely of plant-based dishes which excludes animal products like dairy, eggs, honey and meat. The vegan food is made of plant-based alternatives replacing the traditional animal-based diets. Plant diversity is very diverse it includes seed, fruits and vegetables in addition to this many cryptogamic plants like algae and fungi they have grate nutritional properties and thus are gaining popularity in vegan food industries.

Algae has emerged as a versatile and sustainable food source, offering numerous health benefits and innovative alternatives to traditional animal products. Because of their binding qualities and nutritional content, some algae, such yellow *Chlorella*, have been produced into vegan egg substitutes that closely resemble the texture and composition of real eggs. Furthermore, algae are abundant providers of omega-3 fatty acids, which are generally present in fish. Fish oil supplements can be replaced by algal oil, which is made from certain kinds of algae and contains important fatty acids such as EPA (Eicosapentaenoic acid) and DHA (Docosahexaenoic acid). *Spirulina* and *Chlorella*, two popular varieties of blue-green algae, are frequently eaten as superfoods. *Spirulina* can be used to smoothies and energy bars; it is frequently sold as a powder or tablet. In a similar vein, *Chlorella*, which comes in pill and powder form, is well-known for its purifying qualities. White *Chlorella* is a non-dairy substitute for milk and other conventional dairy products in a variety of recipes.

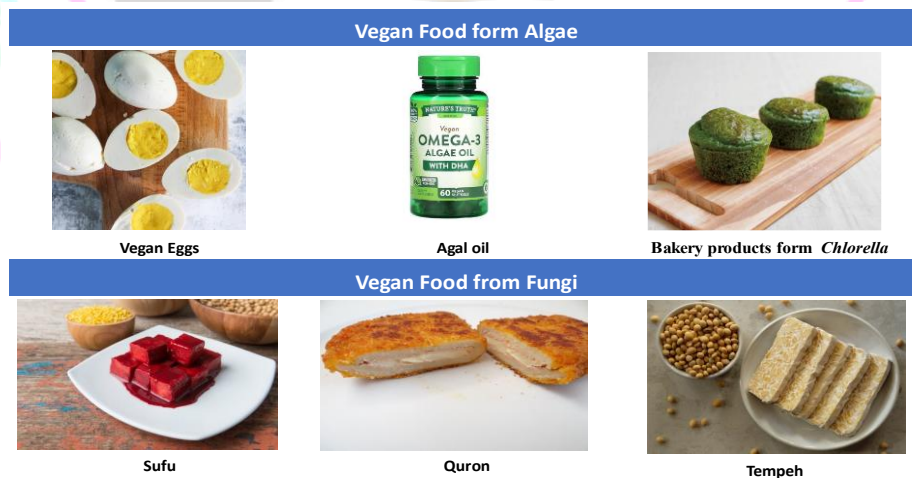
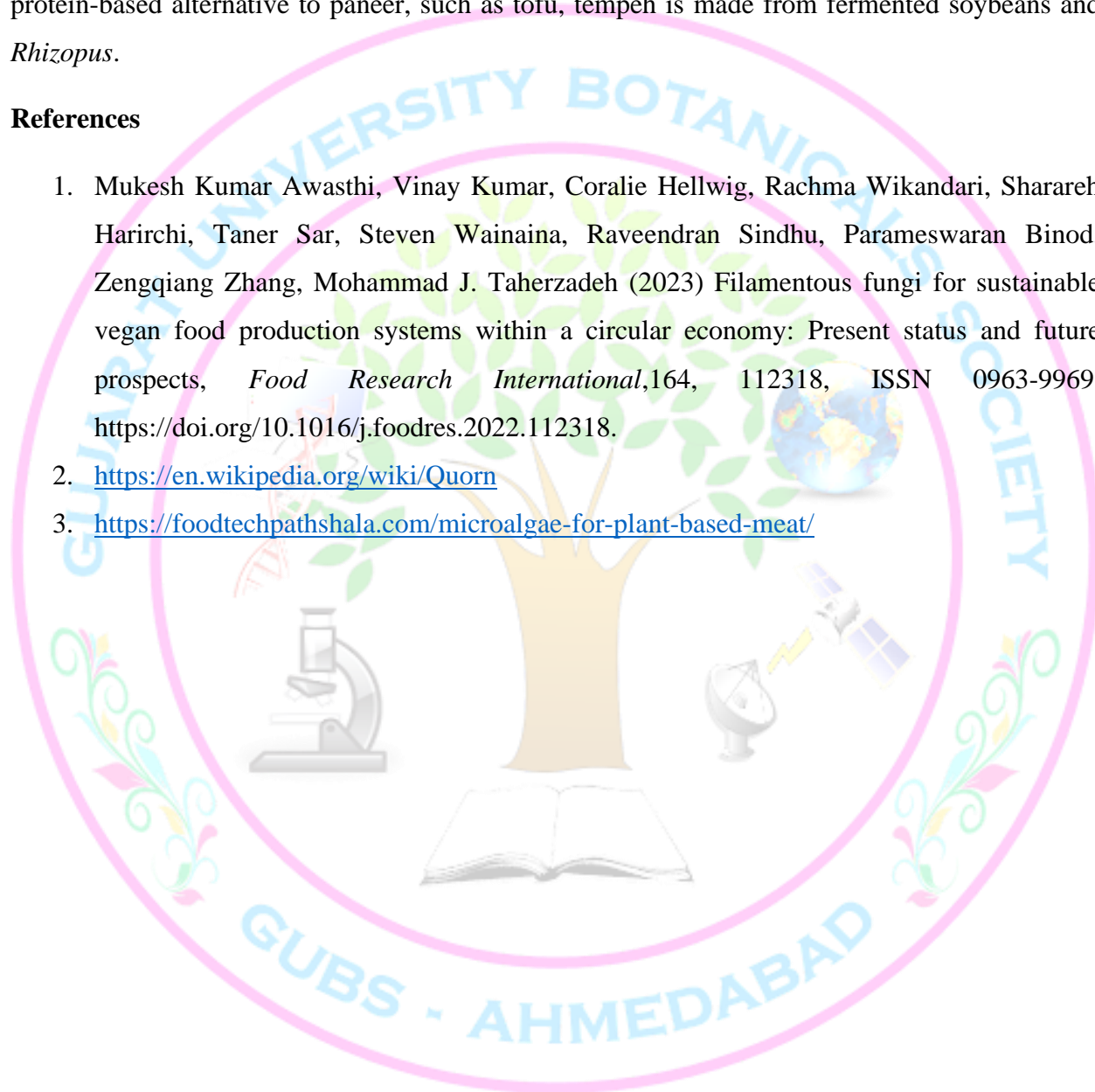


Fig: Vegan Food from Algal and Fungi

Fungi based vegan products like Quorn, a meat substitute made from fungus *Fusarium venenatum*, contains mycoprotein. In addition, it has a high nutritional value with low cholesterol and saturated fat-free. Another product is called furu, or sufu, which is a kind of Chinese cheese manufactured from soybeans when fermented by solid-state fungal fermentation of *Mucor* and *Antimucor*. A protein-based alternative to paneer, such as tofu, tempeh is made from fermented soybeans and *Rhizopus*.

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VEGAN – THE HEALTH BENEFITS OF A PLANT BASED DIET

Mr. Trupesh Revad

The rise in acceptance of vegetarian diets has led to the acceptance of veganism as a healthful and perhaps therapeutic dietary option. The term “Vegan” was initially used in 1944 by members of the Vegan community in the United Kingdom. “The practice of discontinuing with all products obtained wholly or partly from animals” is the definition of veganism. As a result, those who identify as vegans abstain from dairy, eggs, fish and meat. Diets based mostly on plants have gained popularity recently due to their good impacts on the environment and suggested health benefits.

Vegan diets have been more and more popular in western society in recent years, as the use of animal-based products continues to cause number of clinical problems and cancers in developed nations. Examine these coexisting conditions could point to other pathogenic pathways, such as eating certain kinds of diets. The activity of important dietary elements in giving health advantages to the host is responsible for the often-stated therapeutic effects of plant-based diets on humans. Micronutrients, proteins, polyphenols, dietary fiber, and unsaturated and polyunsaturated fats are examples of these components.

A carefully thought-out vegan diet that is supplemented with vitamin b12 encourages athletes to gain strength and muscle growth while maintaining good health. Patients with type 2 diabetes have demonstrated improved metabolic parameters when following a vegan diet. Vegan diet high in polyphenols also boost Bifidobacterium and lactobacillus species, which protect the cardiovascular system and have antibacterial and anti-inflammatory properties.

SOME OF THE BENEFITS OF A VEGAN DIET:

- 1** Vegans suffer less from cardiovascular diseases. They have lower cholesterol levels, lower blood pressure, and are often leaner in physical build.
- 2** A vegan diet has a variety of cancer-protective phytonutrients.
- 3** Helps to promote a healthy weight.
- 4** Vegans have a lower risk of developing type 2 diabetes.

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GLIMPSES OF ACTIVITIES OF GUJARAT UNIVERSITY BOTANICAL SOCIETY

