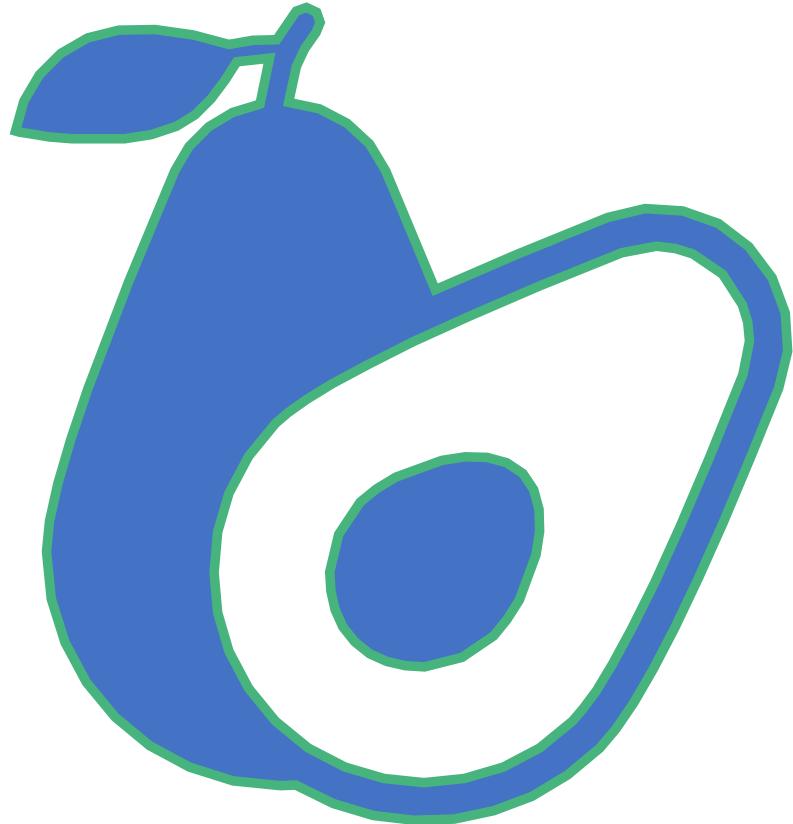




Teaching Nutrition

In English



Overview

- About me
- Why CLIL?
- Why CLILing nutrition?
- Which topics to teach?
- Examples of CLIL-tasks
- Difficulties
- Q & A

About me



Teacher of English & nutrition



HLW Tulln, Lower Austria



Always fascinated by bilingual teaching



First CLIL encounter: University



CLIL course at PH Wien in 2017

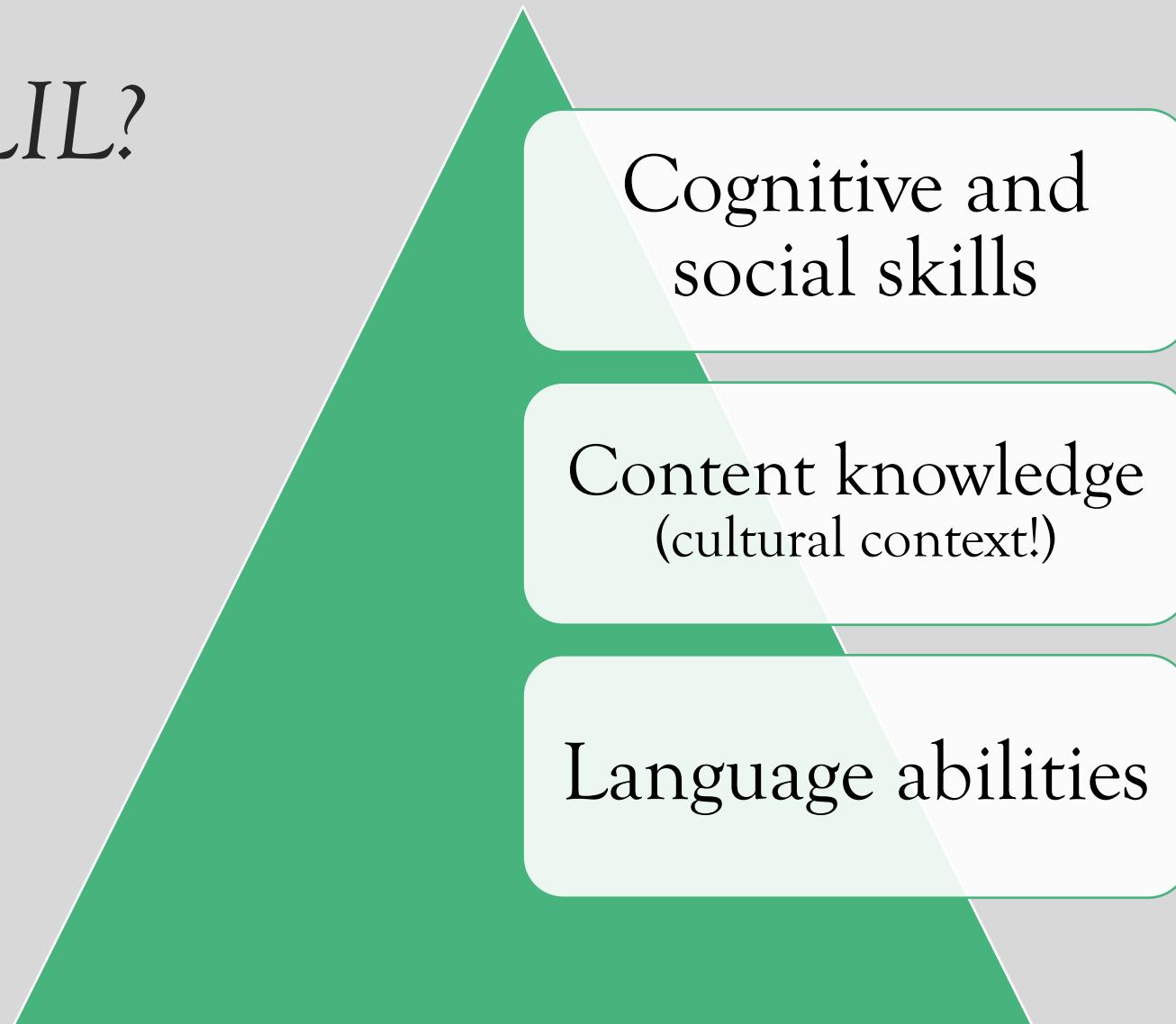


Teaching experience, CLIL Vocs, reading, etc.

Who are you? - Mentimeter

- Go to www.menti.com and use the code 89 70 02.
- You can use this tool in your nutrition class to quickly make a survey of students' eating habits, opinions, previous knowledge or understanding of a topic.
 - How many meals do you eat per day?
 - Which are the 3 most important food trends nowadays?
 - Rank the following diseases according to mortality!

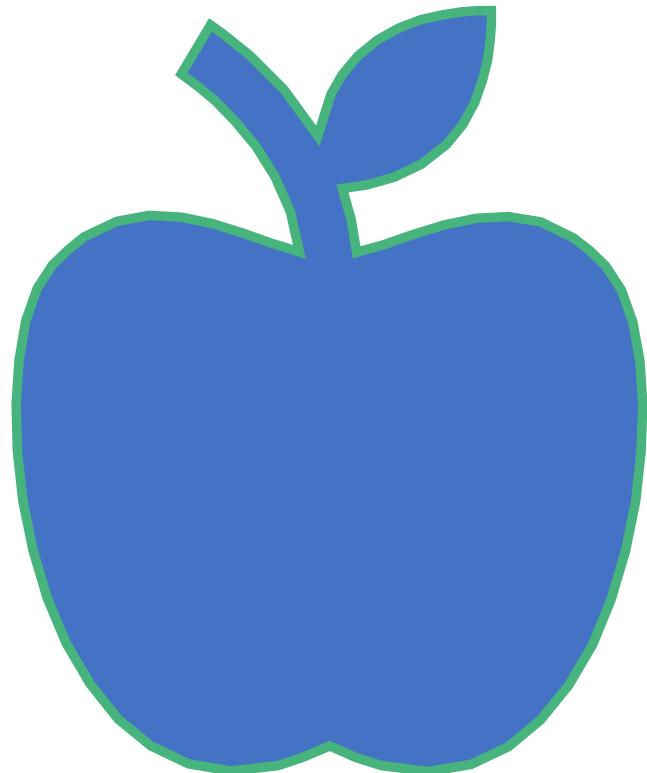
Why CLIL?



Cognitive and social skills

Content knowledge
(cultural context!)

Language abilities

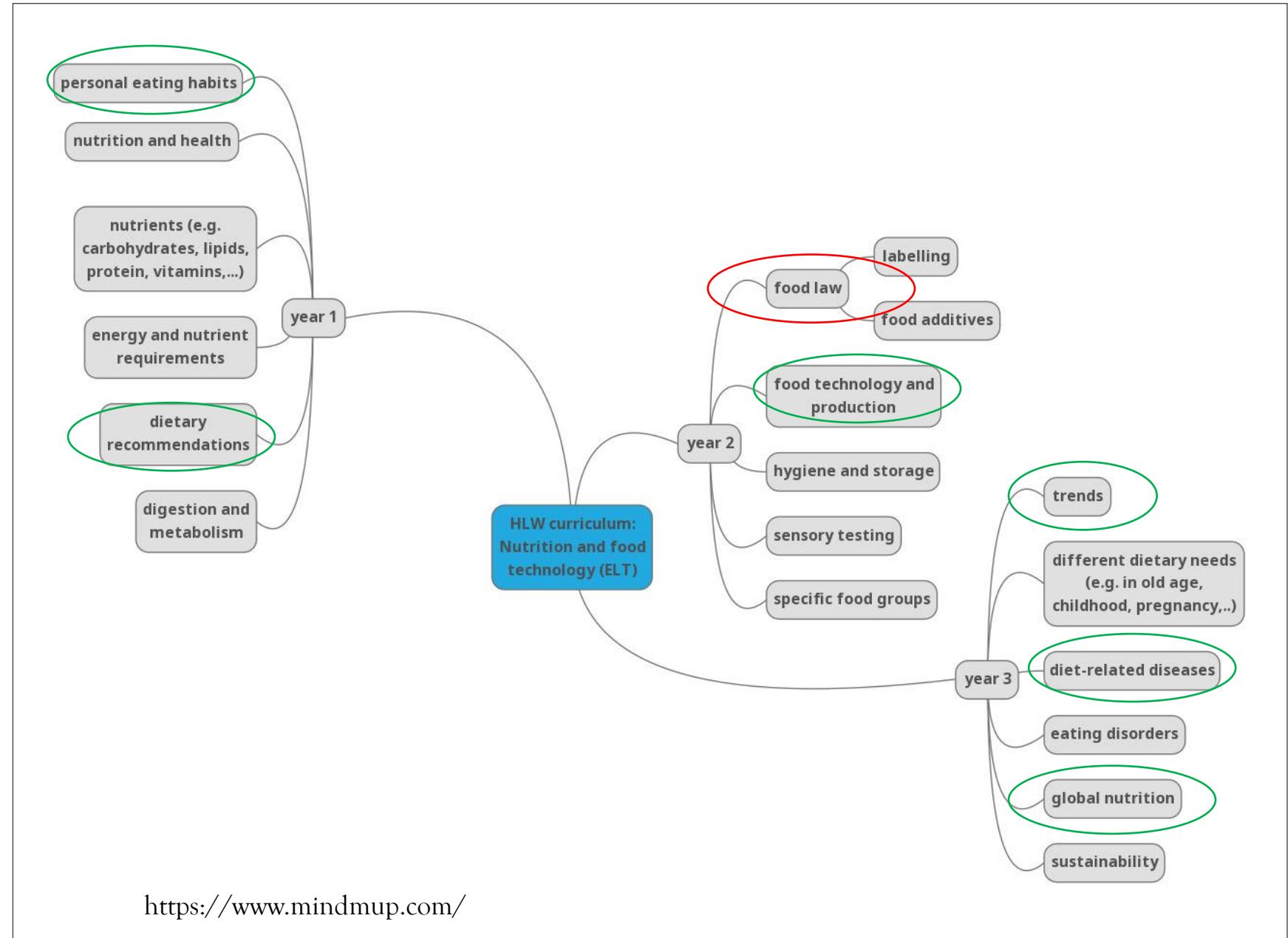


Why CLILing nutrition?

- Isn't nutrition hard enough without the language?
- School:
 - Nutrition = core subject at HLW
 - Diploma thesis
 - Most scientific literature in English
- University:
 - Courses in English
 - Studying abroad
- Life:
 - Working in tourism, international offices, abroad
 - Nutrition gaining increasing importance

Topics to teach

- All topics are suitable for CLIL!
- Easy introductory topics
- Topics which require certain language skills
- Topics which are “typically English” or multicultural
- Not recommended: country-specific topics like food law





CLIL tasks

Nutrition Basics Quiz

CLIL 1: Nutrition basics

- 1) Which elements does the plant need to produce organic substances?
carbon, hydrogen, oxygen / carbon, hydrogen, nitrogen / oxygen, hydrogen, iron
- 2) What is the process, in which plants produce glucose from sunlight, CO₂ and H₂O?
transpiration / digestion / photosynthesis
- 3) Which one is not a macronutrient?
protein / water / carbohydrates
- 4) Which one is not a micronutrient?
fats / vitamins / minerals
- 5) Which nutrient does not provide energy?
fats / carbohydrates / minerals
- 6) Of which substance do we have the largest amount in our bodies?
water / proteins / fats
- 7) Of which substance do we have the smallest amount in our bodies?
minerals / carbohydrates / fats
- 8) Where do we not store carbohydrates in our bodies?
liver / muscles / lung

Production Process: Olive Oil

o FILM

1) Process description

a) FILM: Put the stages of olive oil production in the correct order:

The highest quality olive oil is produced by „cold pressed“ (below 27°C).
The finished olive oil is stored in steel tanks.
Then the fruit is sent directly from the harvester to the grinders.
A hydraulic press squeezes the oil from the pulp.
Olive oil is filled in green glass bottles, to filter out harmful UV light.
In the production plant, the fruit is washed.
In a second step, the fruit is ground more gently.
First the olives are harvested.
The remaining pulp is collected and used as fertilizer or animal feed.
The olive pulp is pressed between mats.

b) FOCUS on LANGUAGE:

Highlight all the verbs in the sentences of exercise a). Which verb form is usually used? → The _____! Why is this verb form used?

Change the following sentences so that the verb form is used:

Workers wash the fruit.	→
The filling machine fills olive oil in green glass bottles.	→
Modern grinders grind the fruit more gently.	→

Underline the phrases which signal the sequence of events in exercise a). (e.g. First, then, finally,...)

Olive Oil Production Process

c) INFOGRAPHIC:

Pair work: Match the production stages with the infographic.

www.eufic.org

OLIVE OIL: how is it produced?

EUFIC



Use the language support box to describe the infographic to your partner:

Language support:

First	the olives	are separated	from	stems, leaves and twigs.
Secondly	the paste	is either heated or	by	
After milling	the warm oil	not heated.	into	
Then	Olive oil	is extracted		
Finally		can be divided		

Vocabulary:

to store = lagern

steel tanks = Stahltanks

harvester = Erntemaschine

grinder = Mühle

to grind – ground – ground = mahlen

hydraulic press = hydraulische Presse

to squeeze = drücken, (au-)quetschen

pulp = Fruchtfleisch

production plant = Fabrik

to harvest – harvested – harvested = ernten

fertilizer = Dünger
animal feed = Tierfutter

Sources:

Film:

<https://www.youtube.com/watch?v=aieNV3V4b>

Infographic: <http://www.eufic.org/en/whats-in-food/article/olive-oil-infographic>

Word search, word matching

Find 15 types of fats and oils in this wordfield!

N T H N A P G Z C C S H E T M
X P Z L E B U N O S M X N J A
R F A A A S W D C R X C I E Z
Y E N L O R E L O O H F R Z P
S U W Y M E D I N T D P A I I
T Z X O S T J D U N Q H G A Z
I Y D X L E R U T T S E R M B
D J A F V F D E S U E T A G C
Z L D I R R N U E G R H M H P
F B L C J I E U N D I M W T P
K O H I W F K T S A L O N A C
C O D L I V E R T R Y G U P L
Q W S B D O R N D U T H S X W
F Q O W P L H G Y E B E Y C H
W B F L A B D G C I E E B K U

Word matching: Types of vegetarianism

Match the type of vegetarianism to the definition. Highlight any unknown words!

vegan	eats a regular western diet without meat
ovo-vegetarian	eats a vegetarian diet plus fish
lacto-vegetarian	eats only food which can be harvested without harming the plant
ovo-lacto-vegetarian	adapts his/her eating habits to the situation: sometimes vegetarian, sometimes meat eater
pescatarian	eats only plant-based products and egg
flexitarian	eats only uncooked food
pudding-vegetarian	eats only plant-based products and dairy products
raw-food vegetarian	avoids meat, but eats eggs and dairy products
fruitarian	avoids all animal products

Role Play: Veganism

Maggie Meat You are the daughter of a famous butcher and practically grew up with a pair of sausages in your mouth. Meat is on your table every day and you <u>don't</u> see the harm – after all, people have been eating meat for centuries and lived well, haven't they?	Francine Fish After you have seen a documentary about mass meat production you have decided to stop eating it. However, you know about the value of protein and <u>omega-3</u> , so you decided to go for fish instead.	Viktor Vegetable You nearly died from a heart attack and have now decided to change your lifestyle. You know that vegetarians live longer and suffer fewer life-threatening diseases, so you want to encourage people to follow you.
Rita Raw You have chosen the extreme vegan lifestyle: raw food. Try to convince the others that meat (and other animal products) is not only murder but a threat to our environment.	Peter Pudding Pizza with chips, <u>pudding</u> and Red Bull? Sounds like a great breakfast to you! You <u>don't</u> care one tiny bit about what you eat, as long as it tastes good. Life is there for us to enjoy!	Talkmaster You ask the nasty questions! It is your job to find out what motivates yours guests to follow their lifestyle and to incite some discussion among them. Prepare at least 10 interesting questions, open and close the discussion.

Language for arguing:

Giving opinion	Agreeing (+)	Disagreeing (-)
In my opinion... In my view... As far as <u>I'm</u> concerned... The way I see it... To my mind... I (really) feel that... I (honestly) think that...	I agree (with you). I <u>couldn't</u> agree with you more. That's (so) true. I feel the same way. No doubt about it. Exactly. Absolutely. That's a good point! <u>I'll</u> say! I see your point (but)...	I (<u>have to</u>) disagree (with you). That's not true. I <u>don't</u> think so. I beg to differ. Not necessarily. That's not always the case. That's not the way I see it. I'm not so sure about that! <u>I'd</u> say the exact opposite!

Think – Pair – Share: Vegetarianism

Think-Pair-Square: What makes people become a vegetarian?



- a. *Brainstorm your own ideas. (Think)*
- b. *Share with a partner. (Pair)*
- c. *Share with a group of 4. (Square)*
- d. *Check with the PPT. Add any new information.*

My ideas:

My partner's ideas:

Our group's ideas:

PPT:

Why choose vegetarianism?



- Health reasons
- Environmental concerns
- Ethical concerns
- Dislike of meat
- Non-violent beliefs
- Compassion for animals
- economics

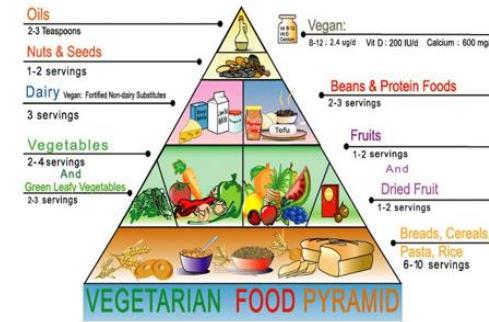
Language for describing and comparing:

Describing	Comparing
<p>The pyramid consists of steps/layers. Step/layer 1 is composed of/made up of/comprises... Above/below this step you find.... The smallest/biggest amount of... can be found at the top/at the bottom/in the middle of the pyramid. ... should be <u>preferred</u>./... should be eaten moderately./... should be avoided.</p>	<p>The ... pyramid has more/less/fewer/no (than)... One similarity/difference is... The most obvious difference is... It is easy to see that... While the pyramid includes...., the ... pyramid... On the contrary/conversely/instead/... Similarly/likewise/equally/...</p>

Similarities and differences between pyramids:

- 1)
- 2)
- 3)
- 4)
- 5)

The Vegetarian Food Pyramid



The Healthy Eating Pyramid



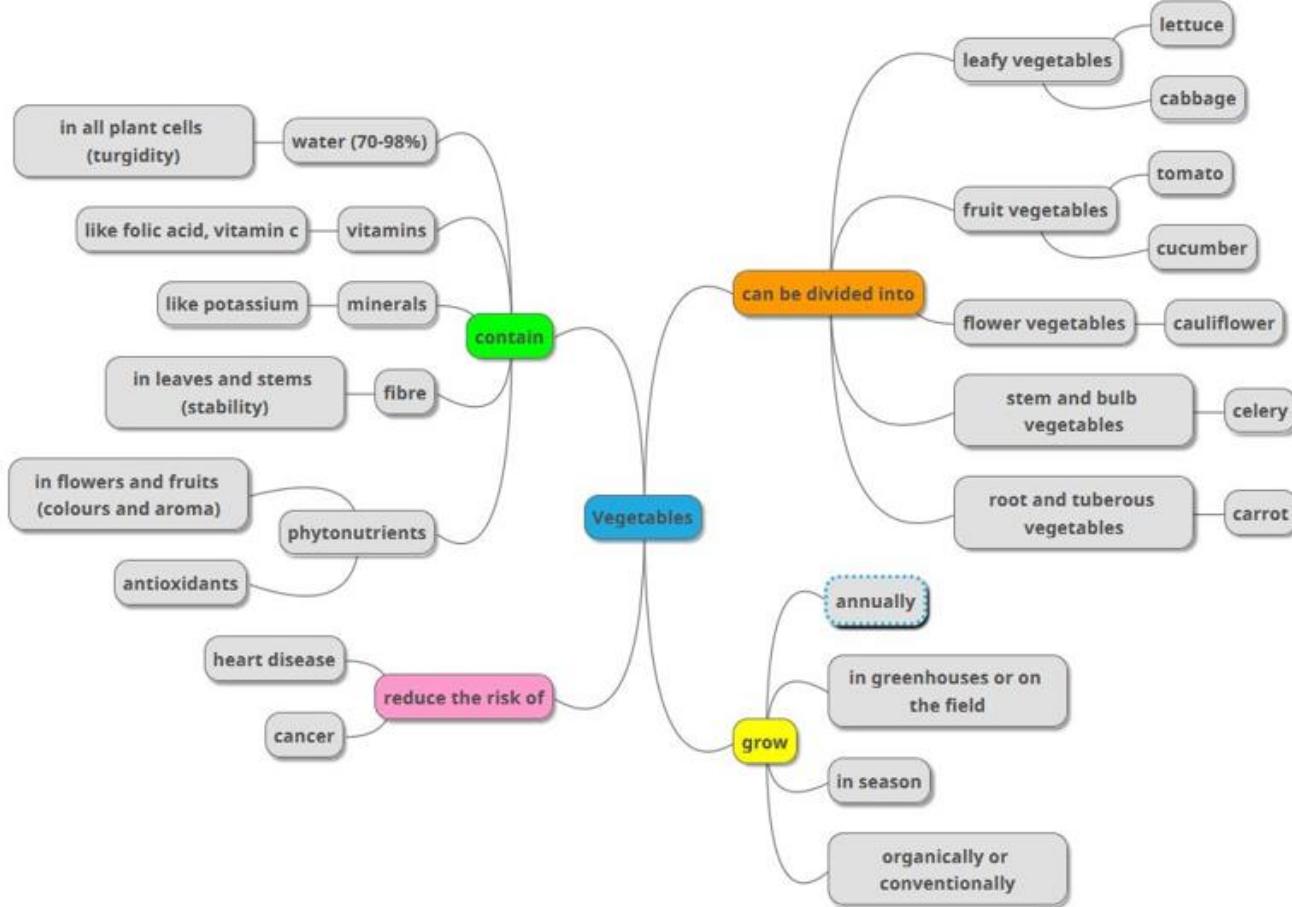
*Look at the different food pyramids. Compare them and tell your partner any similarities and differences you have noticed. Write at least **five** of them down. (full sentences!)*

Sources: Arizona State University, Harvard School of Public Health

DESCRIBING + COMPARING: FOOD PYRAMID

Concept map: vegetables

- Life-sized people puzzle
- Forming sentences
- Creating a gap text
- ...



Cause and effect: Obesity & metabolic syndrome

Activity 1: Cause and effect

a) Match the sentence halves to produce correct sentences. Highlight causes in yellow and effects in pink.

1) A balanced diet	A) This means that blood <u>clods</u> can get stuck in the blood vessels, which <u>closes</u> up the blood vessel. (<u>arteriosclerosis</u>)
2) 45% of Austrians die from heart disease,	B) Your body fat (adipose tissue) increases.
3) Smoking tightens blood vessels.	C) Increase the amount of lesions in your <u>blood vessels</u> .
4) Blood <u>clods</u> can be caused by	D) Can reduce your risk of developing obesity by restricting the <u>amount</u> of calories you eat.
5) If you don't exercise enough,	E) Causes further damage to blood vessels.
6) Vitamin B6, B12 and folic acid can lower your homocysteine status	F) Which is a consequence of arteriosclerosis.
7) High blood pressure can	G) By transforming it into the amino acid methionine.
8) Obesity increases the likelihood of diabetes, which in turn	H) Fat cells from adipose tissue.

b) Create five new sentences with the following sentence starters:

If you exercise regularly,

Eating food with Vitamin B6, B12 and folic acid ...

Arteriosclerosis can be caused by ...

Losing weight will ...

Lowering blood pressure ...

Dairy products and health – POP QUIZ

- How many portions of dairy products are recommended by the food pyramid per day? How big is a portion?
- Which one of these dietary choices is healthier? Explain your choice.

low-fat fruit yoghurt	low-fat plain yoghurt
whole milk	low-fat milk
whey	buttermilk
plain whey drink	strawberry whey drink
Jerome cheese	Emmenthal cheese

- Definitions:
_____ = main carbohydrate in milk; also referred to as “milk sugar”
_____ = making the fat globules in milk smaller to get a creamier texture
_____ = the enzyme which helps you digest lactose
_____ = unpasteurized milk, which still contains the natural microbial flora
_____ = one of the fractions of milk protein
_____ = heat treatment of milk to kill harmful bacteria

raw milk, casein, pasteurization, lactose, lactase, homogenisation.

- What is milk protein allergy and how can you change your diet if you are allergic to milk? Why should babies not be given cow's milk in the first 12 months?

Pop Quiz: Dairy products

CLIL Review

CLIL – Start Review

- 1) What are my expectations towards CLIL?
- 2) What am I afraid of?
- 3) What am I looking forward to?
- 4) What are my wishes?
- 5) I would rate my abilities in English: (10 = most, 1 = least)
10 – 9 – 8 – 7 – 6 – 5 – 4 – 3 – 2 – 1
- 6) I would rate my interest in nutrition: (10 = most, 1 = least)
10 – 9 – 8 – 7 – 6 – 5 – 4 – 3 – 2 – 1

CLIL – Intermediate Review

- 1) Which learning methods have been most helpful?
- 2) What should be different about the CLIL lessons?
- 3) The tests have been too easy/just right/too difficult.
- 4) I would rate my abilities in English: (10 = most, 1 = least)
10 – 9 – 8 – 7 – 6 – 5 – 4 – 3 – 2 – 1
- 5) I would rate my interest in nutrition: (10 = most, 1 = least)
10 – 9 – 8 – 7 – 6 – 5 – 4 – 3 – 2 – 1

CLIL – End Review

- 1) What I liked about this year:
- 2) What I disliked about this year:
- 3) I would like to continue our CLIL lessons next year: yes/no
- 4) I would rate my abilities in English: (10 = most, 1 = least)
10 – 9 – 8 – 7 – 6 – 5 – 4 – 3 – 2 – 1
- 5) I would rate my interest in nutrition: (10 = most, 1 = least)
10 – 9 – 8 – 7 – 6 – 5 – 4 – 3 – 2 – 1

Difficulties in the CLIL-nutrition classroom

- Finding the right level of English
- Having enough lessons per week
- Finding appropriate CLIL-textbooks in nutrition!
- Motivating weaker students
- Testing in German vs. Testing in English



Q & A SESSION