



Healthy Communities

Modul 3

Maintaining Health



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Partners involved:



www.bgz-berlin.de

Germany



www.eurocultura.it

Italy

www.gesundheitbb.de

Germany

www.stowarzyszeniestop.pl

Poland



www.caritas-wien.at

Austria

About the Project

With our **HEALTHY COMMUNITIES** project, we illustrate the contribution that adult education can strengthen the health skills of all citizens (including and especially groups with fewer opportunities), counteracting marginalization, and strengthening participation and commitment. One shortcoming of current health skills development programs is that they do not reach all population groups.

The project team has chosen to focus on the local community, in particular through the connection to the living environment in the community, which has so far only been elementary developed.

Developed and project coordination:

BGZ Berliner Gesellschaft für Internationale Zusammenarbeit mbH
(Berlin Association for International Cooperation)

www.healthycommunities.eu

Project Partner

Caritas der Erzdiözese Wien - Hilfe in Not

Eurocultura

Stowarzyszenie Trenerskie Organizacji Pozarządowych

Gesundheit Berlin-Brandenburg e.V.

Funder: European Union Erasmus+

Berlin, 2026



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This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



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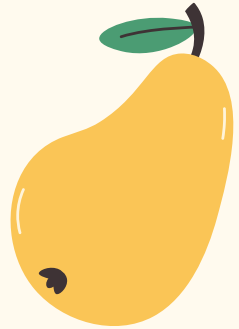
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LIFESTYLE CHECK-LIST

- ☐ I eat at least 400g of vegetables and fruits daily.
- ☐ I consume a minimum of 3 servings of whole-grain cereal products every day.
- ☐ I eat legumes at least twice a week.
- ☐ I limit red and processed meat.
- ☐ I reduce processed foods.
- ☐ I drink enough fluids daily (35 ml per kilogram of body weight).
- ☐ I dedicate 150 minutes a week to physical activity (brisk walking, exercise).
- ☐ I take short active breaks during sitting, e.g., 2 minutes every hour.
- ☐ I look for opportunities during the day to increase physical activity while handling daily tasks, e.g., tracking the number of steps I take.
- ☐ I sleep 7–9 hours daily.
- ☐ I avoid using my phone for at least 1 hour before bedtime.
- ☐ I nurture good relationships with family and friends.
- ☐ I maintain regular meetings with them.
- ☐ I don't smoke cigarettes.
- ☐ I minimize alcohol consumption as much as possible.
- ☐ I do not use psychoactive substances.





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REGULAR HEALTH CHECK-UPS

BASED ON THE LIST OF RECOMMENDED PREVENTIVE TESTS, CREATE YOUR
OWN CHECKLIST TO COMPLETE THIS YEAR.

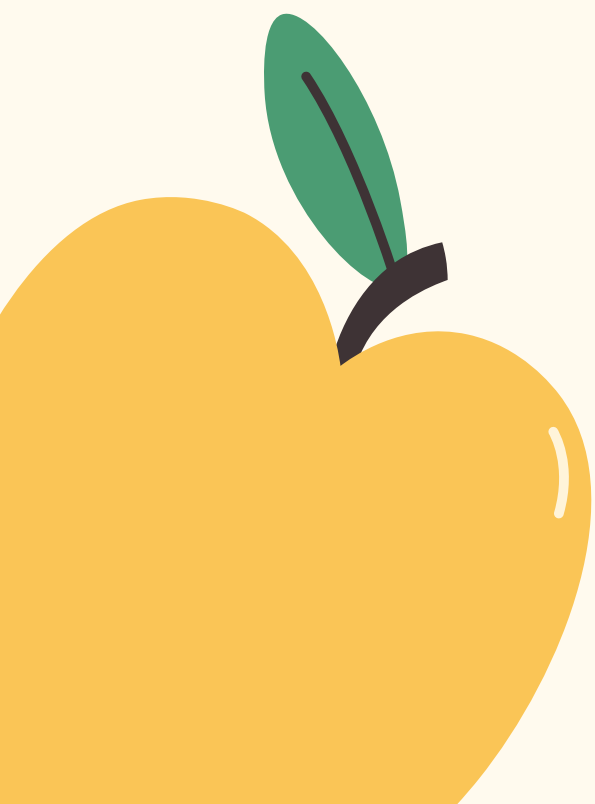
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3. MAINTAINING HEALTH

Stowarzyszenie Trenerskie Organizacji Pozarządowych – Lek. Paulina Anczykowska



LET'S GET TO KNOW EACH OTHER!

Paulina Anczykowska MD

- Certified Physician of Lifestyle Medicine IBLM
- Member of the Polish Society of Lifestyle Medicine
- Family Doctor
- Psychodietitian
- Certified Physician of Polish Society for the Treatment of Obesity



Instagram:

@praktyka.dobrego.zycia



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AGENDA

Introduction – Why
Are We Doing This?

Physical activity

Social Support, Stress,
and Addictions

Regular Health
Check-ups

Health-Promoting
Nutrition

Restorative sleep

Climate Change and
Its Impact on Health

Homework :)



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LIFESTYLE MEDICINE

Lifestyle Medicine is an evidence-based discipline which aims to support patients to prevent, treat and reverse certain chronic conditions.



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LIFESTYLE

In 2016, behavioral factors in Poland were responsible for 48.7% of all deaths and 35.7% of healthy life years lost.

According to WHO, 60% of related factors to individual health and quality of life are correlated to lifestyle.

Global Burden of Disease Study



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LIFESTYLE – WHAT DOES IT MEAN?

- Healthy diet
- Regular physical activity
- BMI within normal range
- Moderate alcohol consumption
- Non-smoking of tobacco products



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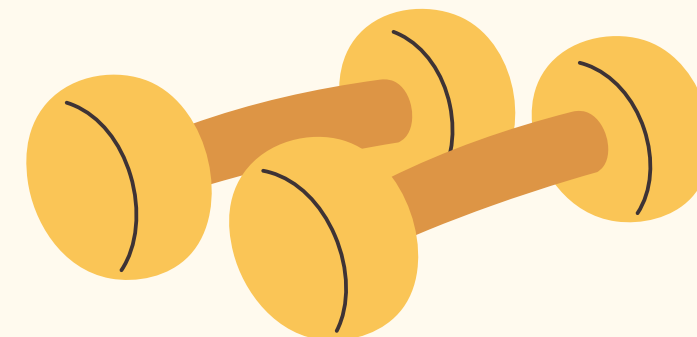


LIFESTYLE – EFFECTS

- 12–14 years longer life
- 93% fewer cases of diabetes
- 81% fewer heart attacks
- 50% fewer strokes
- 36% fewer cancers

"Impact of Healthy Lifestyle Factors on Life Expectancies in the US Population",
Yanping Li, An Pan et al, Circulation. 2018

"Findings from the European Prospective Investigation into Cancer and Nutrition-
Potsdam Study", Ford ES, Bergmann MM et al, Arch Intern Med. 2009



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LIFESTYLE MEDICINE FOCUSES ON 6 AREAS TO IMPROVE HEALTH



6 pillars of Lifestyle Medicine

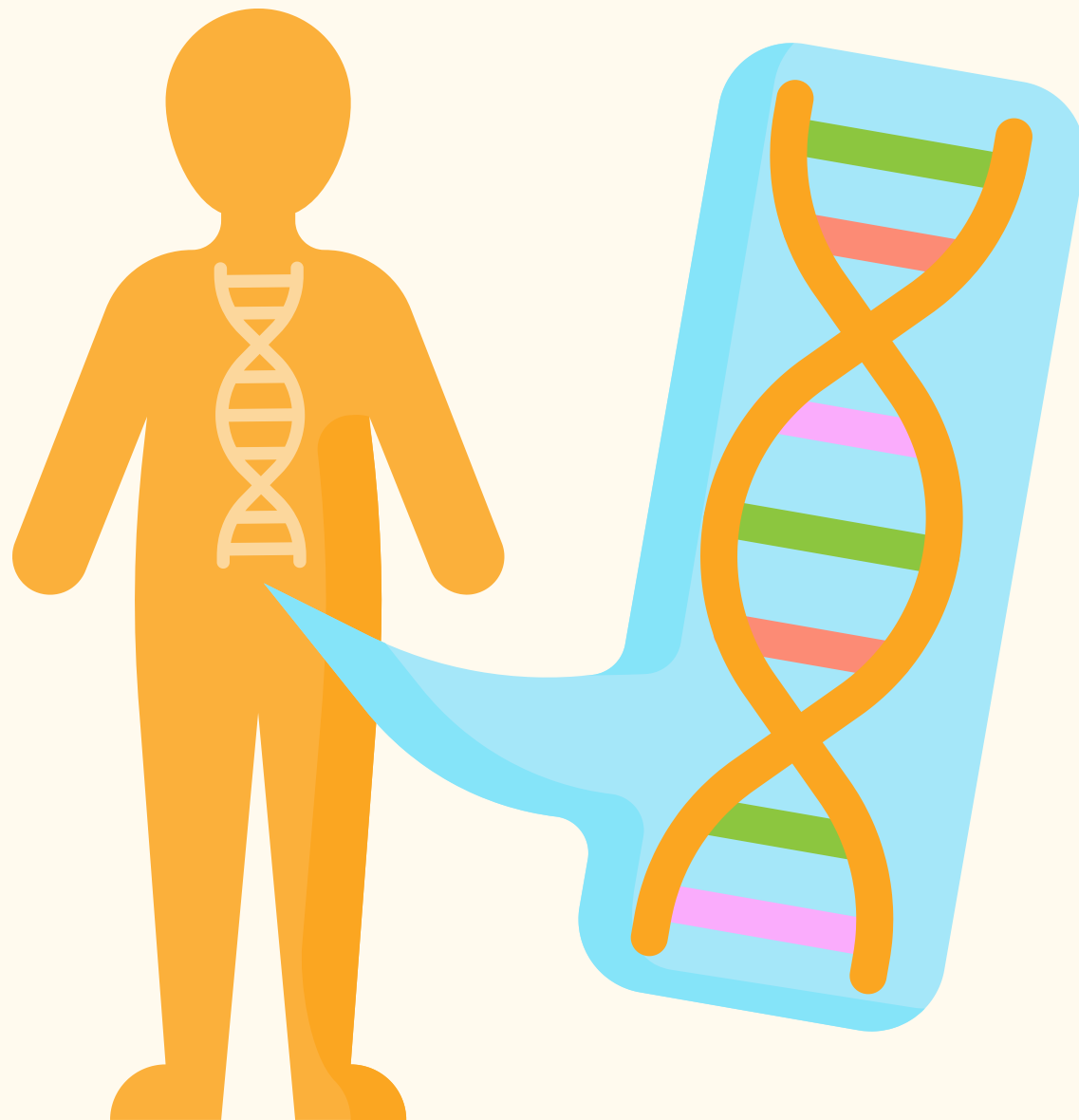


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EPIGENETICS

- Changes in gene expression that are not related to alterations in the nucleotide sequence of DNA.
- Modified by external factors and can be inherited.
- Epigenetic modifications play a key role in many types of cancers, Alzheimer's disease, diabetes, rheumatic diseases, hypertension, depression, schizophrenia, and addictions.



SOCIO-ECONOMIC STATUS AND HEALTH



► Dela J Public Health. 2023 Jun 12;9(2):104–109. doi: [10.32481/djph.2023.06.020](https://doi.org/10.32481/djph.2023.06.020)

Housing, Poverty, and Health Outcomes

[Kim Blanch](#)^{1,✉}

► Author information ► Article notes ► Copyright and License information

PMCID: PMC10445618 PMID: [37622134](https://pubmed.ncbi.nlm.nih.gov/37622134/)

► Bull N Y Acad Med. 1992 Jan-Feb;68(1):17–24.

Effects of poverty on health status.

[B Starfield](#)¹

[Review](#) ► Maturitas. 2011 May;69(1):22–6. doi: [10.1016/j.maturitas.2011.02.011](https://doi.org/10.1016/j.maturitas.2011.02.011).

Epub 2011 Mar 12.

Poverty in childhood and adverse health outcomes in adulthood

[Dennis Raphael](#)¹

Affiliations + expand

PMID: 21398059 DOI: [10.1016/j.maturitas.2011.02.011](https://doi.org/10.1016/j.maturitas.2011.02.011)



► CMAJ. 2006 Mar 28;174(7):923. doi: [10.1503/cmaj.060235](https://doi.org/10.1503/cmaj.060235)

Poverty and health

[Murray](#)¹

► Author information ► Article notes ► Copyright and License information

DOI: PMC1405857 PMID: [16567753](https://pubmed.ncbi.nlm.nih.gov/16567753/)

Paediatrics
Child Health



► Paediatr Child Health. 2007 Oct;12(8):667–672. doi: [10.1093/pch/12.8.667](https://doi.org/10.1093/pch/12.8.667)

Show available content in: English | [French](#)

The impact of poverty on the current and future health status of children

[Rita Paul-Sen Gupta](#)^{1,✉}, [Margaret L de Wit](#)¹, [David McKeown](#)¹

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PMCID: PMC2528796 PMID: [19030444](https://pubmed.ncbi.nlm.nih.gov/19030444/)



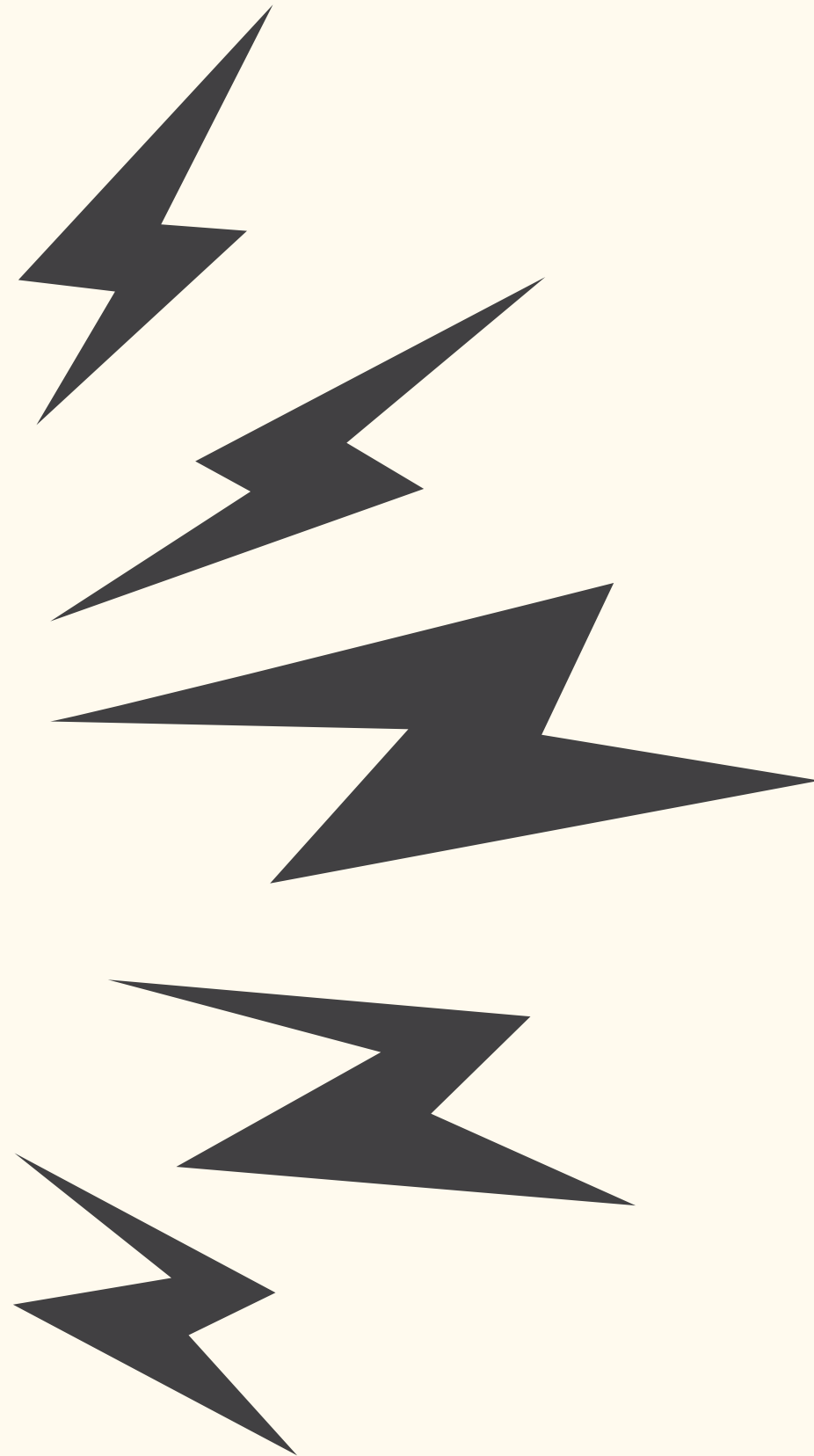
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SOCIAL DETERMINANTS OF HEALTH

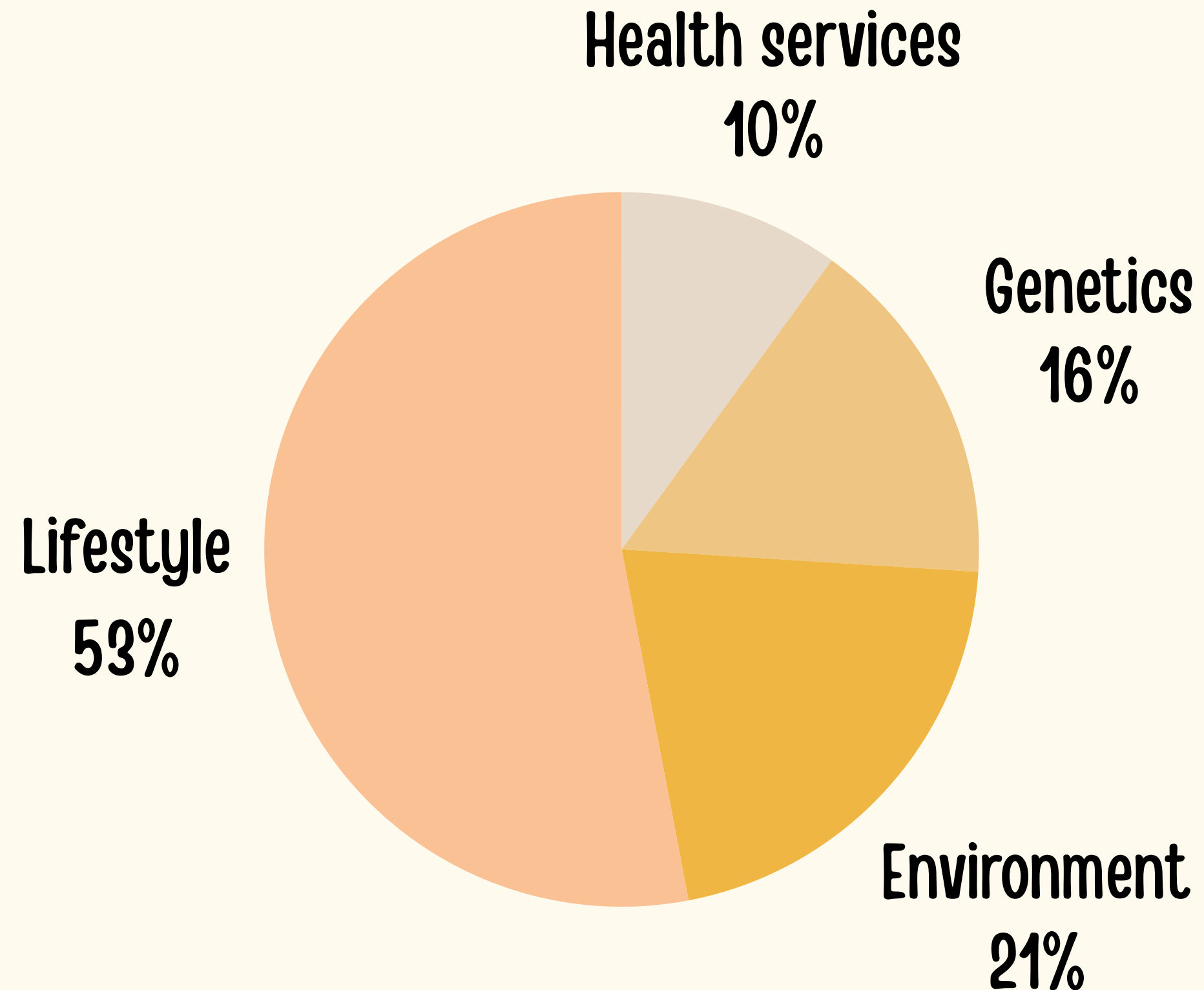


WHAT DOES THIS MEAN IN MORE PRACTICAL TERMS?

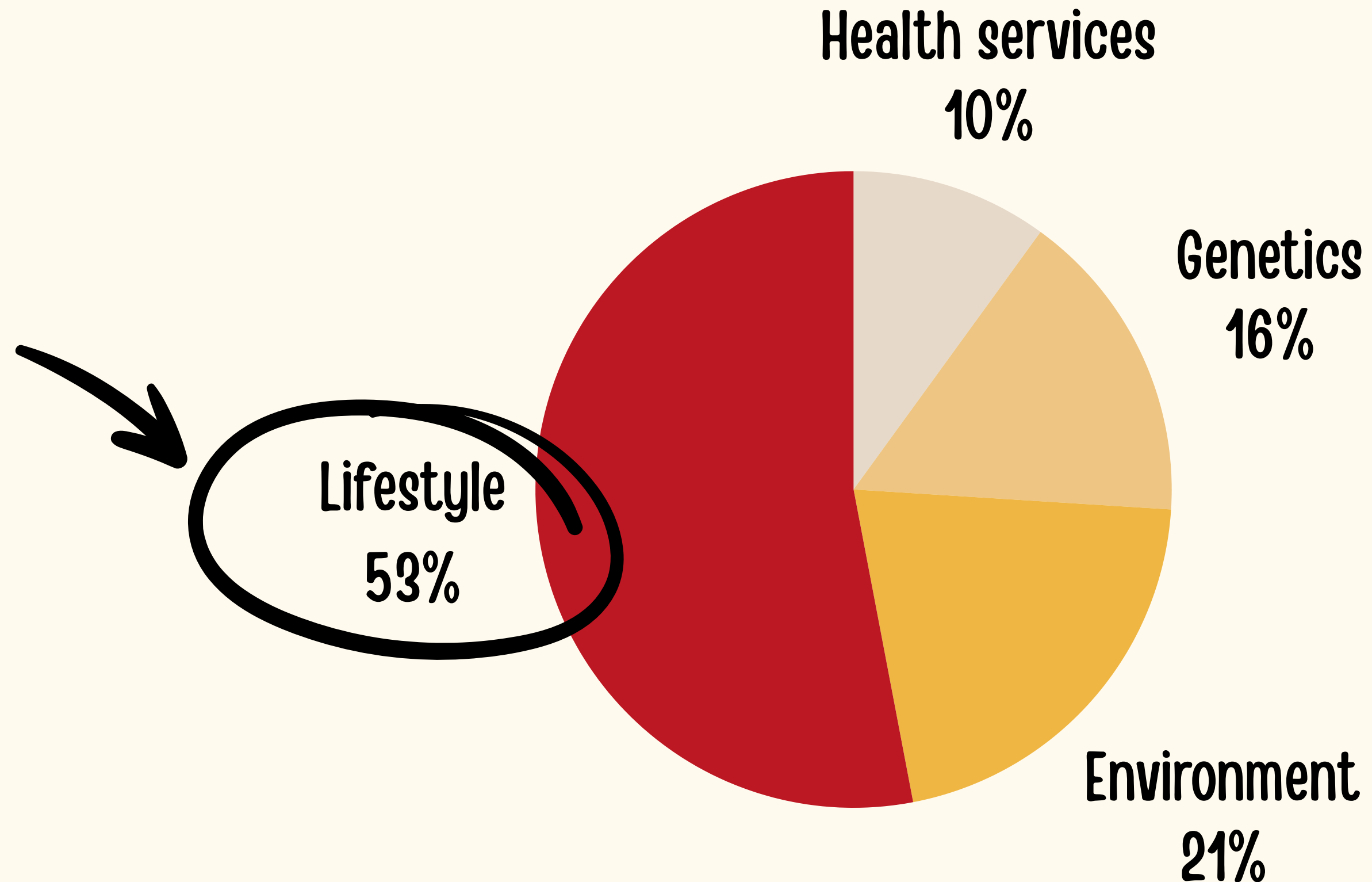


- Waiting times for national health program doctors
- Lack of health education
- Poor living conditions: humidity, cold...
- Distance from green areas
- Constant stress and "survival mode"
- Lack of time to take care of health
- Lack of opportunities for better time optimization
- Social isolation
- Transport issues
- Many, many others

DETERMINANTS OF HEALTH ACCORDING TO LALONDE



DETERMINANTS OF HEALTH ACCORDING TO LALONDE



**DOES A HEALTHY LIFESTYLE
HAVE TO BE EXPENSIVE?**



DOES A HEALTHY LIFESTYLE HAVE TO BE EXPENSIVE?



Do what you CAN.
With the resources you HAVE.
With the time you HAVE NOW.

DOES A HEALTHY LIFESTYLE HAVE TO BE EXPENSIVE?

**SMALL STEPS
ARE BETTER
THAN NO STEPS**

And it's better than waiting for perfect conditions, which may never come :)



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NUTRITION



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Review

> [BMJ. 2008 Sep 11;337:a1344. doi: 10.1136/bmj.a1344.](#)

Adherence to Mediterranean diet and health status: meta-analysis

Francesco Sofi¹, Francesca Cesari, Rosanna Abbate, Gian Franco Gensini, Alessandro Casini

Analysis of a group of 514,816 individuals and 33,576 deaths

An increase in adherence to the Mediterranean diet reduces:

- All cause mortality
- Cardiovascular mortality
- The incidence and mortality of cancer
- The incidence of Parkinson's disease and Alzheimer's disease



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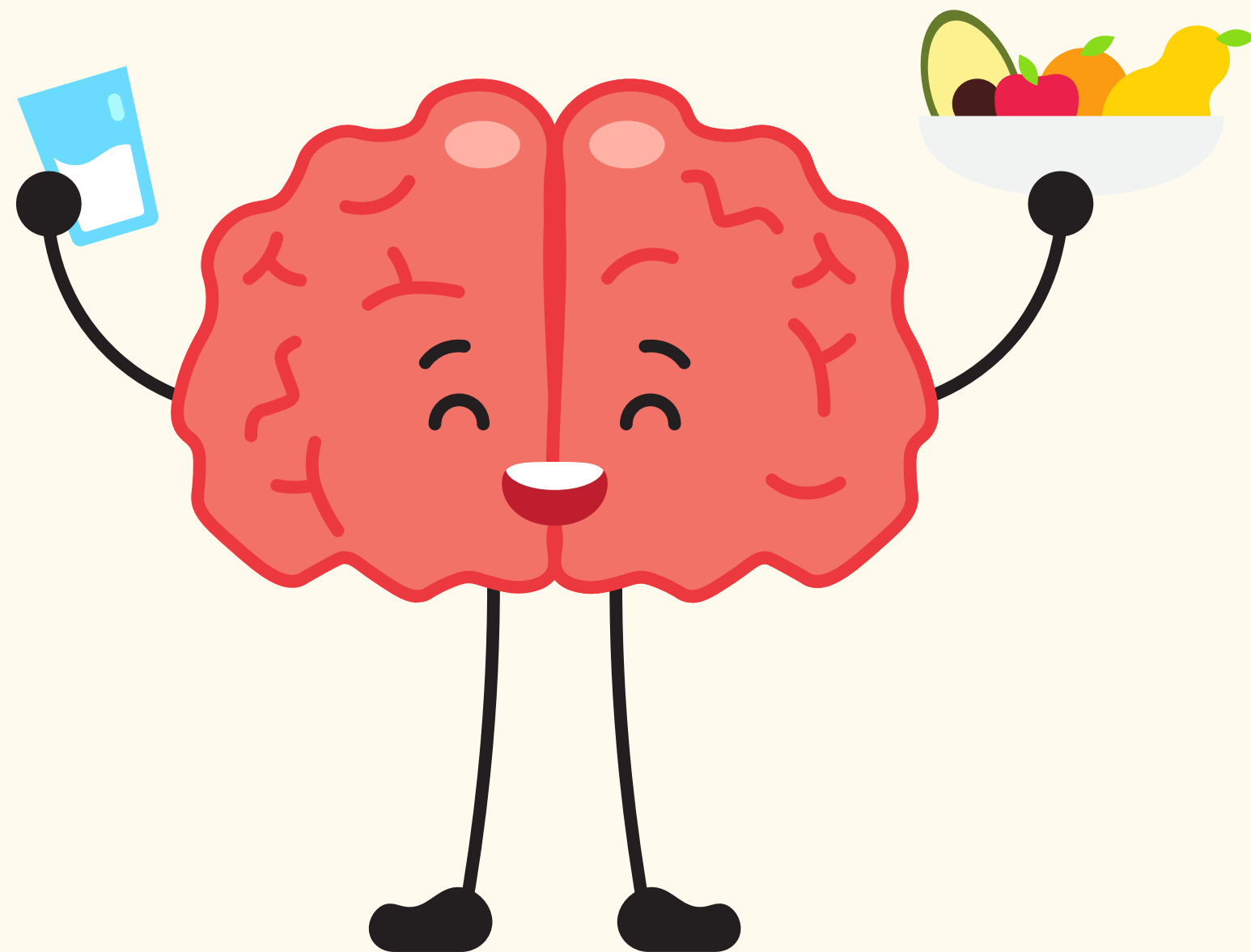


Meta-Analysis

> Ann Neurol. 2013 Oct;74(4):580-91. doi: 10.1002/ana.23944. Epub 2013 Sep 16.

Mediterranean diet, stroke, cognitive impairment, and depression: A meta-analysis

Theodora Psaltopoulou¹, Theodoros N Sergentanis, Demosthenes B Panagiotakos, Ioannis N Sergentanis, Rena Kosti, Nikolaos Scarmeas



High adherence to the **Mediterranean diet** is associated with a reduced risk of:

- Stroke by 29%
- Depression by 32%
- Cognitive impairment by 40%



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Mediterranean diet

- A lot of plant-based products: vegetables, fruits, whole grain products, potatoes, beans, other legumes, nuts, and seeds. The main source of fat is olive oil.
- Moderate amounts – dairy: cheese and yogurt
- Moderate amounts – fish
- Small amounts – poultry and red meat



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ketogenic diet
search term

intermittent fasting
search term

atkins diet
search term

juice diet
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paleo diet
search term

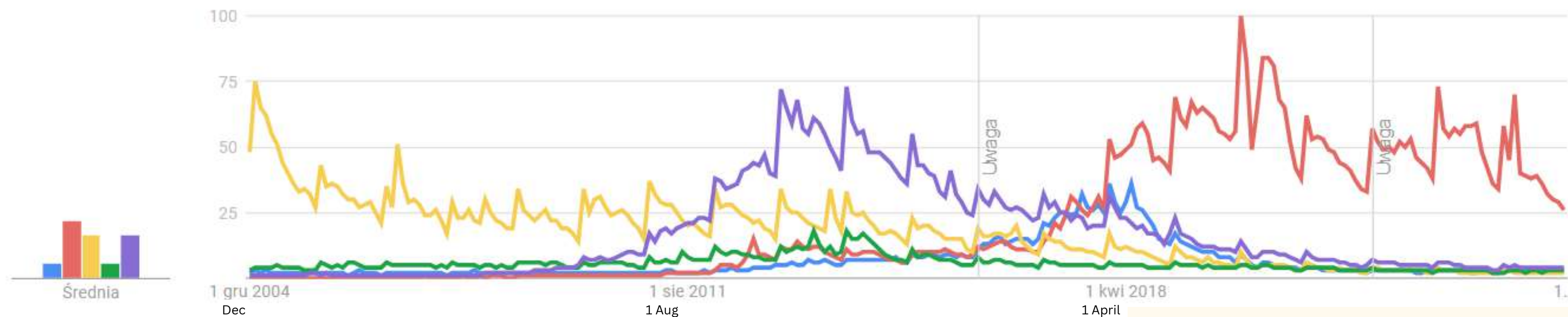
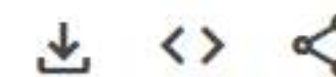
All the world

Od 12.12.2004 do 12.12.2024 ▼

Wszystko ▼

Wyszukiwarka Google ▼

Interest over time



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Food-Based Dietary Guidelines in Europe: Source Documents

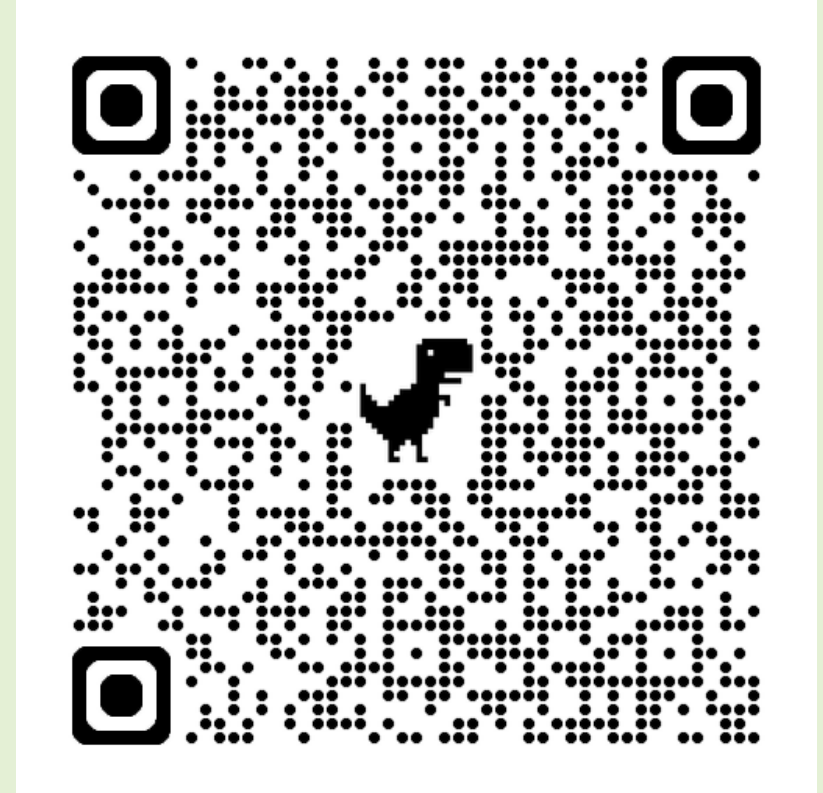
Denmark

Source documents:

- [The Official Dietary Guidelines – good for health and climate \(Danish: De officielle Kostråd - godt for sundhed og klima\), 2021, updated in 2024](#) ([The Official Dietary Guidelines – good for health and climate \(Danish: De officielle Kostråd - godt for sundhed og klima\), 2021, updated in 2024](#)), 2021, updated in 2024

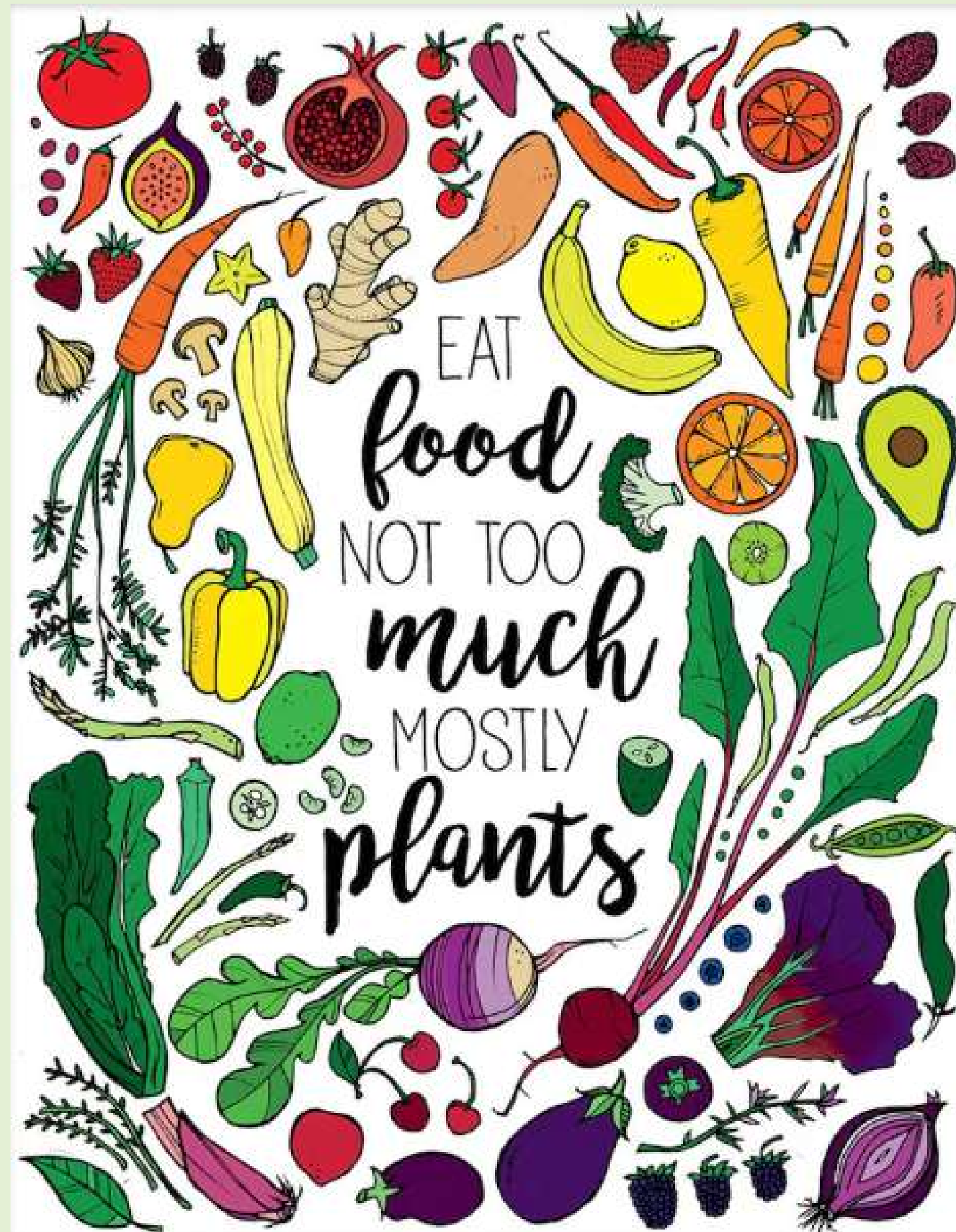
FBDG developed by:

- Danish Veterinary and Food Administration, Ministry of Food, Agriculture and Fisheries of Denmark (Danish: Ministeriet for Fødevarer, Landbrug og Fiskeri)



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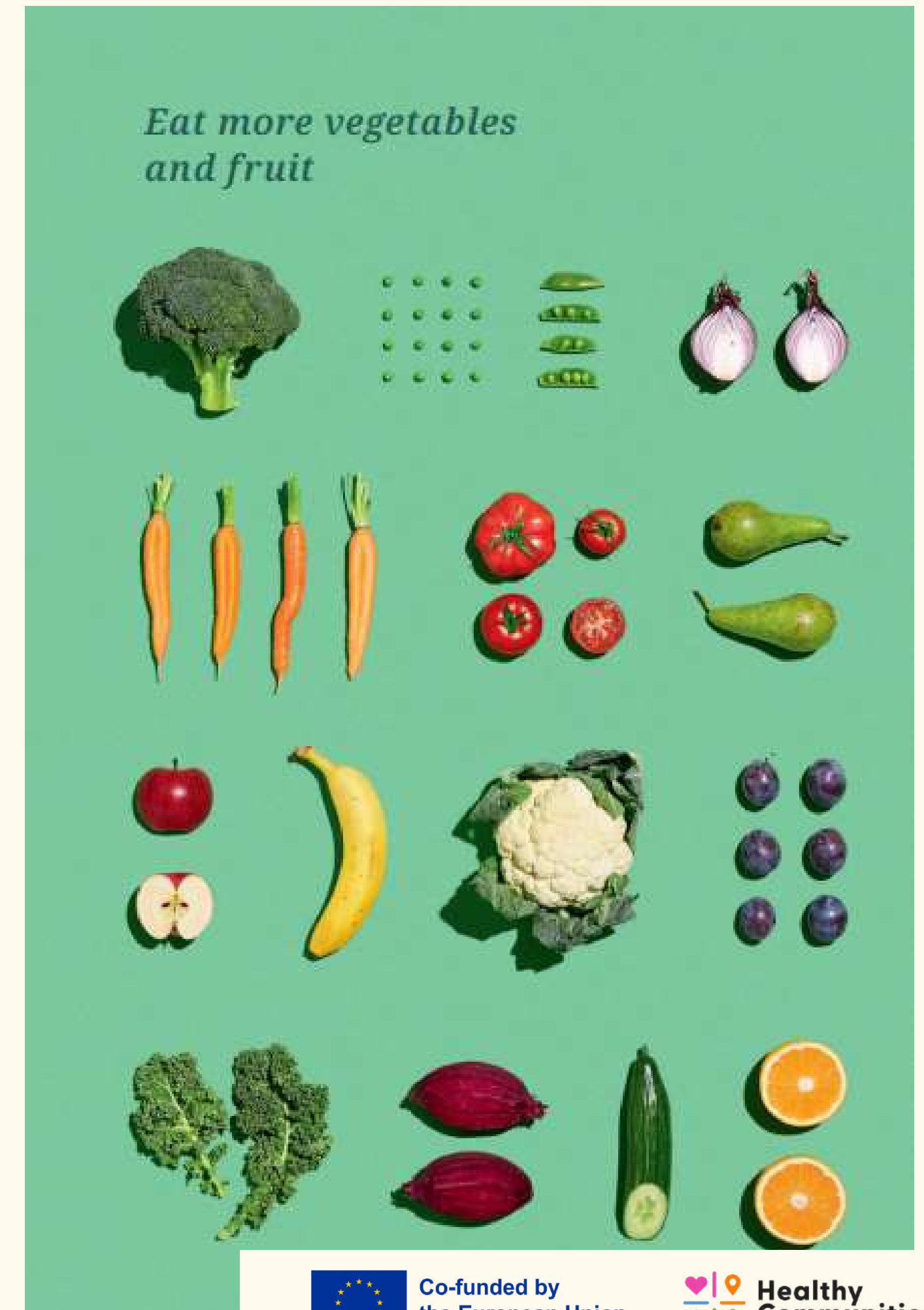
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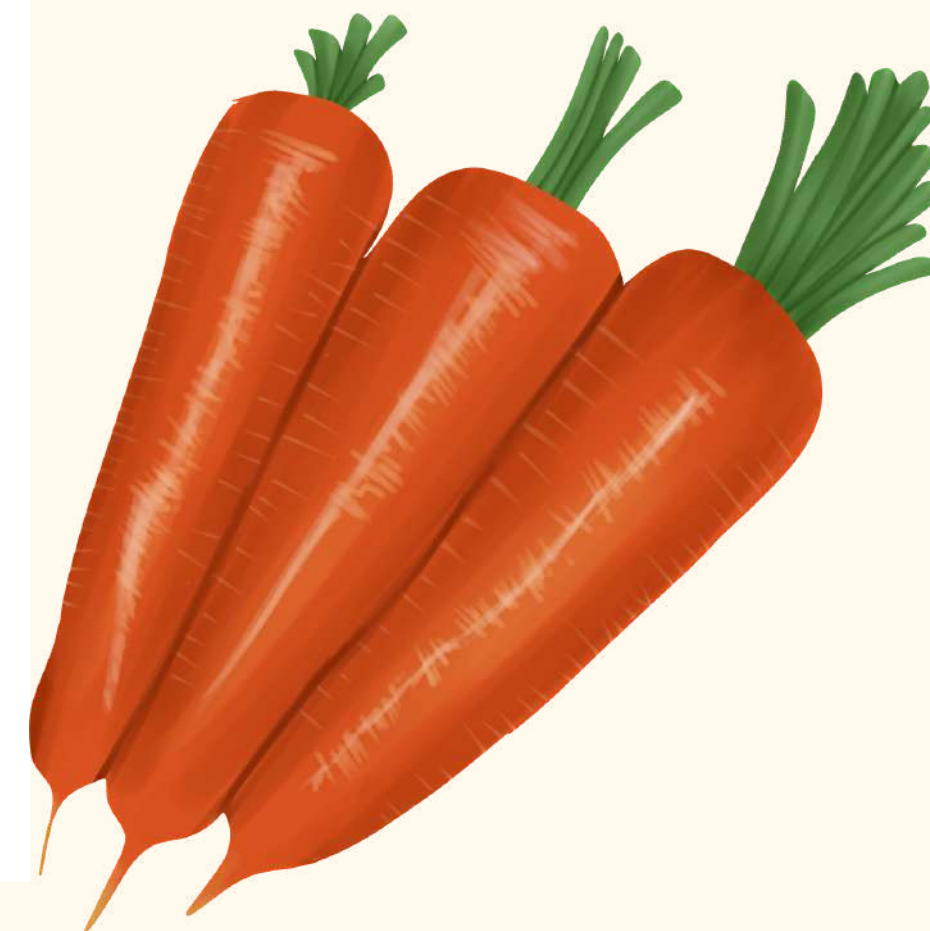
Vegetables and fruits – source of antioxidants

WHO: At least 400 g (i.e. five portions) of fruit and vegetables per day, excluding potatoes, sweet potatoes, cassava and other starchy roots.



Fruit and vegetable intake and the risk of cardiovascular disease, total cancer and all-cause mortality—a systematic review and dose-response meta-analysis of prospective studies

Dagfinn Aune^{1 2 3}, Edward Giovannucci^{4 5 6}, Paolo Boffetta⁷, Lars T Fadnes⁸, NaNa Keum^{5 6}, Teresa Norat², Darren C Greenwood⁹, Elio Riboli², Lars J Vatten¹, Serena Tonstad¹⁰



For every additional 200 g of fruits and vegetables consumed per day:

- 8% for coronary heart disease
- 16% for stroke
- 8% for cardiovascular disease
- 3% for all cancers
- 10% for mortality from any cause

The healthiest vegetables and fruits?



Leafy and cruciferous vegetables – protect brain cells from aging processes, have a positive effect on the cardiovascular system, and their consumption also reduces the risk of cancer.

Berry fruits – contain polyphenols, which have antioxidant properties and reduce inflammation levels, thereby providing benefits in reducing the risk of cancer, heart disease, and stroke.



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LOW-BUDGET VEGETABLES

- Seasonal products are cheaper and more flavorful.
- Frozen vegetables are often cheaper and just as healthy.
- Canned vegetables – inexpensive.
- Fermented foods (e.g., cucumbers, cabbage) prepared in season and healthy.
- Use the whole vegetable (e.g., carrot top pesto or pasta with radish leaves).
- Plan to waste less!
- Buy in bulk during sales and freeze for later.



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VEGETABLE – QUICK AND EASY

- Frozen vegetables don't require cutting or peeling.
- Canned vegetables – quicker preparation time.
- Cook larger quantities of vegetable soups, stews, or curries, and freeze for later – cook once!
- Prepare for several days by storing them in airtight containers.
- Prepare 400g of chopped vegetables in the morning and eat them throughout the day (carrot, celery, bell pepper, kohlrabi, cherry tomatoes, radish, arugula).
- Steamed or oven-baked vegetables – cook without the need for stirring.
- Add raw chopped vegetables to what you're already eating.
- Smoothie – a quick serving of leafy greens.
- Fermented foods – ready to eat right away.
- Plan to shop more quickly and have a prepared recipe.

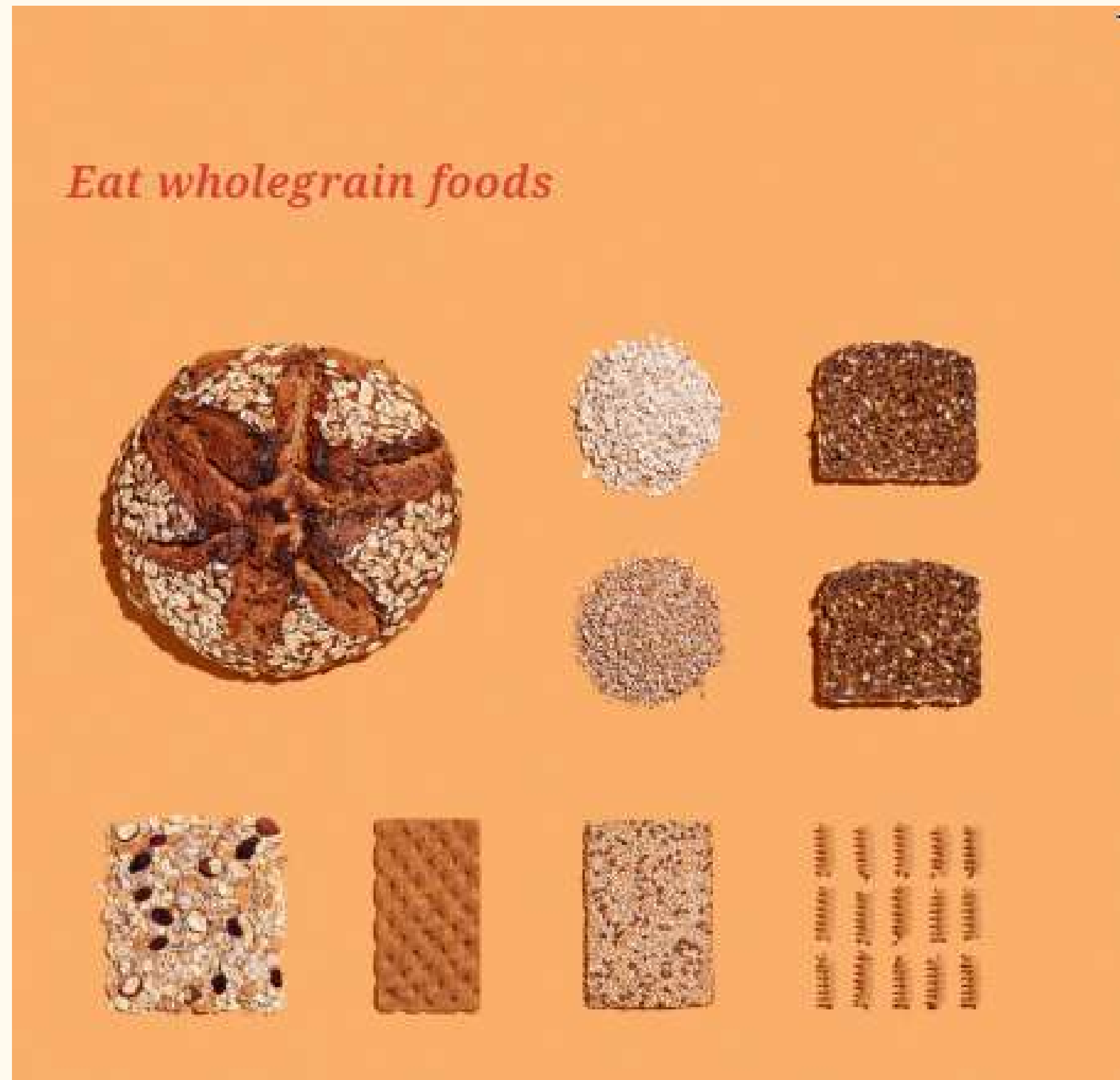


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Whole grain products – fiber and micronutrients.

At least 50% of total grain intake
should come from whole grains.



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Wholegrain means...

Whole grain means that the product comes from a grain that has been milled in its entirety, preserving all its parts: the bran, endosperm, and germ.

As a result, whole grain products are rich in fiber, vitamins (especially B vitamins), and minerals (such as magnesium, zinc, and iron).

NOT THE SAME AS MULTIGRAIN



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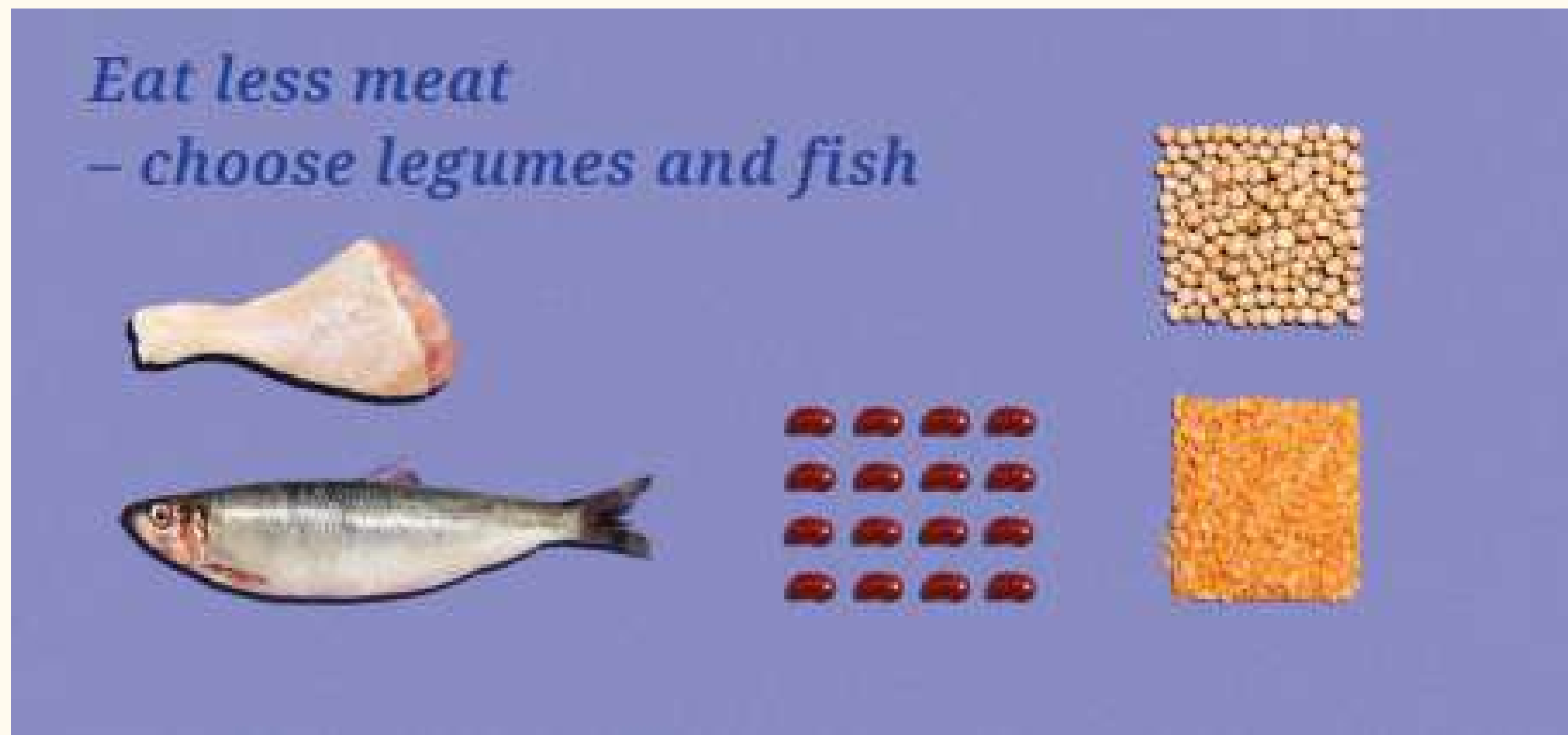


WHOLEGRAIN QUICK AND CHEAP

- "Overnight oats" – oats soaked in milk overnight
- Whole grain pasta – only slightly more expensive than white pasta
- Grains bought in larger packages (also for salads!)
- Whole grain flours at discount stores:
 - Add to baked goods
 - Quick flatbreads (flour, water, salt, olive oil, and cook on a pan)
- Whole grain toast bread from Lidl – affordable and contains a high percentage of whole grain flour
- Buy on sale



Meat – be careful!



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Processed meat



Meat processing methods include:

- heat treatment (e.g. prolonged frying, grilling, smoking),
- salting,
- curing,
- marinating,
- fermentation (maturing),
- other processes that improve taste or extend shelf life.

Sausages, hams, salami, cold cuts, bacon, canned meats, dried or smoked meats, ready-made burgers...



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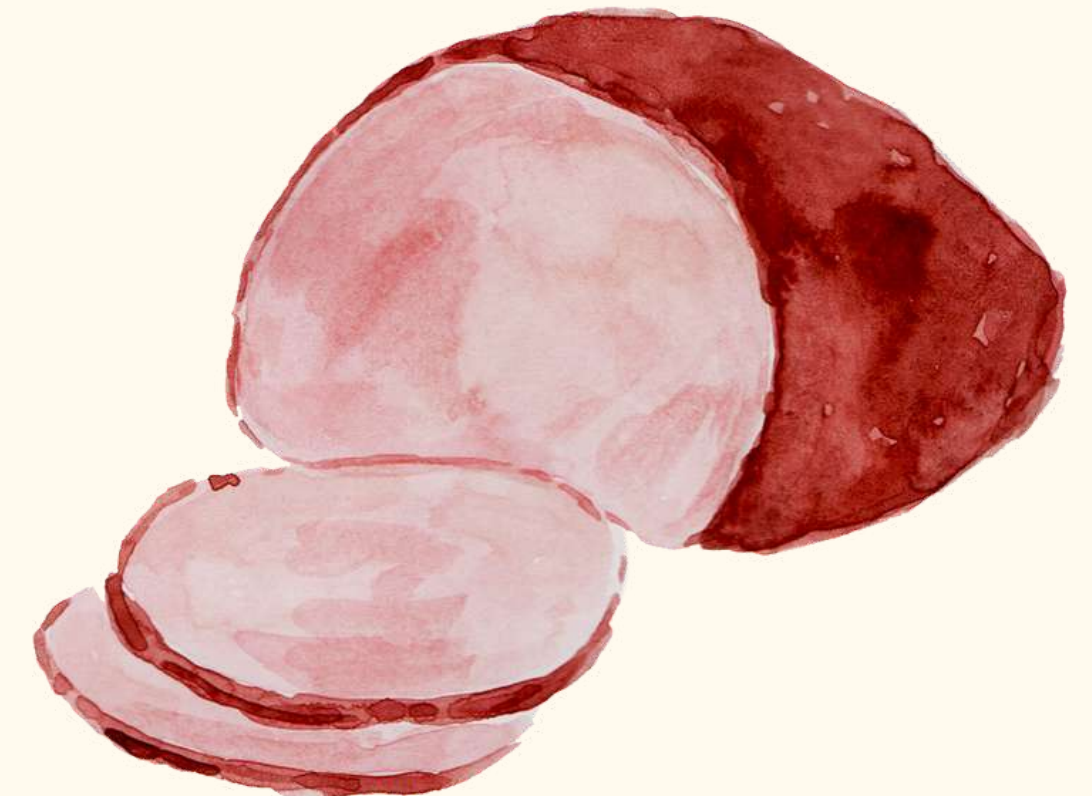


Group 1 Carcinogen – IARC

International Agency for Research on Cancer

Consuming about 50 g of processed meat daily (e.g., 3 slices of ham) increases the risk of developing cancers:

- Colon cancer by about 18%
- Pancreatic cancer by about 20%
- Breast cancer by 10%
- Prostate cancer by about 5%



1/ Wang X. i wsp., Red and processed meat consumption and mortality: dose-response meta-analysis of prospective cohort studies. Public Health Nutrition, 19,5, 893-905

2/ Wolk A. Potential health hazards of eating red meat. J Intern Med. 2017 Feb;281(2):106-122.

3/ Cascella, Marco et al. “Dissecting the mechanisms and molecules underlying the potential carcinogenicity of red and processed meat in colorectal cancer (CRC): an overview on the current state of knowledge.” Infectious agents and cancer vol. 13 3. 15 Jan. 2018,



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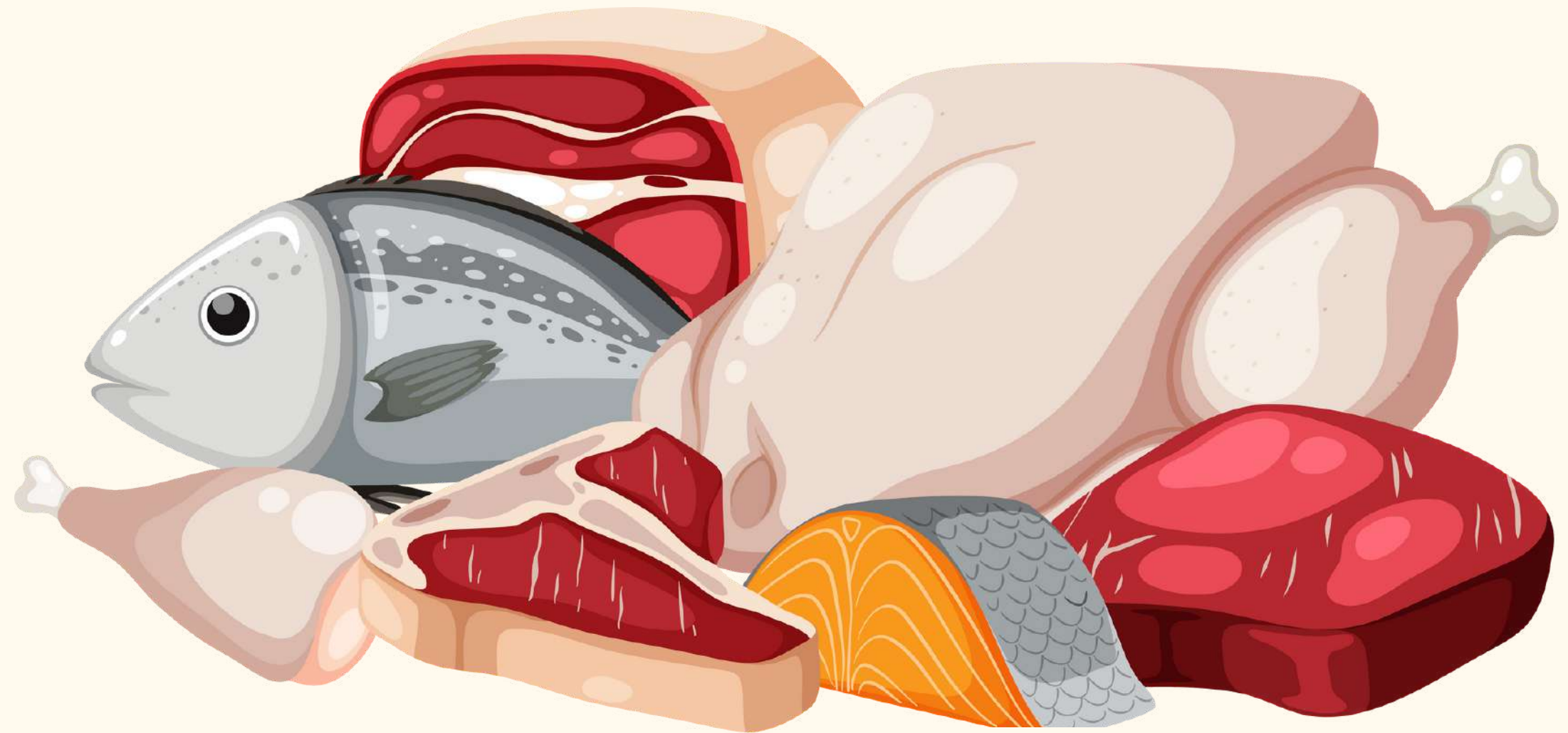


Red meat

Safe cooking methods: boiling, simmering without frying, baking in foil or in a heat-resistant dish (moist cooking methods).

Red meat includes:

- Beef
- Pork
- Lamb
- Mutton
- Goat
- Veal (young cow meat)
- Game meat (e.g., venison, wild boar)



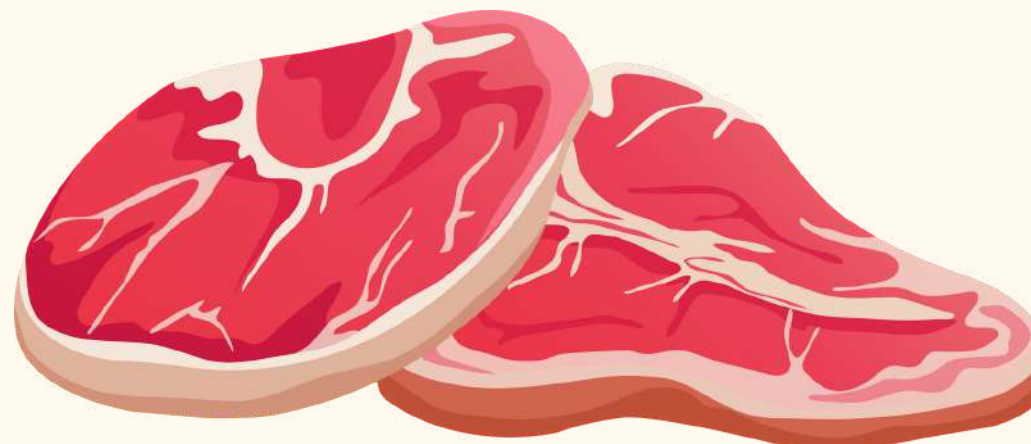
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Red meat

Recommendations: maximum 500–750g before cooking per week (350–500g after cooking).

- Increased incidence of: obesity, diabetes, heart disease, atherosclerosis, strokes, and gout.
- Carcinogen group 2A (e.g., colorectal cancer) – epidemiological studies
- Studies: for every 100 grams (portion the size of half a hand) of red meat consumed daily, the risk of colorectal cancer increases by 17%!
- Be cautious about: colorectal cancer, pancreatic cancer, and prostate cancer.



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LOW-BUDGET: MEAT



- Avoid and limit – replace with legumes and dairy products.
- Focus on meal satiety – other sources of protein, fiber, and volume!
- Choose poultry – it's cheaper and healthier.



Legumes – a cheap superfood



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Legumes – great benefits at a low cost

- 100g more per day – 1 additional year of life
- 200g more per day – 2.5 additional years
- Lower risk of diabetes and heart disease.

Benefits:

Present: plant-based protein and fiber, iron, zinc, potassium, B vitamins, polyphenols, low glycemic index.

Absent: cholesterol, saturated fatty acids, heme iron, aromatic hydrocarbons.



1/ Fadnes LT, Økland JM, Haaland ØA, Johansson KA. Correction: Estimating impact of food choices on life expectancy: A modeling study. PLoS Med. 2022 Mar 25;19(3):e1003962. doi: 10.1371/journal.pmed.1003962. Erratum for: PLoS Med. 2022 Feb 8;19(2):e1003889. 2/ Matras A. "Jedz normalnie, osiągnij więcej", 2022, Altenberg.



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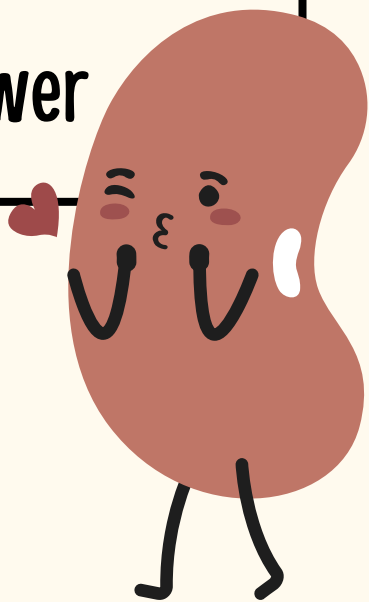
The health benefits of a plant-based diet

	"All-eaters"	Flexitarians	Vegetarians	Vegans
BMI	28,8	27,3	25,7	23,6
Colon cancer risk	Reference point	8% lower	18% lower	16% lower
Diabetes mellitus	Reference point	24%	46%	49%
All cause mortality risk	Reference point	8% lower	9% lower	15% lower

1. Tonstad S, Butler T, Yan R, Fraser GE (2009) Type of vegetarian diet, body weight, and prevalence of type 2 diabetes. Diabetes Care 32:791–796.

2. Orlich MJ, Singh PN, Sabaté J, i in. (2015) Vegetarian dietary patterns and the risk of colorectal cancers. JAMA Intern Med 175:767–776.

3. Orlich MJ, Singh PN, Sabaté J, Jaceldo-Siegl K, Fan J, Knutsen S, Beeson WL, Fraser GE (2013) Vegetarian dietary patterns and mortality in adventist health study 2. JAMA Intern Med 173:1230–1238



Highly processed food

SODAS, SWEETS, SNACKS, PROCESSED BREAD, SWEETENED CEREALS, FRUIT YOGURTS, PROCESSED MEATS (E.G., FISH STICKS), AND MANY OTHERS.



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Why “unhealthy”?

- A lot of calories in a small portion, easy to overeat
- High in saturated and trans fats
- High in sugar and salt
- Low in fiber



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Association Between Consumption of Ultraprocessed Foods and Cognitive Decline

Natalia Gomes Gonçalves¹, Naomi Vidal Ferreira^{2 3}, Neha Khandpur^{4 5},
Euridice Martinez Steele⁴, Renata Bertazzi Levy⁶, Paulo Andrade Lotufo⁷, Isabela M Bensenor⁷,
Paulo Caramelli⁸, Sheila Maria Alvim de Matos⁹, Dirce M Marchioni⁴, Claudia Kimie Suemoto³



- 10,000 people were observed for 8 years.
- In individuals consuming at least 20% of their diet from ultraprocessed food, cognitive functions declined 28% faster.

Ultra-processed food consumption, cancer risk and cancer mortality: a large-scale prospective analysis within the UK Biobank

Kiara Chang¹, Marc J Gunter², Fernanda Rauber^{3 4}, Renata B Levy^{3 4}, Inge Huybrechts², Nathalie Kliemann², Christopher Millett^{1 5}, Eszter P Vamos¹



- Over 500,000 people aged 40–69 were observed, recruited from England, Scotland, and Wales
- A 10% increase in the intake of highly processed food was associated with a 2% higher overall cancer incidence and a 19% higher incidence of ovarian cancer.
- A 10% increase in the consumption of UPF was linked to a 6% higher mortality rate from malignant cancers, a 16% higher rate for breast cancer, and a staggering 30% higher rate for ovarian cancer!

Ultra-Processed Food Consumption and Mental Health: A Systematic Review and Meta-Analysis of Observational Studies

Melissa M Lane¹, Elizabeth Gamage¹, Nikolaj Travica¹, Thusharika Dissanayaka¹,
Deborah N Ashtree¹, Sarah Gauci¹, Mojtaba Lotfaliany¹, Adrienne O'Neil¹, Felice N Jacka^{1 2 3},
Wolfgang Marx¹



Higher consumption of highly processed food is associated with an increased likelihood of:

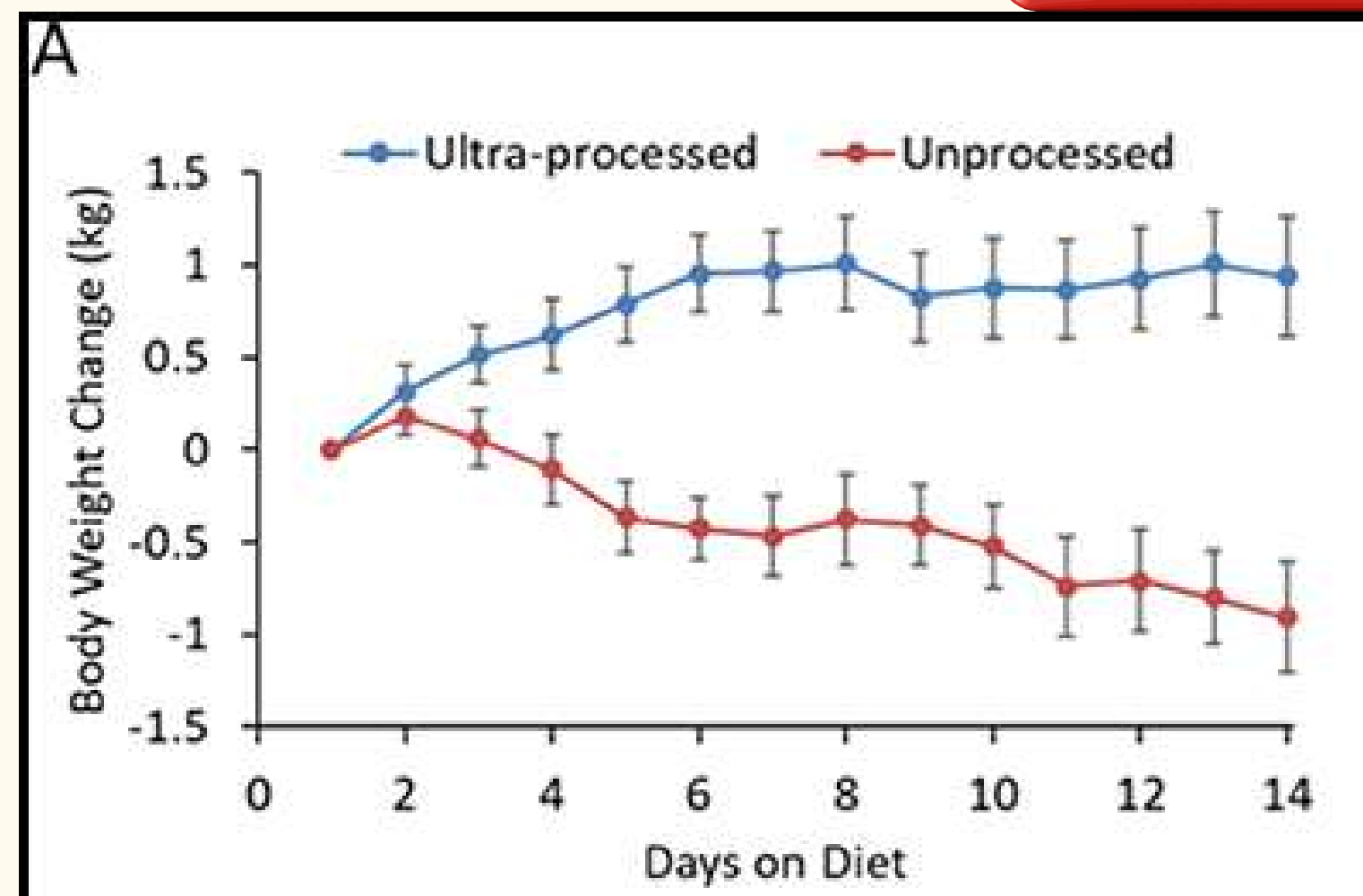
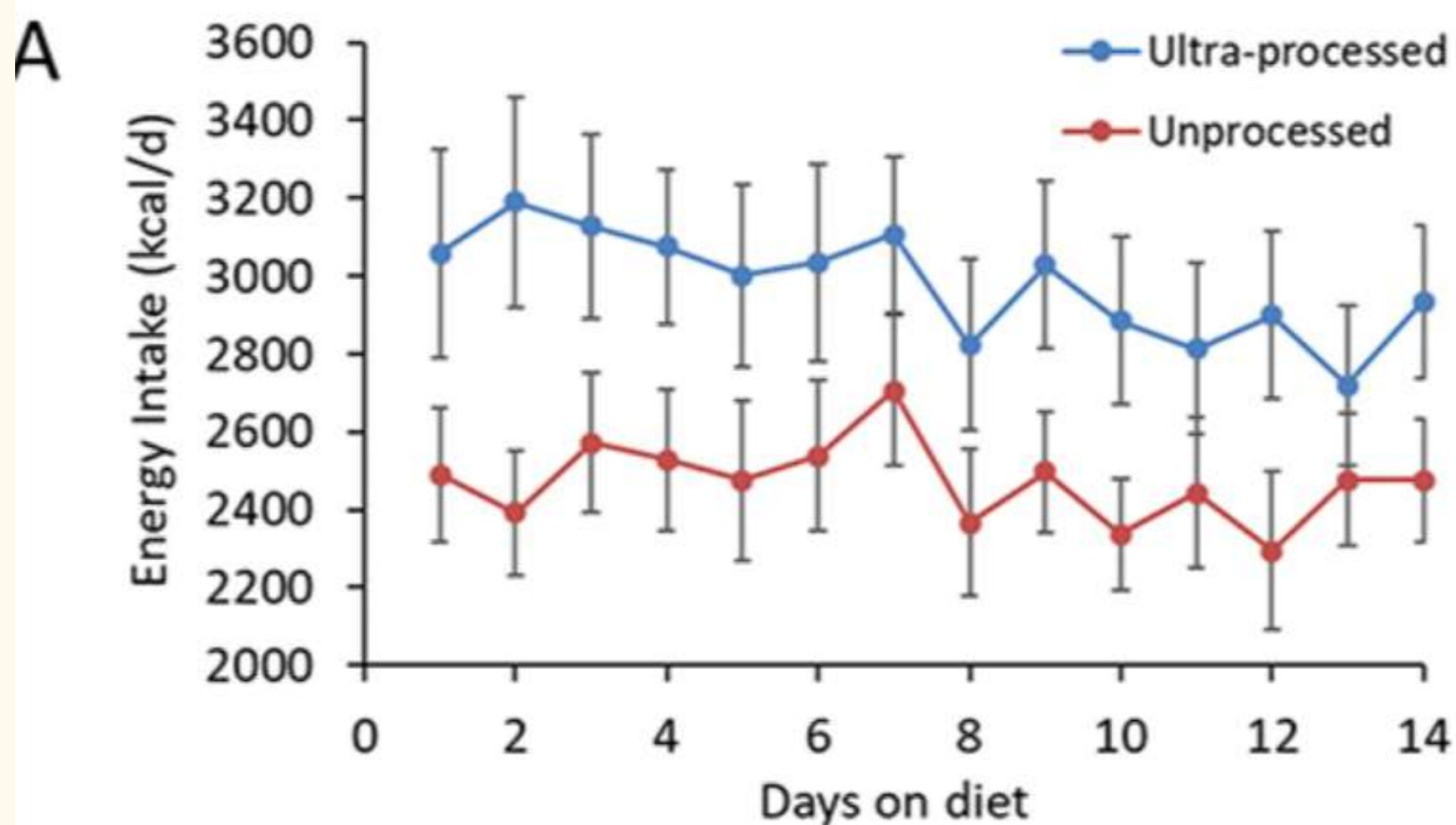
- Experiencing depressive and anxiety symptoms, when these outcomes were considered together – a 53% increase.
- Separately: a 44% increase in the risk of depression and a 48% increase in the risk of anxiety symptoms.

Furthermore, a meta-analysis of prospective studies showed that higher consumption of ultraprocessed food was associated with a 22% increased risk of later depression.

Randomized Controlled Trial > Cell Metab. 2019 Jul 2;30(1):67-77.e3.

doi: 10.1016/j.cmet.2019.05.008. Epub 2019 May 16.

Ultra-Processed Diets Cause Excess Calorie Intake and Weight Gain: An Inpatient Randomized Controlled Trial of Ad Libitum Food Intake



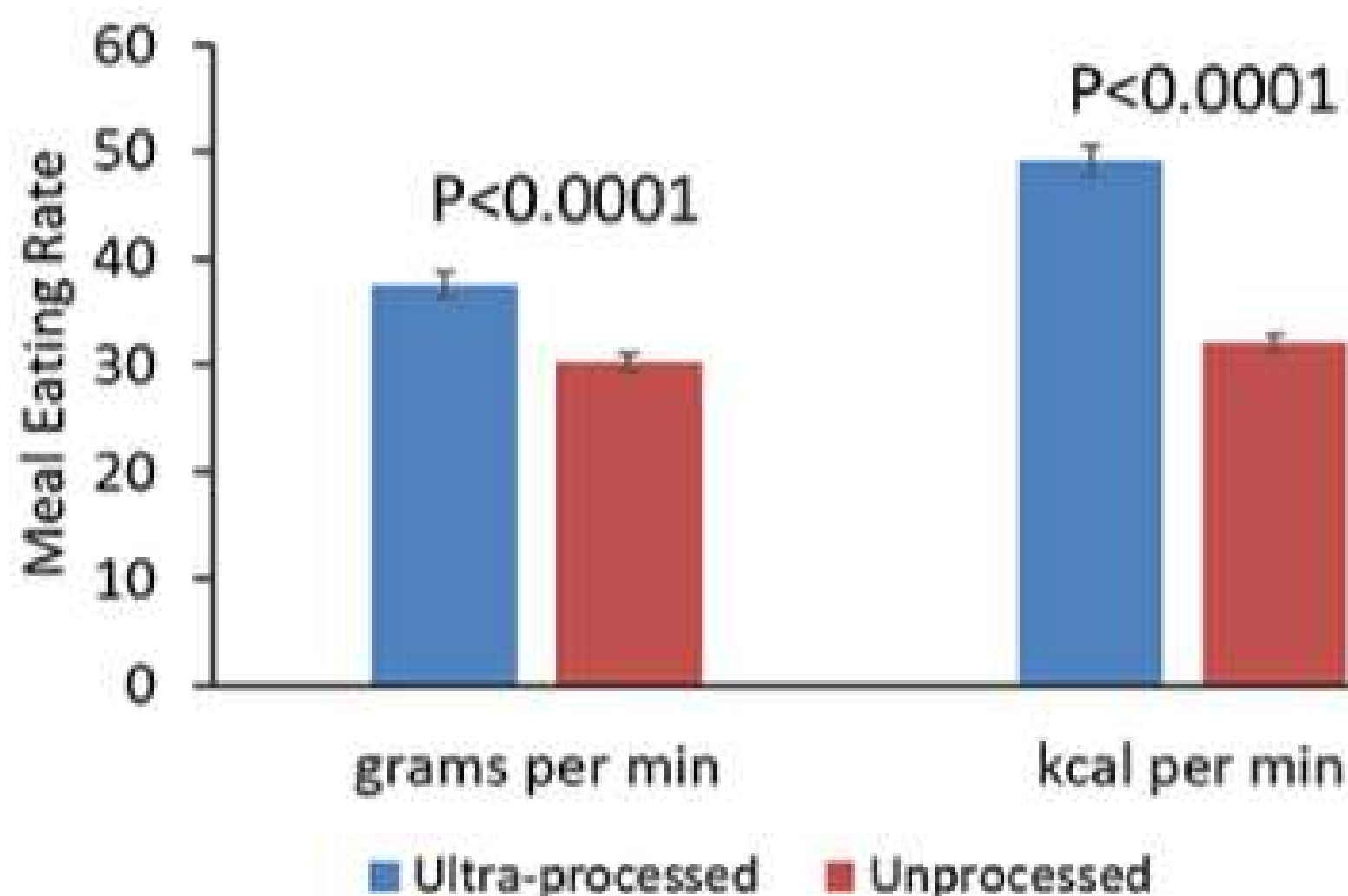
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Randomized Controlled Trial > Cell Metab. 2019 Jul 2;30(1):67-77.e3.

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Ultra-Processed Diets Cause Excess Calorie Intake and Weight Gain: An Inpatient Randomized Controlled Trial of Ad Libitum Food Intake



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PROCESSED FOOD AND TIME

Better (as simple and quick) than processed:

- Whole grain toast with light mozzarella and tomato
- Oat flakes with natural yogurt and apple
- Sandwiches with hummus and pickled cucumbers
- Whole grain tortilla with omelet and vegetables
- Buckwheat with frozen "pan-fried vegetables" and canned legumes
- Cottage cheese with cucumber/radishes and a slice of whole grain bread
- Pasta with a simple tomato sauce, vegetables, and chicken/legumes



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PHYSICAL ACTIVITY



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Healthy
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Healthy Communities

ACTIVE BREAK!



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Gesundheit
Berlin-Brandenburg e.V.
Arbeitsgemeinschaft
für Gesundheitsförderung

Caritas
&Du



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Raport



45% of the respondents report that they never exercise or play sport.

<https://europa.eu/eurobarometer/surveys/detail/2668>

Nikitara K, Odani S, Demenagas N, Rachiotis G, Symvoulakis E, Vardavas C. Prevalence and correlates of physical inactivity in adults across 28 European countries. Eur J Public Health. 2021 Oct 11;31(4):840-845.



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Raport



45% of the respondents report that they never exercise or play sport.

More than one in three (36.2%) adults in the EU were physically inactive

Women were less likely than men to be adequately or highly physically active.

<https://europa.eu/eurobarometer/surveys/detail/2668>

Nikitara K, Odani S, Demenagas N, Rachiotis G, Symvoulakis E, Vardavas C. Prevalence and correlates of physical inactivity in adults across 28 European countries. Eur J Public Health. 2021 Oct 11;31(4):840-845.



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Physical Activity, Exercise Prescription for Health and Home-Based Rehabilitation

by  Herbert Loellgen ^{1,*} ,  Petra Zupet ² ,  Norbert Bachl ³  and  Andre Debruyne ⁴ 

Depression ▼		▲ Autonomic balance
Stroke ▼		▲ Neuromuscular coordination
Cognition ▲		▲ Endothelial function
Capillary density ▲		▼ Coronary artery disease
LDL ▼		▼ Heart failure
Cholesterol ▼		▼ Body weight
Insulin sensitivity ▲		▼ Inflammation
Blood coagulation ▼		▲ Immune function
Cancer ▼		▲ Bone density
Lung disease ▼		▼ Osteoporosis
Risk of death ▼		▼ Sarcopenia
Chronic kidney disease ▲		▲ Dialysis
Hypertension ▼		▼ PAD
Atherosclerosis ▼		▲ Longevity

(▲ : Improvement, ▼ : Decrease)

Benefits!

- 50% reduction in the risk of type 2 diabetes
- 50% reduction in the risk of hypertension
- 30% reduction in the risk of death from all causes
- 30% reduction in the risk of coronary artery disease
- 30% reduction in the risk of stroke
- 30% reduction in the risk of depression
- 25% reduction in the risk of back and joint pain
- 25% reduction in the risk of cancer
- 21% reduction in the risk of falls and frailty syndrome
- 10% reduction in the risk of obesity



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Physical activity



Body movement caused by skeletal muscles, which requires energy.

Not only organized sports activities, but also typical daily school activities and household chores!



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Training

A type of physical activity that is planned, structured, repetitive, and aims to improve or maintain one or more components of physical fitness.



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Recommendations



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Good news to start with!

There is no minimum amount of physical activity that must be met to start experiencing benefits.

Any amount of movement is better than none!

Recommendations



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Adult (18–65)

150 minutes of moderate activity
or
75 minutes of vigorous activity
or
a combination of both

PER WEEK!



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For increased benefits

300 minutes of moderate activity
or
150 minutes of vigorous activity
or
a combination of both

PER WEEK!



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Talk test

Low intensity:

You can talk and sing during the activity.

Moderate intensity:

You can talk, but you won't be able to sing.

High intensity:

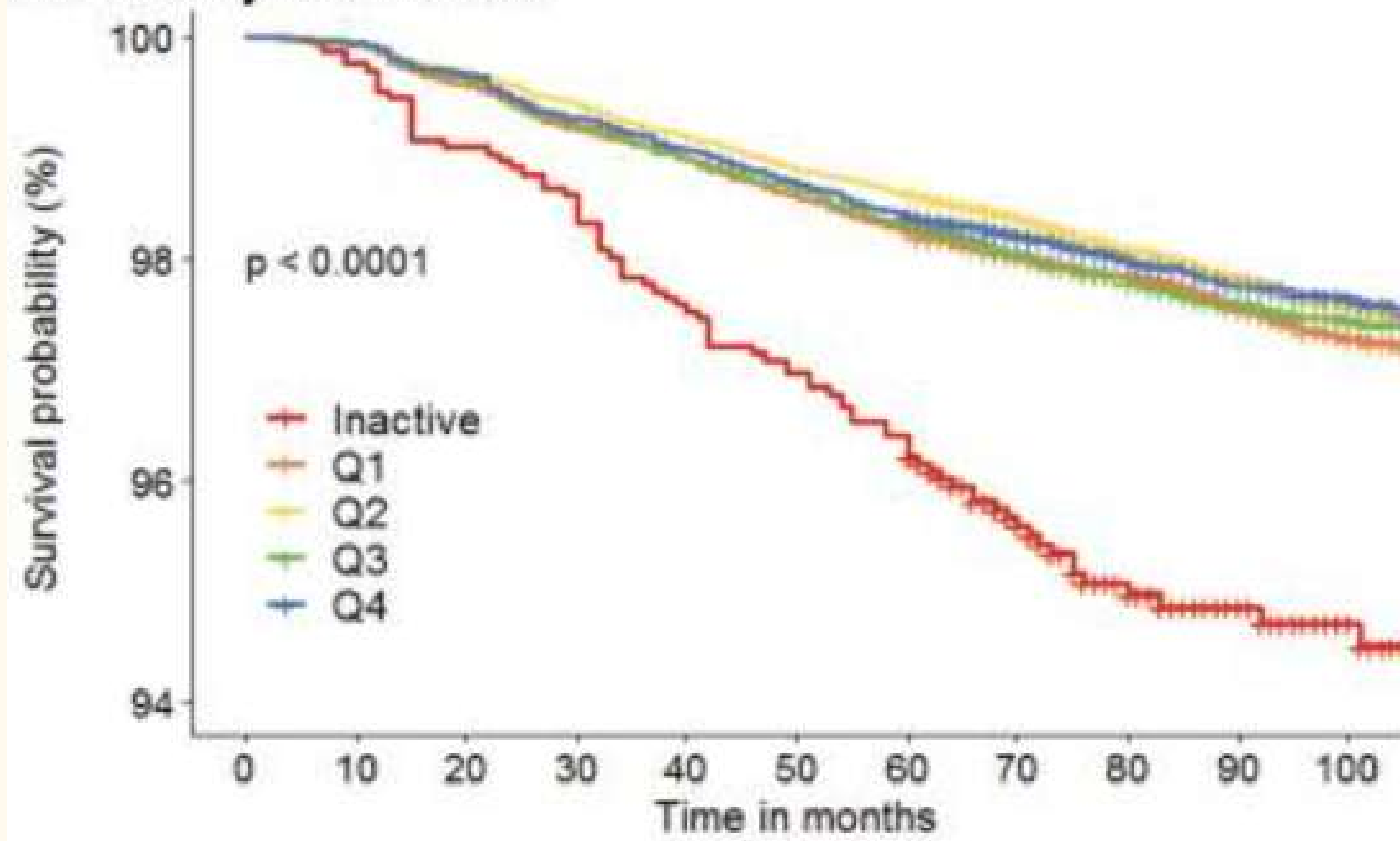
You won't be able to speak full sentences due to shortness of breath.



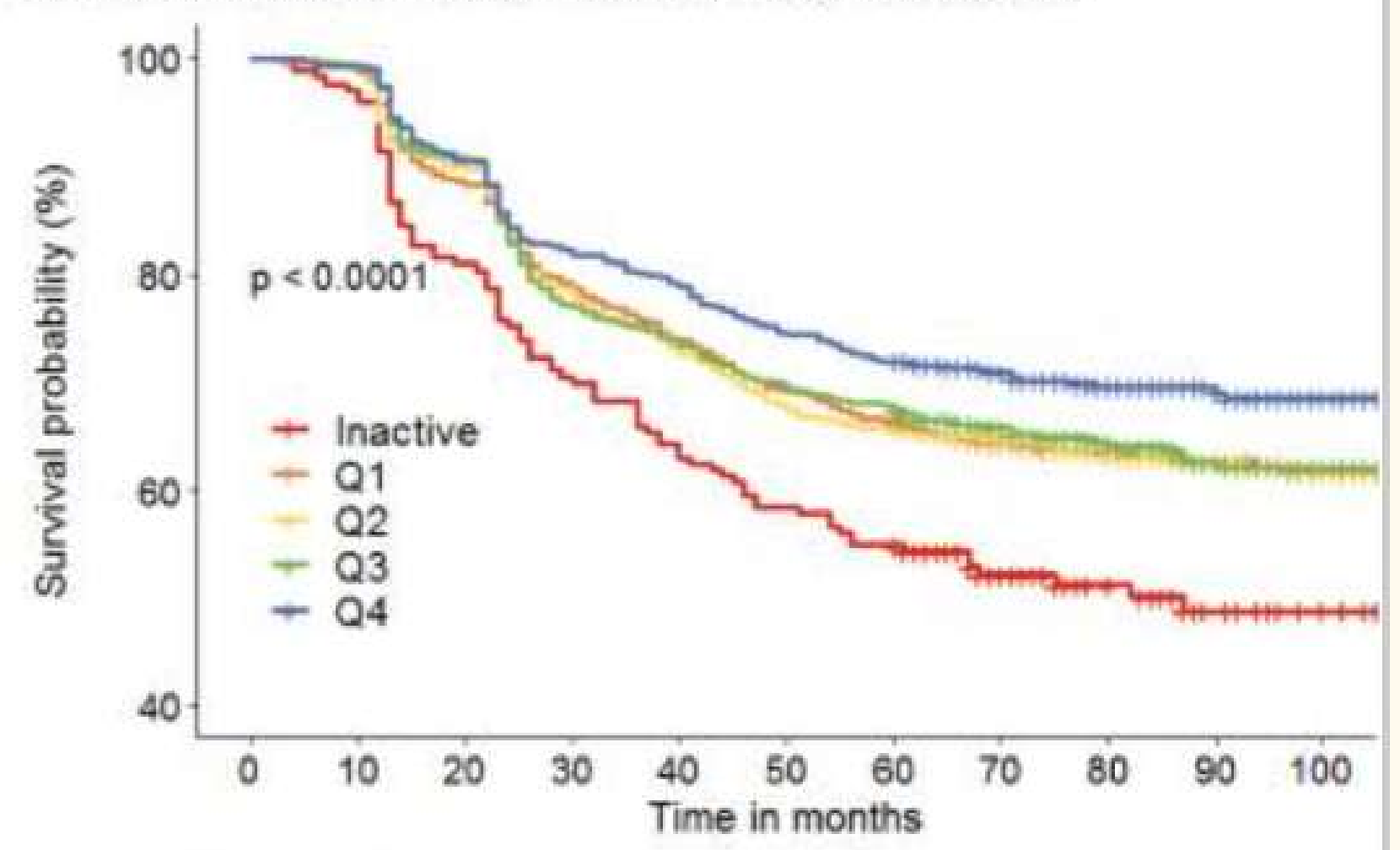
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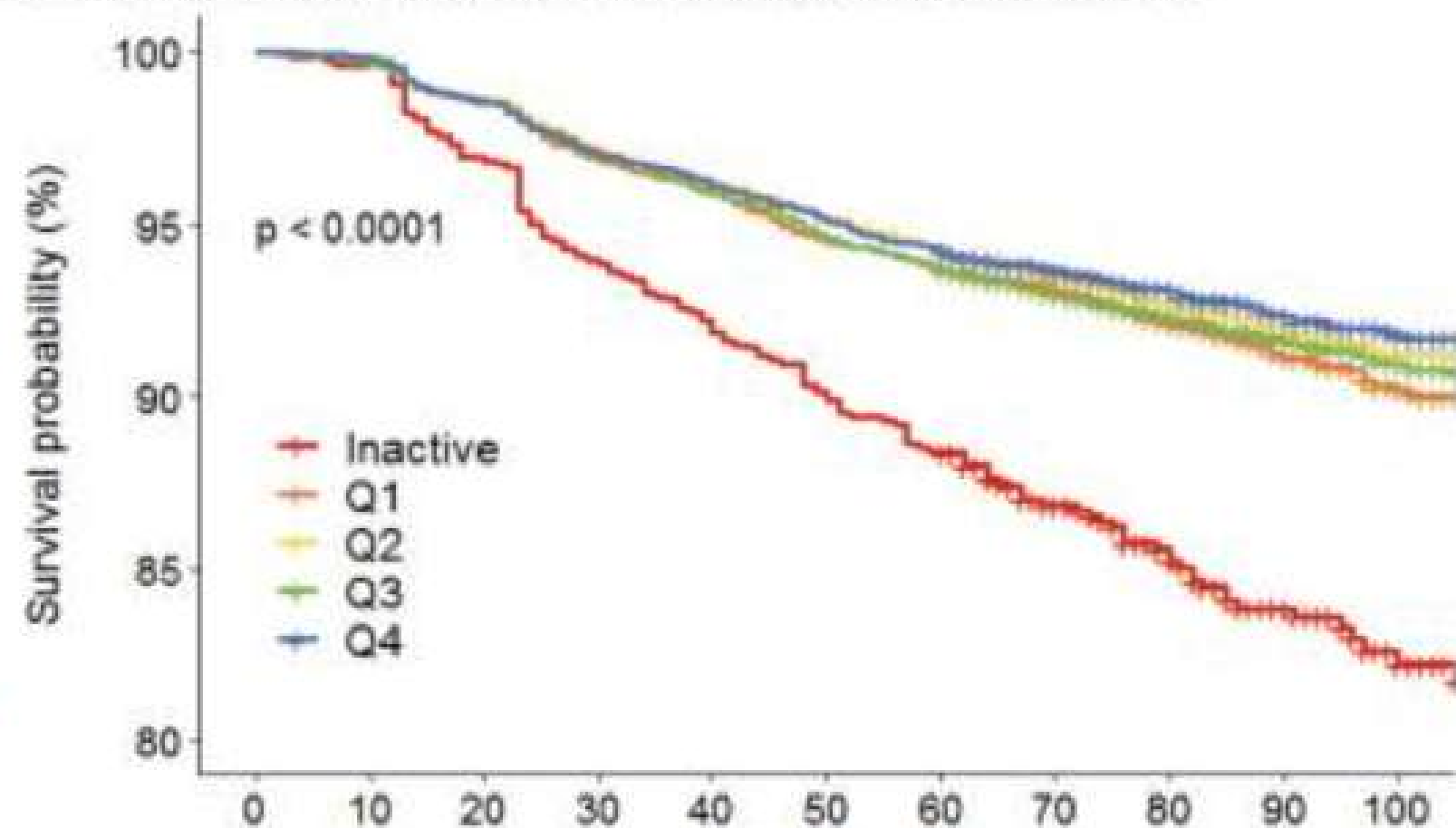
A. Healthy individuals



C. Individuals with cardiovascular diseases



B. Individuals with cardiovascular risk factors



PLOS MEDICINE



PLoS Med. 2021 Dec; 18(12): e1003845.

Published online 2021 Dec 2. doi: [10.1371/journal.pmed.1003845](https://doi.org/10.1371/journal.pmed.1003845)

PMCID: PMC8638933

PMID: [34855764](https://pubmed.ncbi.nlm.nih.gov/34855764/)

Dose-response association between moderate to vigorous physical activity and incident morbidity and mortality for individuals with a different cardiovascular health status: A cohort study among 142,493 adults from the Netherlands



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Combination: aerobic + strength training!

- Gym activity using free weights (e.g., dumbbells) or exercise machines
- Bodyweight exercises: push-ups, squats, limb raises, planks, bridges, lunges, leg swings in a kneeling position
- Stretching



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Physical activity

=

trainings

+

NEAT

(non-exercise activity thermogenesis)



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NEAT

The energy expended for everything we do that is not sleeping, eating or sports-like exercise.



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Cleaning // Playing with children // Carrying groceries // Washing the car // Taking the stairs instead of the elevator // Walking the dog // Walking to the store // Gardening // Washing dishes // Cooking // Standing // Talking // Moving limbs while sitting // Hanging laundry // Craft projects // Parking further from work and walking a few extra streets // Two-minute breaks at work to walk down the hallway // Bouncing or dancing to favorite music // Walking while talking on the phone // Moving around the car while refueling // Walking instead of driving for short distances



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NEAT > training

It has been shown that for individuals who sit for more than 7 hours a day compared to less than 5 hours a day, the risk of death from any cause increases by 30%.

Individuals who engage in even 15 minutes of low-intensity activity daily or 90 minutes weekly reduce their risk by 14%, and their life expectancy increases by 3 years.



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NEAT vs. body mass



- Compensatory reduction in spontaneous activity in individuals who engage in training, resulting in little or no increase in total energy expenditure.
- The "energy gap" explaining the occurrence of obesity is 100–200 additional kilocalories per day over a prolonged period of time.
- A sustained slight increase in energy expenditure is sufficient to prevent obesity in individuals with higher NEAT.



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How many steps daily?



Individuals who use a pedometer to track their daily step count significantly increase their activity levels.

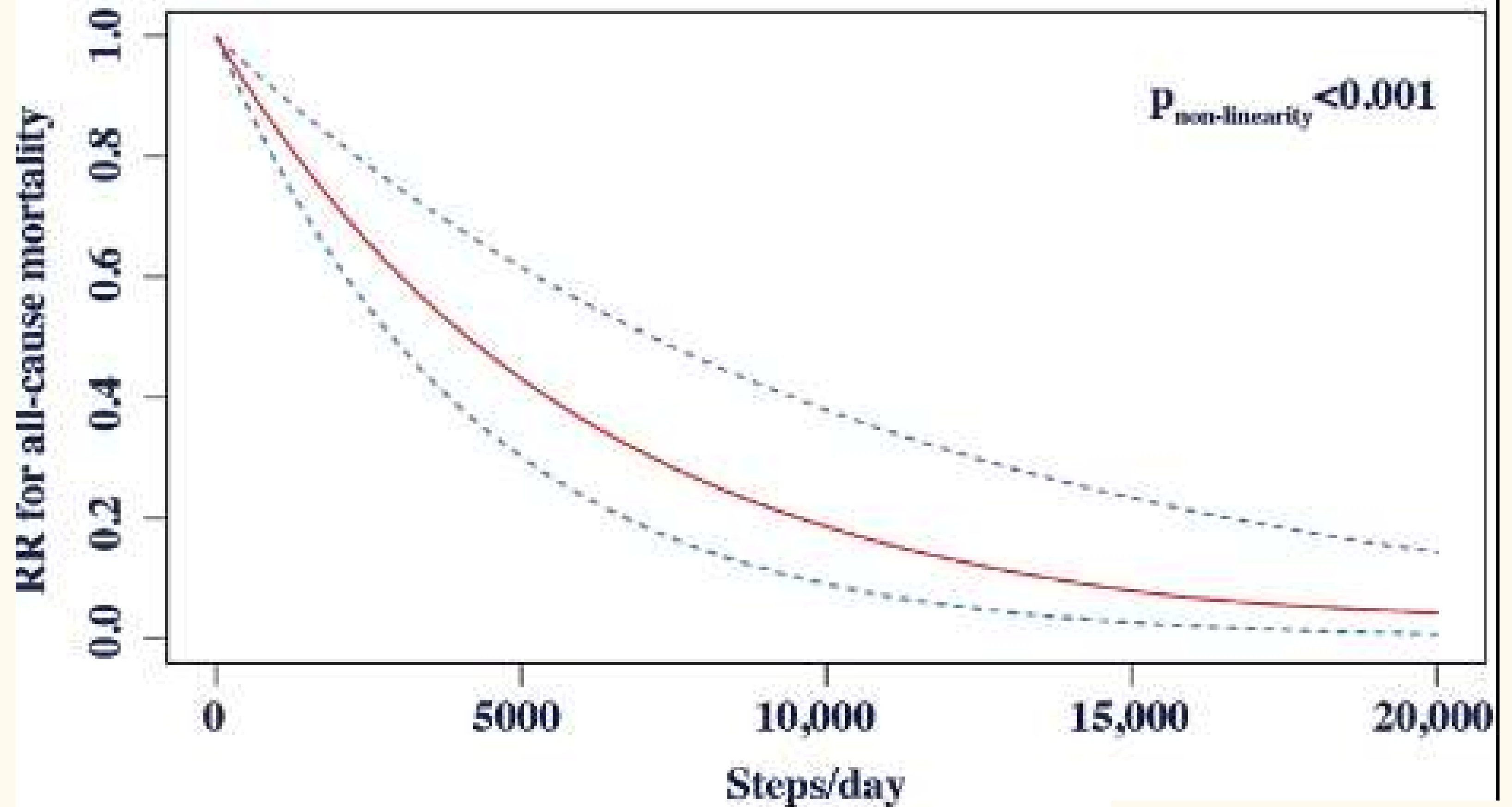
The association between daily step count and all-cause and cardiovascular mortality: a meta-analysis

Maciej Banach^{1 2 3 4}, Joanna Lewek^{1 2}, Stanisław Surma⁵, Peter E Penson^{6 7 8}, Amirhossein Sahebkar^{9 10 11}, Seth S Martin⁴, Gani Bajraktari^{12 13}, Michael Y Henein¹³, Željko Reiner¹⁴, Agata Bielecka-Dąbrowa^{1 2}, Ibadete Bytyçi^{12 13}

- 1/ An increase of 1,000 steps = a 15% reduction in mortality from any cause.
- 2/ An increase of 500 steps = a 7% reduced risk of mortality from cardiovascular causes.
- 3/ The impact of up to 20,000 steps per day has been described– the more, the better.
- 4/ To achieve health benefits, start with even 2,500–4,000 steps per day.



A Association between steps per day and risk for all-cause mortality



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SITTING IS THE NEW SMOKING



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Health benefit

=

benefits of physical activity

-

negative effects of inactivity



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Inactivity – research studies



- A sedentary lifestyle is independently correlated with mortality and is poorly compensated by physical activity.
- A meta-analysis showed that mortality was not elevated only in individuals engaged in a high level of moderate-intensity physical activity (60–75 minutes of moderate-intensity physical activity per day), even if they had more than 8 hours of sedentary behavior daily.

Park JH, Moon JH, Kim HJ, Kong MH, Oh YH. Sedentary Lifestyle: Overview of Updated Evidence of Potential Health Risks. Korean J Fam Med. 2020 Nov;41(6):365-373.



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TV time



- However, watching television for more than 3 hours a day increased mortality independently of physical activity.
- Individuals who watched television for ≥ 5 hours a day showed significantly higher mortality.

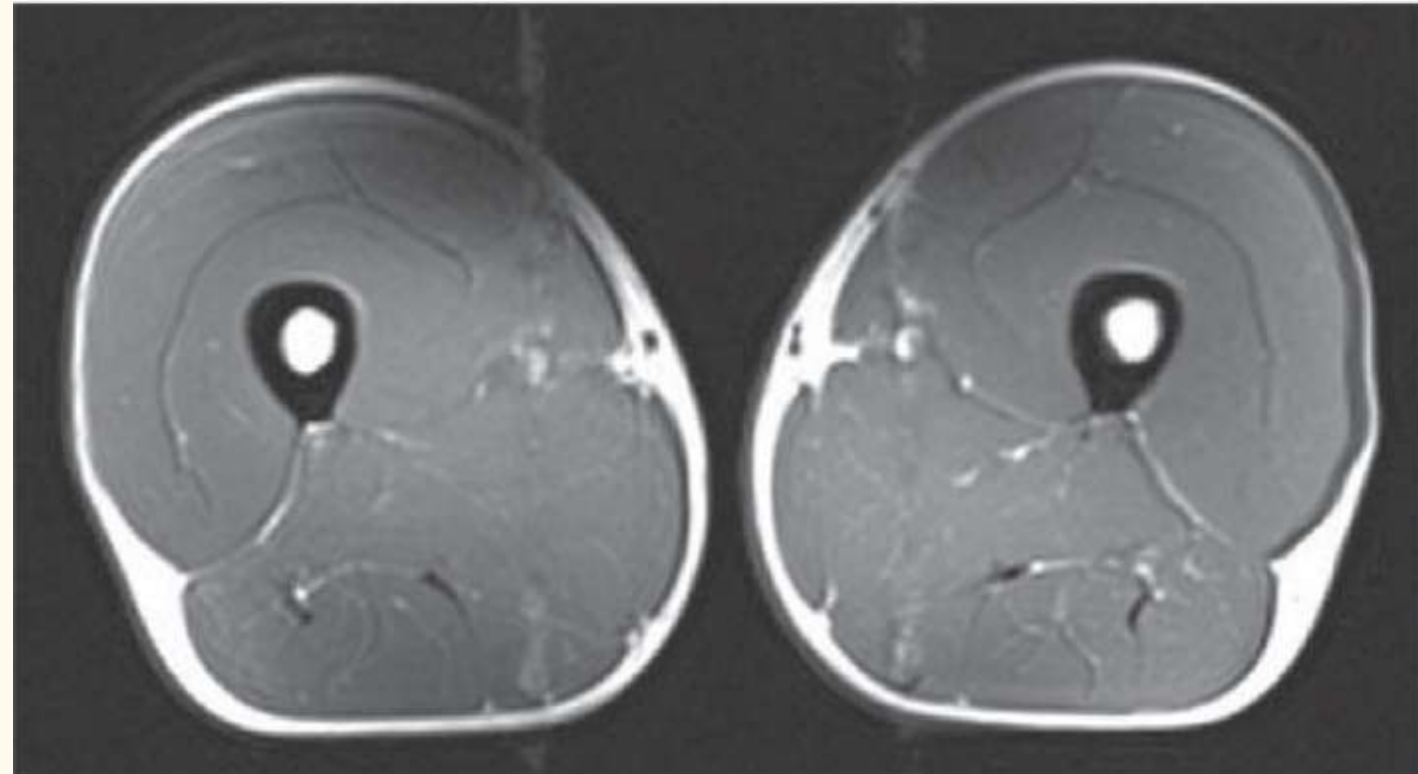
Ekelund U, Steene-Johannessen J, Brown WJ, Fagerland MW, Owen N, Powell KE, et al. Does physical activity attenuate, or even eliminate, the detrimental association of sitting time with mortality?: a harmonised meta-analysis of data from more than 1 million men and women. Lancet. 2016;388:1302–10.



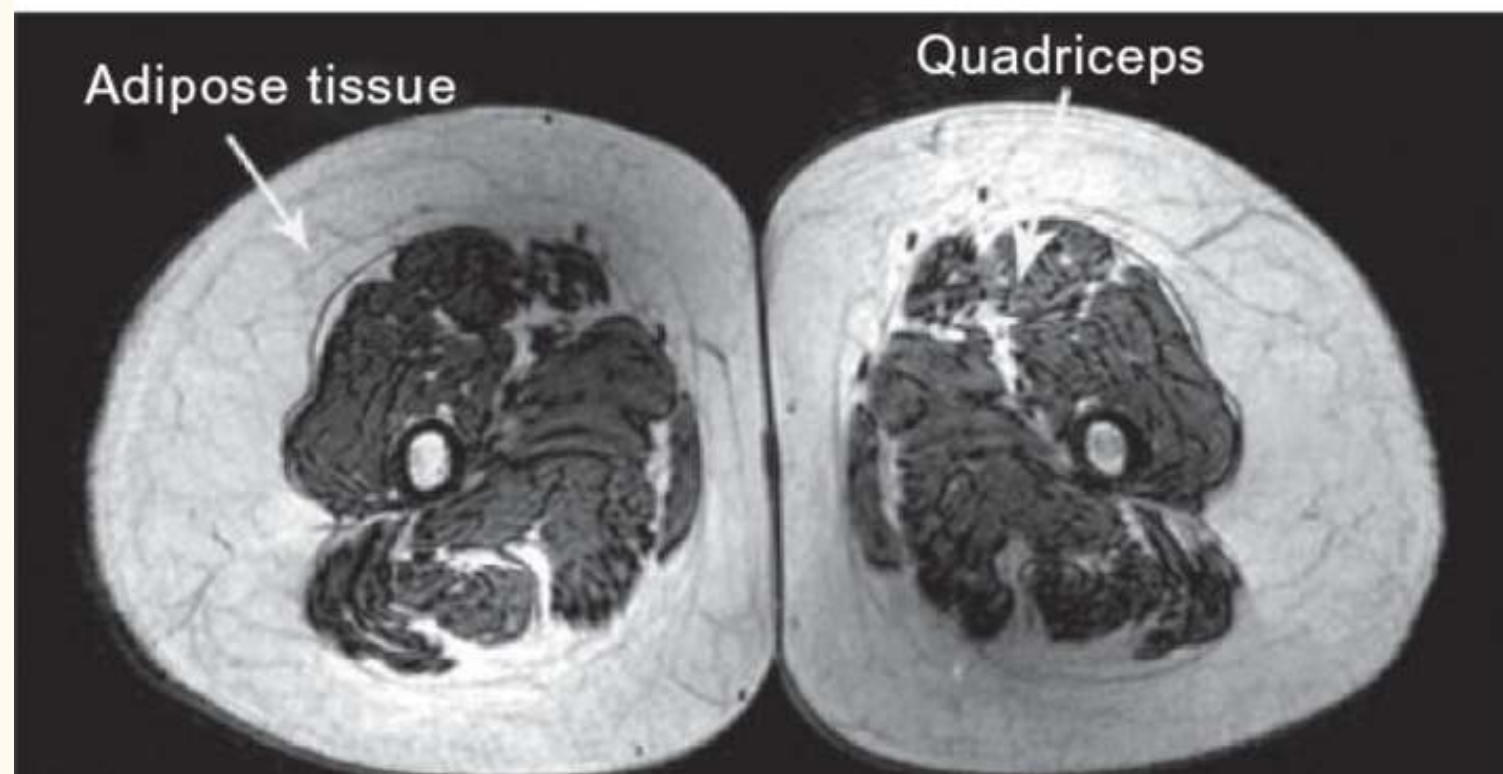
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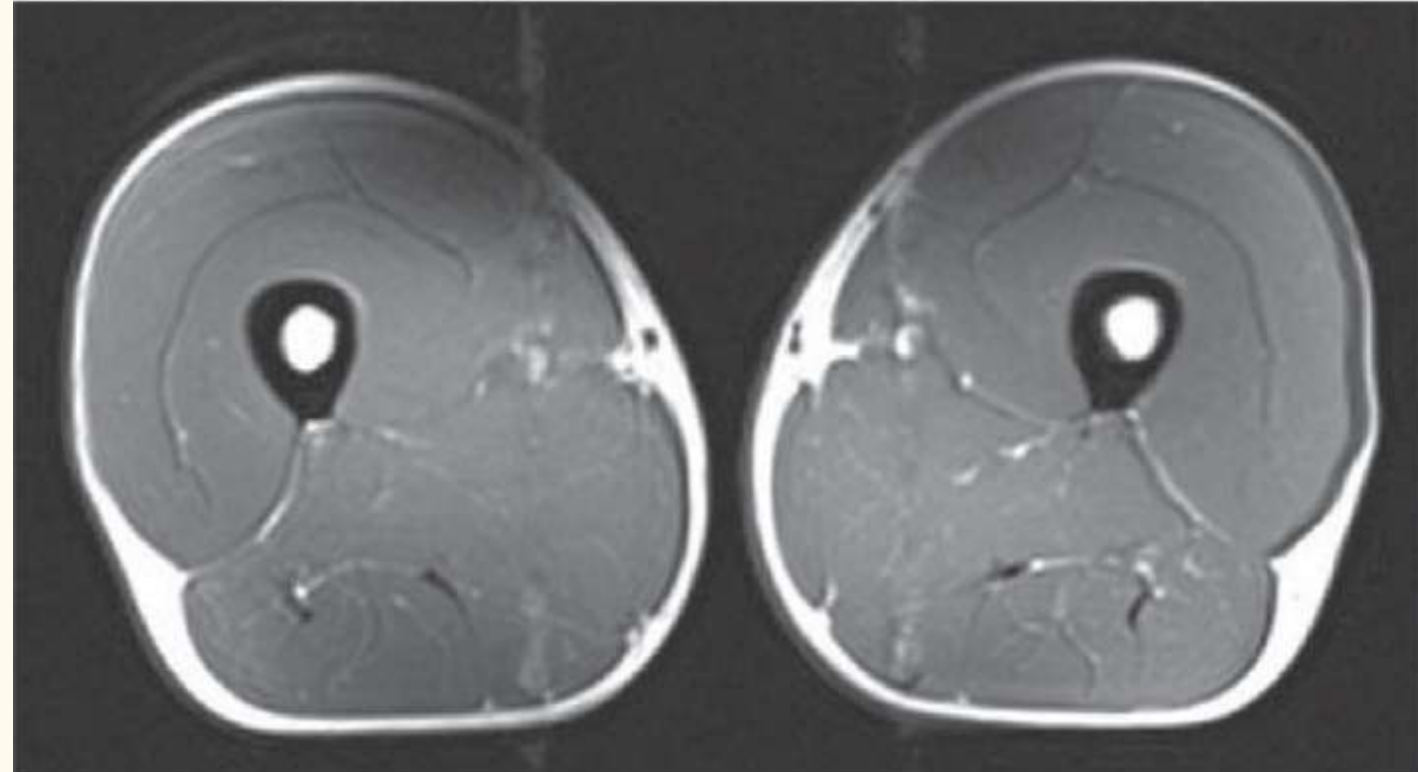
40-year-old triathlete



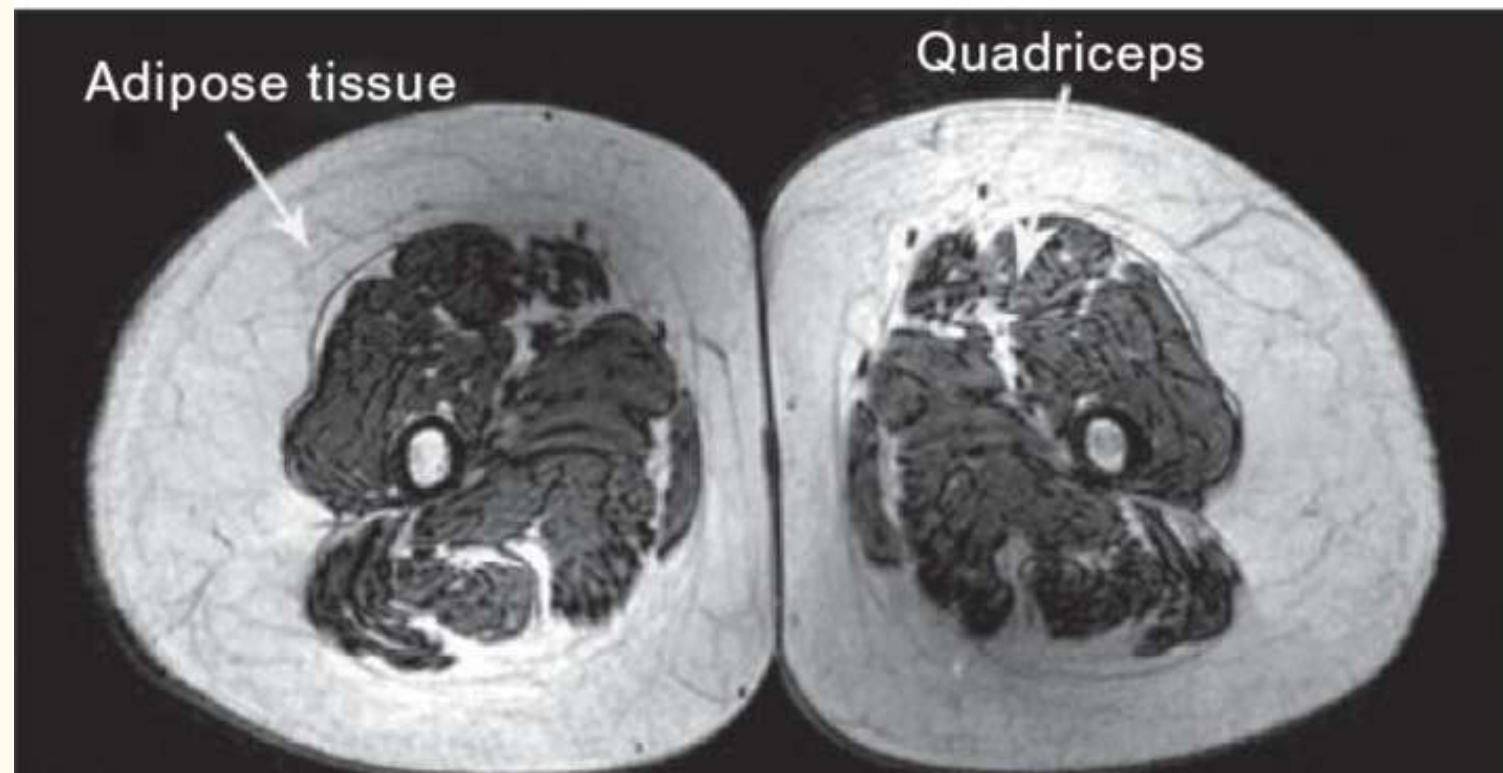
74-year-old sedentary man



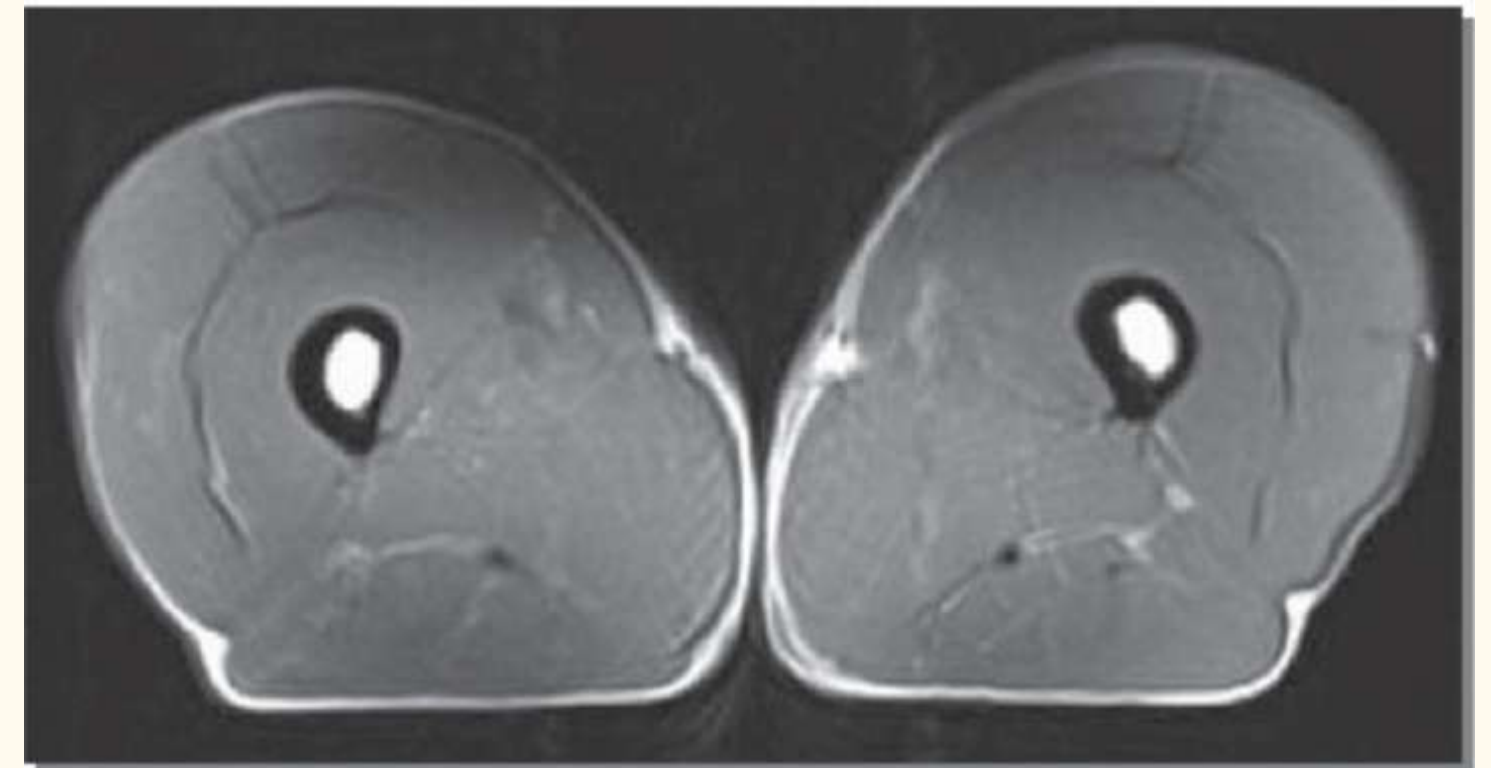
40-year-old triathlete



74-year-old sedentary man



70-year-old triathlete



Active breaks

Benefits for Type 2 Diabetes of Interrupting Prolonged Sitting With Brief Bouts of Light Walking or Simple Resistance Activities **FREE**

Paddy C. Dempsey ; Robyn N. Larsen; Parmeet Sethi; Julian W. Sacre; Nora E. Straznicky; Neale D. Cohen; Ester Cerin; Gavin W. Lambert; Neville Owen; Bronwyn A. Kingwell; David W. Dunstan

Overweight/obese men with type 2 diabetes.

Three days:

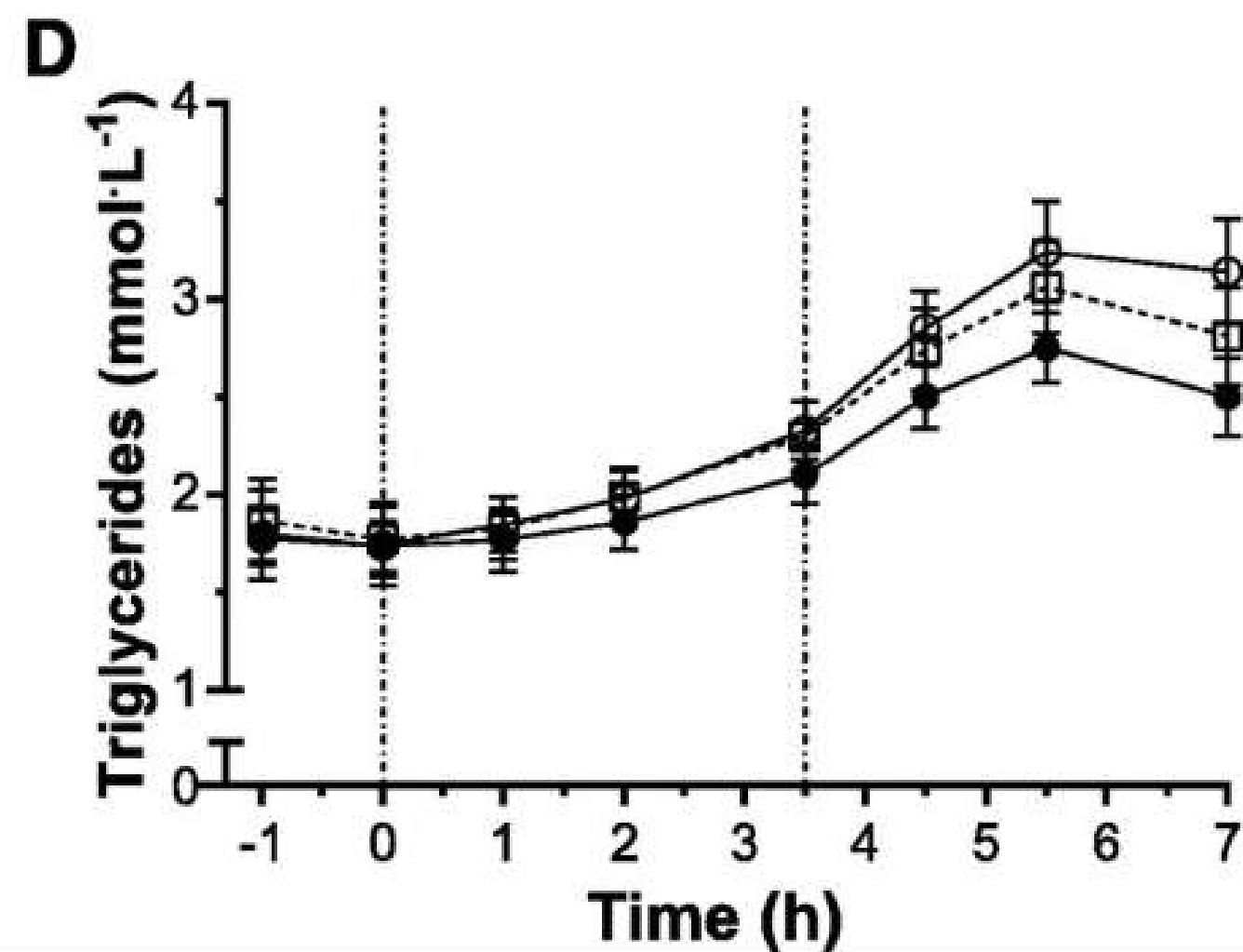
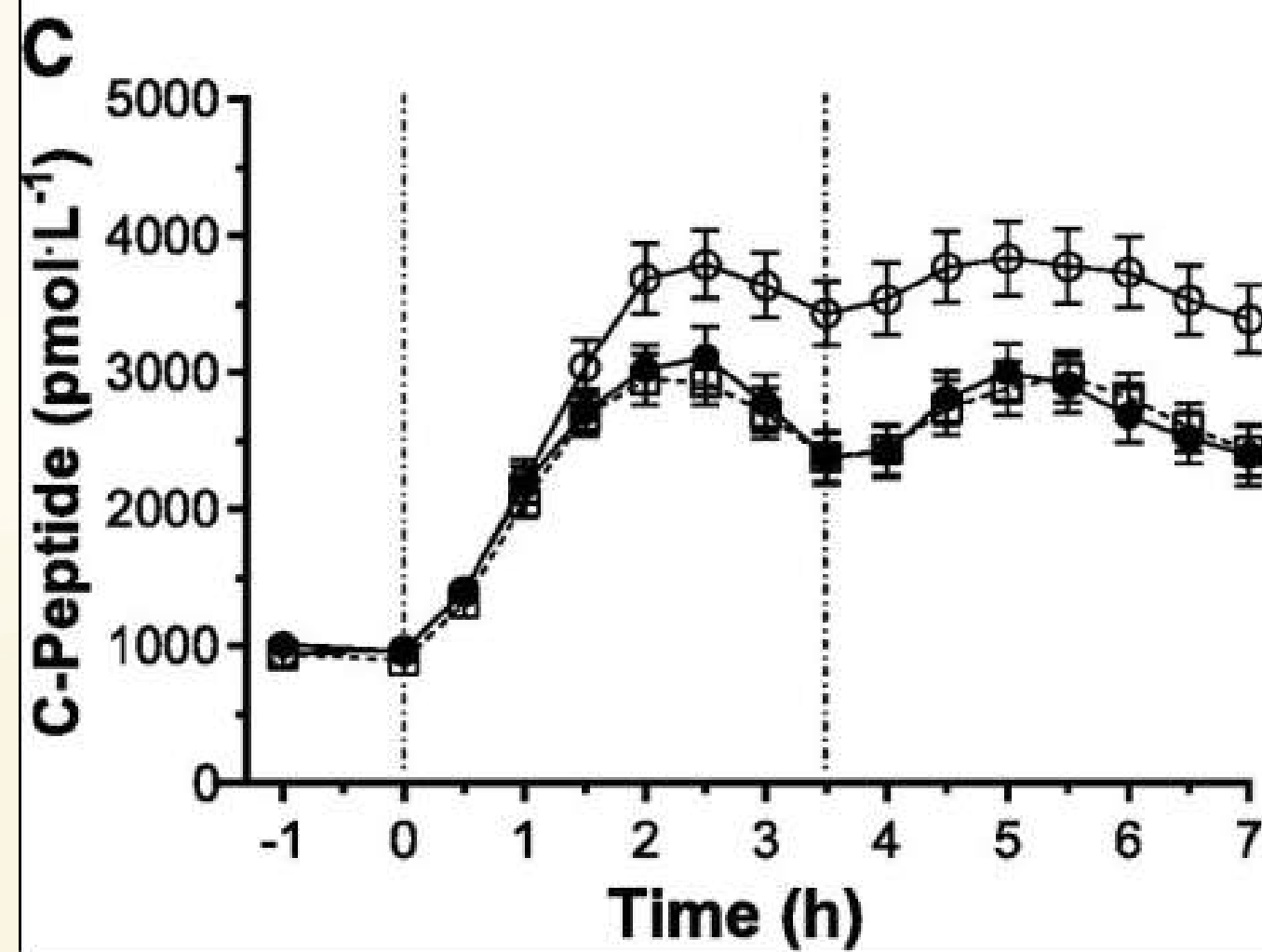
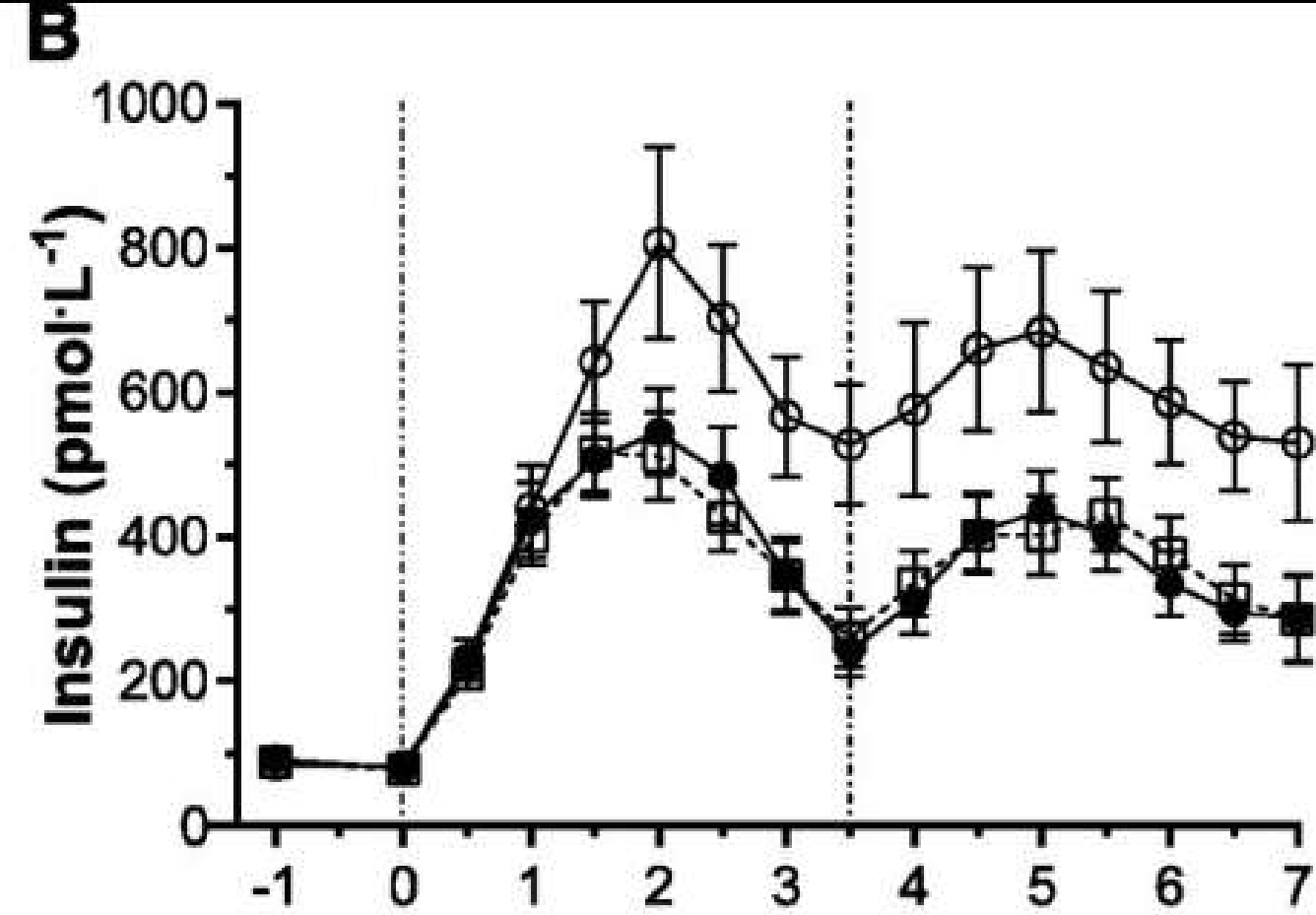
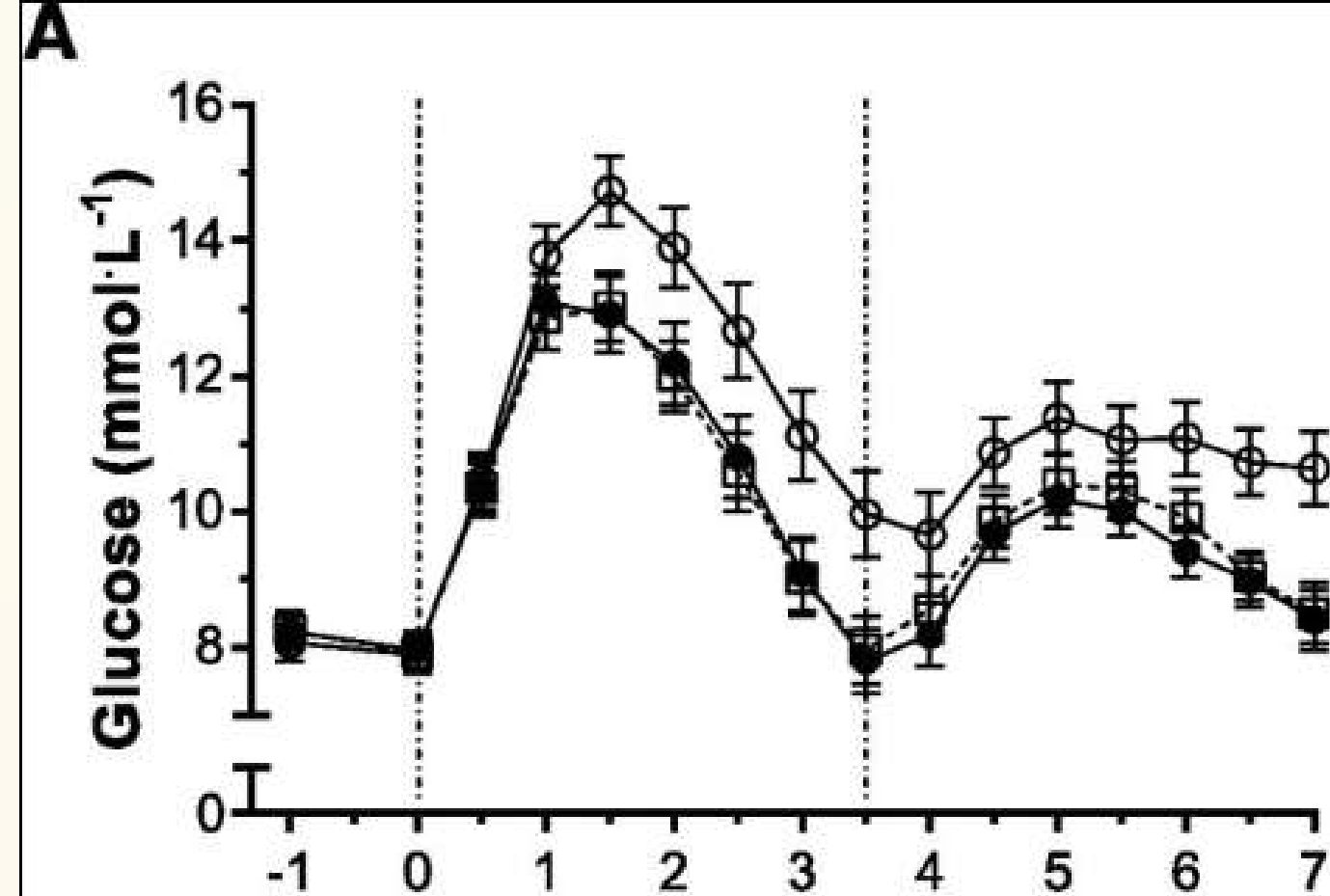
- Continuous sitting (control group) (SIT),
- Sitting plus 3-minute light walks every 30 minutes,
- Sitting plus 3-minute strength exercises (half squats, calf raises, glute squeezes, and knee lifts) every 30 minutes.

In each condition, standardized meals were consumed.



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Table 4 Hazard ratios for cardiovascular mortality in relation to four lifestyles in Golestan Cohort Study

Model	Unhealthy diet and inactive	Unhealthy diet but Active	Healthy Diet but Inactive	Healthy diet and active
Total (2,043/ 40,692)				²
Case/n	757/ 11,427	480/12177	522/8922	284/8170
Age and sex adjusted HR	1.00	0.81 (0.72, 0.91)	0.88 (0.78, 0.98)	0.68 (0.59, 0.78)
Fully adjusted HR ¹	1.00	0.83 (0.74, 0.94)	0.94 (0.84, 1.05)	0.74 (0.65, 0.86)

[Int J Behav Nutr Phys Act.](#) 2022; 19: 138.

PMCID: PMC9670610

Published online 2022 Nov 16. doi: [10.1186/s12966-022-01374-1](https://doi.org/10.1186/s12966-022-01374-1)

PMID: [36384713](https://pubmed.ncbi.nlm.nih.gov/36384713/)

Comparing the risk of cardiovascular diseases and all-cause mortality in four lifestyles with a combination of high/low physical activity and healthy/unhealthy diet: a prospective cohort study

[Asma Kazemi](#),¹ [Najmeh Sasani](#),¹ [Zeinab Mokhtari](#),² [Abbas Keshtkar](#),³ [Siavash Babajafari](#),⁴ [Hossein Poustchi](#),⁵
[Maryam Hashemian](#),^{6,7} and [Reza Malekzadeh](#)⁷



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➤ Methods Mol Biol. 2012;934:89-102. doi: 10.1007/978-1-62703-071-7_5.

Physical activity, stress reduction, and mood: insight into immunological mechanisms

Mark Hamer¹, Romano Endrighi, Lydia Poole

- Active individuals have a 22% lower risk of developing depressive symptoms.
- The protective effect of physical activity was found to be stronger in women (31%) than in men (19%).



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Mental benefits



Increased

**Assertiveness, self-confidence, emotional stability,
cognitive functioning, positive body image, self-
control, sexual satisfaction, good mood, self-esteem,
memory, brain tissue volume**



Decreased

**Anxiety, distress after a stressful event, risk of
developing and symptoms of depression,
dysfunctional and psychotic behaviors, hostility,
tension, phobias, headaches**

LOW-BUDGET ACTIVITY

- Home exercises – no equipment, bodyweight workouts, online training sessions, apps.
- Increasing non-exercise daily activity – incorporating movement into everyday life.
- Walking and exploring the local area – underrated and free!
- Outdoor gyms in parks – free fitness opportunities.
- Affordable sports – running, jumping rope, resistance bands, yoga.
- Stairs – a simple and effective way to stay active.
- Household chores – cleaning, organizing, and tidying up.
- Gardening – combining outdoor time with physical activity.
- Dancing to music at home – a fun and energetic way to exercise.



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PHYSICAL ACTIVITY AND LACK OF TIME

- Tabata or HIIT (High-Intensity Interval Training) – intense exercises like squats, push-ups, or burpees in short bursts of 20–30 seconds.
- 5 minutes of yoga in the morning or evening improves mobility and reduces stress.
- Short online workouts (e.g., 7-minute workout).
- Walking during phone calls – stay active while staying connected.
- Movement breaks (micro workouts) – 2–3 minutes of squats, push-ups, or stretching every hour.
- Playing with children – turn playtime into a workout.
- Cycling instead of driving – a healthy and eco-friendly alternative.



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Restorative sleep



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Sleep

Sleep is a state of our brain that occurs and passes cyclically in a daily rhythm, during which consciousness is suspended, and the body remains immobile.

Physiological sleep is characterized by full reversibility under the influence of external factors (as opposed to a coma).



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Healthy sleep



It is characterized by sufficient duration, good quality, appropriate timing and regularity, as well as the absence of disruptions and sleep disorders.

Watson NF, Badr MS, Belenky G, et al. Recommended amount of sleep for a healthy adult: a joint consensus statement of the American Academy of Sleep Medicine and Sleep Research Society. *Sleep*. 2015;38(6):843–844.



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- Increased risk of certain cancers
- Worsening of gastrointestinal disorder symptoms
- Hypertension
- Dyslipidemia
- Cardiovascular diseases
- Weight-related issues
- Metabolic syndrome
- Type 2 diabetes
- Increased risk of mortality

Disrupted Sleep and Physical Health



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Sleep restriction

- It is associated with strength, productivity, and something highly desirable.
- It is the norm to achieve success.
- Glorification of overwork.



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Ograniczanie czasu snu

- It is associated with strength, productivity, and something highly desirable.
- It is the norm to achieve success.
- Glorification of overwork.

But we also limit it when we feel a lack of time for ourselves – we're more likely to sit in front of the TV than go to bed earlier...



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How much do we need?

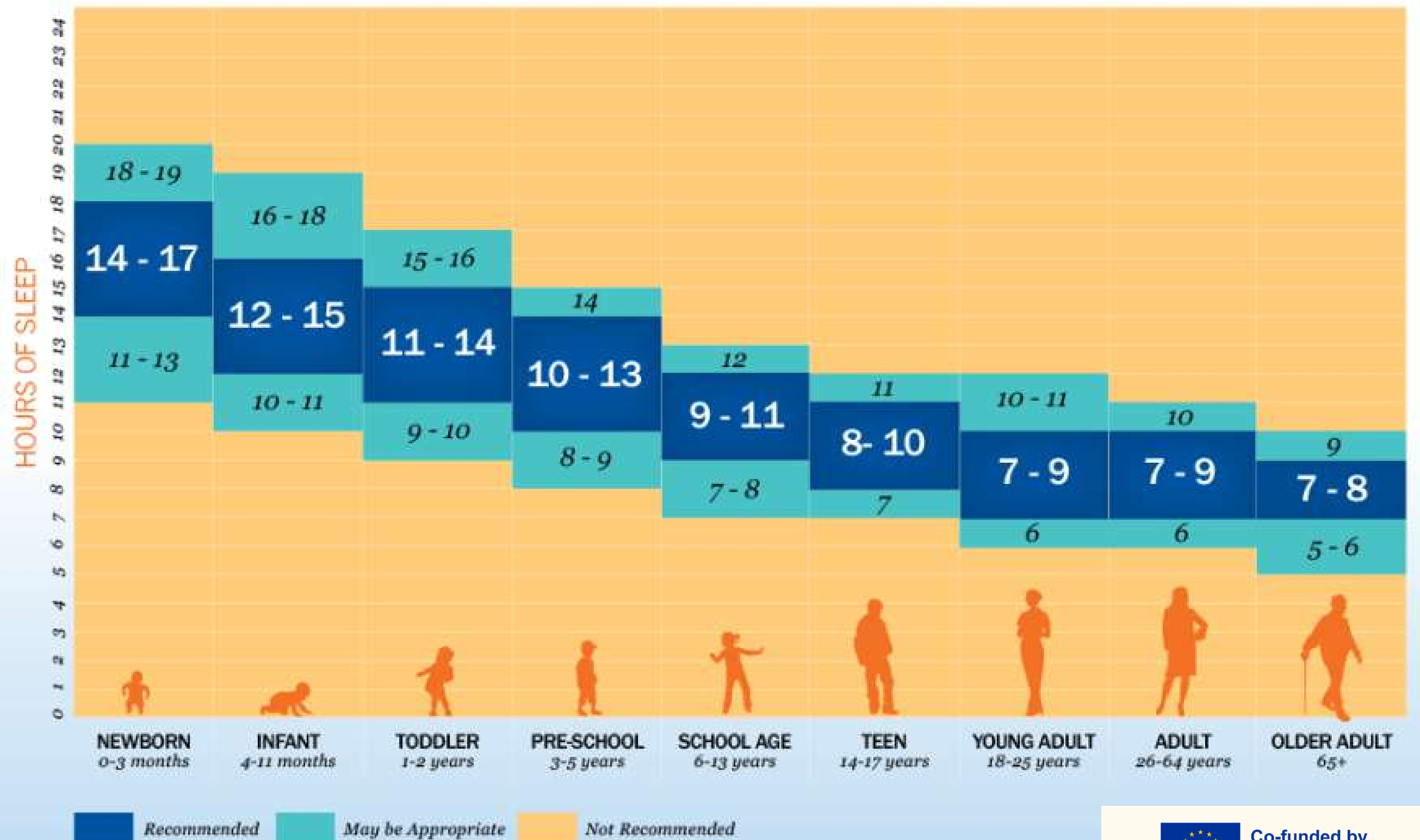
- The amount of sleep needed can vary individually.
- Sleep requirements change with age.



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SLEEP DURATION RECOMMENDATIONS



Mechanisms Regulating Sleep



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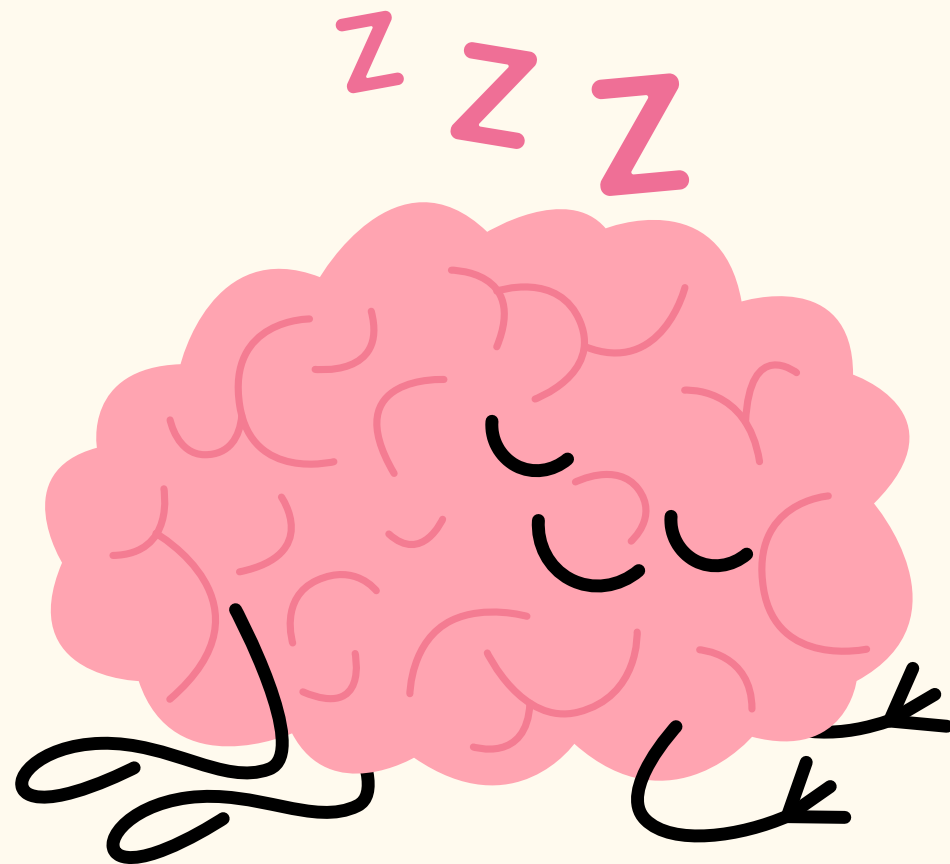


Healthy
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In simple terms...

Two-factor model of sleep regulation

1982 rok, Borbély



Analysis of recent discoveries – conceptually, the model remains useful
2016 rok, Borbély et al.

Two axes

proces S – homeostatic sleep drive

proces C – circadian rhythm



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Process

- Homeostatic process = the task of restoring balance in the body.
- It is associated with the increase in adenosine levels in the blood during wakefulness and activity.
- The rising levels of adenosine cause drowsiness.
- The drowsiness is greater the longer the time has passed since the last sleep period.

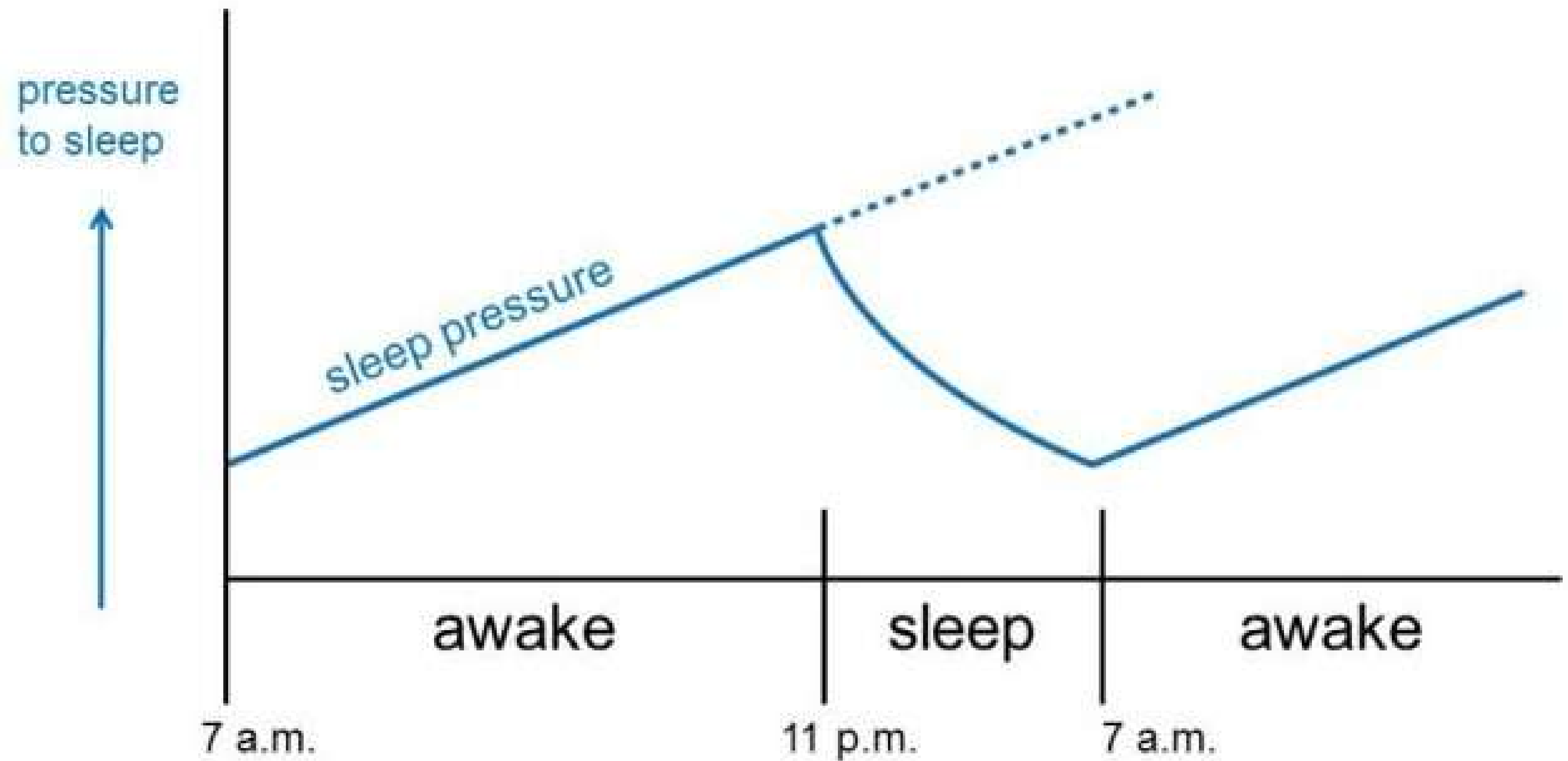


The longer we stay awake,
the stronger the urge to sleep becomes.



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Źródło: www.cdc.gov, NIOSH Training for Nurses on Shift Work and Long Work Hour



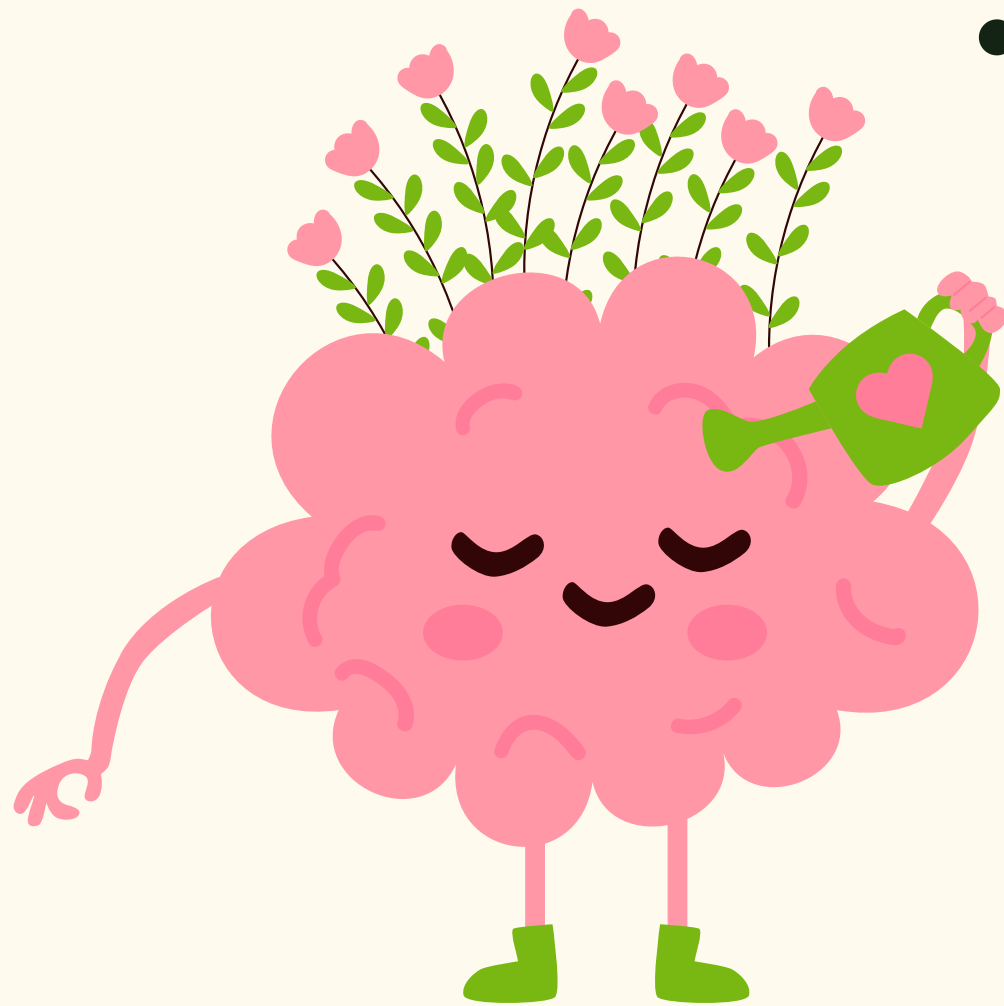
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Proces C

Circadian Rhythm

- Experiment of isolation from external synchronizers (light, clocks, society) – being placed in a cave and observed.
- Despite being deprived of information about the time of day, people maintained their sleep-wake rhythm.
- The difference – it lasted a bit longer (24–25 hours) and varied individually.



Other processes also occur with a circadian rhythm, including: fluctuations in body temperature, cortisol levels, processes related to hunger and food intake, etc.

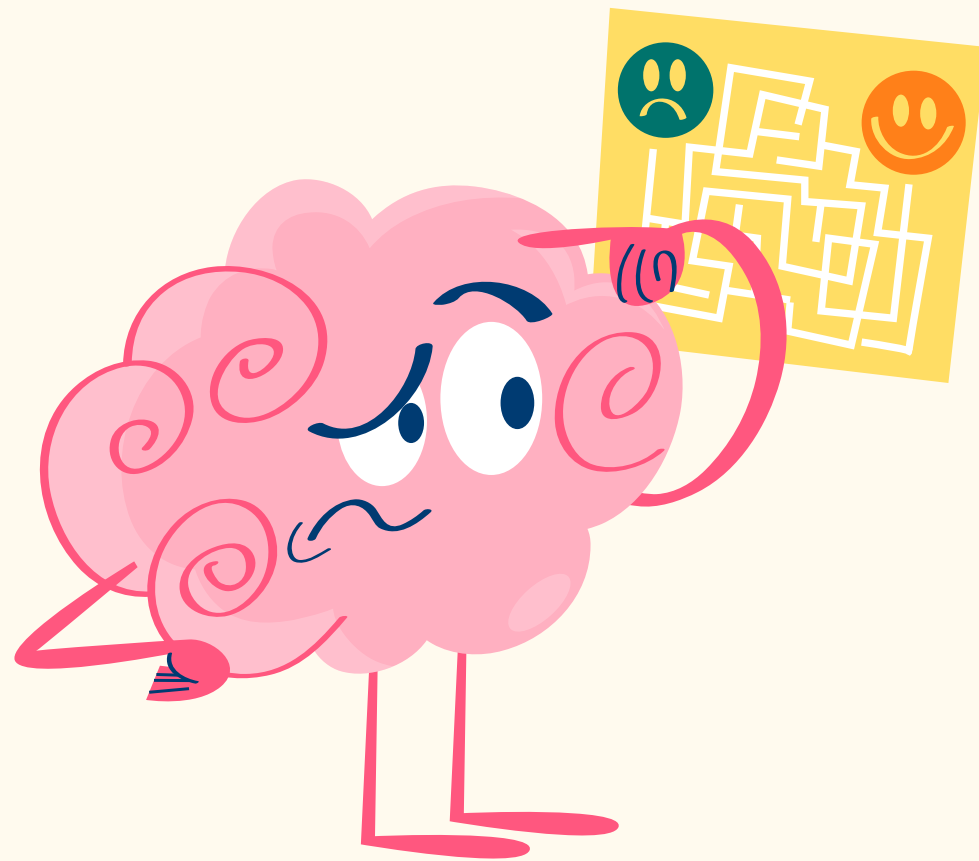


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Process C Circadian Rhythm

- Managed from the top by our biological clock, located in the suprachiasmatic nucleus (SCN) of the hypothalamus.
- By processing so-called "time givers," it allows the adjustment of the circadian rhythm to a 24-hour cycle.

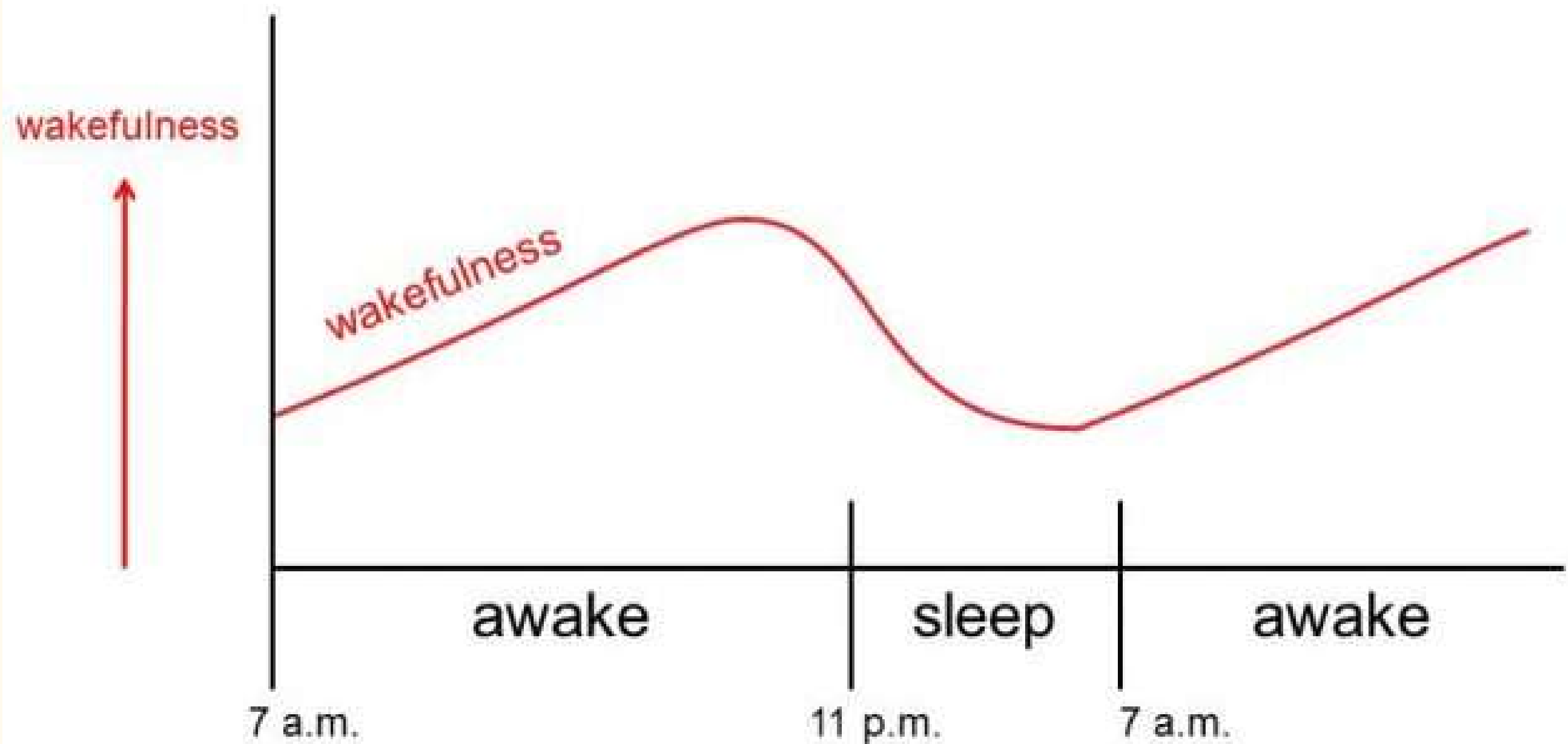


Time givers include: light and darkness, the timing of food intake, its quantity and composition, social and mental activity, physical exertion, the indications of clocks and alarms, which allow performing the same activities every day at fixed times.



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Source: www.cdc.gov, NIOSH Training for Nurses on Shift Work and Long Work Hour



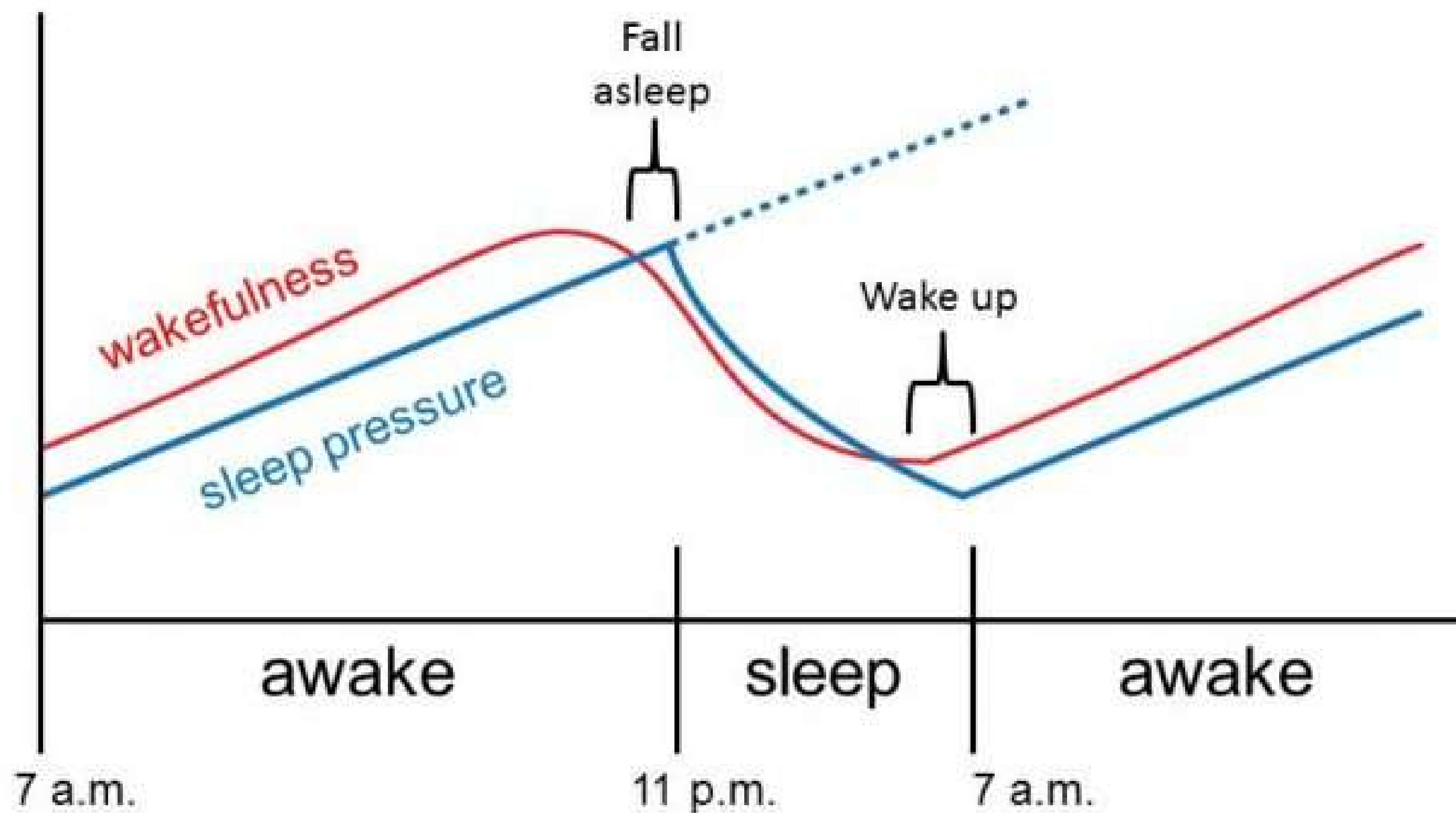
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3...

2...

1...



Źródło: www.cdc.gov, NIOSH Training for Nurses on Shift Work and Long Work Hour



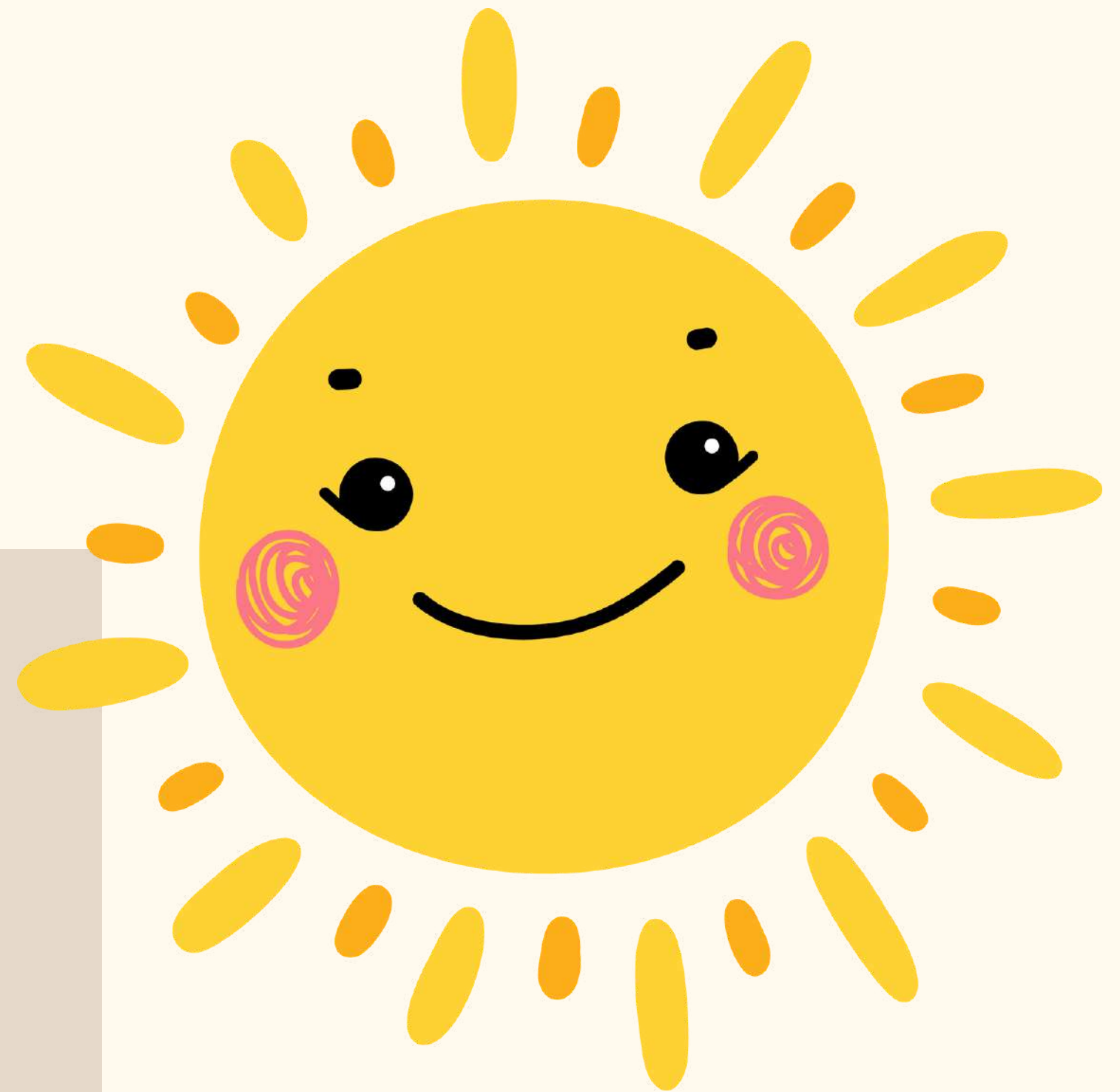
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The strongest time giver

The suprachiasmatic nucleus in the brain receives signals from the retina about the intensity of light or darkness and adjusts the mechanisms controlling our activity and sleep accordingly.

Shift workers – sleepy at 4:00 AM, but not in the morning.



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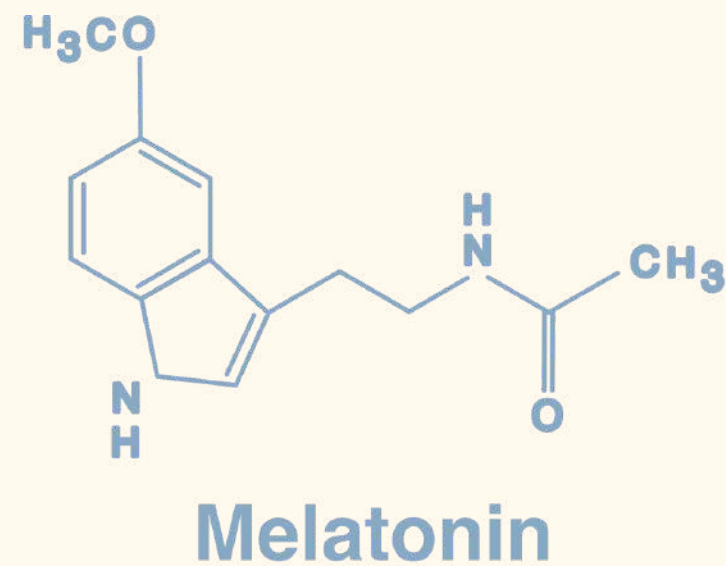
Exposure to light in the morning



- The wavelength of light that most strongly inhibits melatonin secretion and increases alertness is between 450–500 nm, which is **blue light**.
- Sunlight is richest in blue light between 7:00 and 11:00 AM.
- A 20–30 minute exposure to sunlight in the morning strongly supports the proper functioning of our circadian rhythm.



Role of Melatonin



- A sleep-promoting hormone produced in the pineal gland.
- Darkness is the signal to start the secretion of melatonin, which helps us fall asleep.
- It is responsible for falling asleep, as well as the quality and depth of sleep – its peak concentration typically occurs between 12:00 AM and 3:00 AM.

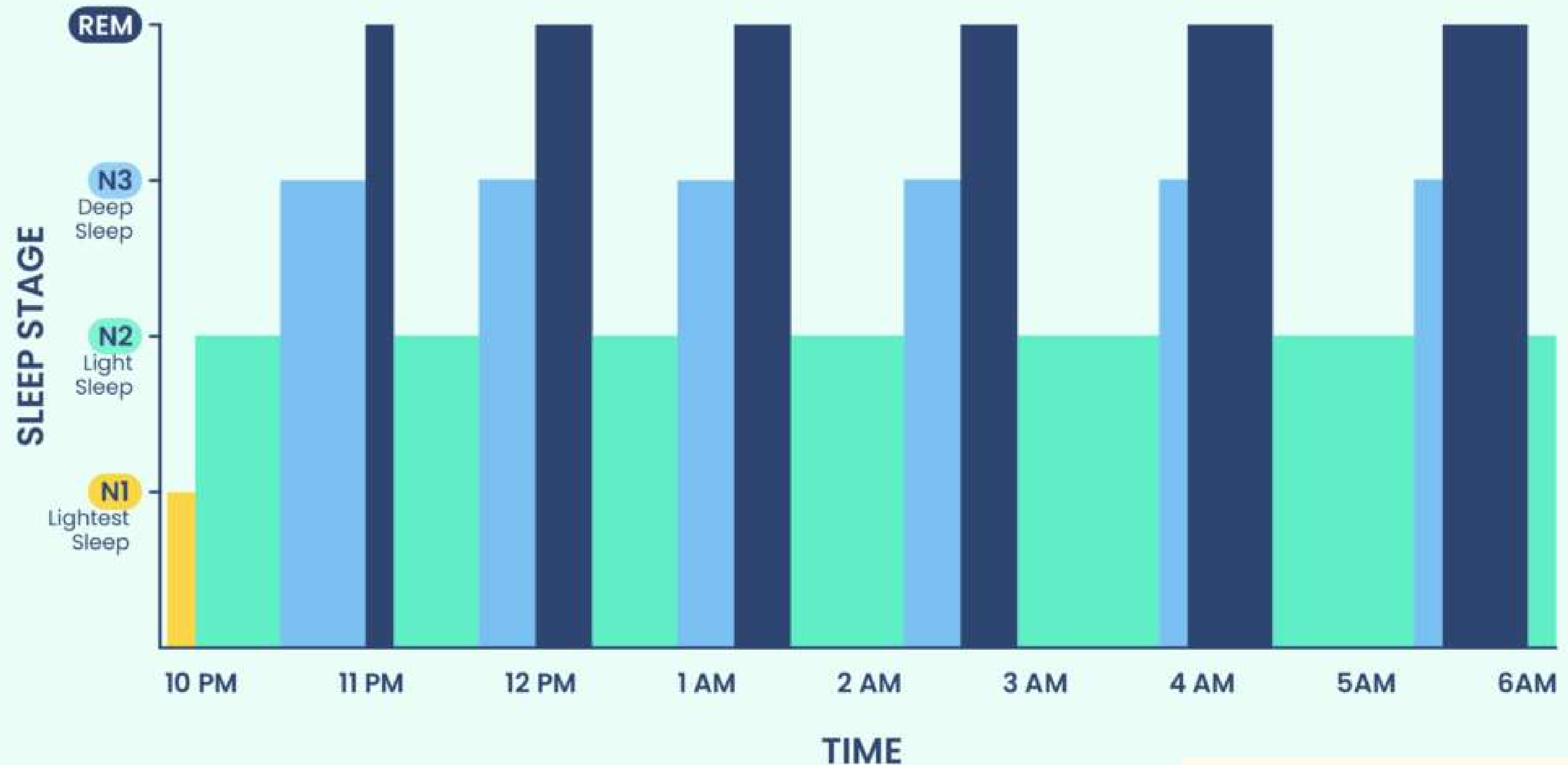


Impact?



- Exposure to light in the late evening usually delays the phase of our internal clock and leads us to prefer later sleep times.
- However, the wake-up time is often dictated by societal obligations (e.g., work) and remains the same.

Sleep Cycles Through the Night



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Disrupted Sleep and Mental Health

- increased stress response,
- increased emotional suffering,
- altered emotional reactivity,
- impaired moral judgment,
- improper assessment of social signals,
- increased anxiety levels,
- mood disorders,
- cognitive, memory, and performance deficits,
- increased risk of suicides



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SLEEP IS NOT JUST FOR THE PRIVILEGED!

How to improve not only the duration but also the quality of sleep?



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Light



What to do to sleep better?

- 1/ Increase exposure to sunlight during the day, especially in the morning, preferably outdoors.
- 2/ Avoid light and screen devices in the evening. At least 1 hour before sleep, ideally 2-3 hours.
- 3/ Try to remove brightly glowing LEDs or electronic clocks from the bedroom.



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Light



What to do to sleep better?

4/ If you enjoy reading in bed, try using a bulb with orange or red light to reduce melatonin suppression.

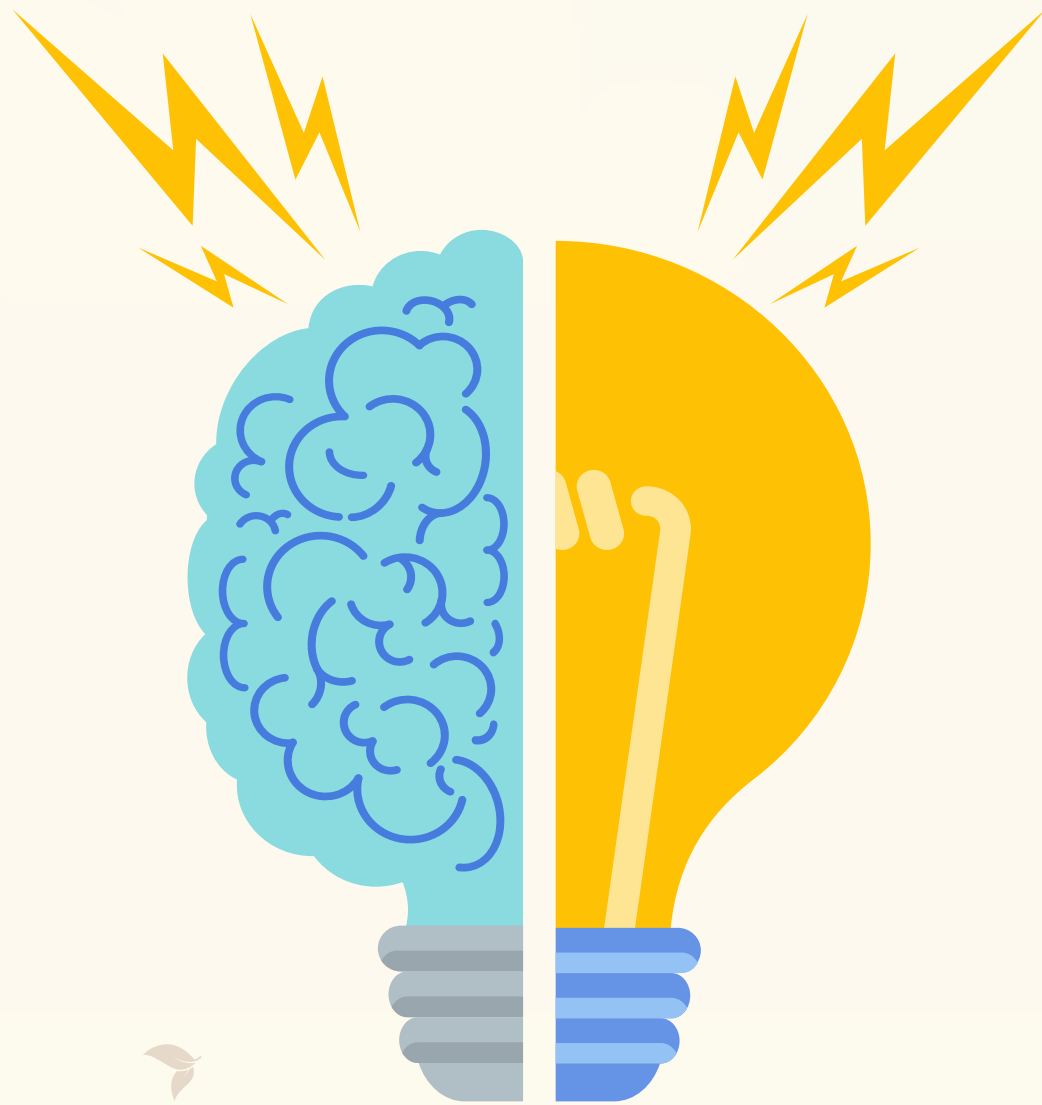
5/ Before putting your phone down in the evening, try dimming the screen and turning on the blue light filtering mode. In case you unexpectedly need to check your phone, it will have a lesser impact.



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Light



What to do to sleep better?

6/ When getting up at night to go to the bathroom, try not to turn on the main, bright light.



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Be active!



What to do to sleep better?

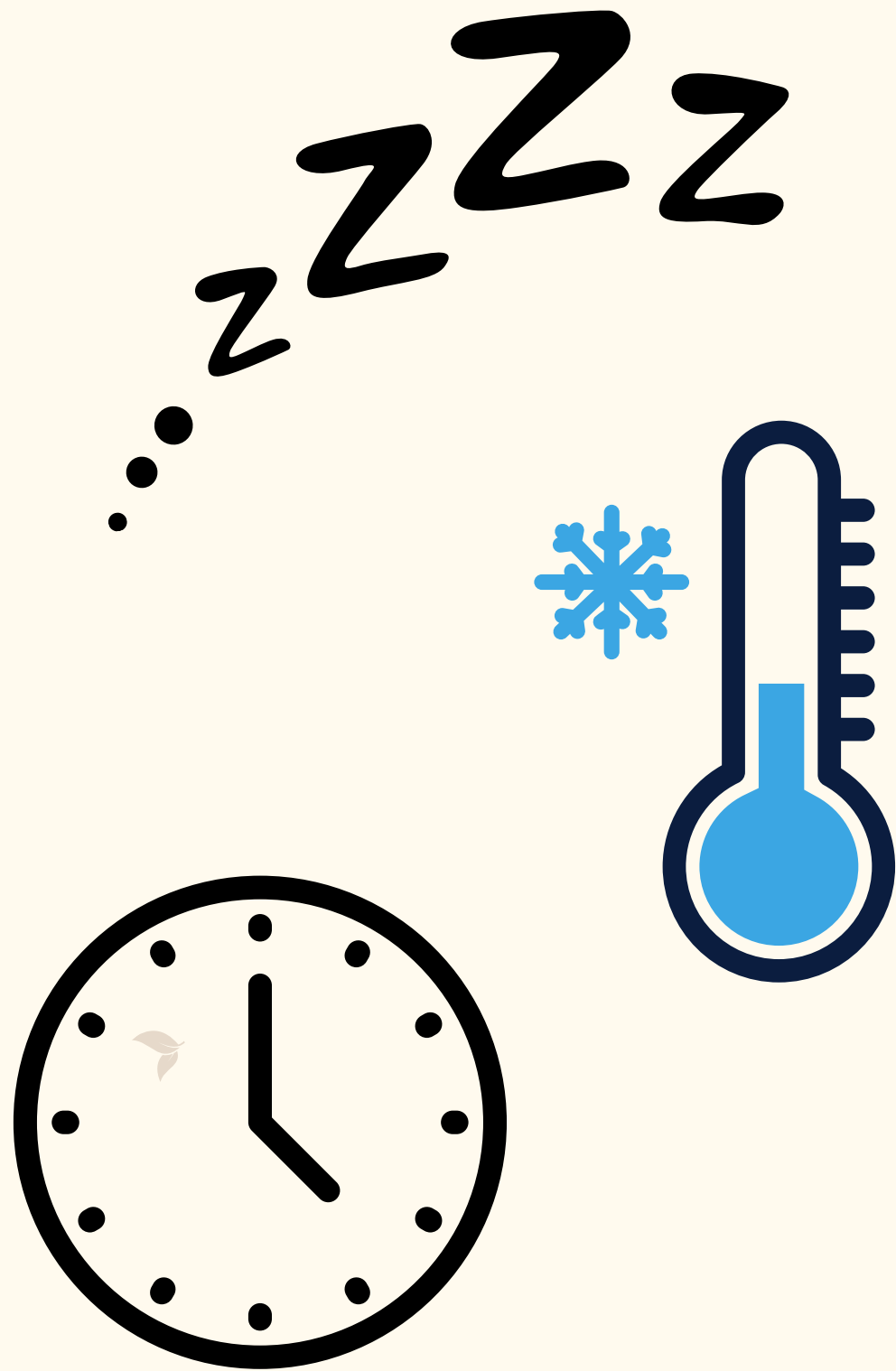
- 1/ Increase your daily physical activity.
- 2/ Exercise what you enjoy! Daily exercise helps strengthen the circadian rhythm and improves sleep quality.
- 3/ Overexertion may impair sleep quality due to pain.
- 4/ Try to combine physical activity with being outdoors and in nature.



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Other



What to do to sleep better?

- 1/ Limit "bed activities" – the bed should only be used for sleeping and sex.
- 2/ Try to maintain a consistent wake-up and bedtime, even on weekends.
- 3/ Take care of the room temperature and wear appropriate clothing.
- 4/ Daytime naps should preferably be taken before the afternoon and last no longer than 20–30 minutes.



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IF THESE CHANGES DON'T WORK, DON'T WAIT!

Untreated insomnia can become chronic!

Consult a doctor, or preferably a therapist specializing in CBT-I.

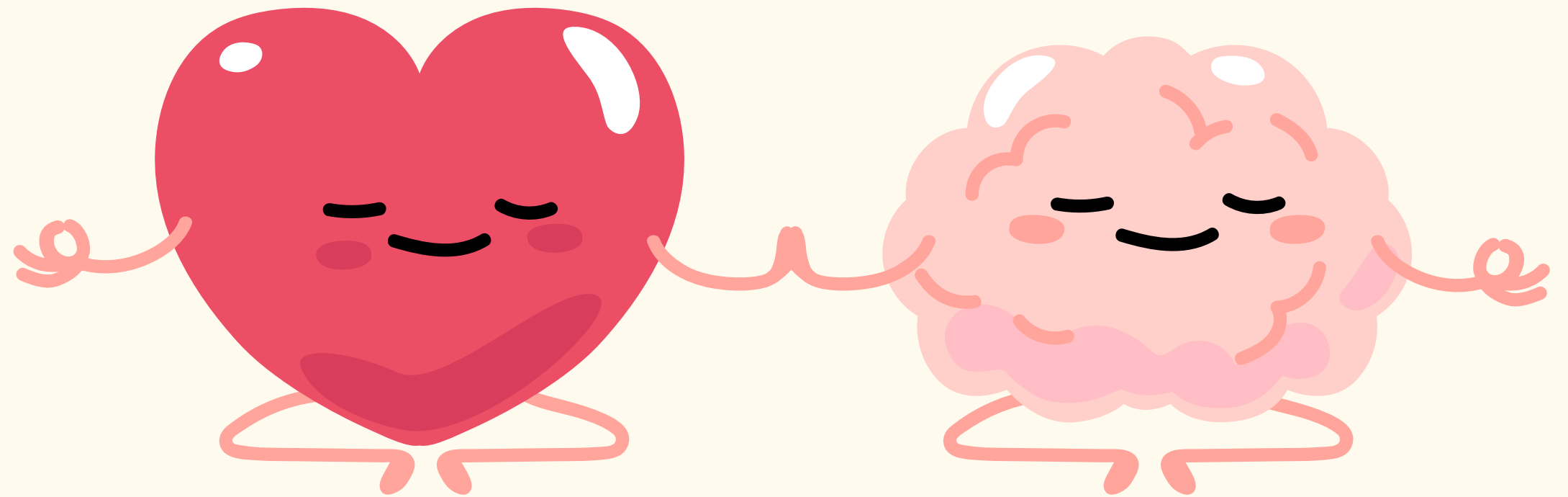
(Cognitive behavioral therapy for insomnia)



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Stress



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Healthy Communities

ACTIVE BREAK!
10 min



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**Caritas
&Du**



Stress

What is it?



„A particular relationship between the person and environment that is appraised by the person as taxing or exceeding his or her resources or endangering his or her well-being”.

– R.S. Lazarus , S. Folkman

- A disruption of homeostasis
- Difficulties or inability to achieve important goals, tasks, or values for the individual.



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Acute vs. chronic

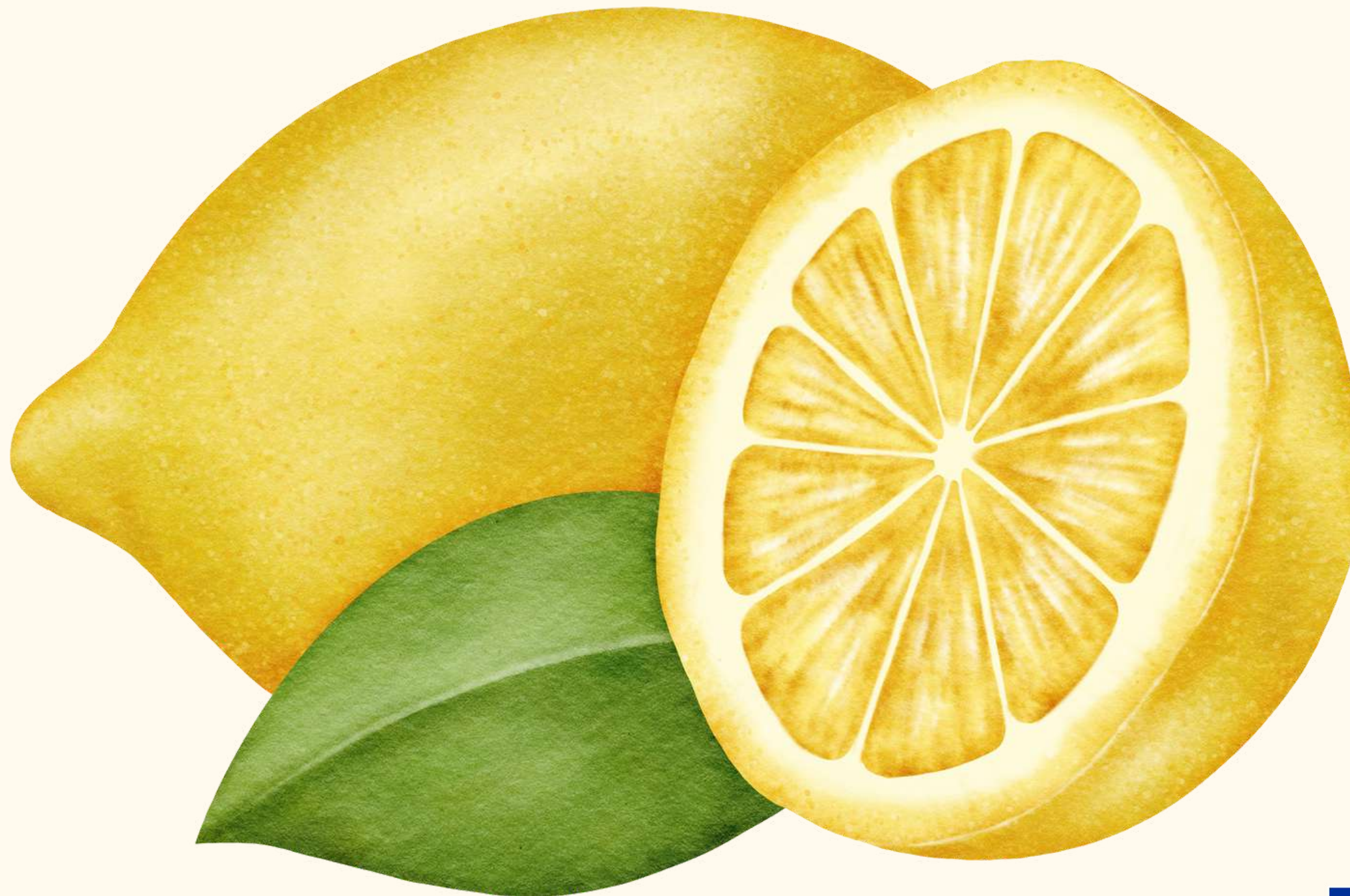
Acute

- short-term,
- serves an adaptive function, motivates,
- after it subsides, homeostasis is restored

Chronic

- It lasts longer,
- leads to the depletion of psychological and physical resources,
- increases the risk of chronic diseases,
- often associated with worrying.

Experiment



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What does it mean to cope?

"constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person."

(Lazarus, Folkman, 1984)



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**Change the situation for less as taxing
or less exceeding the resources**



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Change what you can control!



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**You won't get a medal
for not taking care
of yourself!**



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Healthy
Communities



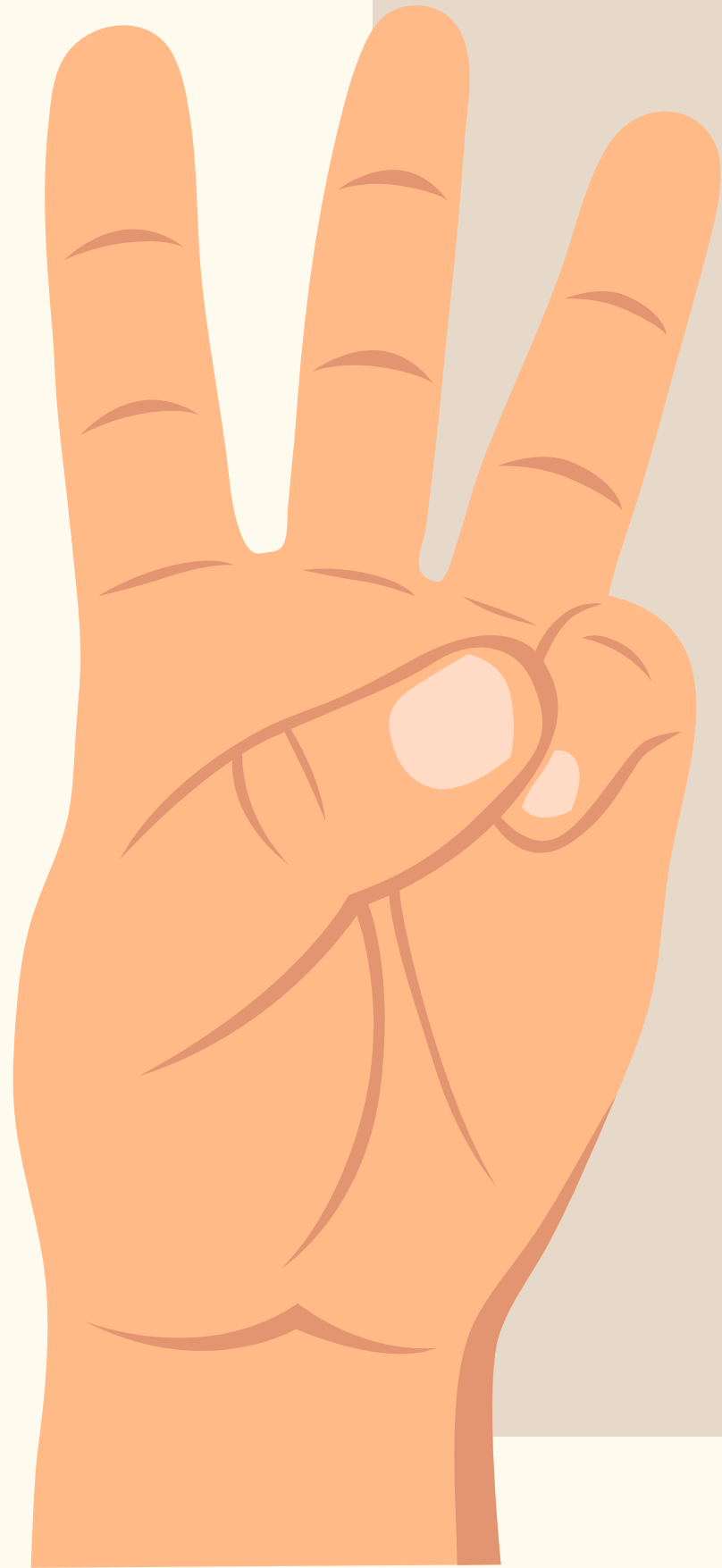
Increasing your resources



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**Changing the perception and
assigning meaning to the situation,
as well as to the resources**



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Therapist: "You should get a therapy dog"

Me: *Sharing my problems to my therapy dog*

Therapy dog:



**Don't hesitate
to seek help
from a
specialist!**



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Cognitive distortions

- Cognitive distortions are **exaggerated and/or irrational** patterns of thinking.
- **Examples:** black-and-white thinking, magnification, generalization, mind reading, fortune telling, dismissing positives.



Beck, J.S. (2005). Cognitive Therapy: Basics and Beyond



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Defusion

Realizing that **thoughts are just words and images** in our minds.



- I have this thought that...
- My mind tells me that...
- 5 questions of healthy thinking

- Harris, R. (2019). Zrozumieć ACT. Terapia akceptacji i zaangażowania w praktyce. Gdańskie Wydawnictwo Psychologiczne.
- Masuda, A., Hayes, S. C., Twohig, M. P., Drossel, C., Lillis, J., Washio, Y. (2009). A Parametric Study of Cognitive Defusion and the Believability and Discomfort of Negative Self-Relevant Thoughts. Behavior Modification, 53(2), 250-262.



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Social support



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SOCIAL CONNECTION

It is a fundamental human need, as important for survival as food, water, and shelter.

Throughout history, our ability to rely on one another has been crucial for survival.



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Our Epidemic of Loneliness and Isolation



2023

The U.S. Surgeon General's Advisory on the
Healing Effects of Social Connection and Community

Loneliness and social isolation increase the risk for
premature death by 26% and 29% respectively.



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SOCIAL ISOLATION VS. LONELINESS



Social isolation – the objective lack of numerous social relationships, social roles, group memberships, and infrequent social interactions.

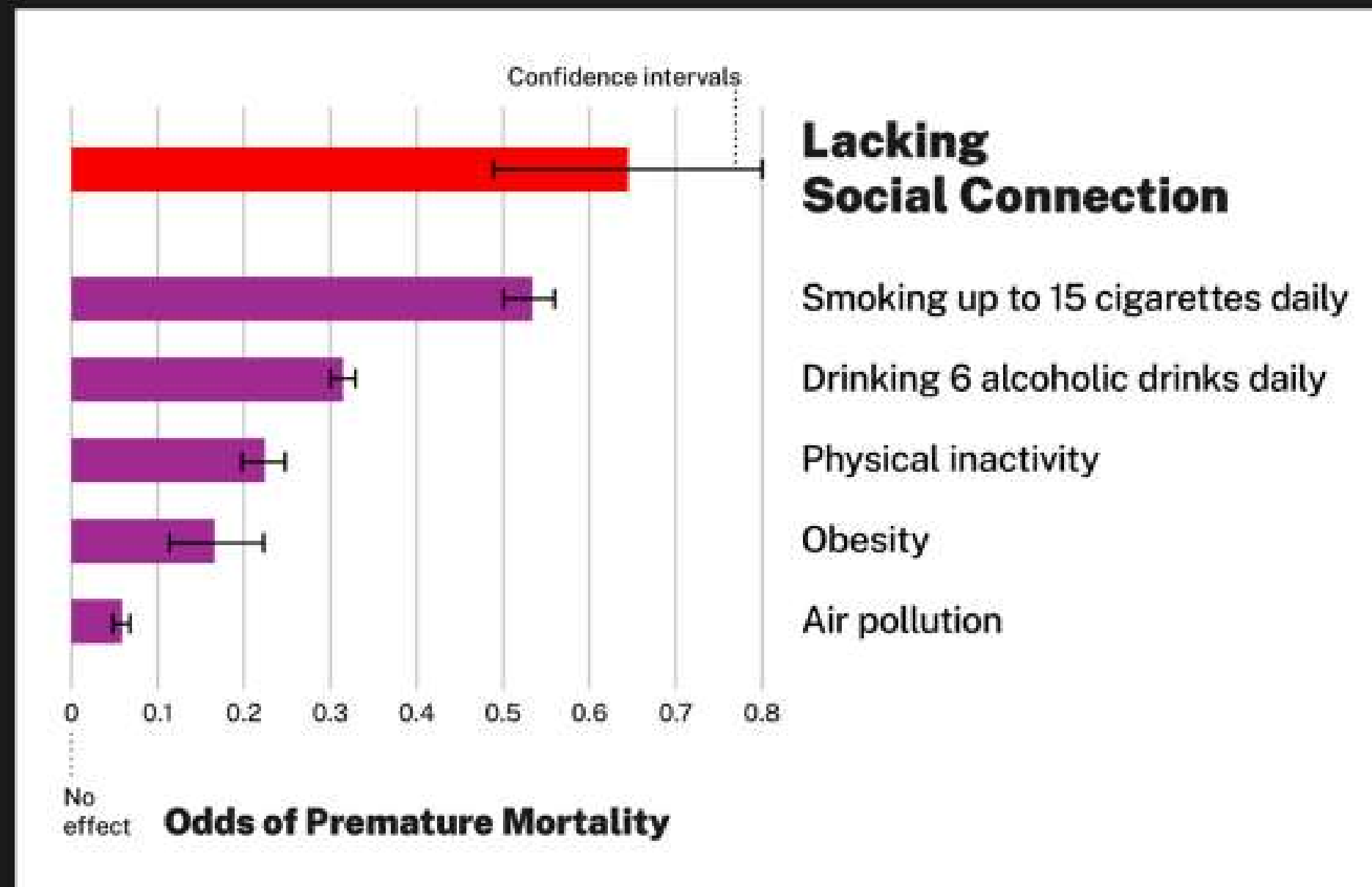
Loneliness – a subjective internal state, a distressing experience resulting from perceived isolation or unmet needs between an individual's preferred and actual experiences.



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Lacking social connection is as dangerous as smoking up to 15 cigarettes a day.



Source: Holt-Lunstad J, Robles TF, Sbarra DA. Advancing Social Connection as a Public Health Priority in the United States. *American Psychology*. 2017;72(6):517-530. doi:10.1037/amp0000103. This graph is a visual approximation.



Office of the
U.S. Surgeon General



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HEALTH RISK

Poor or insufficient social connection is associated with increased risk of disease:

- 29% increased risk of heart disease
- 32% increased risk of stroke
- increased risk for anxiety, depression and dementia
- increased susceptibility to viruses and respiratory illness



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ECONOMIC CONTEXT

Beyond direct health care spending, loneliness and isolation are associated with lower academic achievement and worse performance at work.



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THE THREE VITAL COMPONENTS OF SOCIAL CONNECTION

STRUCTURE

The number of relationships, variety of relationships (e.g., co-worker, friend, family, neighbor), and the frequency of interactions with others.



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THE THREE VITAL COMPONENTS OF SOCIAL CONNECTION

STRUCTURE

The number of relationships, variety of relationships (e.g., co-worker, friend, family, neighbor), and the frequency of interactions with others.

FUNCTION

The degree to which others can be relied upon for various needs.
(For example: emotional support, career mentoring, entertainment, ...)



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THE THREE VITAL COMPONENTS OF SOCIAL CONNECTION

STRUCTURE

The number of relationships, variety of relationships (e.g., co-worker, friend, family, neighbor), and the frequency of interactions with others.

FUNCTION

The degree to which others can be relied upon for various needs.
(For example: emotional support, career mentoring, entertainment, ...)

QUALITY

The degree to which relationships and interactions with others are positive, helpful, or satisfying.



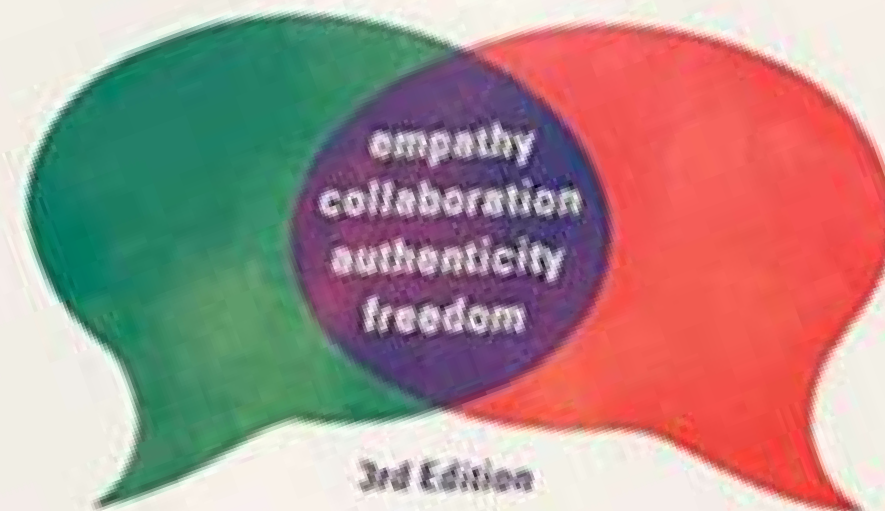
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If "violent" means acting in ways that result in hurt or harm, then much of how we communicate could indeed be called "violent" communication.

Nonviolent **COMMUNICATION**

A Language of Life



3rd Edition

*Words and the way we think matters.
Find common ground with anyone, anywhere,
at any time, both personally and professionally.*

MARSHALL B. ROSENBERG, PhD

Foreword by Deepak Chopra

Endorsed by Satya Nadella, Arun Gandhi, Tony Robbins,
Marianne Williamson, John Gray, Jack Casfield, Dr. Thomas Gordon, and others



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Healthy
Communities

HEALTHY BOUNDARY SETTING

Anger in interactions with others can be a result of boundary violations.

Which boundaries?



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ASSERTIVENESS – A LEARNED SKILL

Having and expressing one's own opinion, as well as directly expressing emotions and attitudes within boundaries that do not violate the rights and psychological territory of others, without aggressive behavior, as well as defending one's own rights in social situations.



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Problematic use

Addictions



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Stimulant - a non-medical substance that exerts a specific effect on the body (most often on the central nervous system). It can affect behavior, consciousness, and bodily functions.



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Stimulant - a non-medical substance that exerts a specific effect on the body (most often on the central nervous system). It can affect behavior, consciousness, and bodily functions.

Addiction - a strong desire to use a psychoactive substance or engage in a particular activity, obtaining it in sufficient amounts, and a strong tendency to resume use after a break.



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Alcohol



The World Health Organization published a statement in The Lancet Public Health in January 2023:

When it comes to alcohol consumption, there is no safe amount that does not affect health.

- **A Group 1 carcinogen – linked to seven types of cancer, including esophageal, liver, colorectal, and breast cancer.**

Anderson BO, Berdzuli N, Ilbawi A, Kestel D, Kluge HP, Krech R, Mikkelsen B, Neufeld M, Poznyak V, Rekve D, Slama S, Tello J, Ferreira-Borges C. Health and cancer risks associated with low levels of alcohol consumption. Lancet Public Health. 2023 Jan;8(1):e6-e7. doi: 10.1016/S2468-2667(22)00317-6.



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Alcohol



The World Health Organization published a statement in The Lancet Public Health in January 2023:

When it comes to alcohol consumption, there is no safe amount that does not affect health.

- **One-third of cancer cases attributed to light or moderate drinking were associated with low levels of alcohol consumption.**

Anderson BO, Berdzuli N, Ilbawi A, Kestel D, Kluge HP, Krech R, Mikkelsen B, Neufeld M, Poznyak V, Rekve D, Slama S, Tello J, Ferreira-Borges C. Health and cancer risks associated with low levels of alcohol consumption. Lancet Public Health. 2023 Jan;8(1):e6-e7. doi: 10.1016/S2468-2667(22)00317-6.



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Tobacco and e-cigarettes

Smoking cigarettes and other tobacco products remains one of the leading causes of death.



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Tobacco and e-cigarettes



Smoking cigarettes and other tobacco products remains one of the leading causes of death.

Even occasional smoking increases the risk of tobacco-related diseases.



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Tobacco addiction worsens the quality of life, causing diseases such as:

- respiratory system
- circulatory system
- cancers (including lungs, larynx, throat, esophagus, mouth, nose, lips, renal pelvis, bladder, pancreas, stomach, liver)
- digestive system
- others: osteoporosis, susceptibility to virus infections, allergies.



Climate change

How to deal with extreme weather conditions?



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Climate change affects health both:

- directly – through extreme weather, air pollution and more
- indirectly – by affecting the social and environmental determinants of health, like nutrition, healthcare access, etc.



Examples:



- Heatwaves have been linked to a wide range of adverse health effects, including heart attacks, kidney disease, cardiorespiratory diseases, decreased mental wellbeing, and even death.



Excessive heat exposure can:

- increase cardiac output (for cooling by vaso-dilation)
- cause dehydration, changes in blood volume distribution and the thermoregulatory response
- increase toxicity and/or decrease the efficacy of drugs, particularly those with a narrow therapeutic index

Examples:



- Risky hours for physical activity (due to heat stress risk) have been spreading beyond the hottest parts of the day over the period 1990–2022.
- Result: reducing overall physical activity and thereby increasing their risk of non-communicable diseases.

The 2024 Europe report of the Lancet Countdown on health and climate change: unprecedented warming demands unprecedented action, van Daalen, Kim R et al., The Lancet Public Health, Volume 9, Issue 7, e495 - e522.



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Examples:



- Climate change has been linked to adverse mental health impacts for various reasons, such as extreme heat, trauma from extreme weather events, loss of livelihoods and culture, and anxiety about the future.

Examples:

- The geographic range and breeding window for mosquitoborne disease is broadening due to changing weather patterns.
- Other climate-dependent diseases: *Vibrio cholera*, West Nile virus, dengue, chikungunya, Zika, malaria, leishmaniasis, variants Lyme disease.



- WHO: Communicating on climate change and health: Toolkit for health professionals, 22 March 2024 | Report
- National Institute of Environmental Health Sciences. Your Environment. Your Health. Climate Change and Human Health February 2024



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Examples:



- Changing weather patterns and extreme weather events can reduce crop yields, potentially leading to food insecurity and malnutrition.

More susceptible groups:

- Low-income groups
- Elderly people
- Infants and children
- Indigenous Peoples
- People in low-lying and coastal areas
- Women, especially pregnant women
- Smallholder farmers, pastoralists, fishing communities
- People who are experiencing socioeconomic disadvantage or unsafe housing
- People with pre-existing health conditions
- People with disabilities or chronic medical conditions
- People who work outdoors in hot climates



Stay safe!

Tips for heatwaves.

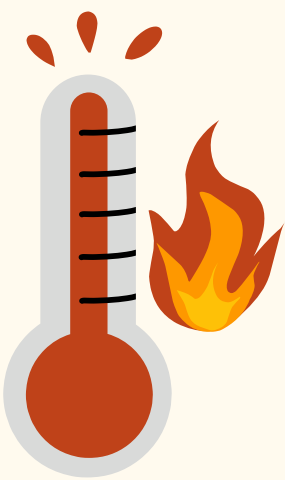


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Healthy
Communities

Keep your home cool



- Ideally, the room temperature should be kept below 32 °C during the day and 24 °C during the night.
- Use the night air to cool down your home.
- Close windows and shutters (if available) especially those facing the sun during the day. Turn off artificial lighting and as many electrical devices as possible.
- Hang wet towels to cool down the room air. Note that the humidity of the air increases at the same time.

Keep your home cool



- If your residence is air conditioned, close the doors and windows and conserve electricity not needed to keep you cool,
- Electric fans may provide relief, but when the temperature is above 35 °C, may not prevent heatrelated illness. |

Keep out of the heat



- **Move to the coolest room in the home, especially at night.**
- **If it is not possible to keep your home cool, spend 2–3 hours of the day in a cool place (such as an airconditioned public building).**
- **Avoid going outside during the hottest time of the day.**

Keep out of the heat



- **Avoid strenuous physical activity if you can. If you must do strenuous activity, do it during the coolest part of the day, which is usually in the morning between 4:00 and 7:00.**
- **Stay in the shade.**
- **Do not leave children or animals in parked vehicles.**

Keep the body cool and hydrated

- Take cool showers or baths. Alternatives include cold packs and wraps, towels, sponging, foot baths, etc.
- Wear light, loose-fitting clothes of natural materials. If you go outside, wear a wide-brimmed hat or cap and sunglasses.
- Use light bed linen and sheets, and no cushions, to avoid heat accumulation.



Keep the body cool and hydrated

- Drink regularly, but avoid alcohol and too much caffeine and sugar.
- Eat small meals and eat more often.
- Avoid foods that are high in protein.



Help others!

- Plan to check on family, friends, and neighbours who spend much of their time alone. Vulnerable people might need assistance on hot days.
- Discuss extreme heat-waves with your family. Everyone should know what to do in the places where they spend time.

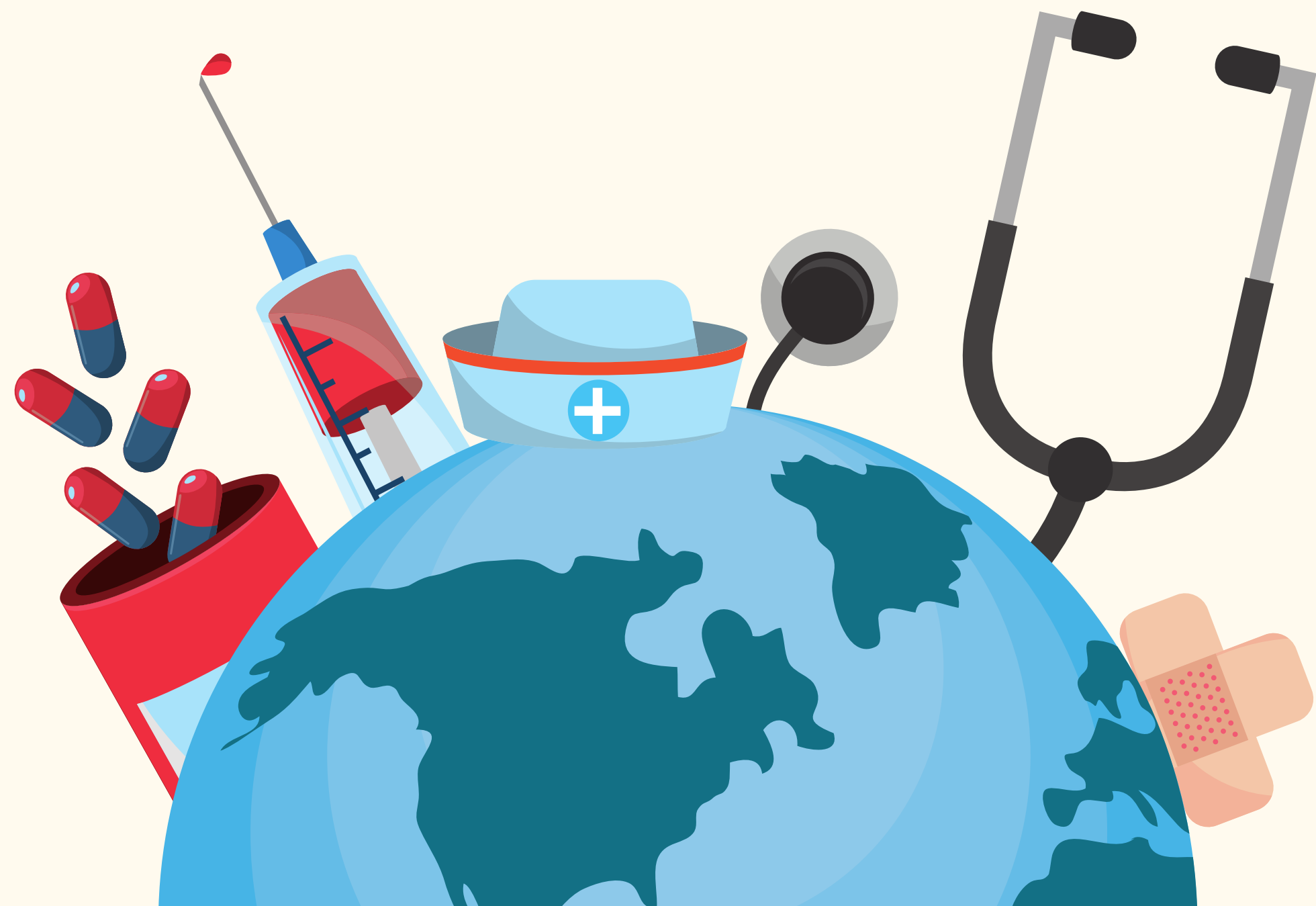


Help others!

- If a person is taking medication, ask the treating doctor how it can influence thermoregulation and the fluid balance.
- Get training. Take a first-aid course to learn how to treat heat emergencies and other emergencies. Everyone should know how to respond.



Regular health check-ups



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Communities

- The ability to detect the disease in its asymptomatic stage, when it hasn't yet affected our daily life.
- Early stages of lifestyle diseases are easier to treat.
- We avoid complications that arise as the disease progresses.
- Possible treatment is less invasive with fewer side effects.
- The possibility of reversing the disease!

What do we gain from the early detection of diseases?



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Recommended Vaccinations for Adults



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- Protecting Personal Health
- Herd Immunity
- Preventing Disease Spread
- Longevity of Protection
- Emerging Diseases
- Travel Protection
- Economic Benefits

What do we gain from the vaccination?



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Home work (optional)

Healthy Community

LIFESTYLE CHECK-LIST

☐ I eat at least 400g of vegetables and fruits daily.

☐ I consume a minimum of 3 servings of whole-grain cereal products every day.

☐ I eat legumes at least twice a week.

☐ I limit red and processed meat.

☐ I reduce processed foods.

☐ I drink enough fluids daily (35 ml per kilogram of body weight).

☐ I dedicate 150 minutes a week to physical activity (brisk walking, exercise).

☐ I take short active breaks during sitting, e.g., 2 minutes every hour.

☐ I look for opportunities during the day to increase physical activity while handling daily tasks, e.g., tracking the number of steps I take.

☐ I sleep 7-9 hours daily.

☐ I avoid using my phone for at least 1 hour before bedtime.

☐ I nurture good relationships with family and friends.

☐ I maintain regular meetings with them.

☐ I don't smoke cigarettes.

☐ I minimize alcohol consumption as much as possible.

☐ I do not use psychoactive substances.



Healthy Community

REGULAR HEALTH CHECK-UPS

BASED ON THE LIST OF RECOMMENDED PREVENTIVE TESTS, CREATE YOUR OWN CHECKLIST TO COMPLETE THIS YEAR.

☐ _____

☐ _____

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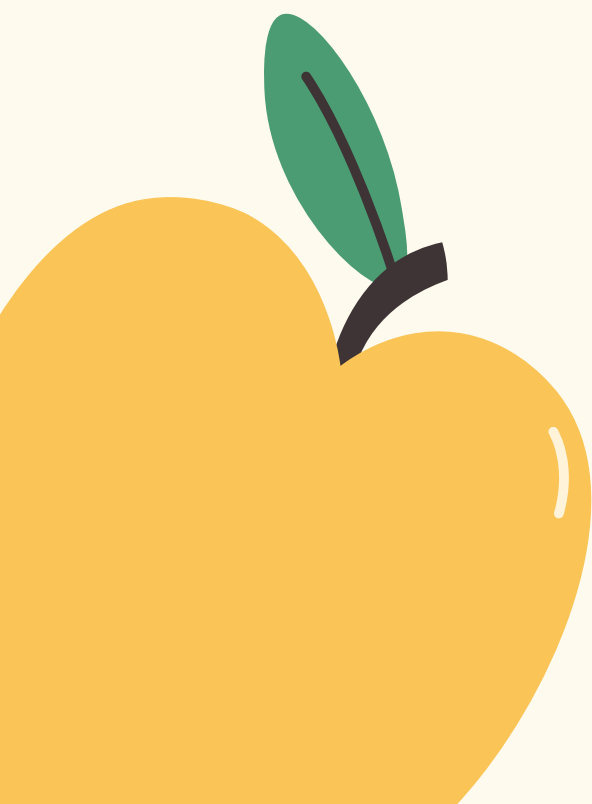
THANKS FOR ATTENTION

Let`s stay in touch!

Instagram: @praktyka.dobrego.zycia



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www.healthycommunities.eu

Project Partner:

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Eurocultura

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