BEANS & GREENS

Teachers' manual

Basics of veganvegetarian nutrition





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Introduction

This teacher's manual provides assistance for the use of the magazine 'Beans and Greens - Basics of vegan-vegetarian nutrition' in workplace and classroom trainings in the kitchen and bakery.

The aim of the Culsus project, in which this workbook was developed, is to promote a dietary shift towards a sustainable nutrition by educating future chefs and other personnel of the hospitality sector on the importance of the sustainable use of vegetarian and vegan ingredients and dishes. This way, we try to meet global challenges such as climate change and food security in the important sector of out-of-home consumption.

The magazine is designed in such a way that it can be worked on independently by future professionals. However, it can also be used in school lessons or seminar settings. For this you will find a number of exemplary teaching units below. Additionally, this manual provides an overview of the respective competences, levels of difficulty, duration, solutions and much more for all topics in the magazine.

We work with the following learning levels:

- 1. Introduction (warm-up games)
- 2. Orientation/Information (easy exercises to get a first impression of the topic)
- 3. Unpacking the issue (diving deeper into the topic)
- 4. Activation (How can we act on what we have learned? How can we include the information in our work life?)
- 5. Evaluation

We look forward to your feedback - whether positive experiences or suggestions for improvement!

We wish you lots of success and fun using the magazine,

Your EPIZ-Team

Exemplary Teaching Unit I - Reasons for a Vegan-Vegetarian Diet COMPETENCES

The students analyse different dietary patterns and describe which foods are consumed in which diet. They examine the local and global impact of the consumption of animal products on the environment and climate. Students asses the changes caused by vegan-vegetarian out-of-home catering on the environment and climate. They develop the ability to recognize the significance of various nutrients within the context of dietary choices. This includes understanding which nutrients are essential for maintaining overall health and well-being. Moreover, they determine which specific nutrients require close monitoring when adopting a vegan-vegetarian diet. They apply their knowledge of vegan-vegetarian nutrition to understand and describe the advantages and disadvantages of vegan-vegetarian catering. In doing so, critical thinking and self-reflection is encouraged.

LESSON PHASE

Introduction, information, deepening, activation, evaluation

DIFFICULTY

Medium

DURATION

90 minutes

MATERIAL

Magazine class set, flipchart paper, markers, optional: vegan chocolate

CONTENTS

Learning Situation

Dear students,

As you know, we are planning to take all our animal products off the menu. This has caused a bit of unrest among our shareholders. At our next shareholder meeting, we will present our plans and it will be up to us to justify our decision. Please prepare a presentation in which we explain our decision.

Please also consider how we can respond to counter-arguments.

Thank you very much,

Your training manager

Phase/time	Teaching organisationSocialMaterialformform		Material
Introduction 5 minutes	Lecturers introduce themselves and categorise the facts in the overall context. Reflection questions at the beginning, are asked in class:	Classroom discussion	
	How interesting do you find vegan/vegetarian cooking?		
	Do you cook vegan/vegetarian food in your company?		
	Do you know any vegans?		
	Why do you think people choose this diet?		
Learning Situation 5 Minutes	Formation of 4 small groups; topics are distributed; working materials are distributed on group tables (first the pages from the magazine, then 5 to10 minutes later the posters etc. so the students focus on the workbooks first). <u>Note:</u> If not specified on the task descriptions, the tasks on the worksheets are optional, but help to create the poster. During this time, prepare vegan chocolate for refreshment.	Classroom discussion	Flipchart paper Group assignmen ts 1 - 4 Magazine Class set Vegan chocolate
Elaboration 30 minutes What does veganism mean and who is the target group?	Group 1 <u>Assignment:</u> Please focus on which diets exist and what the specific reasons for them might be. Please fill in the chart and look for arguments in favour of a plant-based diet. Also research possible celebrity cooperation partners who could advertise for us. Document the results on a flipchart.	Small group work	Group assignmen t 1 Magazine, p. 4-6, 28 (Diet- Check, Tracing the meat, Vegan VIPs) Mobile
			Mobile phones

			with internet
Elaboration 30 minutes Ecological reasons for a vegan- vegetarian diet	Assignment: Please focus on the negative effects that meat consumption has on the environment. Prepare arguments as to why a plant- based diet is more sustainable. Document the results on a flipchart.	Small group work	Group assignmen t 2 Magazine, p. 7-9 (Environm ental impacts of animal products) Phones with Internet
Elaboration 30 minutes Arguments and counter- arguments against meat consumption	Group 3 Assignment: Please focus on misconceptions about a vegan- vegetarian diet and the negative effects of meat consumption. Listen to the interview excerpt and explain why other restaurants do not serve animal products. Document the results on a flipchart.	Small group work	Group assignmen t 3 Magazine, p. 14-15, 19, 29 (Comic, Mythbuste r, Pro/Con vegan- vegetarian) Phones with Internet
Elaboration 30 minutes Nutrient requirements	Group 4 Assignment: Please focus on how the nutritional requirements of humans can be met with plant-based foods. Firstly, explain which nutrients humans need. Secondly, explain which nutrients require particular attention and how a healthy diet can be ensured. Document the results on a flipchart.	Small group work	Group assignmen t 4 Magazine, p. 20 - 24 (Anouk's journey through the world

			of nutrients) Phones with Internet
Securing results - Part I 20 minutes	Groups present their results. Each group may ask one (critical) question. 5 min per group	Classroom discussion	Flipcharts
Completing the learning situation			
Securing results - Part II 20 minutes	You are the shareholders and can decide whether the restaurant should adopt the purely plant-based menu. How do you decide after the presentations?	Small groups + classroom discussion	
	First prepare a closing statement in groups (5 min.), then present and announce the decision.		
Exit 10 minutes	Conclusion and feedback	Classroom discussion	

Group 1 Assignment

Dear Students,

As you know, we are planning to take all our animal products off the menu. This has caused a bit of unrest among our shareholders. At the next shareholder meeting, we will present our plans and it is up to us to justify our decision. Let's prepare a presentation in which we explain our decision. We must also think about how to respond to counter-arguments.

Please focus on what types of diets there are and what the specific reasons for them might be.

- 1. Read these pages to complete the chart and look for arguments in favour of a plant-based diet.
- 2. Research possible celebrity cooperation partners who could advertise for us.
- 3. Document your results on a poster and prepare a maximum 5-minute presentation for the shareholders' meeting.

Thank you very much,

Your training manager

Group 2 Assignment

Dear Students,

As you know, we are planning to take all our animal products off the menu. This has caused a bit of unrest among our shareholders. At the next shareholder meeting, we will present our plans and it is up to us to justify our decision. Please prepare a presentation in which we explain our decision. Also think about how to respond to counter-arguments.

Please focus on the negative impacts meat consumption has on the environment.

- 1. Read these pages and prepare arguments why a plant-based diet is more sustainable.
- 2. Explain why meat consumption is bad for the climate, soil and water.
- 3. Document your results on a poster and prepare a maximum 5-minute presentation for the shareholders' meeting.

Thank you very much,

Your training manager

Group 3 Assignment

Dear Students,

As you know, we are planning to take all our animal products off the menu. This has caused a bit of unrest among our shareholders. At the next shareholder meeting, we will present our plans and it is up to us to justify our decision. Please prepare a presentation in which we explain our decision. Also think about how to respond to counter-arguments.

Please focus on common misconceptions about a vegan-vegetarian diet.

- 1. Read these pages and explain the negative effects of meat consumption.
- 2. Listen to the interview excerpt and explain why other restaurants do not serve animal products.
- 3. Document your results on a poster and prepare a maximum 5-minute presentation for the shareholders' meeting.

Thank you very much,

Your training manager

Group 4 Assignment

Dear Student,

As you know, we are planning to take all our animal products off the menu. This has caused a bit of unrest among our shareholders. At the next shareholder meeting, we will present our plans and it is up to us to justify our decision. Please prepare a presentation in which we explain our decision. Also think about how to respond to counter-arguments.

Please focus on how the nutritional requirements of humans can be met with plant-based foods.

- 1. Read these pages and first explain which nutrients humans need.
- 2. Explain which nutrients require particular attention and how a balanced menu can be ensured.
- 3. Document your results on a poster and prepare a maximum 5-minute presentation for the shareholders' meeting.

Thank you very much,

Your training manager

Exemplary Teaching Unit II - Milk Alternatives

COMPETENCES

Students recognise how nutrition can be healthy for both people and the planet. They apply the nutrition plan of the Planetary Health Diet and develop recipes based on it. Students recognise the properties and characteristics of different milk alternatives. They assess the use of milk alternatives in different recipes and know when to use which alternative.

LESSON PHASE

Introduction, information, deepening, activation, evaluation

DIFFICULTY

Medium

DURATION

90 minutes

MATERIAL

Magazine class set, flipchart paper, markers, laptop + projector (or smartboard) optional: vegan chocolate

CONTENT

The students learn about the Planetary Health Diet (PHD). In small groups, they are assigned a milk alternative and asked to create a themed menu with it. This should consist of a main course and either a starter or dessert prepared with this milk alternative. The dishes should comply with the PHD guidelines.

Phase/ti me	Teaching organisation	Social form	Material
Introducti on 10 minutes	Lecturers introduce themselves and categorise the facts in the overall context. Short survey/quiz to get started. How interesting do you find vegan/vegetarian cooking? Do you cook vegan/vegetarian food in your company?	Lesson discuss ion Quiz	Workbook class set

	Can you produce milk alternatives from 2		
	Can you produce milk alternatives from?		
	A Hemp (yes)		
	B Walnut (possible but you can't buy it)		
	C Dandelion (No)		
	D Sawdust (No)		
Learning Situation 15 minutes	significant impact on our own health, but also on the health of our planet. Researchers havew.youtub com/wat		Laptop +
	The whole class watches the video on the Planetary Health Diet + clarify questions.		
Group work	Form 5 small groups, each of which is randomly assigned a milk alternative.	Small group	Magazine, p.
30 minutes	The groups read the factsheet of their milk alternative.	work	(Fact Sheets, PHD)
	In the groups, a vegan themed menu is developed, with dishes (main course + starter or dessert prepared with the dairy alternative		Phones with Internet
	they were assigned) that follow the Planetary Health Diet. The groups choose if a starter or		Flipcharts
	dessert is more suitable for on their milk alternative.		Cookbooks
	They should explain why the selected milk alternative is suitable and how a sustainable realisation of the dishes can be ensured (raw materials, preparation method).		Vegan chocolate
	The results are documented on flipcharts.		
	Meanwhile, distribute vegan chocolate.		
Securing results	Groups present their menus. Others can ask questions.	Lesson discuss ion	

15 minutes			
Discussion	The question is discussed in class:	Classro	
10 minutes	What challenges do you see with the integration of dairy alternatives in restaurant kitchens, and what benefits can they offer?	om discuss ion	
Exit	Conclusion and feedback	classro	
5 minutes		om	
Jinnaces		discuss	
		ion	

Exemplary Teaching Unit III – Vegan-Vegetarian Advertising

COMPETENCES

The students analyse different dietary patterns and describe which foods are consumed in which diet. They examine the local and global impact of the consumption of animal products on the environment and climate. Students asses the changes caused by vegan-vegetarian out-of-home catering on the environment and climate. They develop the ability to recognize the significance of various nutrients within the context of dietary choices. This includes understanding which nutrients are essential for maintaining overall health and well-being. Moreover, they determine which specific nutrients require close monitoring when adopting a vegan-vegetarian diet. They apply their knowledge to design advertising material for vegan-vegetarian catering and foster their skills in corporate communication.

LESSON PHASE

Introduction, information, deepening, activation, evaluation

DIFFICULTY

Medium

DURATION

180 minutes

MATERIAL

Magazine class set, flipchart paper, markers, laptop + beamer, phones or cameras optional: vegan chocolate

Phase/time	Teaching organisation	Social form	Material		
Introduction 5 minutes	Lecturers introduce themselves and categorise the facts in the overall context. Reflection questions at the beginning,	Classro om discuss ion			
	are asked in class: How interesting do you find vegan/vegetarian cooking?				
	Do you cook vegan/vegetarian food in your company?				
	Do you know any vegans?				
	Why do you think people choose this diet?				
Learning Situation	Formation of 4 small groups; topics are distributed; working materials are	Classro om	Flipchart paper		
5 Minutes	distributed on group tables (first the pages from the magazine, then 5 to 10 minutes later the posters etc. so the students focus on the workbooks first).	discuss ion		Group assignments 1 - 4	
	<u>Note:</u> If not specified on the task descriptions, the tasks on the		Magazine Class set		
	worksheets are optional, but help to create the poster.	Vegan chocolate			
	During this time, prepare vegan chocolate for refreshment.				
Elaboration 30 minutes	Group 1 Assignment: Please focus on which	Small Group group assignment 1		group	•
What does veganism	diets exist and what the specific Magazi	Magazine, p. 4-6, 28			
mean and who is the target group?	in the chart and look for arguments in favour of a plant-based diet. Also research possible celebrity cooperation partners who could advertise for us.	Tracing the meat, Vega	(Diet-Check, Tracing the meat, Vegan VIPs)		
	Document the results on a flipchart.		Mobile phones with internet		

Elaboration 30 minutes Ecological reasons for a vegan- vegetarian diet	Assignment: Please focus on the negative effects that meat consumption has on the environment. Prepare arguments as to why a plant- based diet is more sustainable. Document the results on a flipchart.	Small group work	Group assignment 2 Magazine, p. 7-9 (Environmenta l impacts of meat consumption) Phones with Internet
Elaboration 30 minutes Arguments and counter- arguments against meat consumption	Group 3 Assignment: Please focus on misconceptions about a vegan- vegetarian diet and the negative effects of meat consumption. Listen to the interview excerpt and explain why other restaurants do not serve animal products. Document the results on a flipchart.	Small group work	Group assignment 3 Magazine, p. 14-15, 19, 29 (Comic, Mythbuster, Pro/Con vegan- vegetarian) Phones with Internet
Elaboration 30 minutes Nutrient requirements	Group 4 Assignment: Please focus on how the nutritional requirements of humans can be met with plant-based foods. Firstly, explain which nutrients humans need. Explain which nutrients require particular attention and how a healthy diet can be ensured. Document the results on a flipchart.	Small group work	Group assignment 4 Magazine, p. 20-24 (Anouk's journey through the world of nutrients) Phones with Internet
Securing results Part I 20 minutes Completing the learning situation	Groups present their results. Each group may ask one (critical) question. 5 min. per group	Classro om discuss ion	Flipcharts

Securing results - Part II 20 minutes	You are the shareholders and can decide whether the restaurant should adopt the purely plant-based menu. How do you decide after the presentations? First prepare a closing statement in groups (5 min.), then present and announce the decision.	Small groups + classro om discuss ion	
Know the labels 10 minutes	Introduce and discuss vegan-vegetarian labelling. Show labels on chocolate.	Classro om discuss ion	Magazine page (label) Vegan chocolate
Vegan advertising 50 minutes	In new small groups, ideally with one person from each of the previous groups, the students create a video or advert about the new vegan and vegetarian dishes. In doing so, they should incorporate the knowledge they have previously acquired.	Small group work	Assignment 2 Phones or Camera
Present videos/adver tisements	Students present their advertising products	Classro om discuss ion	
Exit 10 Minutes	Conclusion and feedback	Classro om discuss ion	

Assignment 2

Your company wants to become more sustainable and is therefore adding more vegan and vegetarian dishes to the menu: Dishes that were previously served with meat can now also be ordered in meat-free versions. Your boss asks you to create a video (1-1.30 minutes) for your company's social media channels in which you explain to followers why your company has decided to offer more vegan and vegetarian options, how the dishes taste and why they are more sustainable.

Alternative:

Design a newspaper advert promoting your company's choices for sustainability and new vegan and vegetarian dishes.

Types of Diets and Reasons for Different Diets COMPETENCES

The students analyse different dietary patterns and describe which foods are consumed in which diet. They name and elaborate arguments and motivations for different diets.

LESSON PHASE

Introduction

DIFFICULTY

Simple

DURATION

30 Minutes

MATERIAL

Magazine, page

CONTENT

The Students complete the chart with the products that are consumed in the respective diets. In a second step, they consider other products that are still missing. They should choose products that they have to deal with in their everyday work.

They then look for possible reasons for eating according to the respective dietary patterns. The diagram shows how many people eat according to the respective diets.

SOLUTION [1]



Diet	Characteristics	Reasons and Arguments (examples)
Omnivore	Someone that consumes both animal and plant-based foods.	 Nutritional Variety: Omnivores have access to a wide range of nutrients found in both plant-based and animal-derived foods. Cultural and Culinary Diversity: Embracing an omnivorous diet allows individuals to appreciate and enjoy a wide array of traditional cuisines and culinary experiences. Flexibility and Convenience: Being an omnivore offers practicality and flexibility in various social settings, making it easier to find food options.
Pescetarian	Someone who avoids meat but includes fish and seafood in their diet along with plant- based foods.	 Health Benefits of Omega-3 Fatty Acids: Including fish and seafood in the diet provides valuable omega-3 fatty acids. Environmental Sustainability: Fish from sustainable fisheries can be less harmful to the environment than a meat-based diet. Ethical Considerations: Some people choose not to eat meat from land animals for ethical reasons, because they are against industrialised animal farming but do not want to follow a completely vegetarian or vegan diet.
Vegetarian	A person who does not eat meat, fish or seafood but consumes other animal products.	 Health: a well-planned vegetarian diet can lower the risk of various health issues like heart disease, hypertension, certain cancers, and type 2 diabetes. Ethical and Animal Welfare Concerns: Many vegetarians abstain from consuming meat due to ethical reasons, objecting to the killing of animals for food production. Religious Considerations: In some religions eating meat, or certain kinds of meat, is forbidden.
Vegan	Someone who refrains from consuming all animal products, including meat, dairy, eggs, and often extends this	 Compassion for Animals: Vegans avoid all animal products to minimize animal exploitation and cruelty in the food industry. Environmental Sustainability: Veganism is associated with reduced environmental impact, as plant-based agriculture typically requires fewer resources and

	avoidance to other lifestyle aspects.	 generates fewer greenhouse gas emissions compared to animal agriculture. 3. Potential Health Benefits: a well-planned vegan diet rich in fruits, vegetables, nuts, and seeds can offer various health benefits, including lower risks of heart disease, certain cancers, and hypertension.
Flexitarian	Flexitarianism is a dietary approach that predominantly emphasizes plant-based foods while allowing occasional consumption of meat or other animal products.	 Reduced Meat Consumption: The main idea is to reduce overall meat consumption rather than eliminating it completely, promoting health and environmental benefits associated with a plant-based diet while still incorporating some animal products. Personalized Approach: Flexitarianism offers flexibility, allowing individuals to tailor their dietary choices based on personal preferences, health needs, ethical considerations, and lifestyle factors. Health Benefits: Flexitarians often choose this approach for health reasons, aiming to reap the benefits associated with a plant- focused diet, while still enjoying occasional meat or animal products.

Tracing the Meat and Environmental Impacts of Animal Products **COMPETENCES**

Students recognise meat consumption patterns around the world and evaluate their own consumption. They examine the local and global impact of the consumption of animal products on the environment and climate. Students asses the changes caused by vegan-vegetarian out-of-home catering on the environment and climate.

LESSON PHASE

Information, deepening

DIFFICULTY

Intermediate

DURATION

45 Minutes

MATERIAL

Workbook, internet-capable devices

CONTENT

The students read the texts and study the graphics. In the first part, they assess their own meat consumption and compare it with global consumption. They then analyse the graphs on the environmental impact of food production. They write the results in the form of an email to their own colleagues, for which they then research further sources.

The production of animal-based foods has a really big impact on the environment, and your company recognises this and therefore wants to remove meat from its menu. As the situation is so complex, your boss asks you to write an email to all employees explaining the negative environmental impact of meat consumption and the positive effects of switching to vegan-vegetarian foods. Describe what you have learnt from the graphics and research further aspects yourself.

Alternatively, small groups can also deal more specifically with the topics of CO² equivalents, soil and water. The students then create their own overviews of the impact of the consumption of animal products on their respective topic. For this purpose, sources other than the illustrations should be consulted.

Organic Versus Conventional – Who Will win the Battle? **COMPETENCES**

The students evaluate the advantages and disadvantages of organic and conventional farming. They reflect on these and evaluate which they find better.

LESSON PHASE

Information, activation

DIFFICULTY

Intermediate

DURATION

30 minutes

MATERIAL

Workbook, digital device with internet

CONTENT

The students watch the two short films on YouTube that compare organic and conventional farming. At the end, they vote for who wins the battle.

SOLUTION

Examples:

Organic farming:

- Natural soil fertility is preserved
- Protection of groundwater
- Preservation of biodiversity and species diversity

Conventional agriculture:

- Higher yields on the same area
- Lower price

Check your kitchen!

COMPETENCES

The students analyse their training company according to vegan-vegetarian nutrition criteria.

LESSON PHASE

Activation

DIFFICULTY

Simple

DURATION

60 minutes

MATERIAL

Workbook, kitchen

CONTENT

The students analyse the kitchen of their training company according to the questions listed on the worksheet and enter the results.

Advertise with Sustainability

COMPETENCES

The students design advertising material for vegan-vegetarian gastronomy.

LESSON PHASE

Activation

DIFFICULTY

intermediate

DURATION

20 minutes

MATERIAL

Magazine, p. 12

CONTENT

The students read the task and design a reel or an advert.

Vegan Comic

COMPETENCES

The students explore more reasons against the consumption of animal products and develop their own ideas.

LESSON PHASE

Information

DIFFICULTY

Simple

DURATION

25 minutes

MATERIAL

Workbook

CONTENT

The students read the comic. After reading, they draw a tile that explains another reason for the veggie bistro to only offer plant-based food. They then present the tiles to each other and organise them into their own comic, which can be hung up in the classroom.

SOLUTION

Further reasons could be:

Growing demand: More and more people are opting for a plant-based diet for various reasons.

Innovative cuisine: Vegan cuisine offers the opportunity to be creative and experiment with new ingredients and preparation methods.

Responsible business: A vegan restaurant demonstrates social responsibility.

Less water consumption: The production of plant-based food requires significantly less water than the production of animal products.

Reducing deforestation: Meat production is one of the main reasons for the deforestation of rainforests to create pasture or farmland for animal feed.

Compostable waste: Most waste in a vegan restaurant, such as vegetable scraps or peelings, is biodegradable and can be composted.

Looking for a Label

COMPETENCES

Students recognise the three most important vegan-vegetarian labels.

LESSON PHASE

Information

DIFFICULTY

Simple

DURATION

10 minutes

MATERIAL

Workbook

CONTENT

The students read the information about the seals and go in search of products bearing these seals in the kitchen of their training company.

Is a Vegan World Possible?

COMPETENCES

The students recognise the causes and reasons for their own meat consumption and that of the population. They identify obstacles that stand in the way of a vegan-vegetarian lifestyle. They imagine a purely vegan world and describe how this affects different areas of life. Finally, they derive the scope and need for action for various stakeholders and break down and concretise a specific option for action for themselves or their own company.

LESSON PHASE

Activation, deepening

DIFFICULTY

Difficult

DURATION

45 Minutes

MATERIAL

Workbook

CONTENT

1. Critique phase (10min)

In the first step, the students use the questions to consider why people continue to consume so much meat and where there are obstacles that stand in the way of a vegan lifestyle. In doing so, they reflect on themselves as well as their environment.

2. Utopia phase (10min)

In the second step, the students are asked to imagine a completely vegan society. Using the sentence beginnings, they are guided through this society. They finish the sentences freely according to their imagination and develop an alternative concept to the current world.

3. Realization phase (25min)

Audio

In the third step, the transition from criticism to utopia should take place. The students develop demands for action from political actors, civil society, businesses (focus on their own company) and individuals like themselves. From the areas over which they have direct influence, they select an option for action and concretize it. To this end, the exact problem, the goal of the action, as well as the responsibilities and possible allies are named. Based on this, a course of action should be worked out as precisely as possible to implement this change.

SOLUTIONS

There are no wrong answers here, it is only important that the students work out concrete action steps that can be implemented.

As an example the students can listen to the Kernvoll interview part on the obstacles for a vegan company.

This interview is split in parts throughout the workbook. You find the whole Interview here (18 minutes).





Script of the interview

Mythbuster COMPETENCES

Students debunk common misconceptions about a vegan-vegetarian diet. They are prepared to explain them to guests.

LESSON PHASE

Information

DIFFICULTY

Simple

DURATION

15 Minutes

MATERIAL

Workbook, internet-capable devices

CONTENT

The students read the vegan myths and should first guess what is right and what is wrong. Then they read the texts.

Together, the class can think about their prejudice of a vegan-vegetarian diet and reflect if they ever fact checked them. If they don't really know, they should research them to confirm or debunk them.

Nutrient Requirements

COMPETENCES

Students develop the ability to recognise the importance of different nutrients in relation to their dietary choices. This includes understanding which nutrients are essential for maintaining general health. In addition, they determine which specific nutrients are particularly important in a vegan-vegetarian diet. Students familiarise themselves with a variety of plant-based foods that are rich in essential nutrients, especially those that are often lacking in plant-based diets. They are able to give instructions and advice for a nutritious and balanced vegan diet without resorting to animal products.

LESSON PHASE

Information, deepening

DIFFICULTY

Intermediate

DURATION

45 Minutes

Material

Workbook

CONTENT

Students read Anouk's research journey an answer the questions along the way. After they finish they fill out the crossword puzzle.

SOLUTIONS

Carbohydrates

Carbohydrates are sugar, so we find simple forms of them in everything sweet like honey or fruits. Complex carbohydrates, which make up most of our diet, are found for example in grains, potatoes and legumes. For a fibre rich diet, whole grain should be favoured. But you also find it in beams or various other vegetables like broccoli. [1]

<u>Fats</u>

Vegetable oils and other sources of fat such as nuts, avocados and olives are high in unsaturated fatty acids and have a much more favourable fatty acid composition than most animal foods. Particular attention should be paid to the intake of omega-3 fatty acids. This is contained in linseed oil and linseeds, hemp oil and hemp seeds, walnut oil and walnuts, chia seeds and rapeseed oil. [2]

<u>Protein</u>

Plant protein sources have historically been legumes, especially in combination with cereals. Also nuts and seeds are great protein sources. There are also numerous protein analogues of animal foods on the market. [3]

Learn more about legumes and protein in the Beans and Greens Workbook about legumes.

<u>Minerals</u>

Iron rich products include, pulses (lentils, chickpeas...), oilseeds (pumpkin seeds, sesame seeds...), nuts (pistachio, almonds...) and some vegetables (fennel, rocket...). The bioavailability of iron in plant products is better, if they are combined with Vitamin C rich or fermented products. [1]

Crossword Puzzle:



Developing Healthy and Climate-Friendly Recipes

COMPETENCES

Students recognize how nutrition can be healthy for both humans and the planet. They apply the dietary plan of the Planetary Health Diet and develop recipes based on it. They evaluate Recipes according to the PHD.

LESSON PHASE

Activation, deepening

DIFFICULTY

Difficult

DURATION

60min

MATERIAL

Workbook, internet-capable devices, cookbooks

CONTENT

The students read the page and watch the video. Questions about the diet plan are clarified. In small groups, they use the internet and cookery books to plan two meals, one vegan and one vegetarian, that follow the Planetary Health Diet. After 45 minutes, the groups present their recipes and their classmates assess whether the recipes fulfil the Planetary Health Diet criteria.

SOLUTIONS

The recipes should contain most of the nutrients listed in the chart. It is important that the ratios are correct. Nothing additional should be added. However, perfection is not possible in every dish, ideally both dishes should complement each other.

For an example the students can listen to the Kernvoll interview excerpt about a vegan sport nutrition.

Climate-Friendly Diet: What can you do?

COMPETENCES

Students examine that climate-friendly catering involves more than just the food used (for example, preparing varied dishes, avoiding waste, regional purchasing).

LESSON PHASE

Information

DIFFICULTY

Simple

DURATION

15 minutes

MATERIAL

Magazine, p. 25

CONTENT

The students read the tips for climate-friendly out-of-home catering.

Go Online! COMPETENCES

The students explore apps and influencers from the vegan-vegetarian and sustainability sectors.

LESSON PHASE

Activation

DIFFICULTY

Simple

DURATION

20 minutes

MATERIAL

Magazine, p. 26, digital device with internet

CONTENT

The students read the texts. They research the apps, websites and influencers and try out the apps if necessary. They research other websites or influencers.

Vegan VIPs

COMPETENCES

Students identify celebrities who follow a vegan diet and realise that competitive athletes also follow a vegan diet and still perform at their best. They research other celebrities who follow a vegan-vegetarian diet. They analyse statements made by vegan celebrities and position themselves.

LESSON PHASE

Information, evaluation

DIFFICULTY

Simple

DURATION

25 Minutes

MATERIAL

Workbook, internet-capable devices

CONTENT

The students read the page and discuss whether they know the celebrities listed, if not they look them up on the internet. They then research other well-known personalities who are vegan-vegetarian. Groups can be formed to look specifically at sportspeople, musicians, actors or other celebrities.

The room can then be divided, with one end of the room representing approval and the other rejection. They should position themselves between these poles in relation to the individual quotes and justify their decision.

Tip:

The Game Changers - documentary with Arnold Schwarzenegger and Lewis Hamilton about vegan nutrition among top athletes is a good recommendation. Unfortunately, it is only included in the Netflix subscription.

Pro-Con Vegan-Vegetarian Diet

COMPETENCES

The students apply their knowledge of vegan-vegetarian diets to understand and describe the advantages and disadvantages of a plant-based diet. They compare the advantages of different diets and form and evaluate their own opinion. In doing so, they encourage critical thinking and self-reflection.

LESSON PHASE

Evaluation

DIFFICULTY

Intermediate

DURATION

60 Minutes

MATERIAL

Workbooks

CONTENT

The students apply the knowledge from the previous pages and create a list of pros and cons for opening their own restaurant. To prepare for the upcoming debate, they should also think about counter-arguments.

Divide the students into two teams representing the pro and con arguments of the topic. Each team presents arguments that support their side, followed by counter-arguments from the opposing team. Each team member should speak at least once.

After the discussion, students can listen to an interview with Kernvoll, a vegan catering company from Germany, about their reasons for switching to a vegan diet.

SOLUTION [4, 5]

Pros (examples):

1. Health Benefits:

- Plant-based diets reduce risks of chronic diseases.
- Appeals to health-conscious customers.
- Caters to dietary restrictions and preferences.

2. Environmental Sustainability:

- Lower carbon footprint and resource usage.
- Promotes biodiversity and conservation.
- Sustainability as a promotion point.

3. Ethical Considerations:

- Aligns with values of animal welfare.
- Offers cruelty-free options.
- Reduces demand for factory farming.

4. Innovative Menu Options:

- Creative and flavourful dishes.
- Sets the restaurant apart.
- Capitalizes on growing demand.
- 5. Community Engagement:
 - Fosters community among like-minded individuals.

Cons (examples):

- 1. Limited Target Audience:
 - Smaller customer base.
 - Perception of restriction to menu offers.
 - Requires additional marketing efforts.

2. Ingredient Sourcing and Costs:

- Expensive and logistically challenging.
- Balance affordability with quality can be difficult.
- 3. Perception of Taste and Satisfaction:
 - Preconceived notions may exist.
 - Taste preferences may differ.

4. Market Competition and Niche Appeal:

- Faces competition from mainstream restaurants offering traditional fare.
- May struggle to attract customers who prioritize meat-based options, limiting potential market reach.
- 5. Limited Menu Variety:
 - Plant-based restaurants may face challenges in offering diverse menu options compared to traditional eateries.
 - The reliance on plant-based ingredients may restrict the range of dishes available, potentially limiting appeal to a broader audience.

Make Your own Milk Substitute!

COMPETENCES

The students make their own oat drink.

LESSON PHASE

Activation

DIFFICULTY

Simple

DURATION

10 minutes

MATERIALS

Magazine, phones with internet, ingredients for recipe

CONTENT

The students prepare the oat drink according to the instructions. As a support, they watch the video in which the preparation is shown and explained.

Fact Sheets Milk Alternatives

COMPETENCES

Students examine the properties, specialities, origin, sustainability and nutrients of various milk alternatives. They evaluate the use of milk alternatives in various recipes and know when to use which alternative.

LESSON PHASE

Information, deepening

DIFFICULTY

Simple

DURATION

60 minutes

MATERIAL

Magazine, p. 29-35

CONTENT

The students read all the fact sheets on the different milk alternatives. Alone or in small groups, they create visual overviews of the use of the various milk alternatives in the kitchen.

In small groups, they research three recipes in which cowmilk is used and together they think about which milk alternative they would use to replace it. These can be three random recipes or divided into a starter, main course and dessert. They should explain why the selected milk alternative is suitable for the dishes and how sustainable implementation can be ensured (raw materials, preparation method). Alternatively, the groups are assigned milk alternatives and vegan themed menus are developed for the milk alternatives.

At the end, the following question is discussed in class:

What challenges do you see in integrating dairy alternatives into a restaurant cuisine, and what benefits could result from it?

The small groups can first exchange ideas and then gather the results from the class.

The participants then research the allergens in the fact sheets and fill in the table.

SOLUTIONS

Allergens	rice	oats	soy	almond	coconut
Lactose	х	х	yes	х	x
Nuts	х	х	х	yes	x
Gluten	х	yes	х	x	х
Soy	х	х	yes	x	x

Recipe Mayonnaise/Potato Salad

COMPETENCES

Students prepare their own vegan mayonnaise and potato salad.

LESSON PHASE

Activation

DIFFICULTY

Moderate

DURATION

45 minutes

MATERIAL

Magazine, p. 36, digital device with internet, ingredients for the recipe

CONTENT

The students prepare the potato salad according to the instructions. As a support, they watch the video in which the preparation is shown and explained.

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