



animals,
climate and
civic education

Teaching unit 1

Cow's milk - ethical issues related to the use of animals

Imprint

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1. Introduction

1.1. Duration

90 minutes. The learning unit can be extended beyond two 45-minute lessons, see variations from page 12.

1.2. Topic, target group and prior knowledge

This teaching unit examines the living conditions of bovines in the dairy industry and raises ethical questions about using animals in this way.

- Suitable for students aged 12-18
- Understanding of reproduction, understanding of the terms “breeding” and “fattening”

1.3. Subjects

The teaching unit is suitable for use in subjects such as biology, social studies and ethics. However, they can also be used in other subjects such as general studies, politics, humanities and religion, as well as economics and environmental education.

1.4. Learning objectives

Expertise:

The students ...

- ... develop a basic understanding of the life of bovines in farming.
- ... develop their own points of view and consider how they can participate democratically and exert influence.

Presentation skills:

- The students present the main topic they have worked on in their small group to the class.

Evaluation/judgement skills:

- The students form an independent judgement about the life of bovines in the dairy industry.

Communication skills:

- The students understand the life cycle of a cow in the dairy industry and can describe it.

1.5. Material

All materials for this learning unit are available at the following link:

<https://tinyurl.com/alice-teaching-unit-1>

- Image file “Introductory image.jpg” (via projector)
- Film “How bovines live in our society” (2017)
- Projector for showing introductory image and film
- Printouts of worksheets 1-4 (group work, one copy for each student in the respective group)
- Printouts of the “life stages” (DIN A4 set, print 1 x)
- If required: facilitation cards, 16 pieces - 4 per group
- Whiteboard, magnets and pens for writing on the board

1.6. Differentiation

In order to meet the different needs and requirements of the students, different levels of difficulty are built into the teaching unit and marked with asterisks:

* = easier / ** = medium / *** = more demanding

1.7. Linguistic aspects

Our language is shaped by our view of the world and conditions this view in a complex interaction. Hence it is important to use language consciously. Many established terms used to talk about animals imply a fundamental otherness of animals. Mammals like bovines and pigs for example are talked about as “livestock” rather than as animals. From biological and ethological perspectives, these distinctions in language cannot be justified. They suggest fundamental differences where there are none, and are often meant to be derogatory. Therefore, we recommend that these distinctions be avoided and, if necessary, discussed during lessons.

In the ALICE materials we avoid linguistic differentiations between humans and animals where not appropriate, and use less common terms when the usual terms seem problematic. For example we use the term “fishes” instead of “fish”, to emphasise the fact that fishes are also individuals. Terms such as “farm animals” and “pets” are written in quotation marks or replaced with other terms such as farmed animals.

Terms such as “honey bees” and “dairy cows” reduce animals to their current use by humans and are avoided. “Dairy cows”, for example, are not bovines that simply “supply milk” to humans, but female bovines that, like other mammals, produce milk for their offspring after birth.

The original German text contains a section on gender conscious language, this has been left out as it is not relevant to the English language.

2. Overview of the teaching unit

Phase, activity and duration	Action	Method	Materials
Phase 1			
Introduction 5'	Visualise the ethical issues relating to the consumption of cow's milk using the introductory image	Whole group discussion	Introductory image (projector)
Phase 2			
Development I and consolidation I 15-20'	Conveying knowledge about the situation of cattle in Germany through film		
Observation tasks for the film 3'	Explain observation tasks	Whole group discussion	
Film 7'	Watch film	Individual work	Film "How bovines live in our society" (projector)
Discussion 5-10'	Reflect on the film	Whole group discussion	
Phase 3			
Development II and consolidation II 50-55'	Understand the life stages of a "dairy cow" and placing them in a moral context		
Instructions 3'	Explain work assignment and divide into groups	Group work	Worksheets
Group work 10'	The life stages of a "dairy cow" are worked out in small groups	Group work	
Presentation 20'	Groups explain their life stage and add it to the life cycle of a "dairy cow" on the board	Whole group discussion	Printouts of "life stages" (and facilitation cards), whiteboard, magnets or pens
Summary 3'	The life cycle of a "dairy cow" is summarised using the illustration on	Whole group discussion	

	the board		
Reasons for milk consumption 5'	Collect reasons for consuming cow's milk	Whole group discussion	Whiteboard and pens
Discussion 10'	Reasons are contrasted with the life cycle of a "dairy cow" and moral dimensions are discussed	Whole group discussion	Introductory image (projector)
Phase 4			
Ideas for action 15'	Individual options for action are developed and considered	Individual work, working in pairs, whole group discussion	Whiteboard and pens

Note for 45-minute units: For the first 45 minutes, go through the first four steps of Development II and Backup II immediately after the introduction (up to and including the summary). For the second 45 minutes, go through the steps of Development I and Consolidation I and continue from "Reasons for consuming cow's milk". To do this, show the life cycle of "dairy cows" on the board from Development II and Backup II again.

Note: If time is short, omit phase 2.

3. Detailed description of the teaching unit

3.1. Introduction: Cow's milk consumption and ethics

Duration: 5 minutes

The aim of this stage is for students to recognise the ethical issues behind the consumption of cow's milk and to stimulate their interest in the topic. The discussion should be kept short at this stage, there will be time for this later.

1. Ask an initial question:

Projection of "Introductory image.jpg"

What could this juxtaposition mean?

Expected answer:

- Children get milk from their mothers and from cows. Humans produce milk for their children, female cows produce milk for their children, but humans drink it.

Potential further questions:

* *What do both images have in common?*

Expected answers:

- Milk
- Children
- Drink
- Mothers

** *Do you see a connection between these two pictures?*

Expected answers:

- Both children drink milk, but one from their mother, the other from a cow.
- The human mother has the opportunity to breastfeed her child, the mother cow does not. Instead, a human child drinks her milk.

Explanation: *Humans and bovines are mammals. Humans feed their children with their mother's milk for the first few months. Female bovines also have to give birth first so that their bodies can produce milk, because this milk is the food for the newborn calf. Humans take the milk from cows to use it themselves.*¹

2. If necessary, clarify the controversy:

There are people who think that's okay, and people who don't. Why do you think that is?

Expected answers:

- Humans need milk to grow, so that's fine. Cows need to be milked, otherwise they don't do well.
- Some people don't think it's okay to drink cow's milk because it's made for calves and not for humans.

3. Demonstrate the widespread use of cow's milk

What products contain cow's milk?

Expected answers:

- Cheese, butter, yoghurt, cakes, processed foods, cosmetics, medicines, etc.

Bridging:

Today we look at what milk production means for female bovines in agriculture. We also look at whether this is morally justifiable or whether something need to change.

3.2. Development I and consolidation I: Film

Duration: 15-20 minutes

1. Observation tasks for the film - 3 minutes

Introduce the film:

We are now watching the film “How bovines live in our society” about the situation of bovines in Germany. The film contains scenes that some people may find difficult to watch. If it gets too much for someone, it’s OK to leave the room.

Give students an observation task for the film and write it on the board (so that it is visible during the film). Ask the students to write down key words.

Possible observation tasks (possibly two tasks: one for each half of the class)

** Describe the life of calves in the dairy industry.*

*** Describe the life of bovines in farming. What do bovines need to feel well?*

**** Describe the ways in which humans intervene in the lives of “dairy cows”. Explain the problem raised by the film.*

2. Watch film “How bovines live in our society” - 7 minutes

Note: Subtitles and automatic translation into French and English are available on YouTube.

3. Discussion - 5-10 minutes

Ask the students to summarise the film and answer the observation tasks.

Describe the ways in which humans intervene in the lives of “dairy cows”.

Expected answers:

- Humans intervene in the entire life of the “dairy cows”: sexuality, choice of partner, family, etc.
- No right to physical integrity and a life without pain?

Explain the problem raised by the film.

Expected answer:

- The film raises the question of whether we have the right to treat bovines in this way.

Let's talk about the needs of the animals: In the film you also learned about some of the needs of bovines. A need is something that needs to be met for us to feel good. What needs do you remember from the film?

Ask for two to three responses.

Expected answers, complete and explain if necessary:

- Very social animals, horns, grazing, family, galloping, relaxing, ruminating, living in a herd, grooming.

Much of what you have learned from the film applies to all female bovines, for example that they are nine months pregnant. However, there are differences between countries, for example in the average age at which animals are slaughtered.

Note: In the background text of the unit, choose one aspect of dairy farming and briefly discuss the differences between Germany, France and Austria.

Bridging:

We have already learnt a bit about the needs of bovines and their life in agriculture. Let us now look at this in more detail.

3.3. Development II and consolidation II: Life stages of a “dairy cow” and moral discussion

Duration: 50-55 minutes

Steps:

1. **Explaining the task and dividing into groups** (3 minutes)
2. **Group work:** Students work in small groups to learn about a stage in the life of a “dairy cow” using the worksheets provided (10 minutes).
3. **Presenting the results of the group work:** Students explain their life stage to the class and then add their stage on the board (5 minutes per group = 20 minutes).
4. **Summary:** After all stages have been added to the board, the cycle is summarised by the students or by you, the teacher (3 minutes).
5. **Reasons for consuming cow's milk:** Reasons for consuming cow's milk are collected and written up on the board (5 minutes).
6. **Discussion:** The reasons for consuming cow's milk are contrasted with the life cycle of a “dairy cow” and moral dimensions are discussed (10 minutes).

1. Explaining the task and dividing into groups - 3 minutes

We will now look at the life stages of a so-called dairy cow. To do this, we will form four groups, each of which will look at a stage in the life of a “dairy cow”. You will be given a text to read. You will then present the key information to the class.

Divide the class into four groups.

Alternatively, you can divide the class into eight groups and double up at each station. By having two groups, the groups can support each other during the presentation.

Materials: Worksheets (one sheet per student, depending on the group) and A4 sheets for the life stages (one sheet per group, depending on the group) are handed out. Variation: Each group receives four facilitation cards on which they can note down the most important information. These are added to the whiteboard at the end.

2. Group work - 10 minutes

The class works in groups. In the meantime, prepare the board picture by attaching the printout for the starting point of the cycle to the board, drawing empty rectangles for the other printouts and connecting arrows on the board (see “Illustration of life cycle on whiteboard” on page 10).

Important: Leave enough space for both the “dairy cow” cycle and the “reasons for consuming cow’s milk” collected in the next step.

3. Presenting the results of the group work - 20 minutes

At the beginning of each group presentation, the sheet with the name of the stage to be presented is placed on the board in the correct position so that the sequence of stages in the life of a “dairy cow” is clear.

Sequence of the groups => step by step the board is created (see example illustration below):

Start with the starting point of a female bovine’s life on the whiteboard:

- Starting point: Female calf is born on a dairy farm

The groups present their stages in turn:

- Group 1: Insemination and pregnancy
- Group 2: Birth
- Group 3: Rearing
- Group 4: The cow is being milked

This cycle is repeated every year.

Describe the end point of a female bovine’s life and attach the corresponding printout to the board:

- End point: Cow is slaughtered

=> In Germany, "dairy cows" are currently killed after an average of 4.5 years, in France after an average of 5 years and in Austria after an average of 6 years. Bovines can actually live to be 20 years old. "Dairy cows" are killed so early because their bodies are exhausted after several years in the dairy industry. Some can then no longer become pregnant or are ill. It is then more profitable for the dairy farm to kill the cow and replace it with a young animal.

Note: Draw the arrows from the starting point to group 1, 2, etc. to show the life cycle of a 'dairy cow' (the arrow from group 4 then goes back to group 1). The picture on the board will be created during the presentations. If facilitation cards are used, they should also be attached. Put one worksheet per group on the board so that everyone can see the pictures on the different worksheets.

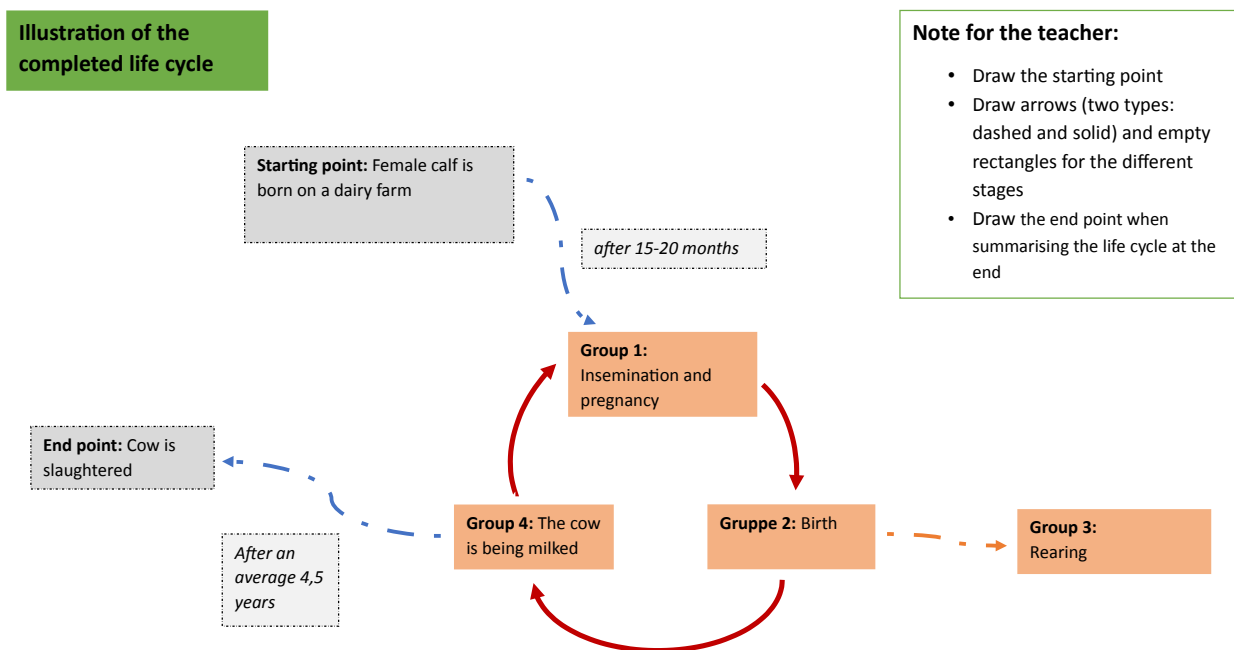


Illustration of life cycle on the whiteboard

4. Summary - 3 minutes

Who can briefly summarise the cycle?

Move on to the reasons for consuming cow's milk:

Why do you think bovines are kept in this way?

Expected answers:

- Money, demand for milk because it is cheap.

5. Reasons for consuming cow's milk - 5 minutes

Let's take a closer look at why cow's milk is consumed. Why do you think many people use cow's milk?

Write the following question on the board: "Why do many people use cow's milk?"

Write the reasons the students give on the board.

Expected answers:

- Taste, habit, tradition, people need milk, calcium, traditional recipes, grown up with it, known through advertising, just known, easily available, offered at school.

Note: Use the board so that both the reasons and the cycle are visible.

6. Discussion - 10 minutes

Show the introductory image again for the following discussion. If there is enough space, it can remain visible in the background during the discussion.

Ask the students to compare the reasons collected with the life cycle of bovines in the dairy industry visualised on the whiteboard.

Earlier we learned about the life cycle of a so called dairy cow. Now look at the reasons you have collected for using cow's milk: To what extent is it morally justifiable to consume cow's milk?

Write this question on the board.

Discuss the question with the class.

Possible further questions

*

Do you think that we humans have a responsibility towards bovines?

What do you think it is like for the animals?

Can the bovines fulfil their needs?

Are there alternatives?

**

Do we have the right to use cow's milk?

According to Section 1 of the Animal Welfare Act², no one may cause pain, suffering or harm to an animal without reasonable cause. To what extent is the law complied with in the dairy industry - what do you think?

Bridging:

Some of you don't like the way the "dairy cows" live on the farm and might want to do something about it. We now want to think together about what each and every one of us could do to improve the situation for bovines.

3.4. Ideas for action

Duration: 15 min minutes

Experience has shown that many students have strong emotions about this topic. Therefore the final part of the lesson focusses on ideas for taking action. In this way, the students develop ways of dealing constructively with their feelings.

1. Write the following question on the board: “What needs to happen for bovines to have better lives?”

Ideas are collected and written on the board.

Different stakeholders should be addressed:

Who has the power to change things? Farmers? The government? Politicians? Supermarkets? Consumers? ...

Expected answers:

- Abolish (dairy) animal agriculture as such
- Calves should stay with their mothers for longer
- Slaughter bovines later
- More grazing
- No longer sell milk
- Making dairy products more expensive
- Government subsidies for plant-based alternatives
- Adjust tax rate
- Change regulatory frameworks on animal agriculture

2. Write the following question on the board: “What can you do to make this happen?”

(“this” => see answers to the previous question)

Think-Pair-Share:

Take 2 minutes to think by yourself and note down keywords.

Now think with the person next to you about what you can do. This does not mean that you have to do it. Note down keywords (approx. 5 minutes).

Collect the answers on the whiteboard.

Expected answers / suggestions for additions:

- Opt for plant-based alternatives to cow’s milk products when shopping and eating out
- Talk to family and friends about the situation of bovines in the dairy industry

- Ask in cafés and restaurants whether products contain cow's milk
- Ask for alternatives in the school canteen
- Set up an animal rights group to promote the issue among other students
- Organise a tasting of plant-based products
- Cooking and baking vegan food for others
- Take part in demonstration
- Paint a poster that draws attention to the issue
- Support petitions on the issue or start a petition yourself
- Ask the local town hall and/or political parties what they are doing for animals
- Research lobbyism behind cow's milk
- Find out about the issues from animal rights organisations
- Street activism

Potential follow-up questions:

Were you aware of this issue before? If not, would you have liked to have known about the issues around cow's milk earlier?

Optional for older students: Discussion of social responsibility

Adapt the question accordingly:

What needs to happen in our society to improve the situation of animals?

Obtain answers and discuss them with the class.

Finally, ask the following question to emphasise your personal power of choice>

We have now collected a few ideas on what needs to be done in society to bring about change. What can each and every one of us do to improve the situation for animals?

Then collect options for action and discuss them with the students.

4. Variations: Duration: +90 minutes

4.1. Variation 1: Focus on ethical discussion

Duration: once +90 minutes

In groups with higher levels of ability (from age 16 or 17), phase 3 (see table on page 4 and 5) can be modified and shortened to allow more time for the ethical discussion.

Potential change in phase 1 compared to the “normal plan” (then 10 minutes):

- Already in this phase, introduction to the ethical problem question (moral acceptability). Then spectrum line => The students line up in the classroom according to their opinion on the issue; three to five students are asked to explain their position.

Potential change in phases 2 and 3:

- At the end of phase 2, the observations from the film are explored more thoroughly (phase 2 then 25-30 minutes in total).
- Phase 3 is modified so that one half of the class receives all the texts from the four worksheets as reading texts and the other half of the class collects reasons for consuming cow’s milk, for example using a suitable newspaper article representing the view of the dairy industry (at least 10-15 minutes).
- The step “Reasons for consuming cow’s milk” in phase 3 is replaced by a discussion on the structural, historical and political conditions of milk consumption (at least 20 minutes):
 - What structural conditions favour the dairy industry?
 - What are the economic conditions of “dairy cow” farming?
 - *Who are the stakeholders in the dairy industry?* => This question prepares for the role play proposed for phase 4, see below

Potential change to phase 4 (then 35 minutes):

- In groups, the students prepare for a role play (15 minutes).
 - Possible roles: farmer, consumer, government, slaughterhouse, supermarket, animal rights organisation.
 - Task: Note down arguments, prepare to refute possible counter-arguments.
- Role play (15 minutes), possibly using formats such as panel discussion, fishbowl, expert hearing, which are either familiar to the students or can be introduced in this lesson.

It is also possible to keep the normal seating arrangement, the only important thing is that the allocated roles are recognised.

If necessary, you may be asked to take notes.

- Personal statement (5 minutes): Either the students position themselves again using the spectrum line in the classroom (and individuals are asked if and why their opinion has changed/strengthened) or the students answer the question (moral justification) whilst remaining seated: *What is your personal opinion on this question?*

If a another 90 minutes are available, these can be used as follows:

- Approx. 45 minutes to write a short essay
- Approx. 45 minutes to develop ideas for action (see phase 4)

4.2. Variation 2: Series of lessons (related to the subjects of biology, politics/economics and ethics)

Duration: three to six times 90 minutes

This series is suitable for less able/younger learning groups as there is more time for each sub-topic. However, as the subtopics can also be explored in greater depth, it is also suitable for higher-achieving groups.

- *First block (90 minutes): The dairy industry from the animals' perspective*
This essentially corresponds to the "normal session plan" as outlined above. However, phase 4 (Ideas for action) is omitted, but there is more time for prioritising/consolidation in the previous phases.
- *Second block (90 minutes): The dairy industry from people's point of view*
The economic and cultural significance of milk is explored here. Newspaper articles can be suitable materials for this.
- *Third block (90 minutes): Panel discussion and options for action*
The panel discussion method can be developed and implemented here, see variation 1.
Ideas for action: see phase 4

Possibility of project-like consolidation in the following double lessons: Students get together in groups/pairs to practically implement one of the ideas for action.

4.3. Variation 3: Visioning

Duration: once +90 minutes

Start at phase 3 / step 6 Discussion (all the same before). This "criticism phase" (first part of the workshop) is now followed by a "visioning phase". In this variation, more time is allowed for discussing possible changes in human-animal relationships. It is suitable for older students.

- Question for opening up the discussion: *Do you think humans have a responsibility towards bovines?*

Visioning phase:

- Question: *What could a world look like in which people treat bovines in a morally acceptable way?*
- In small groups, the students develop their vision. First, they think about what "morally responsible treatment of bovines" actually means for them. In the next step, they collect ideas on how to achieve their vision. They then consider the barriers and how these could be overcome.
- The groups present their different visions. Possible questions:
 - What do the visions have in common?

- How feasible do you think they are?
- What needs to change?
- A utopia picture by the artist Hartmut Kiewert (<https://hartmutkiewert.de/>) can be used as a source of inspiration.

For example, the picture in the padlet (Mall II, 2016) could be used to initiate a conversation with the following question:

- *What utopia do you see here?*
- Finally, we can move on to the ideas for action.

¹ Hoy, S. (2009). Nutztierethology. Ulmer Verlag, Stuttgart

² Animal Welfare Act in the version published on 18 May 2006 (Federal Law Gazette I p. 1206, 1313), last amended by Article 2 (20) of the Act of 20 December 2022 (Federal Law Gazette I p. 2752): <https://www.gesetze-im-internet.de/tierschg/BJNR012770972.html>

All links in this lesson plan and associated materials were last checked on 15/03/2024.