EUROPEAN COOPERATION
IN SCIENCE AND TECHNOLOGY

BODY AND HEALTH: CANCER PREVENTION& SCREENING

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Working Group 1

Training school,

Prague 17. - 19. 2024

COST Action CA21123
Cancer- Understanding Prevention in Intellectual Disabilities (CUPID)

OBJECTIVES

By the end of this presentation you should be able to:

- have to information about → **HEALT**
- have to information about → **CANCER**
  - developing of cancer
  - symptoms of cancer
  - examination tests
  - treatment of cancer
- have to information about → **SCREENING**

HEALTH

- feeling **GOOD** in your body and mind
- your body works **WELL**
- you have **ENERGY**
- you **CAN** take care of yourself



YOU are **HAPPY**

ILLNESS

- feeling **NO** good in your body and mind
- your body **DOES NOT** work well
- you have **NO** energy
- you **CAN´T** take care of yourself.



YOU are **SAD**

HABITS TO STAY HEALTHY

- eating healthy food
- being active
- washing hands
- brushing teeth
- sleeping 8 hours
- visiting the doctor
- avoid smoking and drinking alcohol





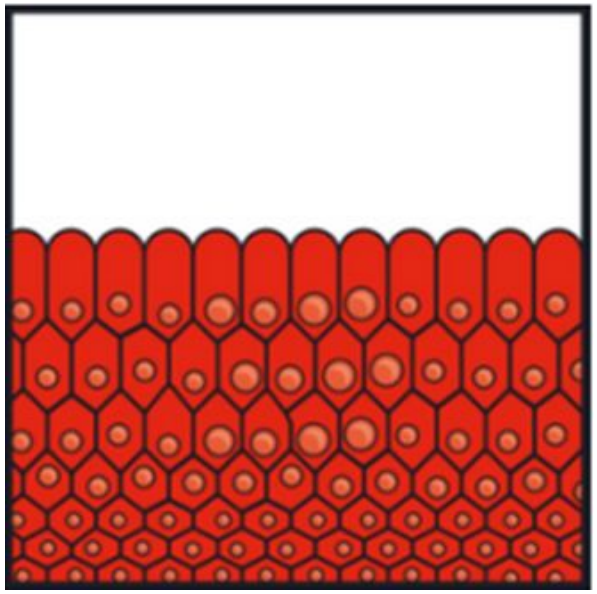




YOU are **HEALTHY**

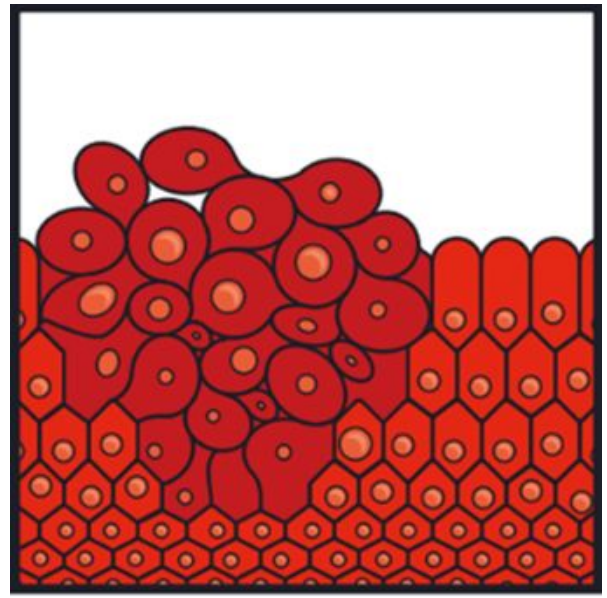
WHAT IS CANCER?

Cancer happens when some cells in the body start to grow uncontrollably and form lumps called tumors. It can occur anywhere in the body.





ILL cell form a TUMOR



SYMPTOMS OF CANCER

The symptoms depend on the type of cancer, but can include:

- lumps or swelling on the body
- feeling very tired or weak
- pain that does not go away
- changes in skin or digestion
- cough and coughing up blood
- losing weight

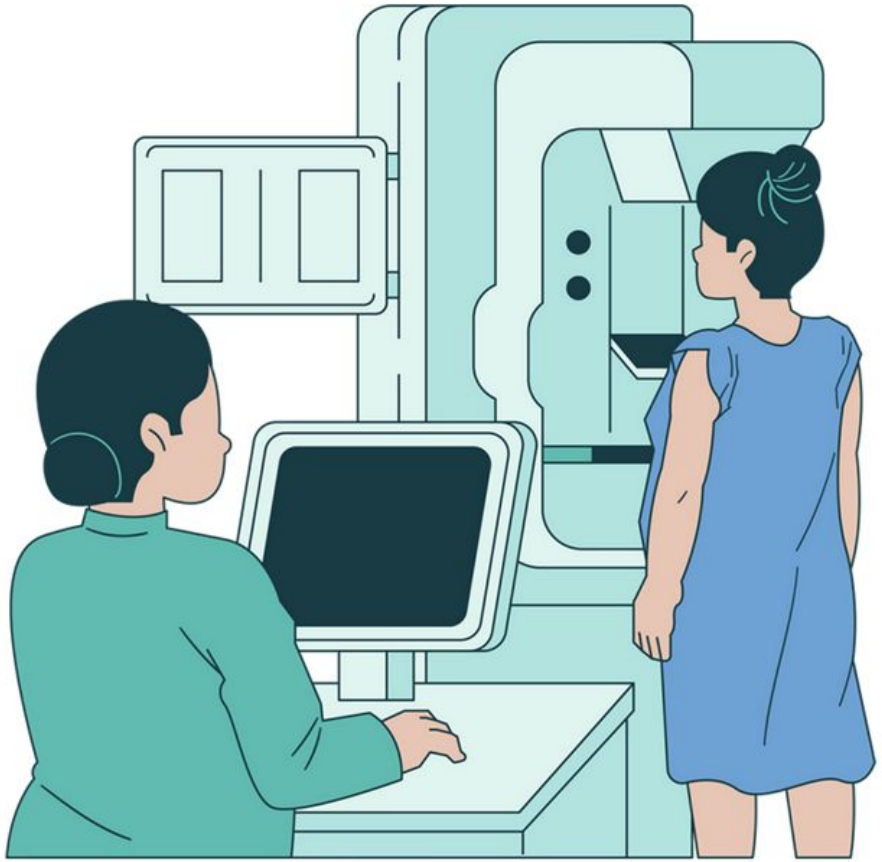


VISIT the doctor

TESTS FOR CANCER

If a doctor thinks someone might have cancer, they will do tests, like:

- blood tests
- X-rays
- ultrasound
- take a sample of tissue (biopsy)

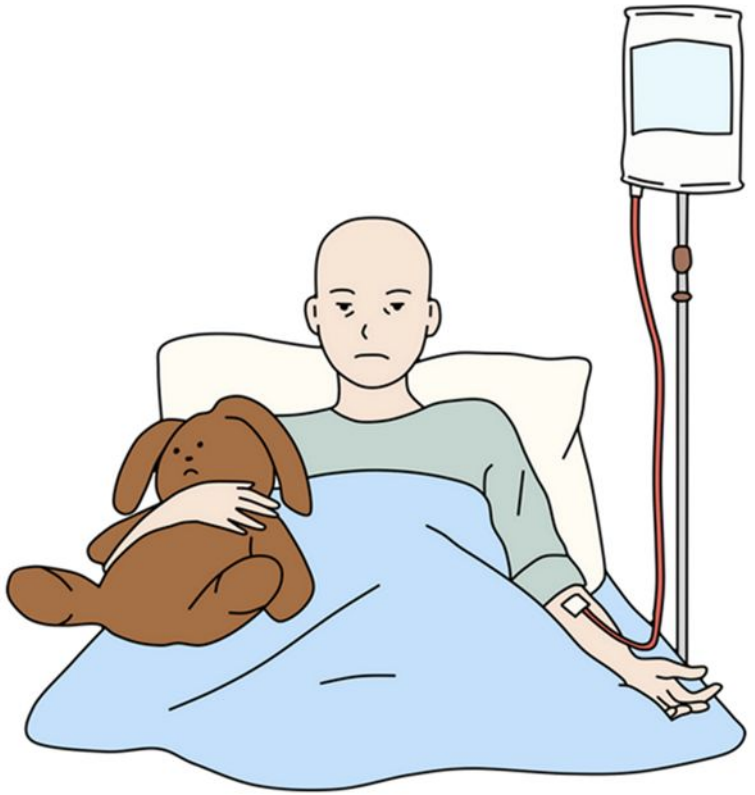


Tests help **DIAGNOSE** cancer, so treatment can start as soon as possible.

TREATMENT FOR CANCER

The treatment depends on the type and stage of cancer and can include:

Radiotherapy	Using X-rays to destroy cancer cells.
Chemotherapy	Medicines that kill cancer cells.
Hormonal therapies	Change the activity of certain hormones in the body which can slow down or stop cancer from growing.
Immunotherapy	Boosting the immune system to fight cancer.
Surgery	Removing the tumor.



Starting treatment **EARLY** helps you get better soon.

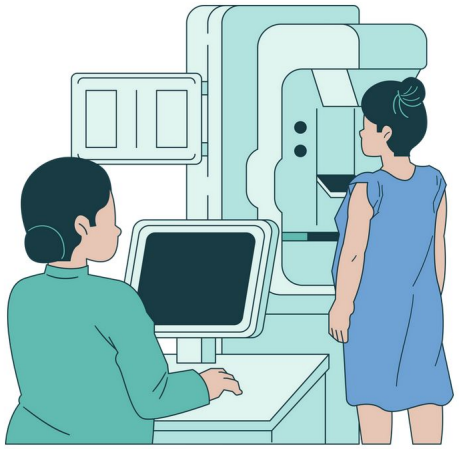
WHAT IS SCREENING?

Screenings are tests that look for very early signs of cancer.

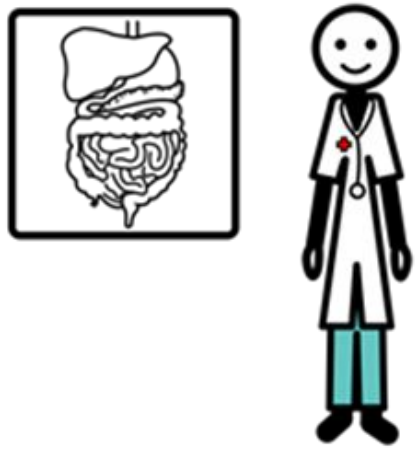
You have screening even if you feel well.

It's like a check-up to find things before they get serious.

- **cervical screening**
- **breast cancer screening**
- **colon cancer screening**







Early cancer is easier to treat and the treatment works better

CERVICAL SCREENING



in the Slovak Republic

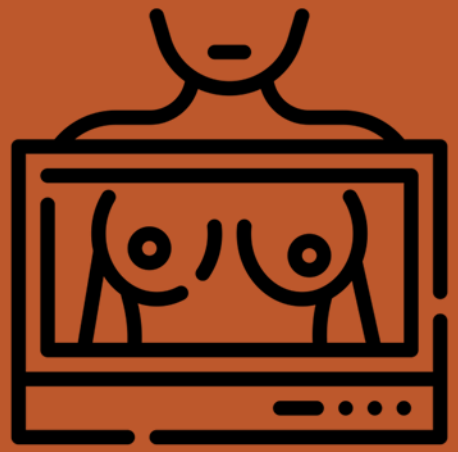
Cancer prevention:
What is a woman entitled to?

from 12 – 13 years
free HPV vaccinations for children

from 18 years
check-ups at the gynaecologist 1x/ years

from 23 – 64 years
regular cytology examination 1x/1 – 3 years

BREAST CANCER SCREENING



in the Slovak Republic

Cancer prevention:
Detect a possible malignant breast tumor at a very early stage

from 18 year –	Self-examination 1x/mouth
	Gynaecological check-up 1x/year
from 40 – 49 years -	Mammography examination 1x/2 years
from 50 – 69 years -	Mammography screening 1x/2 years

COLON CANCER SCREENING



in the Slovak Republic

Cancer prevention:

What are we entitled to?

no age limit – colonoscopy in people at increased risk

50 – 75 years – the fecal occult blood test (FOBT)
1x/2 years

colonoscopy
1x/10 years

up to 75 years – screening at the doctor‘s recommendation

WHY IS IT GOOD FOR YOU?

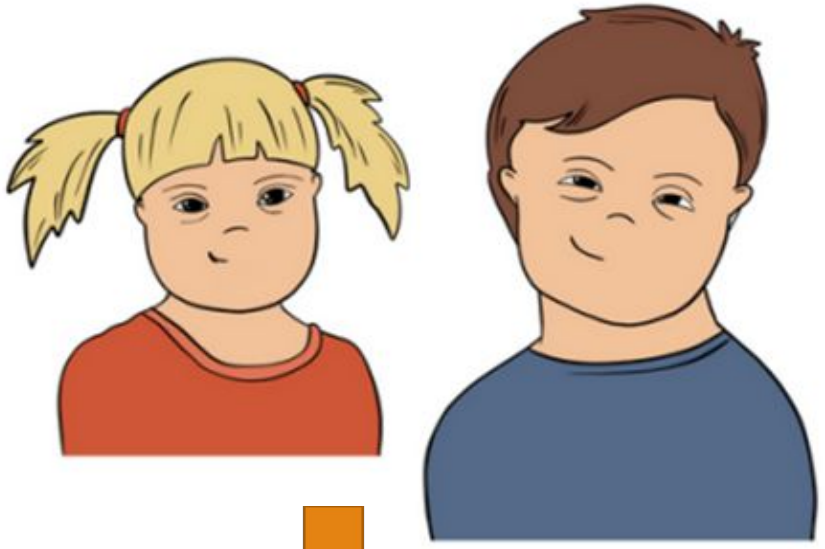


- **Finding Problems Early** — Screening can detect health problems early. The sooner problems are found, the easier they are to treat or manage.
- **Improving Quality of Life** — If problems are found early, the person can get the help and support they need sooner, improving their health and well-being.
- **Preventing Serious Problems** — Regular screening can help prevent serious issues by addressing them early before they worsen.
- **Tailoring Support** — Screening can help find the best ways to support and educate the person, making daily activities easier.

Getting the help and support you need

PEOPLE WITH INTELLECTUAL and DEVELOPMENTAL DISABILITIES - IDD

Intellectual disability means a person has some difficulties with thinking, learning, and solving problems. They might need more time to learn new things and help with daily activities.



Common challenges include:

- learning
- communication
- independence
- social skills

People with IDD can live happy and full lives with the right support

SUPPORTING PEOPLE

With Intellectual and Development Disabilities - IDD
Doctors may consider:

- open and friendly approach
- observing the person´s need.
- clear communication.
- demonstrating what will happen
- asking for consent before touching



Make patients with IDD feel safe and welcome

CONCLUSION

AN AWARENESS DAY could serve as a reminder for healthcare professionals about the importance of including people with IDD in screenings.

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THANK YOU

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International Agency for Research on Cancer. Screening in the European Union Report on the implementation of the Council Recommendation on cancer screening. Lyon 2017 Available from: < https://health.ec.europa.eu/system/files/2017-05/2017_cancerscreening_2ndreportimplementation_en_0.pdf>

Help centers. Liga proti rakovine. https://www.lpr.sk/centra-pomoci/





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CUPID supported by COST (European Cooperation in Science and Technology).

COST Description

COST (European Cooperation in Science and Technology) is a funding agency for research and innovation networks. Our Actions help connect research initiatives across Europe and enable scientists to grow their ideas by sharing them with their peers. This boosts their research, career and innovation.

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CUPID

Cancer- Understanding Prevention in Intellectual Disabilities

cost EUROPEAN COOPERATION IN SCIENCE AND TECHNOLOGY

Training School
Prague 17 to 19 September 2024

Inclusive Innovation

Working together to raise awareness and understanding through new technologies

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Institute of Educational Technology
The Open University

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Aims of this session

- Explore how innovation could help to reduce barriers to awareness and learning for people with intellectual and developmental disabilities
- Consider how accessibility and participation in design plays a role in achieving this
- Identify areas where these could be applied to cancer understanding and prevention.

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Why inclusive innovation?

- Innovation changes the world we live in
- If we can steer it well, the changes can be positive
- If people with intellectual and development disabilities, or other minority groups, are not a focus in innovation it often raises new barriers and causes inequity.

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Foundations: Accessibility

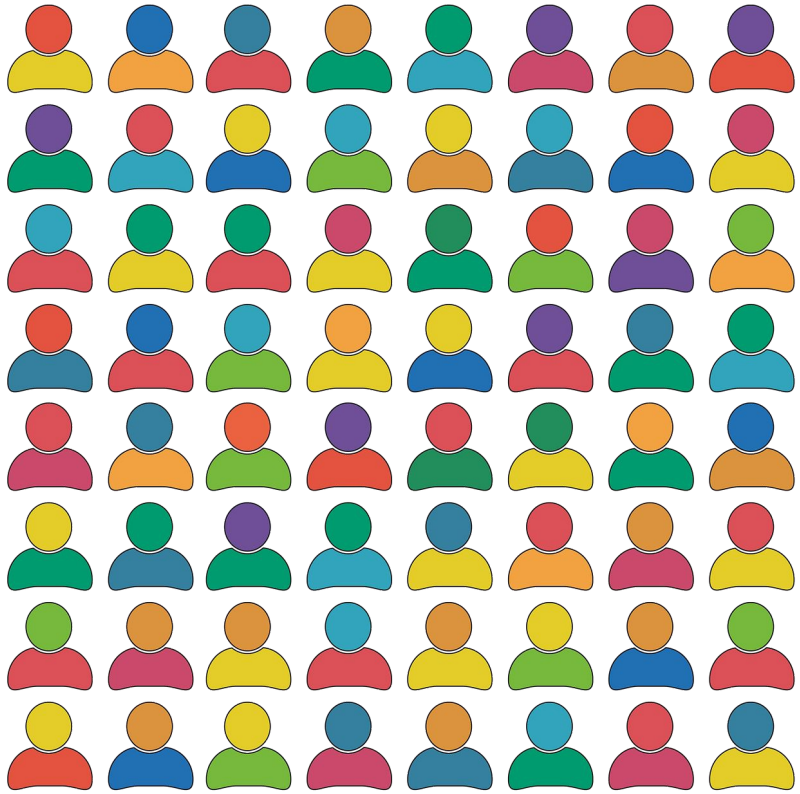
- Encourage a focus on accessibility from an early stage in any initiative.
- This should reduce the barriers to use and inequities that may otherwise emerge.



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What do we mean by accessible?

- That access is not limited by disabilities
- Access not limited for a particular population, for example:
  - language being used is not too complex
  - less reliance on prior knowledge
  - engagement does not require costly or specialised devices and resources
- Whether content and systems can technically be accessed
- Whether the activities are suitable for all people to engage with.



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Coughlan, T., Lister, K., Seale, J., Scanlon, E., & Weller, M. (2019). Accessible inclusive learning: Foundations. *Educational visions*, 51-73. Ubiquity Press.

Accessibility regulations as a driver for change

- EU Web Accessibility Directive – expectations for public sector bodies to make websites and mobile apps accessible
- European Accessibility Act – everyday products and services

- Both feature the Web Content Accessibility Guidelines (WCAG)
- WCAG has Four Principles:
  - Perceivable
  - Operable
  - Understandable
  - Robust



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Cognitive accessibility

- For example:
  - Content can be simplified or read out with assistive technologies
  - Clear and well structured
  - Easy to navigate
  - Mistakes can be corrected easily
  - Text is supported by images or other content to make it easier to understand
  - No time limits placed on the user to read content or respond.

There has been increased focus on cognitive accessibility in recent changes to the WCAG standards.

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Cognitive Accessibility at W3C | Web Accessibility Initiative (WAI) | W3C



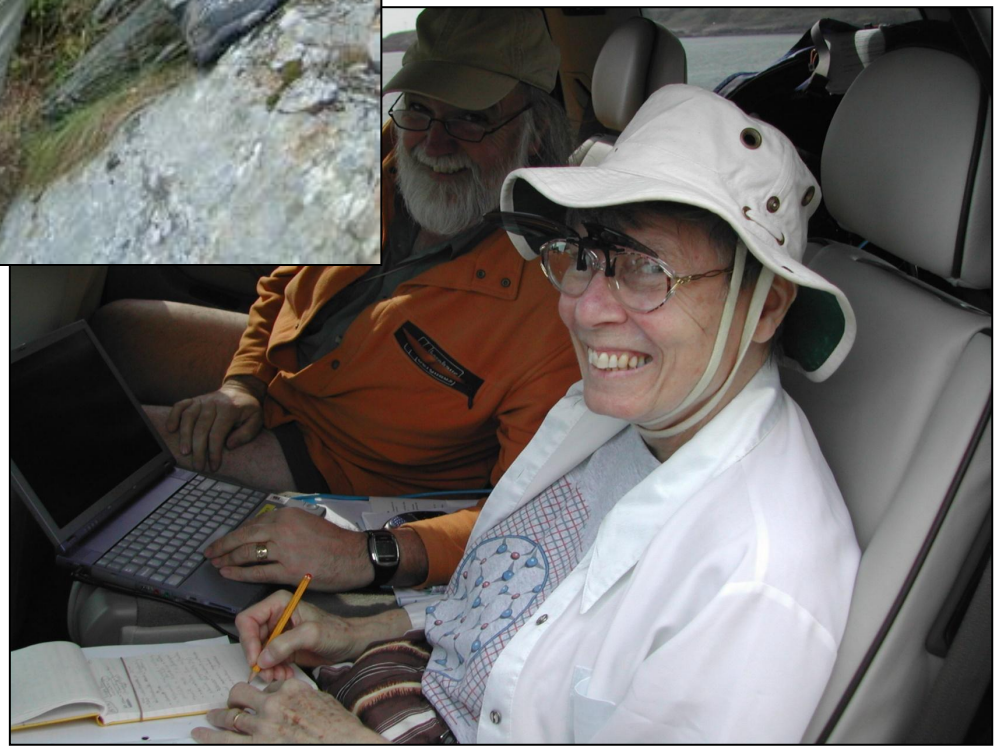
Accessibility is not just about meeting standards.

It is also about recognising barriers and working to remove them.

Fieldwork is an important learning experience.

But the environments aren’t accessible for all.









Coughlan, T., Adams, A., Rogers, Y., & Davies, S. J. (2011). Enabling live dialogic and collaborative learning between field and indoor contexts. *25th BCS Conference on Human-Computer Interaction*. 88-98

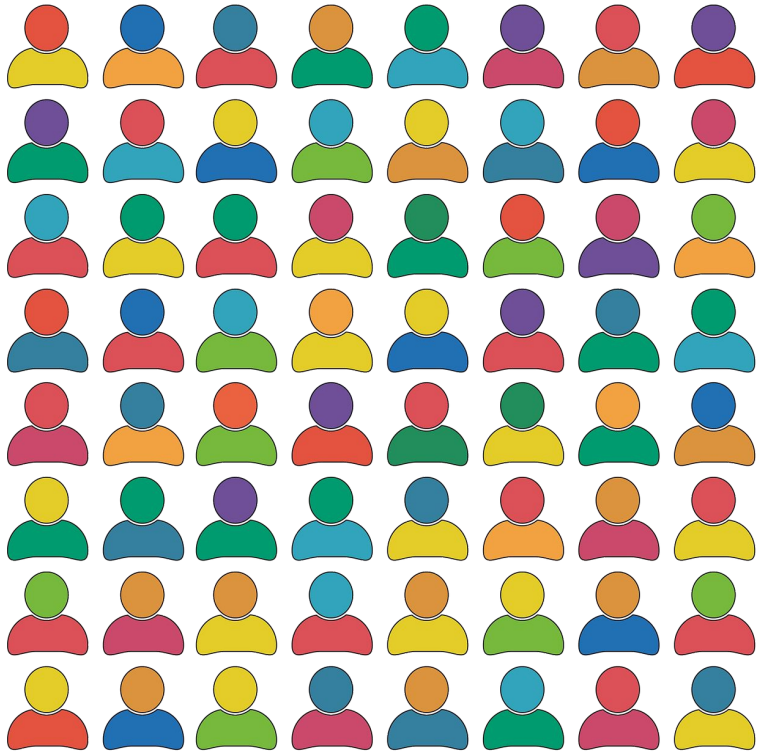
Foundations: Inclusive innovation

When people innovate, do they:

- Assume what they need is what other people need?
- Build it first and leave considering others until later?
- See improving things for the majority as the only measure of success?

Or:

- Look for barriers that mean some people are left behind?
- Talk to a wide range of people?
- Listen and act on what they say from the start?
- See reducing inequity or improving things for all as success?



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Some principles for Inclusive Innovation

Start with the audiences who face challenges.

Then look towards opportunities to innovate for all.

Explore simple, novel ways to get people to be creative.

To open up new ways of thinking and participation.

Consider accessibility from the beginning of the process.

To create results that are both innovative and inclusive.

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Enabling inclusive research

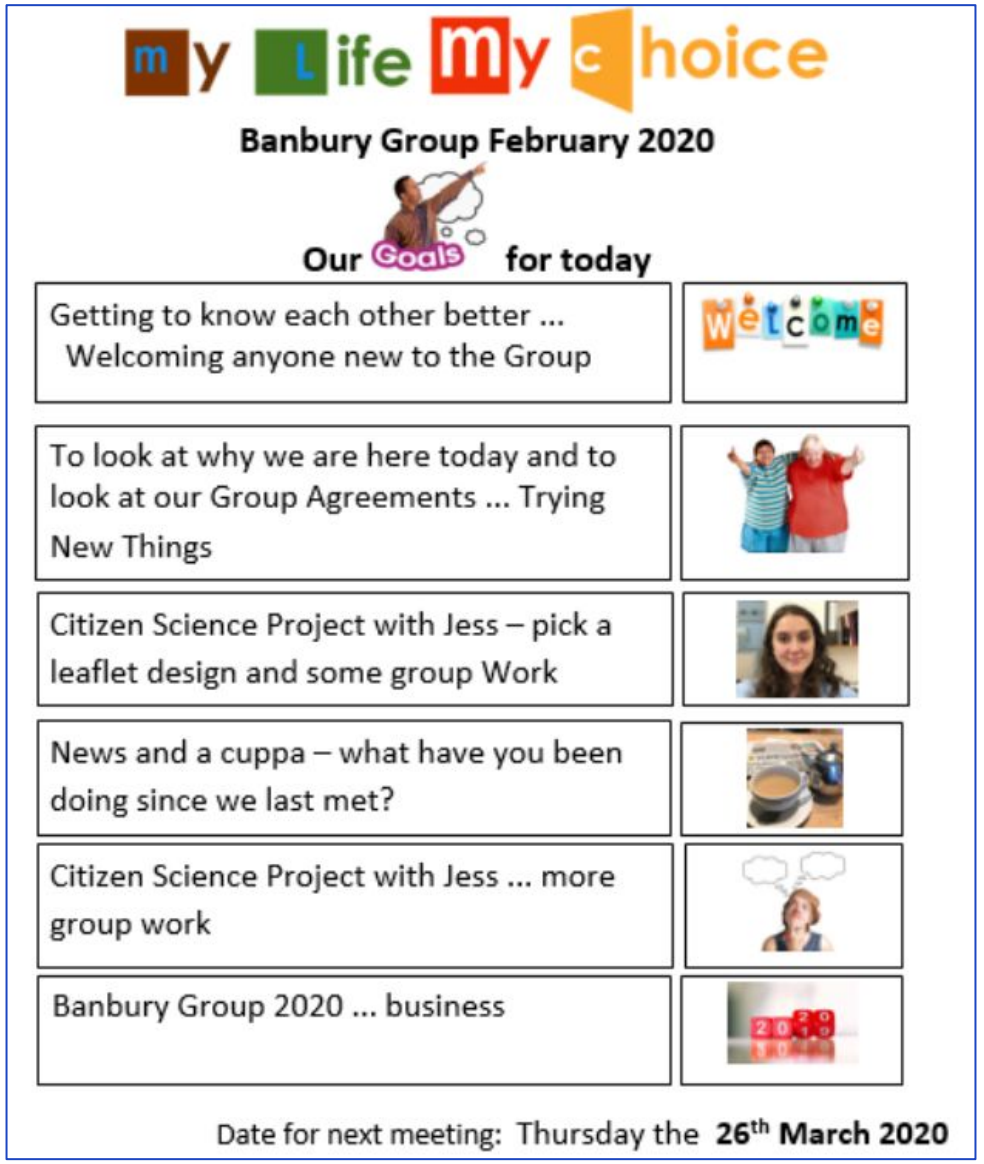
- How can we develop models for participation for people with intellectual disabilities in research?
- Citizen Science as a starting point as it aims to engage widest public in research.

- **Disengagement**: Being the object of other people's research. Not being part of the direction or agenda of the research.

Or

- **Belonging**: Research questions, approach and results created in partnership.

- A non-disabled researcher and supporting structures can facilitate attention and progress in tasks.
- Familiar environment and routines help to enable new ways of working.



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Carr, Jessica E. (2021). Can an Inclusive Approach Meaningfully Engage People with Learning Disabilities? Exploring Capacity Building for Citizen Science. PhD thesis, The Open University.

Technology use by people with intellectual and developmental disabilities

- PWIDD have fewer opportunities to access computers and use computers less
- But technology holds potential for increased autonomy and empowerment
- Barriers are often raised because of concerns for the risk of potential harm
- But there are also also risks to digital exclusion.

- Can we create **possibilities-focused approaches**
- **positive risk taking**
- and support for **creative uses of technology**?

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Seale, J. (2024). The Potential Contribution of Ethical Frameworks in Guiding the Development of Digitally Inclusive Support Practices for Adults with Learning Disabilities. In: Bianchi, A., Vogt, J.A. (eds) Intellectual Disabilities and Autism: Ethics and Practice. Springer.

Example: Communicating barriers and experiences

- A participatory research agenda with disabled students
- Listening to what they wanted us to explore and the problems we should work with them to address.

- Theme arising: Limited ways to share their experiences and be understood
- Empower them to represent barriers faced and the impacts of these over time
- Expanded this to represent their goals, successes, important events…

- Led to a set of tools called Our Journey
- Simple interface for building up stories about learning and life
- Started off as cards and a board to use in meetings and workshops.



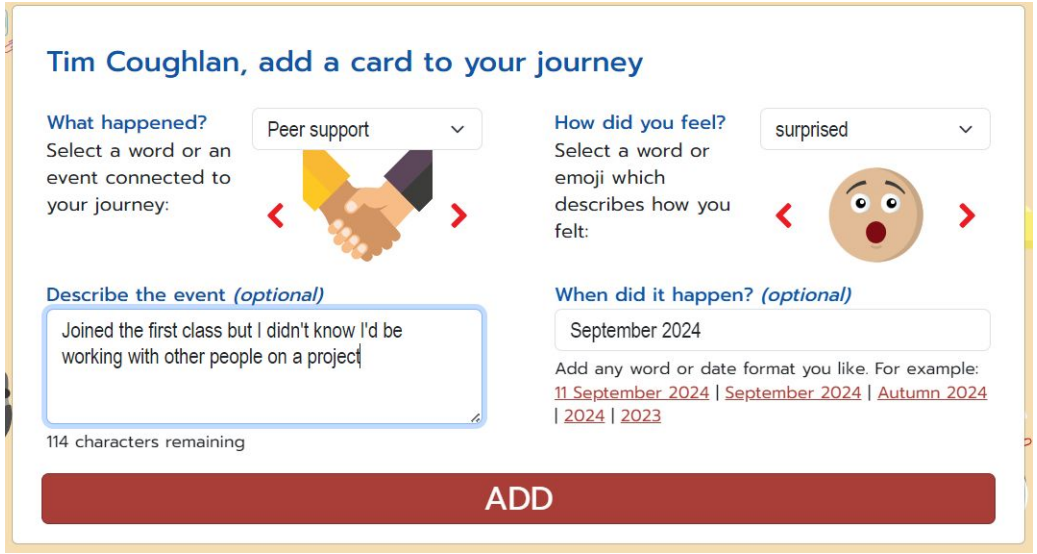


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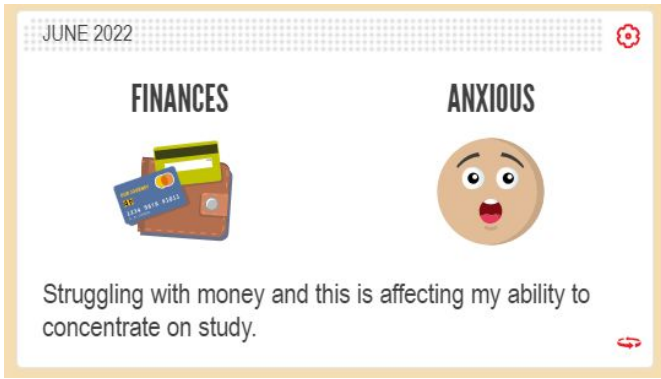
Coughlan, T., Lister, K. and Freear, N. (2019). Our Journey: Designing and utilising a tool to support students to represent their study journeys. In: Proceedings of the 13th Annual International Technology, Education and Development Conference 2019.

Supporting storytelling

- Listening to ideas and feedback and seeing how people used the cards, we created an online version: ourjourney.ac.uk
- Used by diverse students and teachers
- Reflecting on challenges, setting goals, sharing situations, talking about their mental health.
- Student controls their journey.
- Storytelling is an important tool for development and for communicating.
- We all need help to get started and to use storytelling effectively.



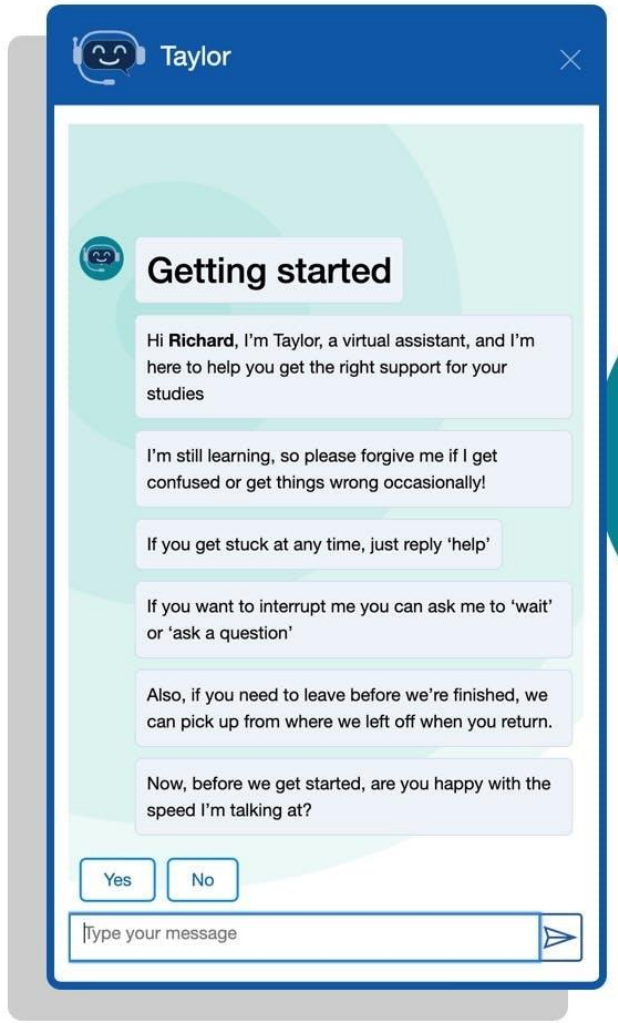




Coughlan, T., Lister, K., & Lucassen, M. (2021). Representing the unseen with “our journey”: a platform to capture affective experiences and support emotional awareness in university-level study. *Journal of Formative Design in Learning*, *5*(1), 39-52.

Example: Talking about disabilities and study support

- ‘Taylor’ was developed with support from Microsoft
- A virtual assistant for disclosing disabilities and asking questions about support
- Capable of text or speech input / output
- Designed with the participation of disabled students and advisory staff
- Live trials as an alternative to the usual form filling approach to gaining support.



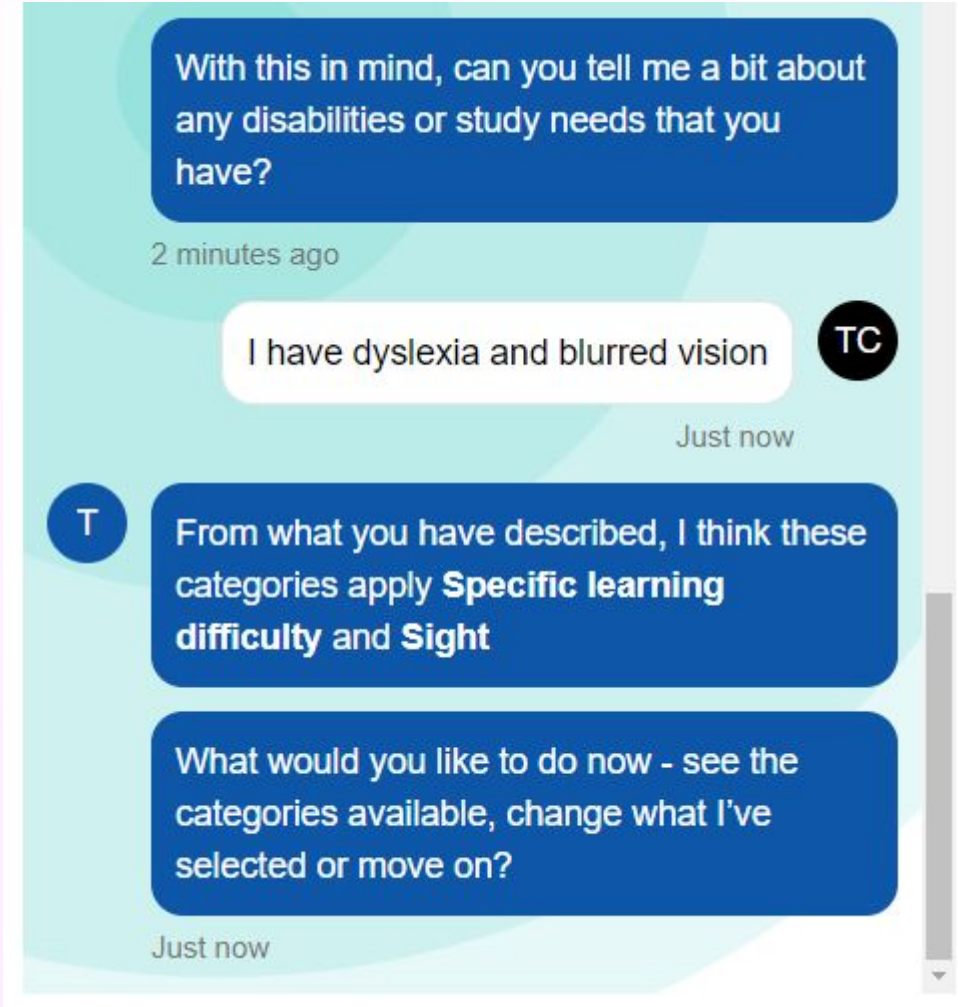


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Using language understanding

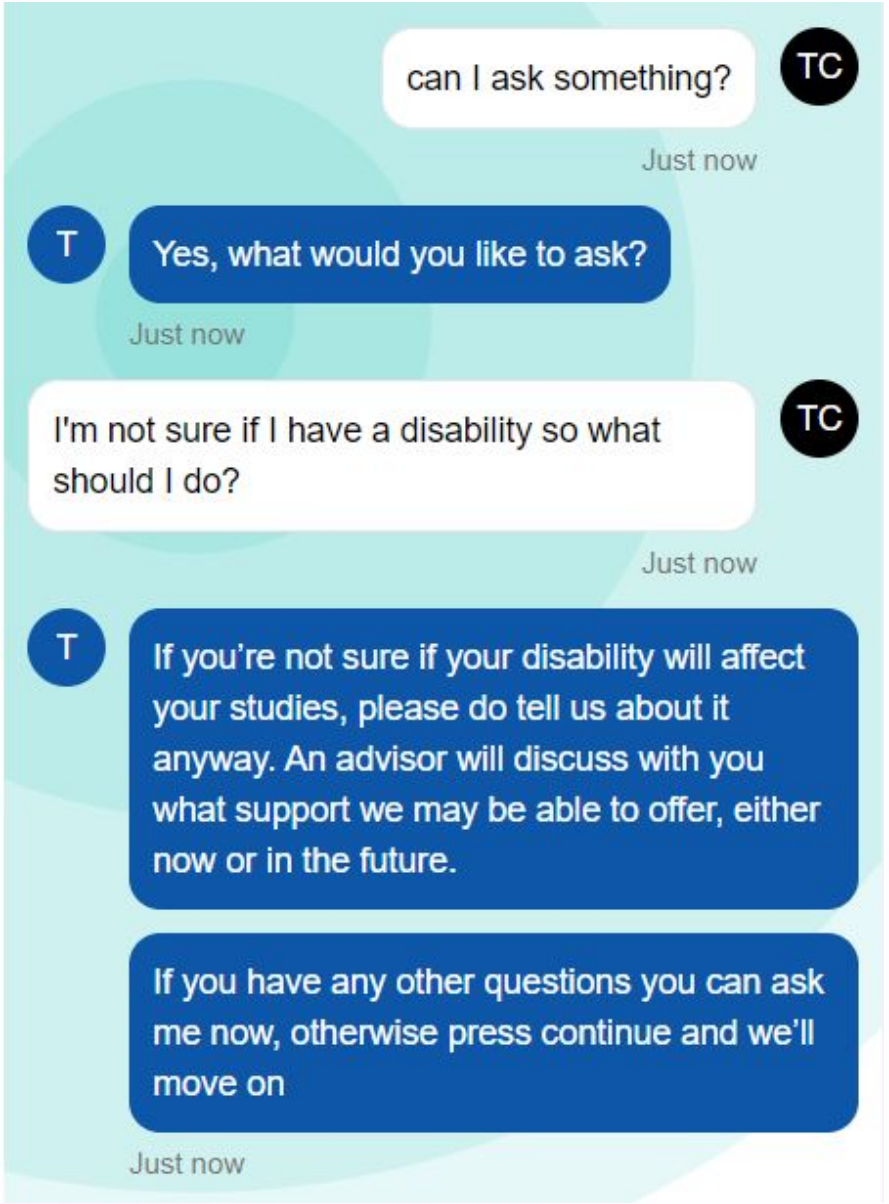
AI Language Understanding models can extract disability categories from free text



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Helping students to learn about support and study

- Providing guidance and responses, using a knowledge base.
- Taylor has over 100 study and disability related question and answer pairs
- Developed with our student consultants and advisors
- Enhanced through conversations.



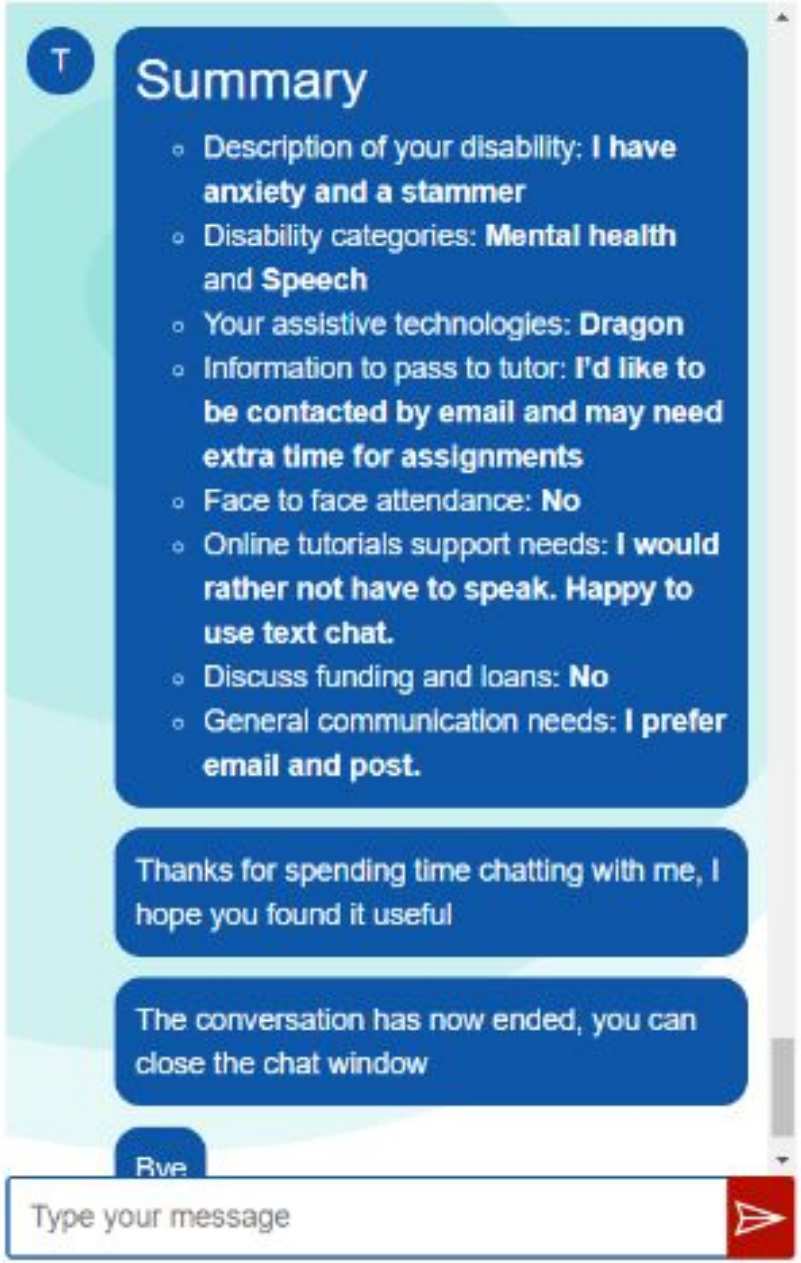
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Summarising the conversation

Information is summarised for use in follow up conversations and student profile creation.

Opportunity to check and change what has been captured.

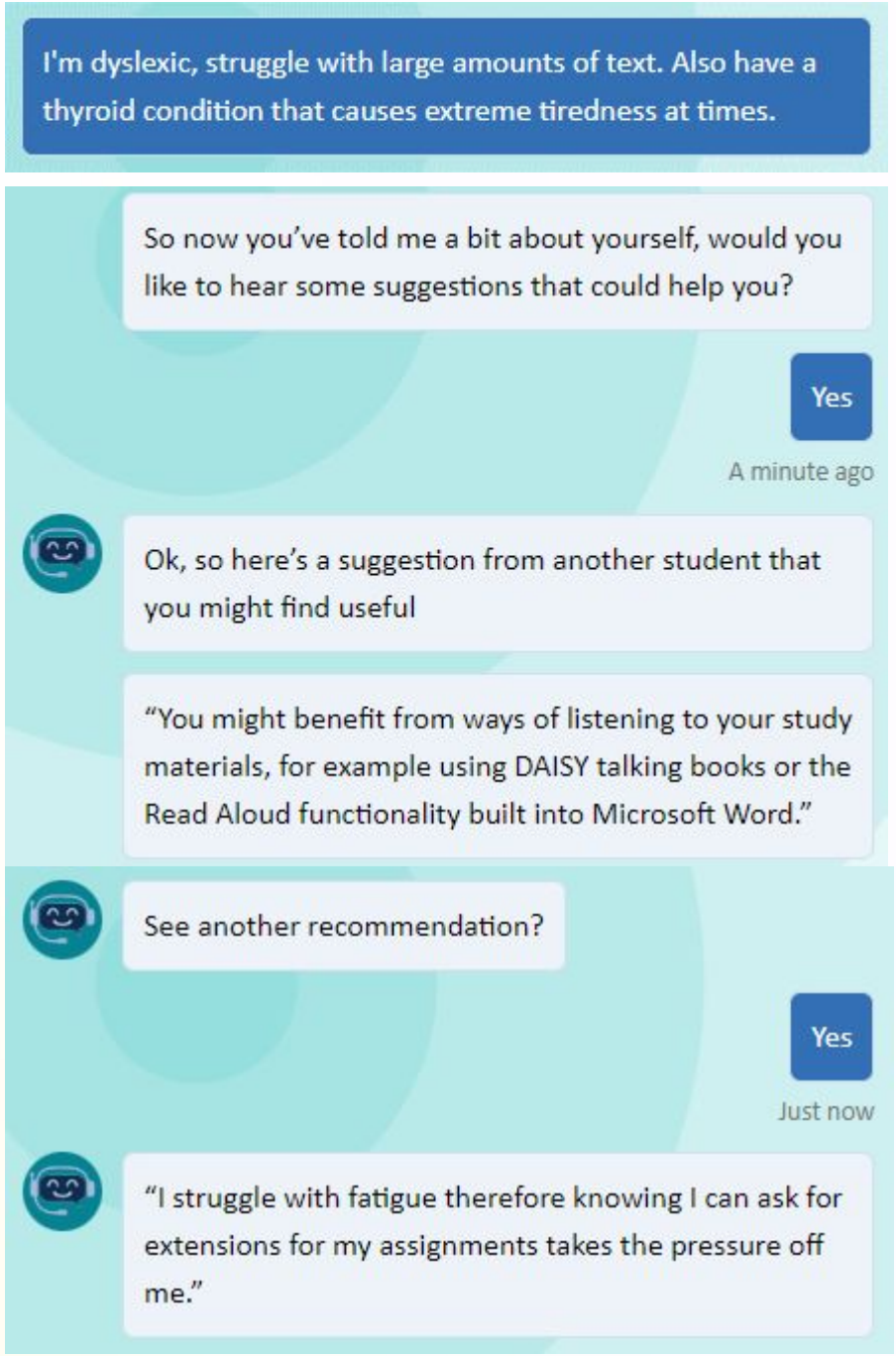
Then sent to the relevant advisor team.



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Personalised suggestions

- Experienced students who had disclosed disabilities were asked to provide suggestions of the resources, tools and strategies that help them with their studies
- Taylor then recommends the suggestions that are relevant to each new student with disabilities.



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Next steps: Building a Digital Access Advisor

DA **Advisor**

Hello! I'm here to support you with your studies. Could you please tell me a bit about your disabilities and any specific challenges you face while studying? This will help me provide you with the most relevant study tips and support.

U **You**

I'm an access student studying Y032. I have dyslexia and struggle to use a keyboard. What might help me with my studies?

DA **Advisor**

Thank you for sharing that information. To provide you with the best possible support, could you please elaborate a bit more on the following:

- How does dyslexia specifically affect your reading and writing tasks?
- What kind of difficulties do you face when using a keyboard? Is it related to motor skills, pain, or something else?
- Are there any particular study activities or tasks that you find especially challenging?

This will help me tailor the study tips to your needs more effectively.

U **You**

I find it difficult to use a keyboard because of arthritis. Then my dyslexia makes it more difficult to write the assignments. Is there anything the university can do to help?

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Learning about support and study

DA **Advisor**

Thank you for providing more details. Based on your challenges with dyslexia and arthritis, there are several ways the Open University (OU) can support you. Here are some suggestions and resources that might be helpful:

Support for Dyslexia:

- **Assistive Technology**: The OU offers various assistive technologies that can help with reading and writing. For example, text-to-speech software can read out text to you, and speech-to-text software can help you dictate your assignments instead of typing them.
- **Study Skills Support**: The OU provides resources and workshops specifically designed to help students with dyslexia develop effective study skills. This includes strategies for reading, note-taking, and writing assignments.

Support for Arthritis:

- **Ergonomic Equipment**: The OU can provide advice on ergonomic equipment that can make typing easier, such as ergonomic keyboards and mice. They may also offer voice recognition software, which allows you to dictate your work instead of typing.
- **Alternative Formats**: If you have difficulty handling physical books, the OU can provide course materials in alternative formats, such as digital versions that can be read on a tablet or e-reader.

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Assisting the individual to understand

U **You**

Thankyou. Can you make an easy read version of this for me?

DA **Advisor**

Of course! Here is an easy-read version of the information:

Help for Dyslexia:

- **Assistive Technology**:
  - Use software that reads text out loud to you.
  - Use software that lets you speak your assignments instead of typing.
- **Study Skills Support**:
  - The OU has workshops to help you with reading, note-taking, and writing.

Help for Arthritis:

- **Ergonomic Equipment**:
  - Use special keyboards and mice that are easier to use.
  - Use voice recognition software to speak your work instead of typing.
- **Alternative Formats**:
  - Get digital versions of books to read on a tablet or e-reader.

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Example: Guiding organisations to improve their provision

- Working with Natspec, the UK membership organisation for specialist colleges that support disabled learners
- Problem: Understanding of assistive technology is limited across the sector.
- Continual change in technology, diverse learners and learning contexts.
- Tailored guidance is needed but there are many colleges, limited expertise and funding.
- We created a new way to deliver advice.

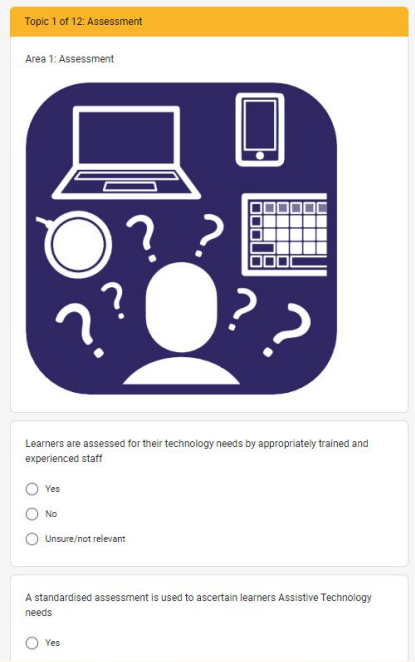


Harrod-Beck, Neil; Coughlan, Tim and Greenwood, Richard (2024). Intelligent strategy development and recommendations: Using TechAbility Standards to improve support for disabled learners. The Open University | TechAbility, UK.

Using AI and Standards to provide organisations with tailored guidance

- College staff complete a form to audit their current provision.
- The system draws on the TechAbility Standards to produce tailored reports that provide actions and guidance on where and how to improve.





Enhancing Dictation Accessibility for Learners

Suggestions for Improvement:

To enhance dictation accessibility, consider the following approaches to support learners in using their voice effectively to write text:

- **Create an Inclusive Environment:** Ensure the learning environment is as quiet as possible to minimize distractions and allow for clear voice recognition.
- **Leverage Quality Equipment:** Provide noise-cancelling, high-quality headsets to improve the accuracy of voice recognition and dictation software.
- **Assess Timing:** Schedule dictation tasks when learners are most alert and their concentration levels are high.
- **Training and Pilot Testing:** Teachers should familiarize themselves with dictation tools and perform a trial run to anticipate possible learner challenges.
- **Foster Enjoyment and Resilience:** Make dictation tasks enjoyable and encourage a patient, persistent attitude.

Steps for Implementation:

1. **Assessment and Environment Preparation:**
    a. Evaluate the level of noise and potential interruptions in the learning space and make necessary adjustments.

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Harrod-Beck, Neil; Coughlan, Tim and Greenwood, Richard (2024). Intelligent strategy development and recommendations: Using TechAbility Standards to improve support for disabled learners. The Open University | TechAbility, UK.

Discussion Activity: Let's explore the opportunities!

1

Pick a topic of interest within the goals of the CUPID Network:

- Prevention
- Screening
- Diagnosis
- Treatment
- Roles of carers or support workers
- Raising awareness
- Behaviour change
- your own topic…

2

What is a problem in this topic area that we should seek to resolve through innovation?

3

What do we need to do to enable effective participation of people with intellectual and developmental disabilities?

Thank you!

Dr Tim Coughlan
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COST Description

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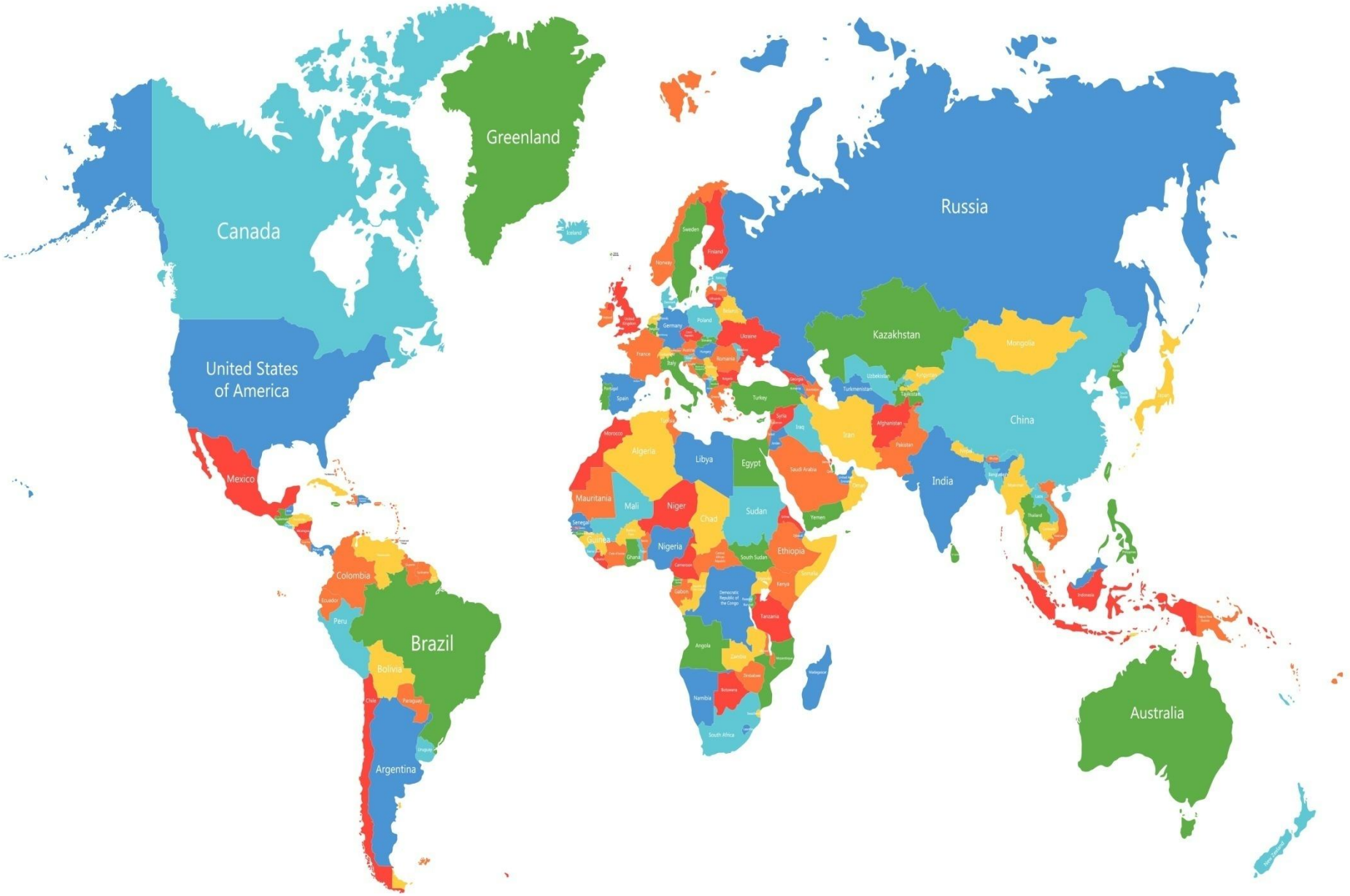
Diet and Weight

Eda SAHIN

Training School

Prague 17 to 19 September 2024

CUPID
CANCER UNDERSTANDING PREVENTION IN INTELLECTUAL DISABILITIES


Greenland
Canada
Russia
United States of America
Kazakhstan
Mongolia
China
India
Mexico
Brazil
Australia
Argentina

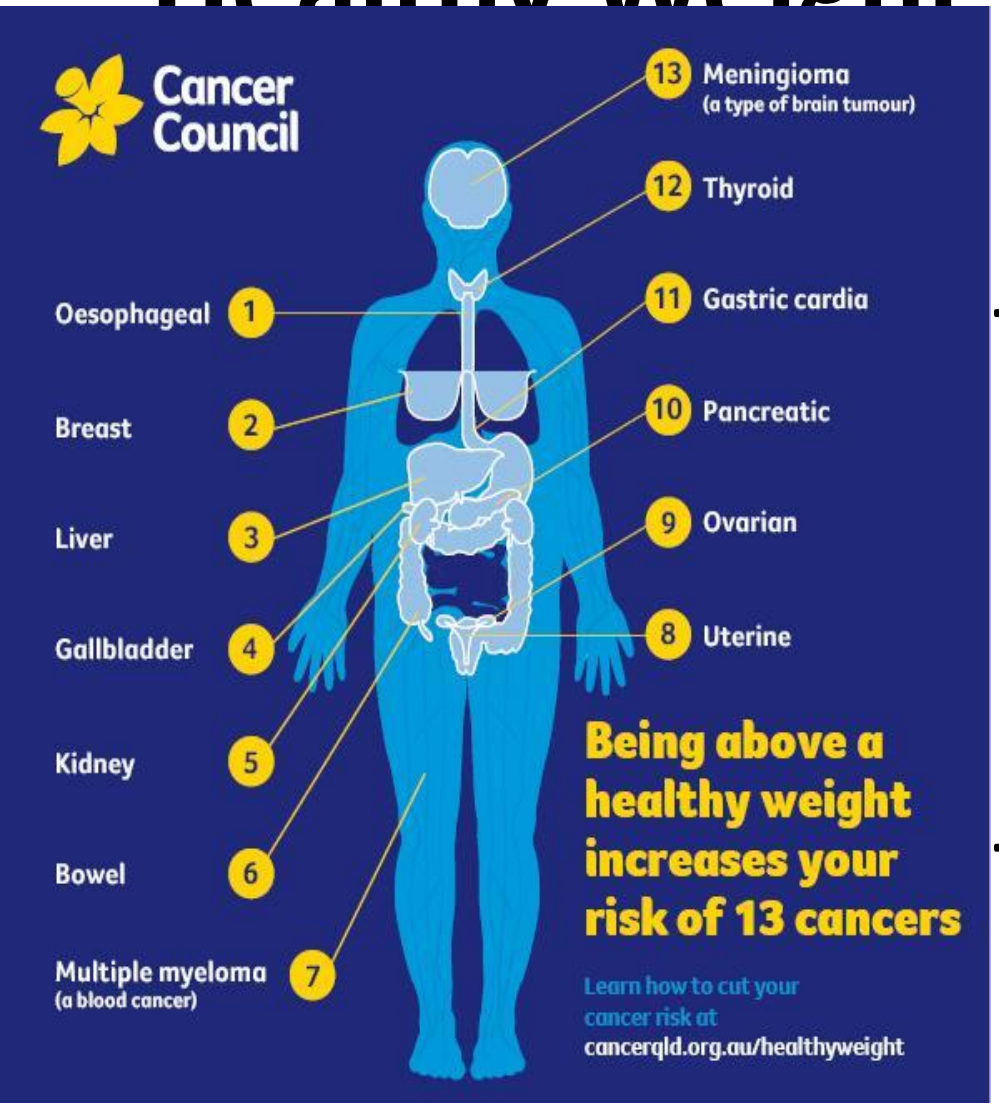

Byprac
Edirne
İstanbul
Gebze
Sakarya
Bursa
Çanakkale
Ankara
Eskişehir
Samsun
Giresun
Trabzon
Rize
Batum
ბათუმი
Gürcistan
Tiflis
თბილისი
Kars
Ermenistan
Erzurum
Sivas
Türkiye
Afyonkarahisar
İzmir
Aksaray
Kayseri
Malatya
Van
Konya
Denizli
Diyarbakır
Siirt
Batman
Mardin
Şanlıurfa
Gaziantep
Adana
Bodrum
Antalya
Marmaris
Side
Mersin
Halep
حلب
Musul
الموصل
Erbil
اربيل
Süleymaniye





- Good nutrition,
- Weight control,
- Exercise.

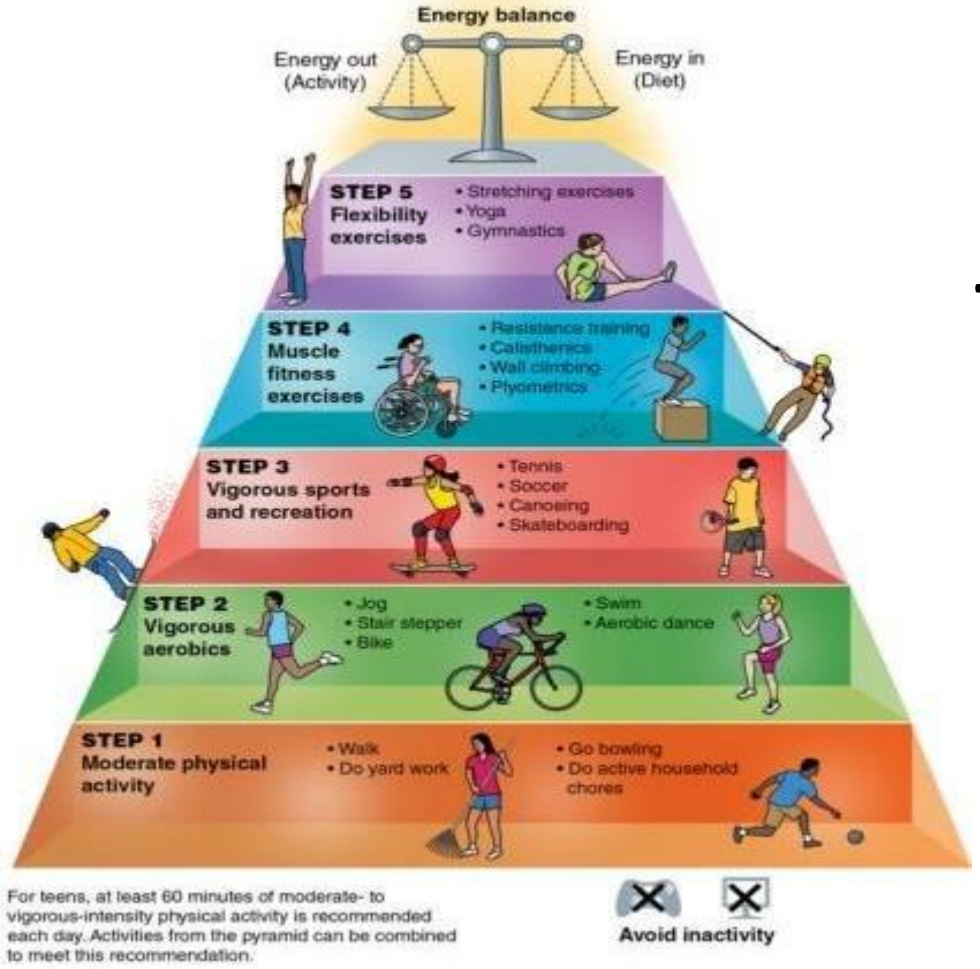
Healthy Weight



-Avoid weight gain.

-Body fat in the waistline

Physical Activity



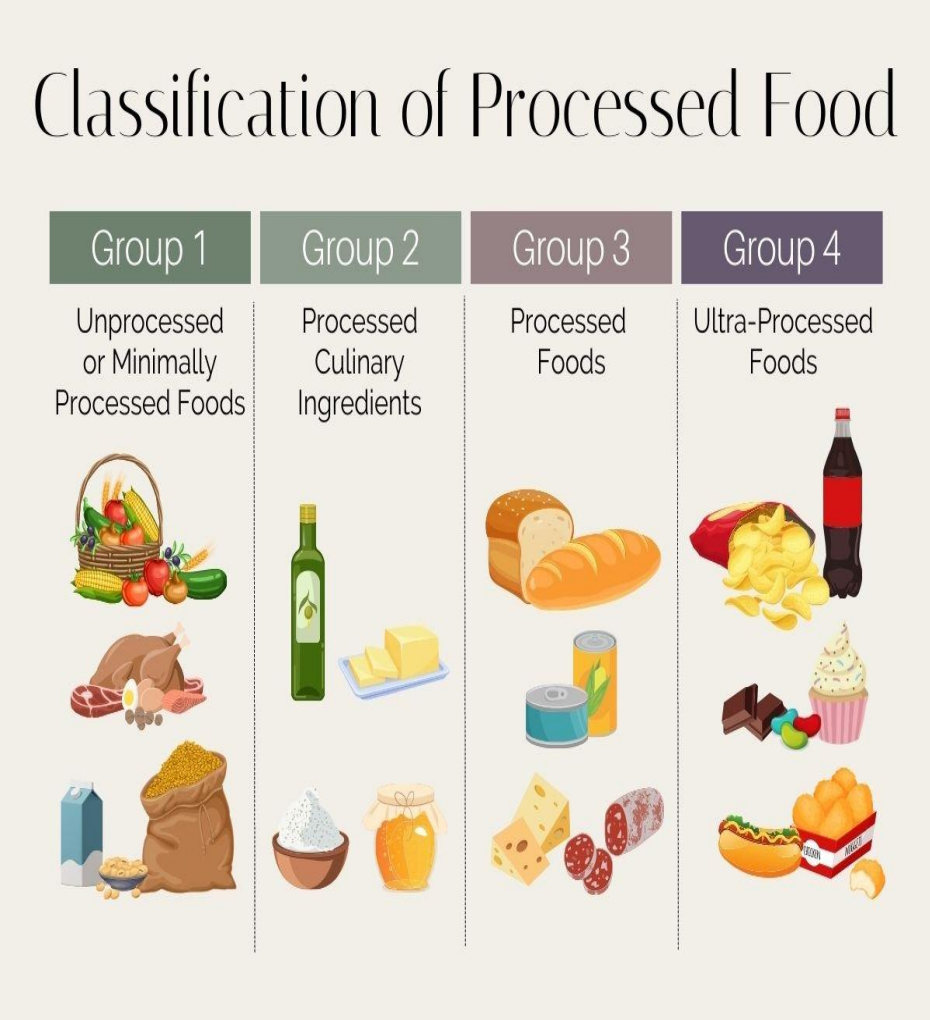
-Be physically active as part of everyday life.

Healthy Diet



-Base all your meals on plant foods.

Processed Foods



- Limit processed foods to control calorie intake and maintain a healthy weight.

Red and Processed Meats



- Limit intake of red meat and avoid processed meat.

Alcoholic Drinks



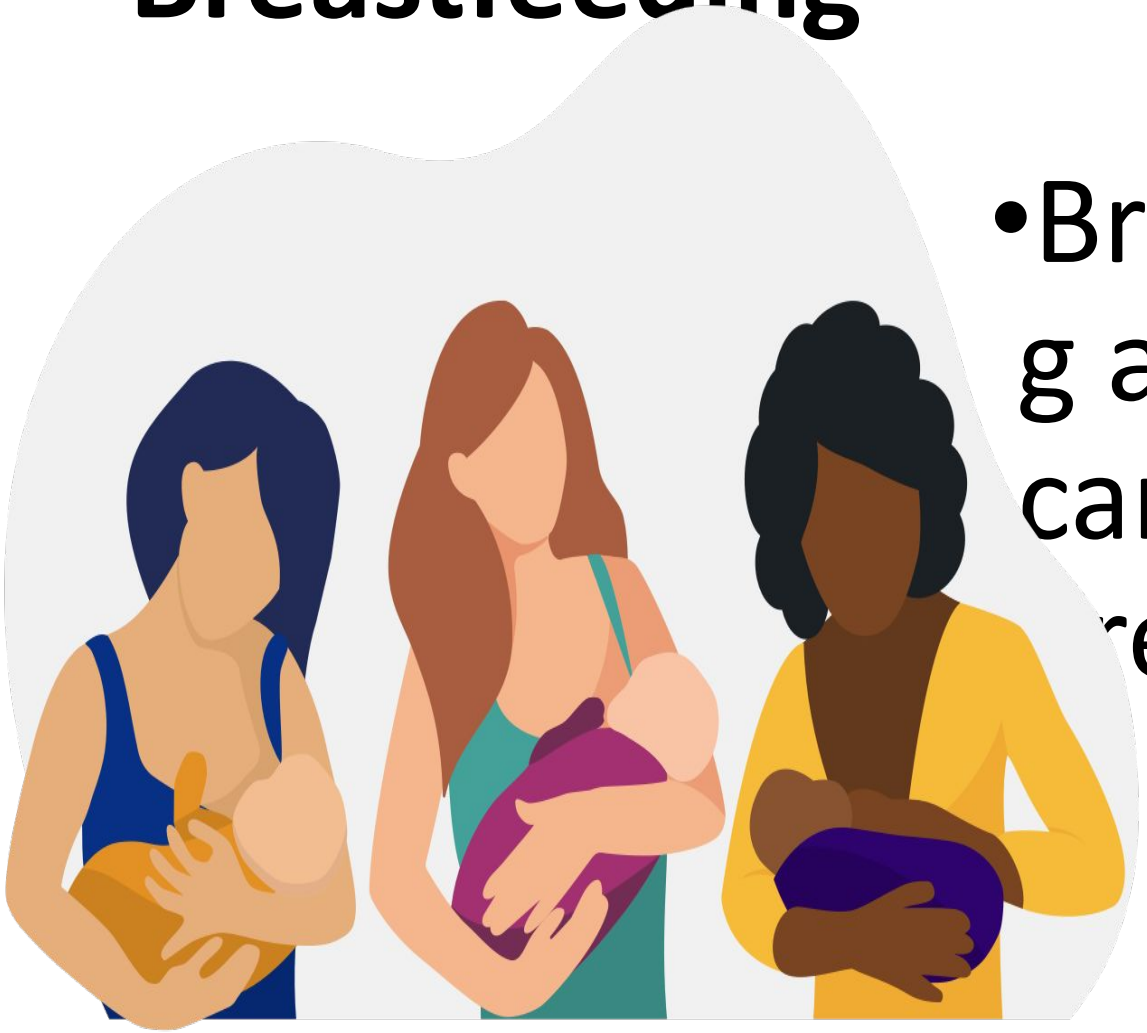
- Limit alcoholic drinks.
- **And always remember — do not smoke or chew tobacco.**

Dietary Supplements



- Aim to meet nutritional needs through diet alone.

Breastfeeding



- Breastfeeding aids in cancer prevention.

Conclusion

A healthy diet, a healthier world

Thank you for your attention







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Acknowledgement

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CUPID supported by COST (European Cooperation in Science and Technology).

COST Description

COST (European Cooperation in Science and Technology) is a funding agency for research and innovation networks. Our Actions help connect research initiatives across Europe and enable scientists to grow their ideas by sharing them with their peers. This boosts their research, career and innovation.

Weblink

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CANCER PREVENTION

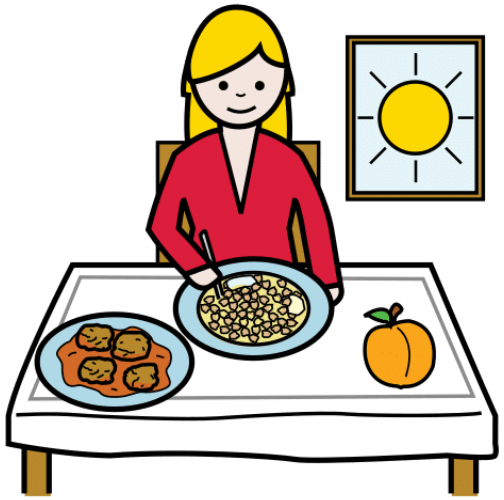
DIET AND WEIGHT

Katarzyna Ćwirynkało
Agnieszka Żyta

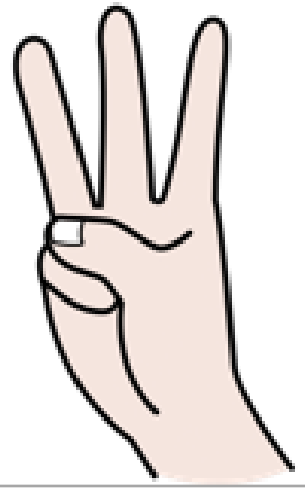
Plan 3 or 4 meals each day

For example:
breakfast
lunch
afternoon snack
dinner

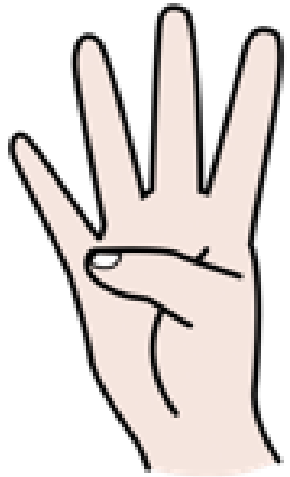


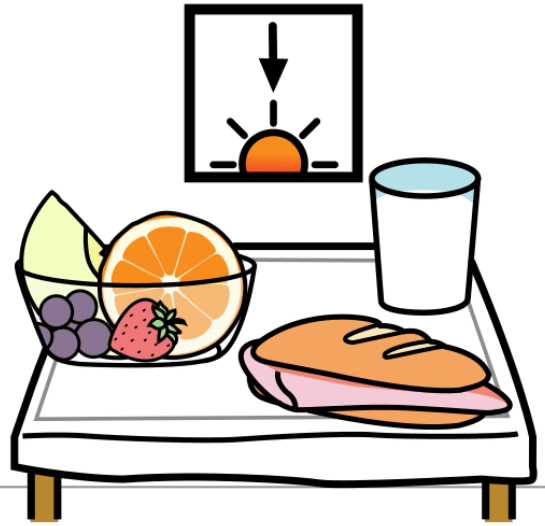


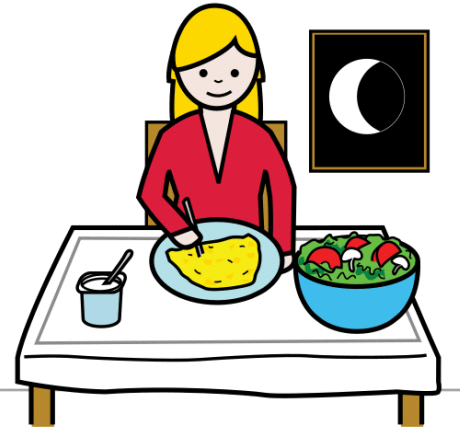
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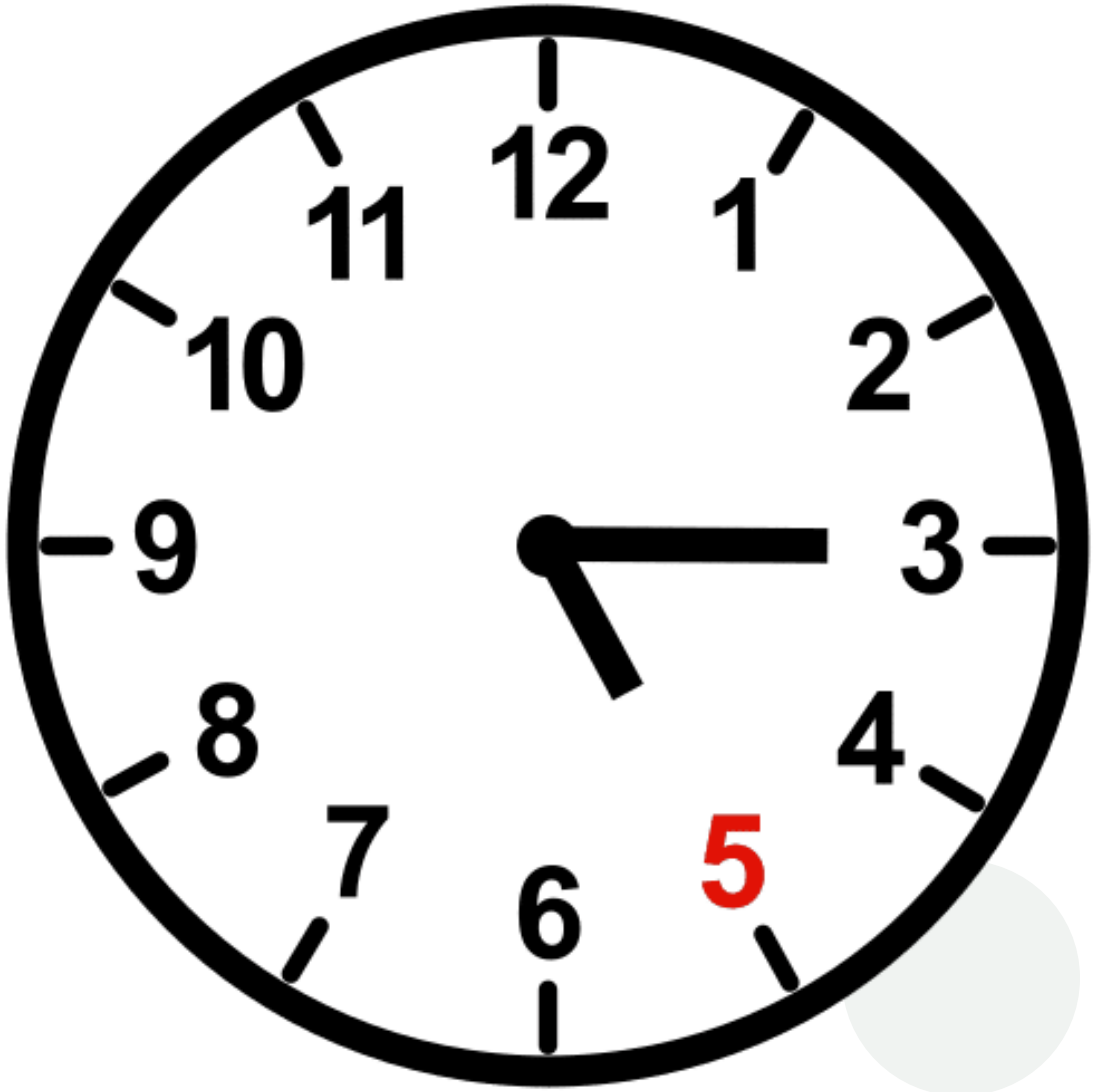


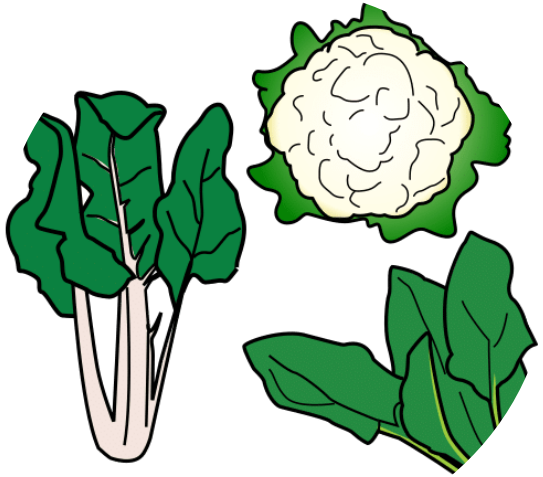


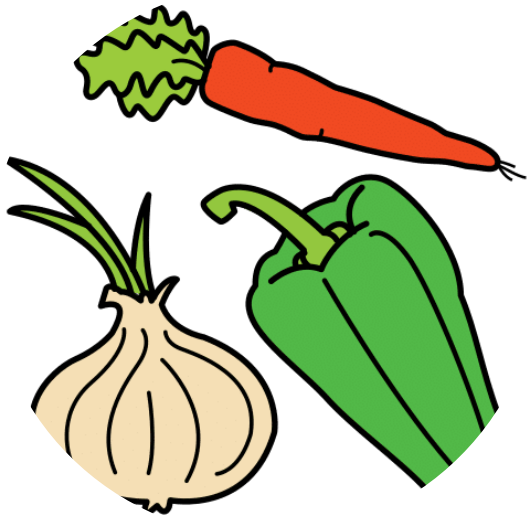


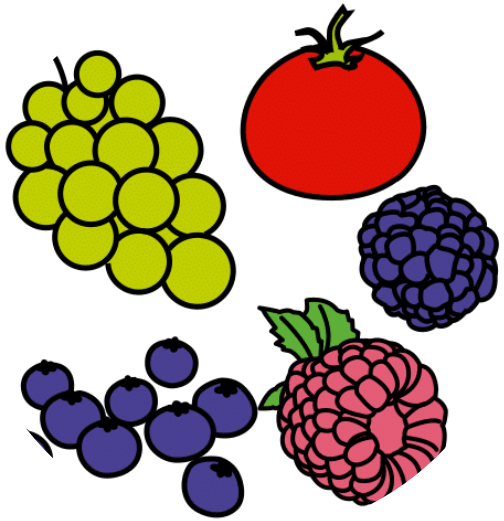
Eat regularly every 3-4 hours. Remember!

If you eat regularly, you avoid sudden hunger and being tired











Eat plenty of vegetables and fruit

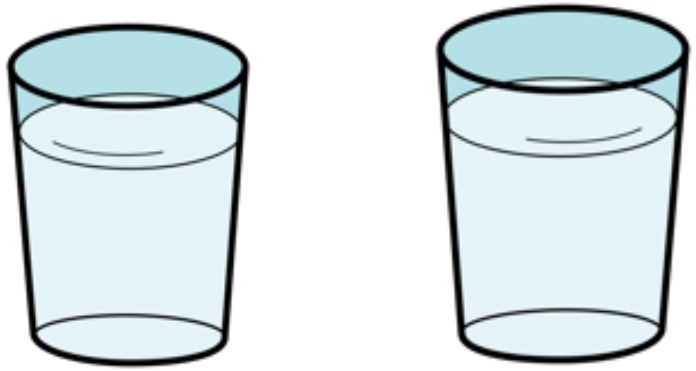
- Vegetables and fruit have vitamins and minerals.
- Vitamins and minerals are healthy elements of food.
- Eat fruit and vegetables every day.





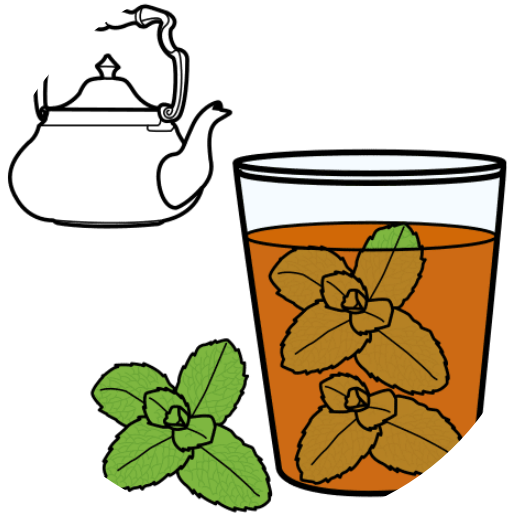
Drink water before or after eating

- Try to drink 2 litres of water every day.
- That's about 8 glasses.
-



Give up sweetened and soda drinks

- You can add your favourite fruit or herbs to your water.
- For example, lemons, strawberries or mint.
- If you like tea, choose green or white.





You can drink 1 or 2 coffees each day



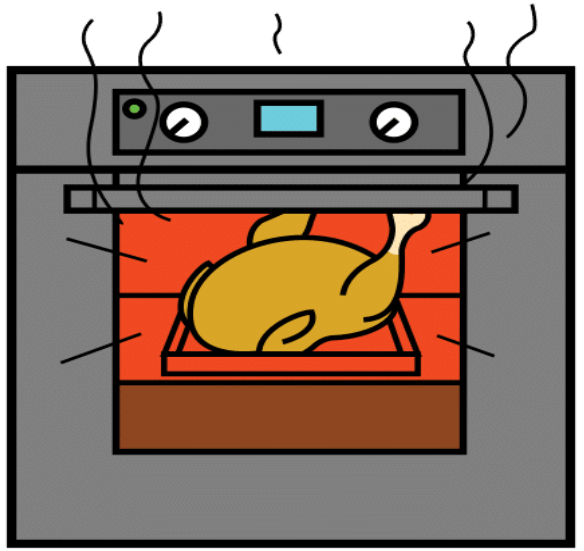


Rarely eat red meat

- Choose poultry meat or fish.
- Cook or bake meat in the oven.
- Avoid frying.
- When frying, meat loses its healthy properties.

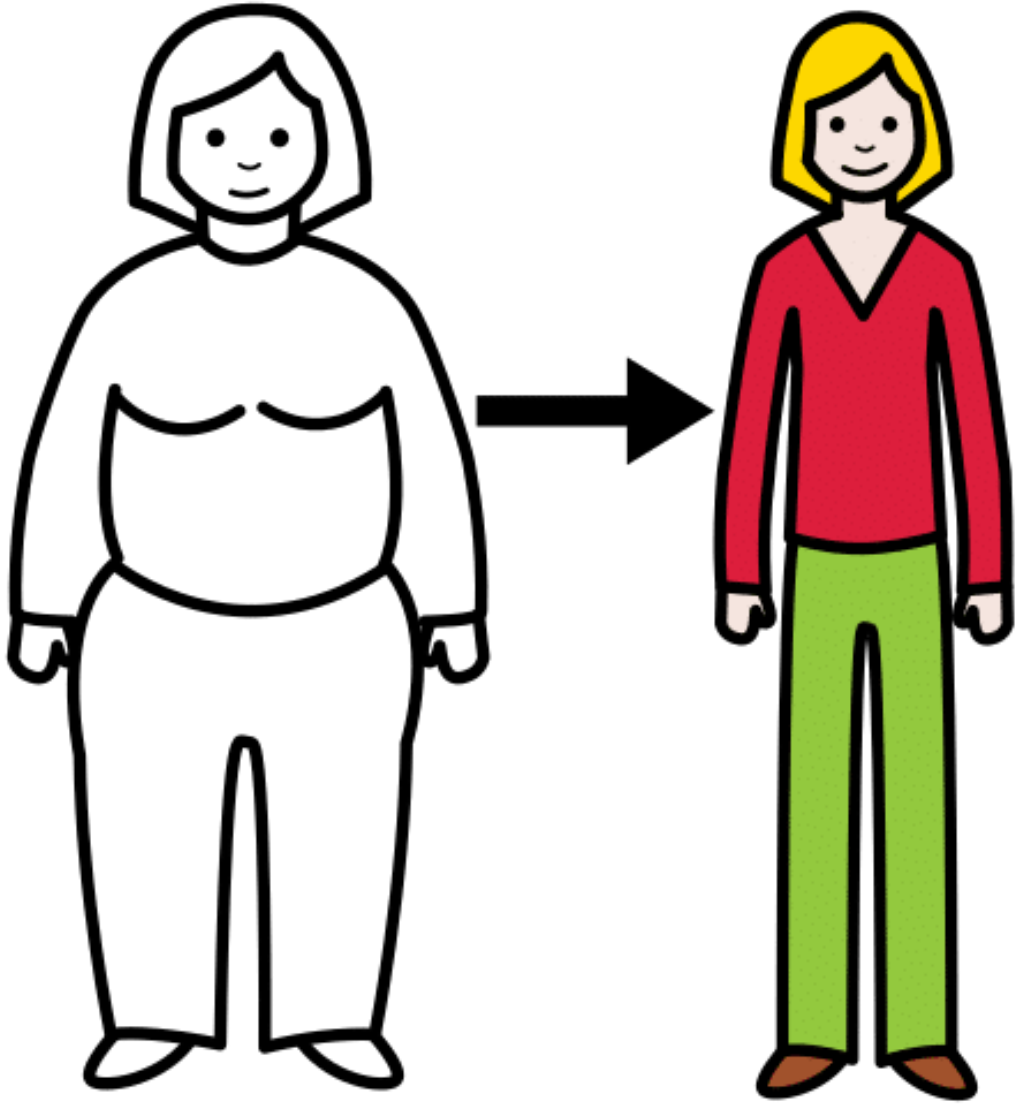






Avoid eating sweets

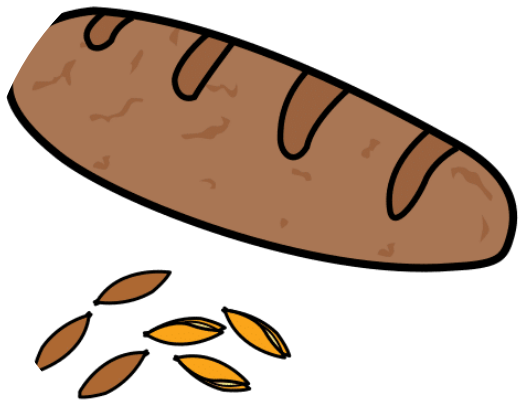
- By giving up sweets, you take care of your health and your appearance



Choose dried fruit instead of sweets

- Or seeds such as sunflower and pumpkin seeds







Eat cereal products every day

- For example, porridge or oatmeal.
- Swap light bread for dark bread.
- Dark bread has more healthy
- Fibre is an ingredient we need for our health.
- When you eat products with fibre you take care of your stomach and large intestine.

Eat less animal fats (lard and butter)

- Swap animal fats for vegetable fats.
- Vegetable fats are made from the flowers, seeds, fruits of plants.
- This is for example sunflower oil, rapeseed oil or olive oil.





Limit salt

- Use less salt and more spices.
- Spices will improve the taste of your food.
- You can use dried and fresh spices.





Sources:

- Dbamy o zdrowie. Scenariusz zajęć. Podręcznik dla trenerów. Polskie Stowarzyszenie na rzecz Osób z Niepełnosprawnością Intelektualną. Warszawa 2024, p. 77-79;
- Pictograms available at:

  https://arasaac.org/pictograms/search/fish?offset=20&tab=0



OUR EXPERIENCES







Three training sessions:

- diet and weight
- cancer screening
- sun protection and physical activity

Time: May and June 2024









Participants - attendees of Occupational Therapy Workshops















Thank you