

Journée „Gesond iessen, Méi beweegen“ 2023

GIMB pour tous



Conférence Mercredi, 26 avril 2023

Beweeegung ass Medezin

Daniel Theisen, PhD
*ALAN a.s.b.l. Maladies Rares
Luxembourg*



Journée „Gesond iessen, Méi beweegen“ 2023

GIMB pour tous



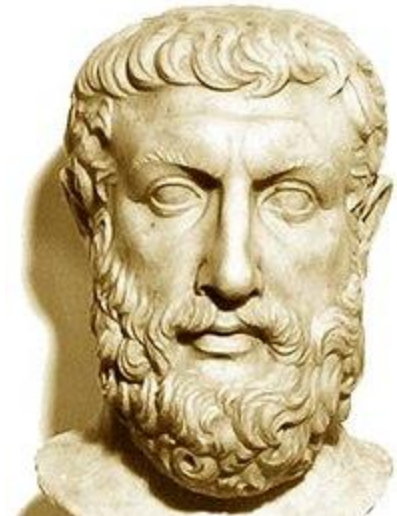
Conférence Mercredi, 26 avril 2023

Beweeegung ass Medezin

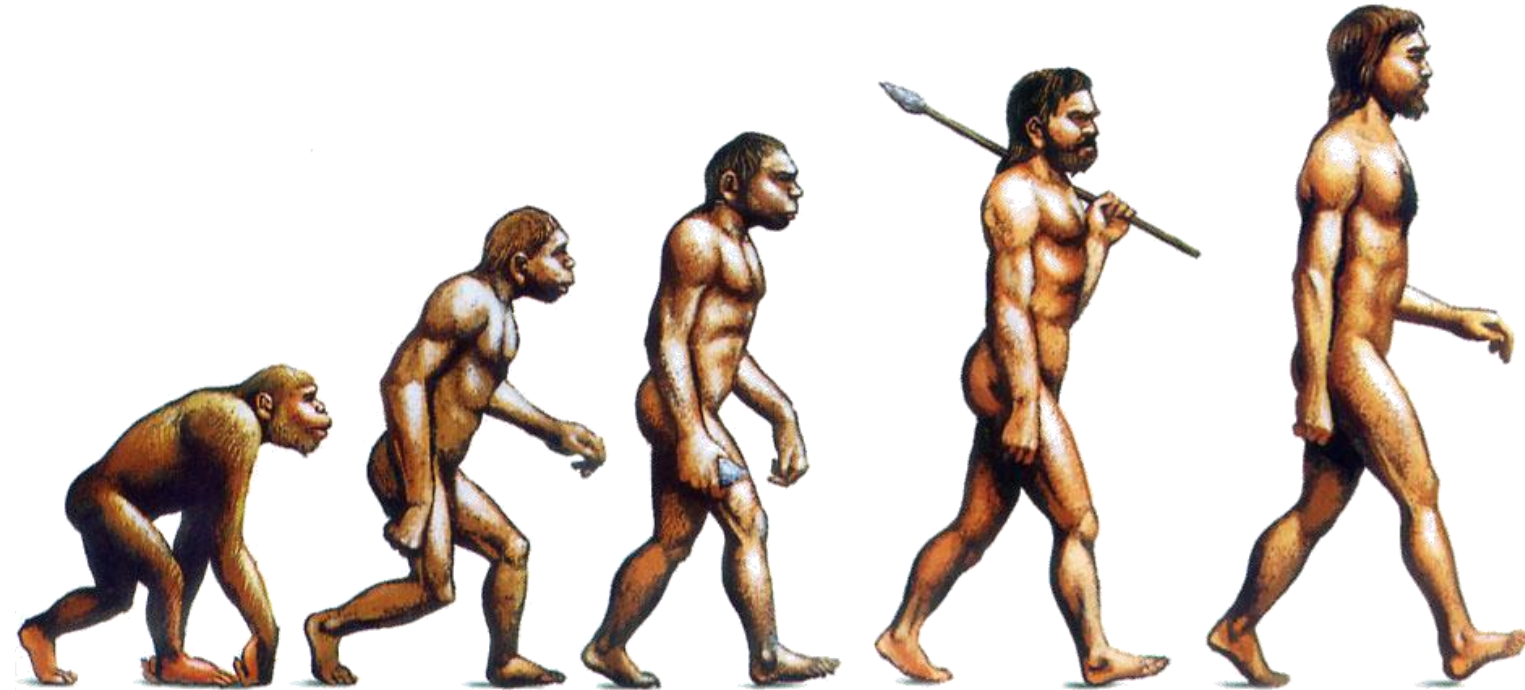


« Chez l'homme, le manque d'activité physique détruit la bonne condition, alors que le mouvement et l'exercice physique méthodique la préservent »

Plato (427–347 BC)

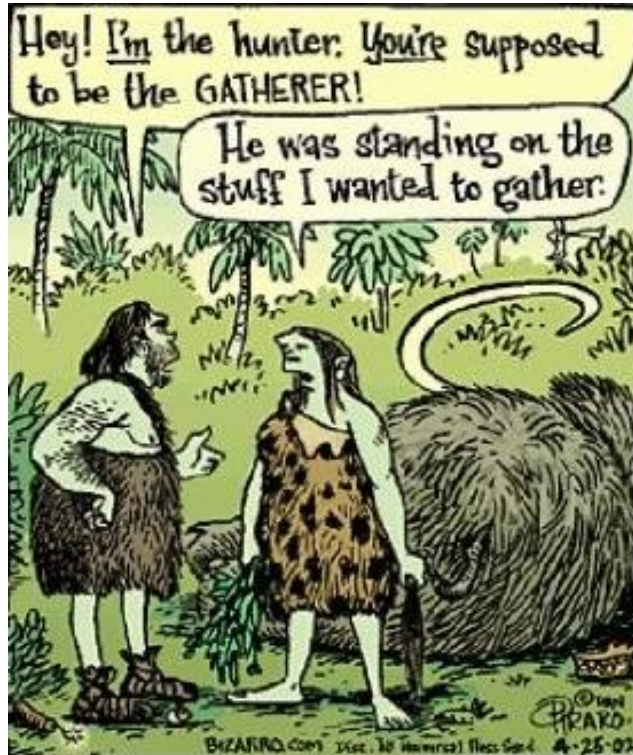


Evolution humaine



Génome de *homo sapiens* inchangé depuis ~10.000 ans
Spécialisé dans le déplacement bipède et la course

Chasseurs et cueilleurs



Chasseurs et cueilleurs



Transport

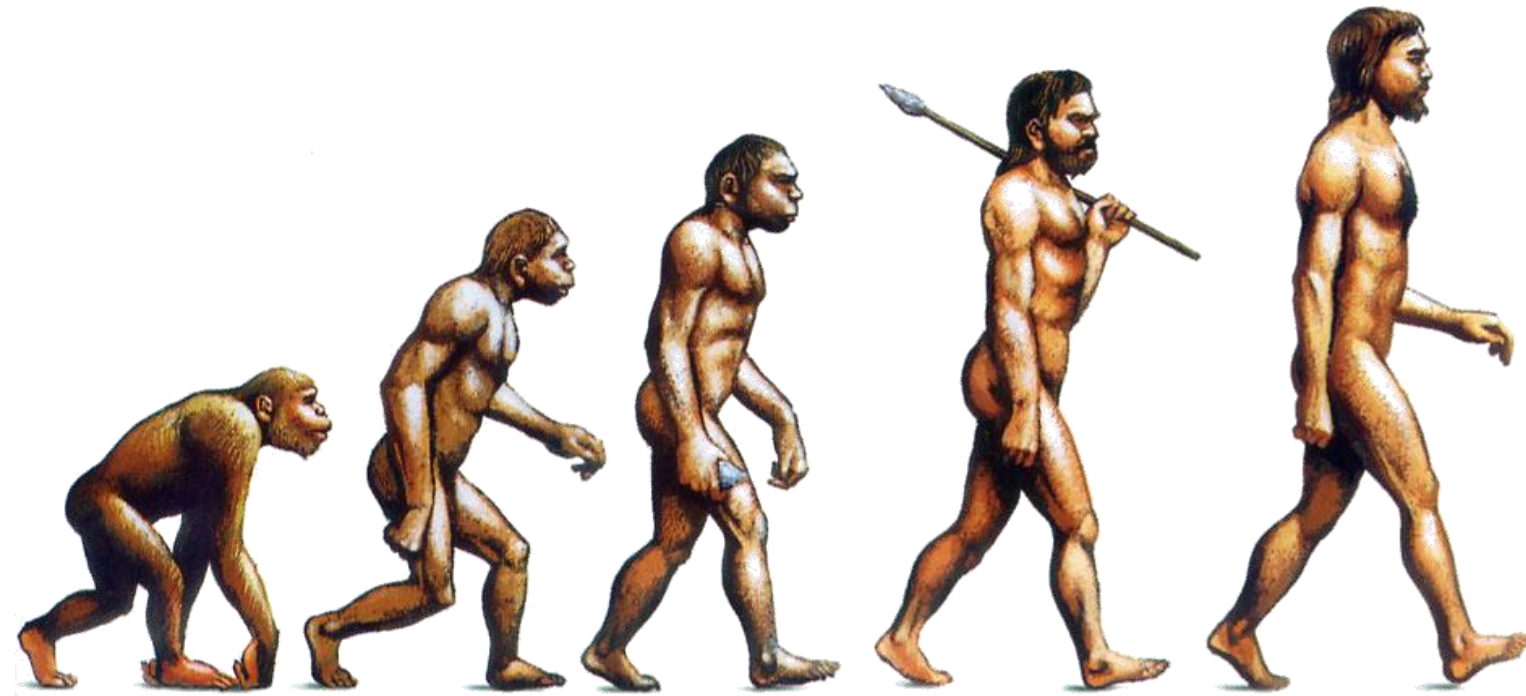


Activités journalières

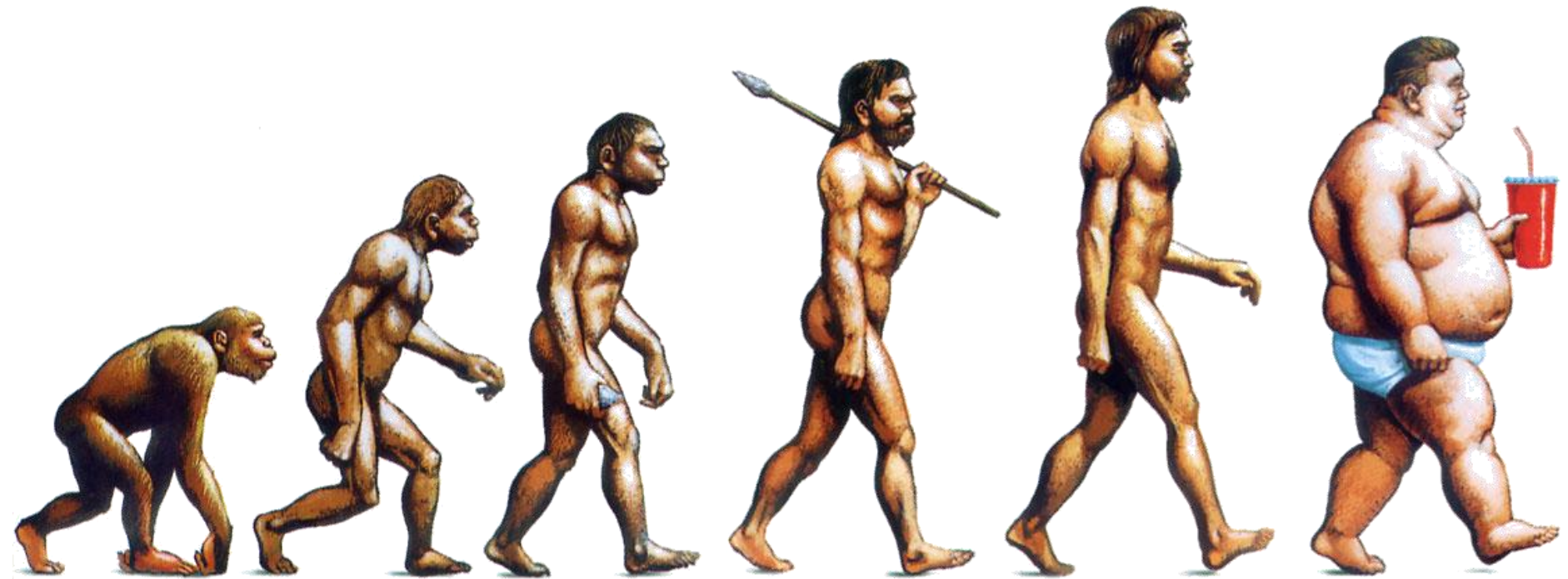


Alimentation

Evolution humaine



Evolution humaine - ou non?



Nous sommes génétiquement inadaptés
à notre style de vie sédentaire !

Comme dirait le Boss ...




Baby we were
born to run

Inactivité physique et maladies



“What fits your busy schedule better, exercising one hour a day or being dead 24 hours a day?”

A close-up photograph of a person's midsection, showing a significantly enlarged belly. The person is wearing a bright yellow t-shirt. The background is blurred, suggesting an outdoor setting. The text is overlaid on the image in a bold, black, sans-serif font.

**Jusqu'à 10% des décès
liés aux maladies non-
transmissibles dans le
monde sont attribuables
à l'inactivité physique**

**L'inactivité physique a
coulé mondialement 67.5
milliards de U\$ en 2013**

(In)activité & santé

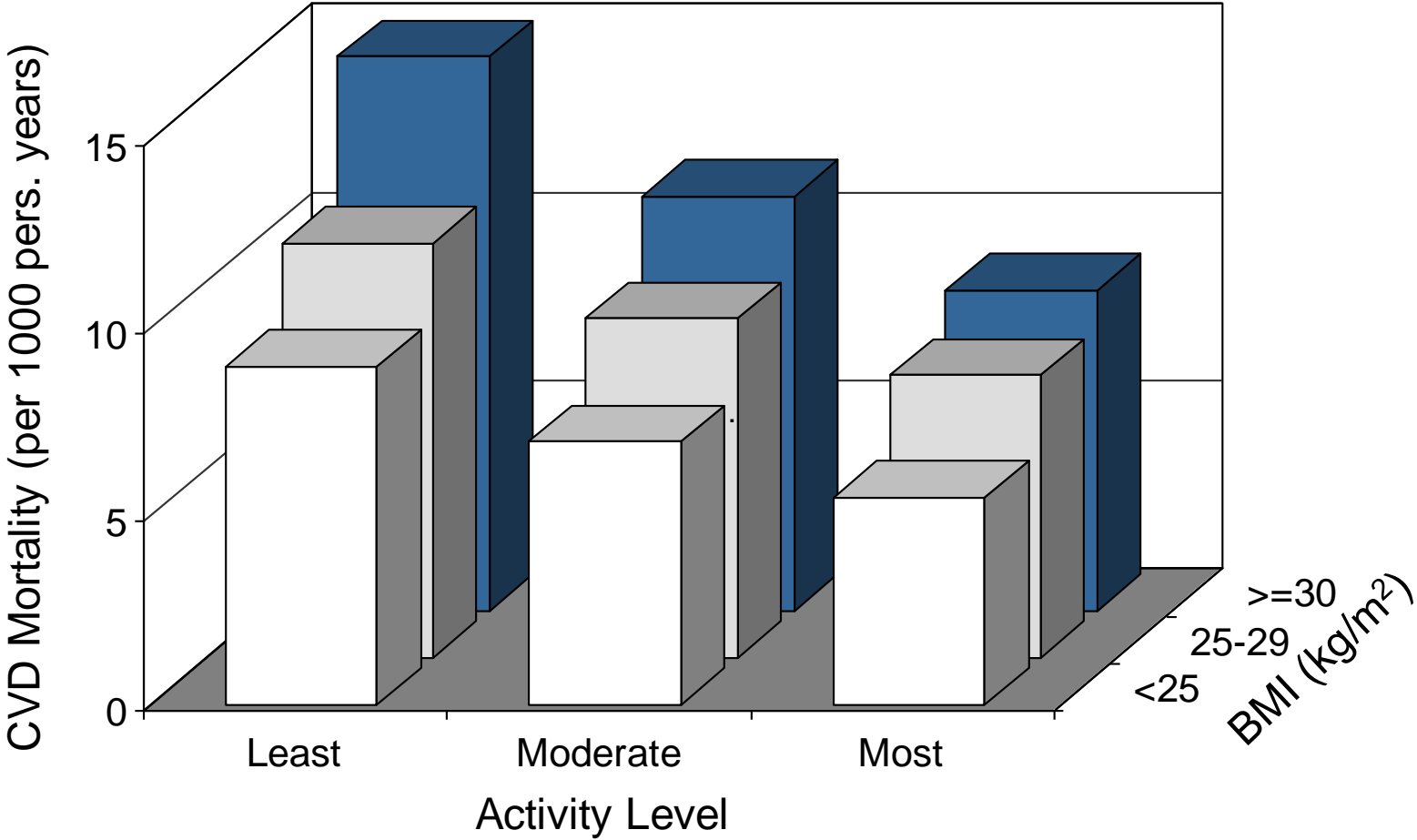
Rank	Risk factor
1	Smoking
2	High BMI
3	High Blood pressure
4	High Fasting plasma glucose
5	Alcohol use
6	High total cholesterol
7	Low glomerular filtration
8	Low levels of physical activity
9	Drug Use
10	High intake of processed meat



The Lancet, 2015
(Courtesy: Prof Saverio Stranges)

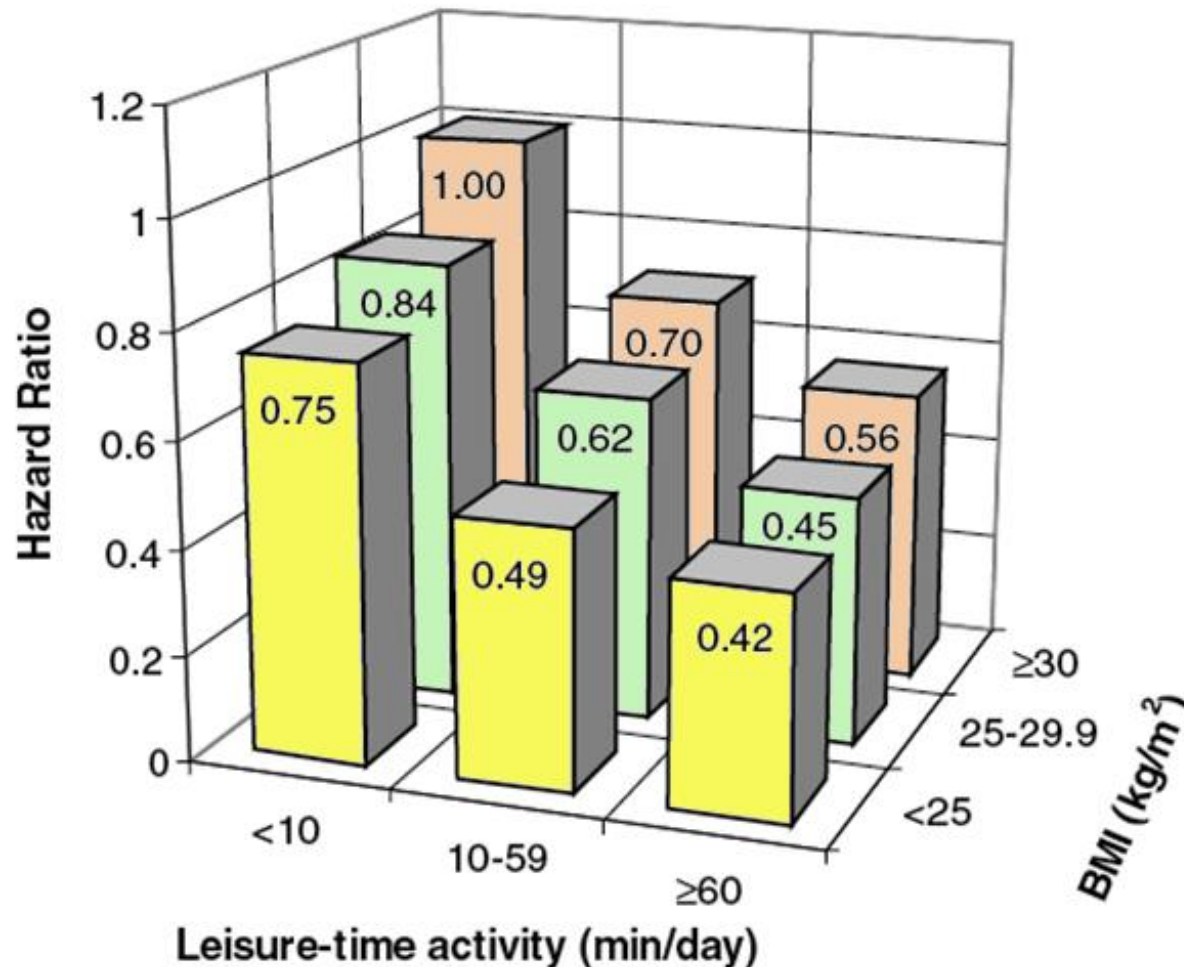
Mortalité cardio-vasculaire (n=9.790)

National Health & Nutrition Examination Survey



(Fang *et al.*, Am J Prev Med 25, 2003)

Protection contre le cancer colorectal (n=45.906)



(Larsson *et al.*, Eur J Cancer 42, 2006)

World

2045	783 million
2030	643 million
2021	537 million

↑ 46%
increase

North America & Caribbean (NAC)

2045	63 million
2030	57 million
2021	51 million

↑ 24%
increase

Europe (EUR)

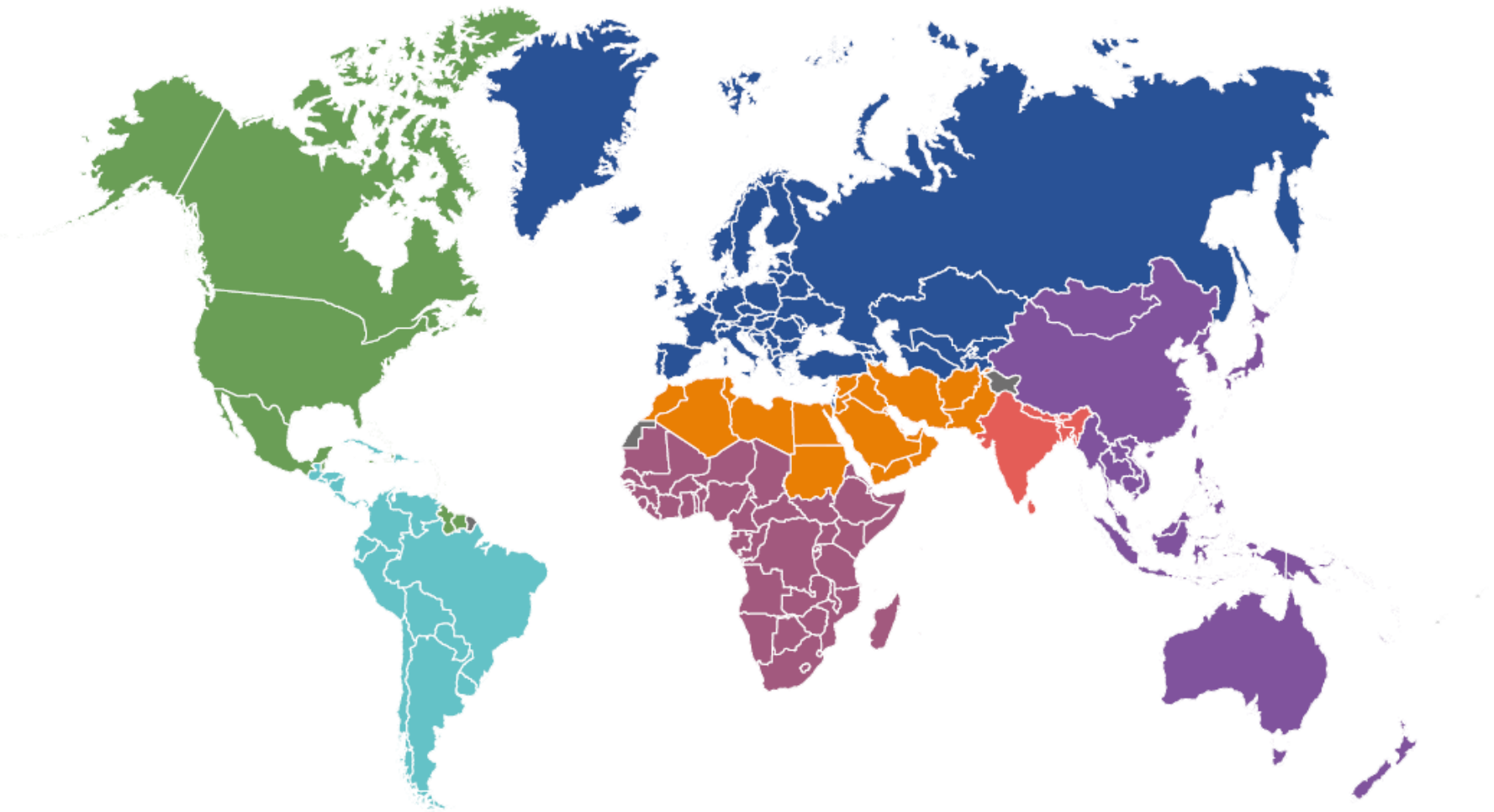
2045	69 million
2030	67 million
2021	61 million

↑ 13%
increase

Western Pacific (WP)

2045	260 million
2030	238 million
2021	206 million

↑ 27%
increase



South & Central America (SACA)

2045	49 million
2030	40 million
2021	32 million

↑ 50%
increase

Africa (AFR)

2045	55 million
2030	33 million
2021	24 million

↑ 134%
increase

Middle East & North Africa (MENA)

2045	136 million
2030	95 million
2021	73 million

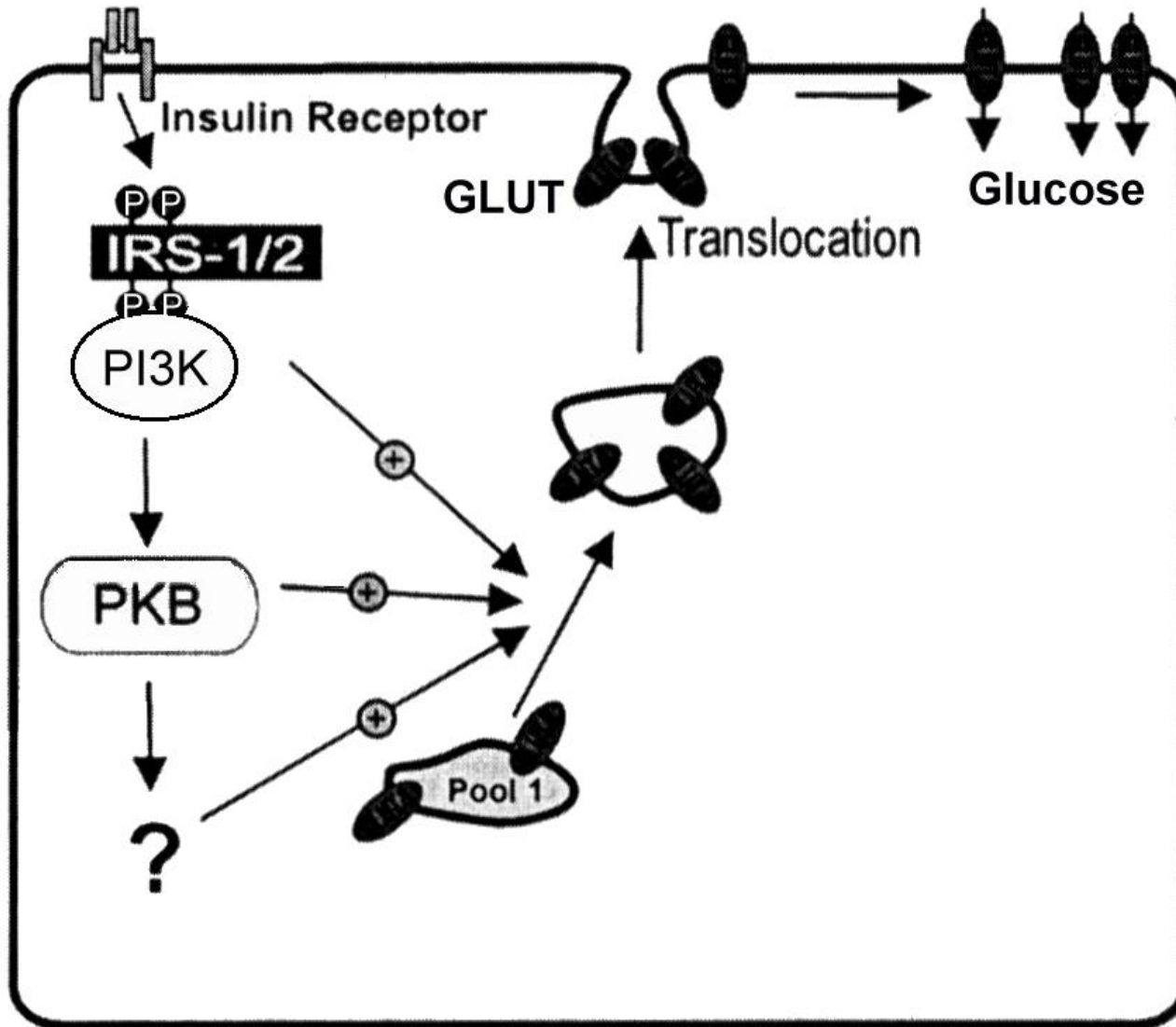
↑ 87%
increase

South-East Asia (SEA)

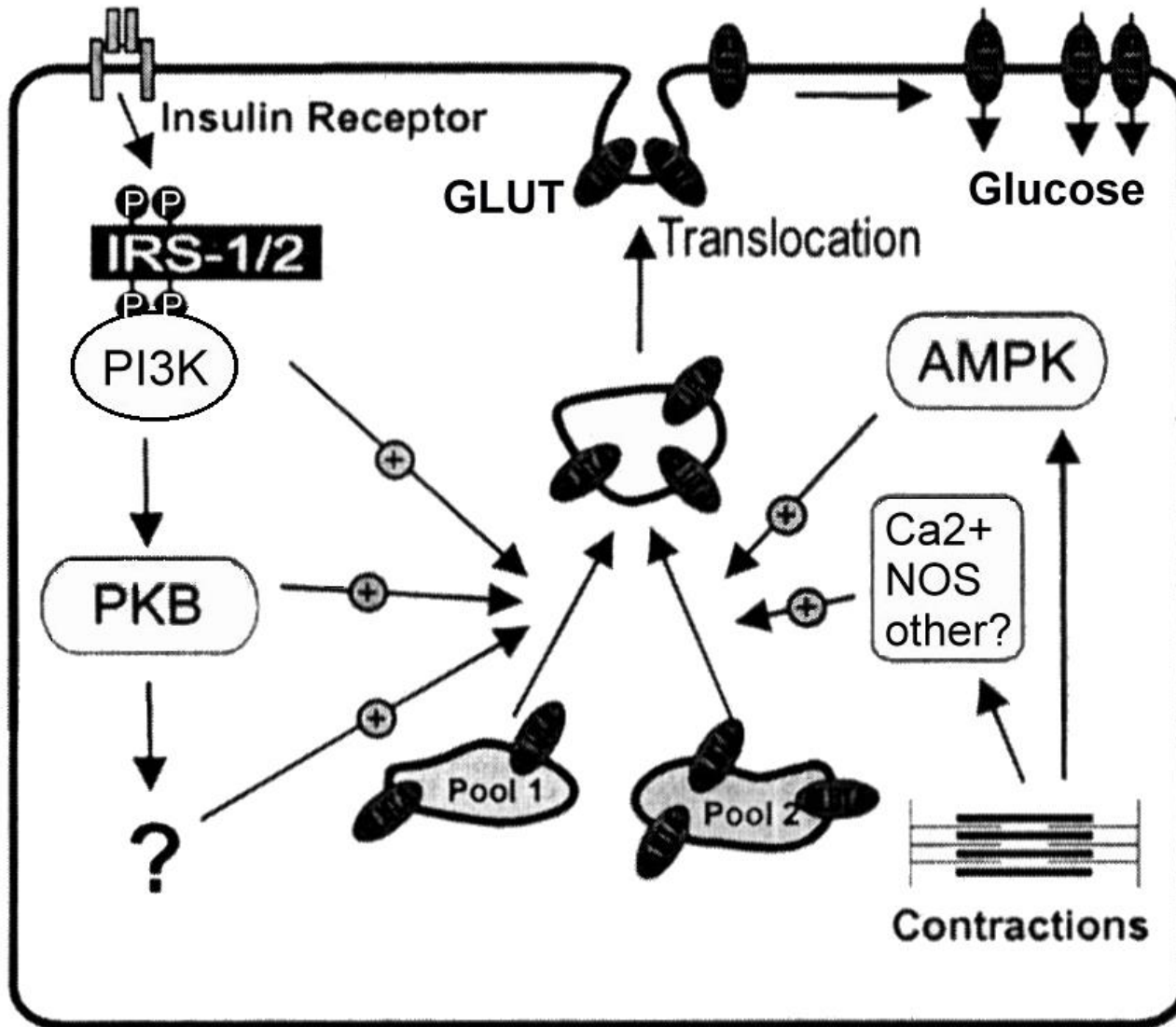
2045	152 million
2030	113 million
2021	90 million

↑ 68%
increase

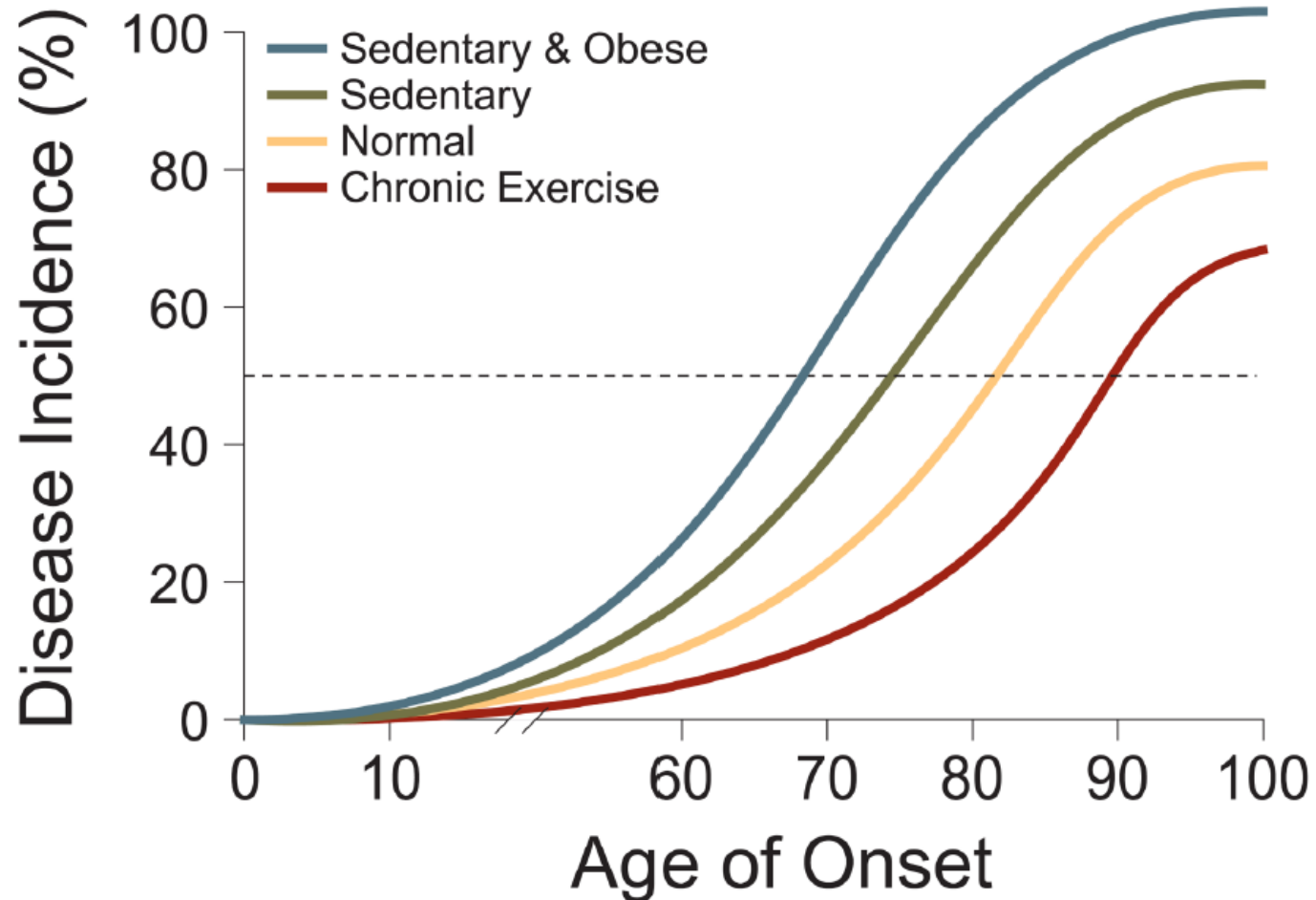
Action de l'insuline



Action de l'insuline



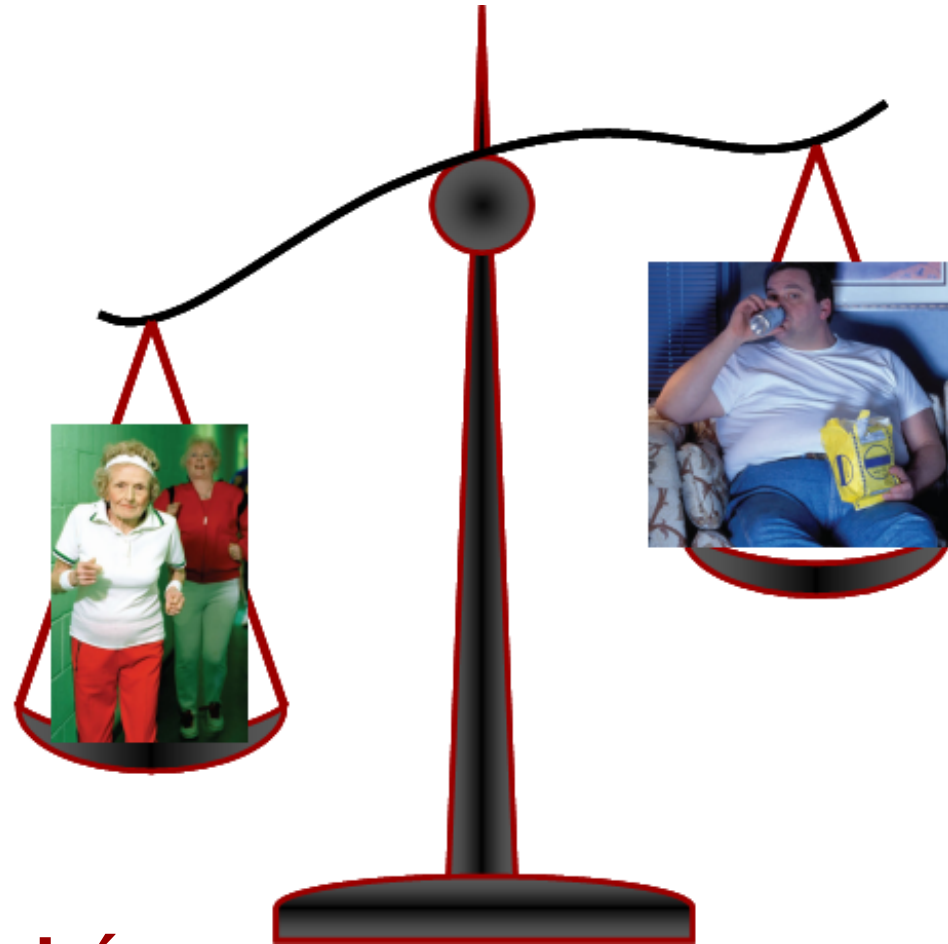
L'AP protège contre les maladies



Hamschin & Spiegelman (2008) *Nature*

Bilan globalement positif ...

- Protection contre les maladies cardiovasculaires
- Prévention du diabète
- Maîtrise du poids corporel
- Protection contre certains cancers
- Lutte contre l'ostéoporose et la sarcopénie
- Préservation de la santé mentale
- Stimulation de la fonction cognitive



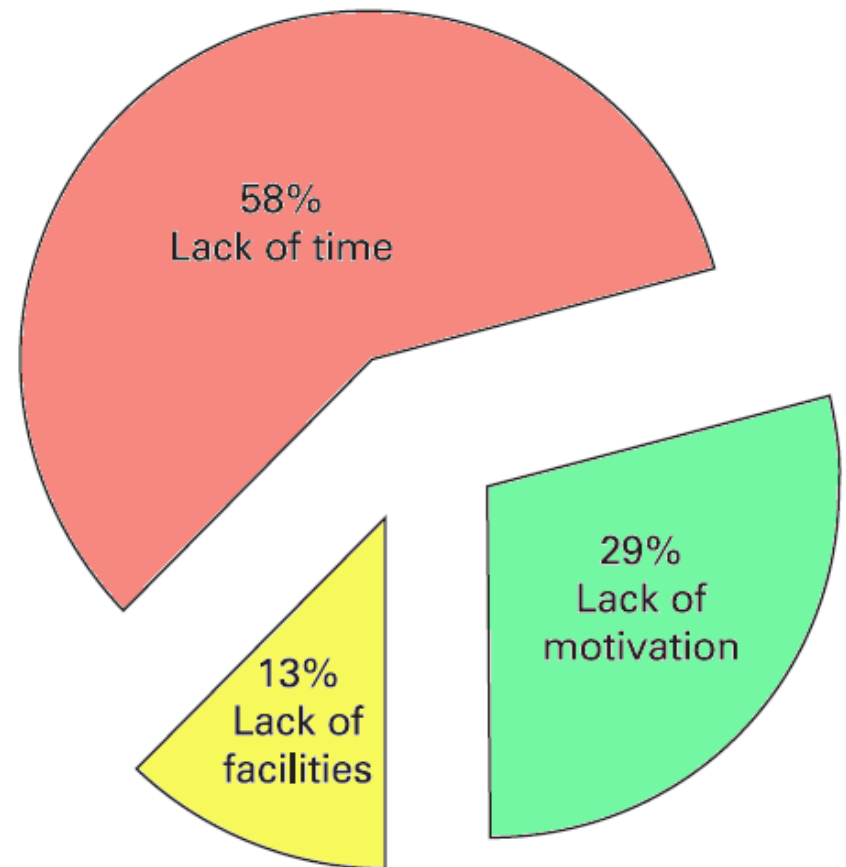
**Effets secondaires non-désirés:
Aucun !**



Des obstacles insurmontables



101 raisons (ou excuses ?)

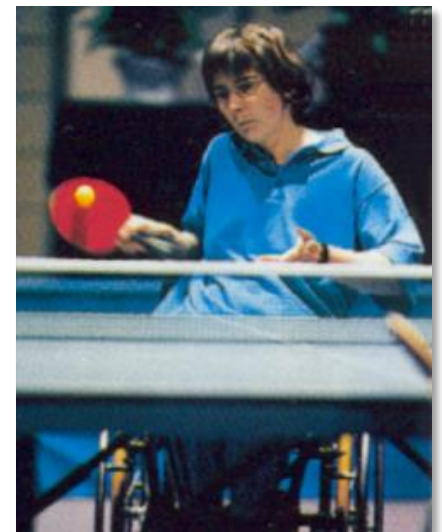


(Gupta & Fan, *Brit J Sports Med*, 2009)

Favoriser l'AP dans différents contextes



Valoriser un style de vie actif



Valoriser un style de vie actif



Januar 2020: 92 kg



Sept. 2020: 67 kg

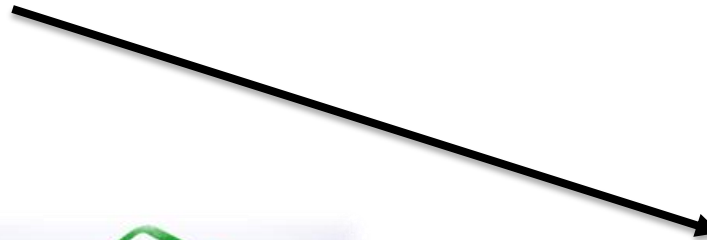
A quand la prescription médicale ?



Personne
de confiance



Manque de temps



Manque d'infos



Pas de valorisation financière

Physical activity prescription

(for people wishing to become more active)

Prescription N°:
000 001

Name: _____ Sex: F M Other
Forename: _____ Registration N°: | | | | | | | | | | | | | | | | | | | | | |

Evaluation of the physical activity level (for 1 usual week in the last 6 months)

🚶 Aerobic physical activity (cardiovascular endurance)

- Frequency (session/week) 0 1 2 3 4 5 6 7 >7
- Duration (min/session) 10 20 30 40 50 60 >60
- Intensity (optional) light Moderate Vigorous

🏋️ Muscle strengthening 2x/week: yes no

🦵 Balance exercise 3x/week (≥ 65 years): yes no

Motive for the prescription (one or more)

- Overweight/Obesity Musculoskeletal Diabetes Cardiovascular diseases
- Mental health Cancer Pneumological Neurological Other
- Primary prevention Specific motives (optional): _____

Main patient's goals (achievable & short-term; one or more)

- Better endurance Muscle building Better balance
- Better mental health Better flexibility Other: _____

Recommended physical activity: « Start low, go slow » (for a independent patient)

1st wished activity:

- Walking Bike Swimming
- Strengthening: muscle balance
- Other: _____

Frequency (session/week) 1 2 3 4 5 6 7 >7

Duration (min/session) 10 20 30 40 50 60 >60

Intensity Light Moderate Vigorous
Breathing: none light to moderate intense

Special precautions: _____ Location (optional): _____

2nd wished activity:

- Walking Bike Swimming
- Strengthening: muscle balance
- Other: _____

Frequency (session/week) 1 2 3 4 5 6 7 >7

Duration (min/session) 10 20 30 40 50 60 >60

Intensity Light Moderate Vigorous
Breathing: none light to moderate intense

Special precautions: _____ Location (optional): _____

Transfer to the Maisons Sport-Santé for eligible patients (cf. contact details on the back)

Aims: 🚶 Cardiovascular endurance 🏋️ Muscle strengthening 🦵 Balance/Coordination

Stamp or Name & Doctor code: _____ Date: ___ / ___ / _____

Signature: _____

Follow-up appointment: _____ in ___ month _____ or the ___ / ___ / _____

Physical Activity (PA)

References & links



« Some is better than none »

Benefits of physical activity

- 🌐 Inactivity is the 4th risk factor for mortality in the world.
- 👤 More than 1/3 of adults and 1/2 of adolescents in Luxembourg do not reach the PA level recommended by the WHO.
- ⚖️ The benefits outweigh the risks of PA, provided it is started slowly and increased gradually.
- 🌟 Benefits of PA:
 - 15 minutes of moderate-intensity walking a day can reduce mortality by up to 15%.
 - Overall improvement in quality of life and mental health (anxiety, sleep, etc.).

Primary prevention¹ ("Healthy" individuals)

- ↳ 20-30% Depression & Dementia
- ↳ 20-35% Cardiovascular diseases
- ↳ 20% Breast cancer
- ↳ 30-40% Type 2 Diabetes & Metabolic syndrome
- ↳ 30% Colon cancer
- ↳ 22-83% Osteoarthritis
- ↳ 30% Falls in the elderly

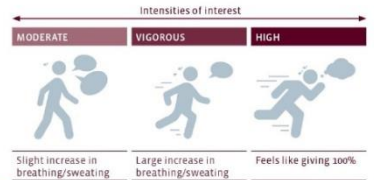
Secondary prevention² ("Sick" individuals)

- ↳ Cardiovascular mortality & symptomatology
- ↳ Mortality and complications related to diabetes
- ↳ Cancer recurrence:
- ↳ Back pain (especially with walking)



WHO Recommendations

- **Children & adolescents** (5 to 17 years)
 - ≥ 60 min/day of moderate to vigorous activity
 - ≥ 3 times/week of vigorous endurance activity
- **Adults** (18 to 64 years)
 - 🚶 150 - 300 min/week of moderate PA
 - or
 - 🏃 75 - 150 min/week of vigorous PA
 - 🏋️ ≥ 2 sessions/week of strength training
- **Persons aged over 65 years**
 - 🚶 150 - 300 min/week of moderate PA
 - or
 - 🏃 75 - 150 min/week of vigorous PA
 - 🏋️ ≥ 2 sessions/week of strength training
 - 🦵 ≥ 3 sessions/week of varied activities working on functional balance



Good practice statements

- 🚶 Limited physical activity (PA) is better than no PA: a limited amount of PA is nevertheless beneficial to health.
- 🦽 Everyone should start with small amounts of PA and gradually increase the frequency, intensity, and duration.
- 🦵 Older people should be as active as their functional ability allows and should adjust their level of exertion according to their physical condition.
- ⚠️ In the event of new or unusual symptoms, please contact your doctor to ensure that there are no new contraindications to performing PA.

Maisons Sport-Santé

Program Details:

With this prescription, eligible patients can be cared for in one of the Maisons Sport-Santé of their choice and benefit from supervised and guided PA.

Sessions can take place X times a week, for X months.

Making appointments:

sport santé

www.sport-sante.lu
contact@sport-sante.lu
+352 27 720 123



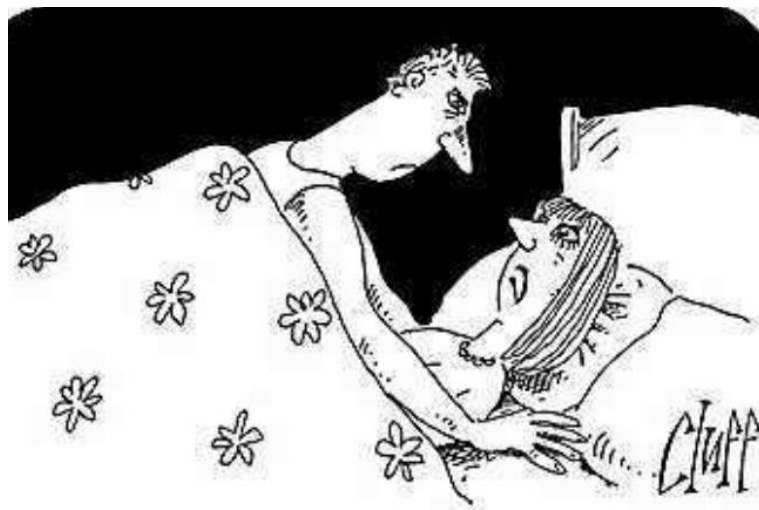
¹ Primary prevention aims to prevent the occurrence of a disease.

² Secondary prevention aims to slow the progression and impact of a disease at an early stage.

Quelques trucs et astuces



Quelques trucs et astuces



ACTUALLY, I DO MIND YOU WEARING YOUR PEDOMETER!



Quelques trucs et astuces

- < 5000: sédentaire
- 5000-7500: peu actif
- 7500-10000: moyennement actif
- >10000: hautement actif
- ≥ 12000 maintien après perte de poids

Utiliser un pedomètre = réaliser 2000 pas/jour de plus (100 kcal)

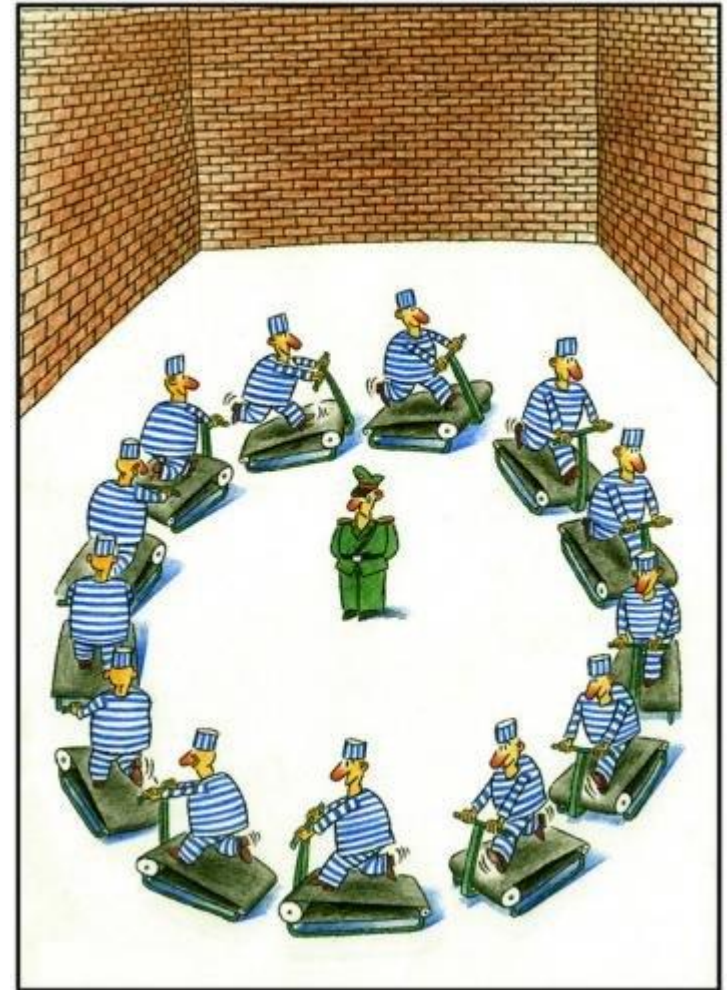
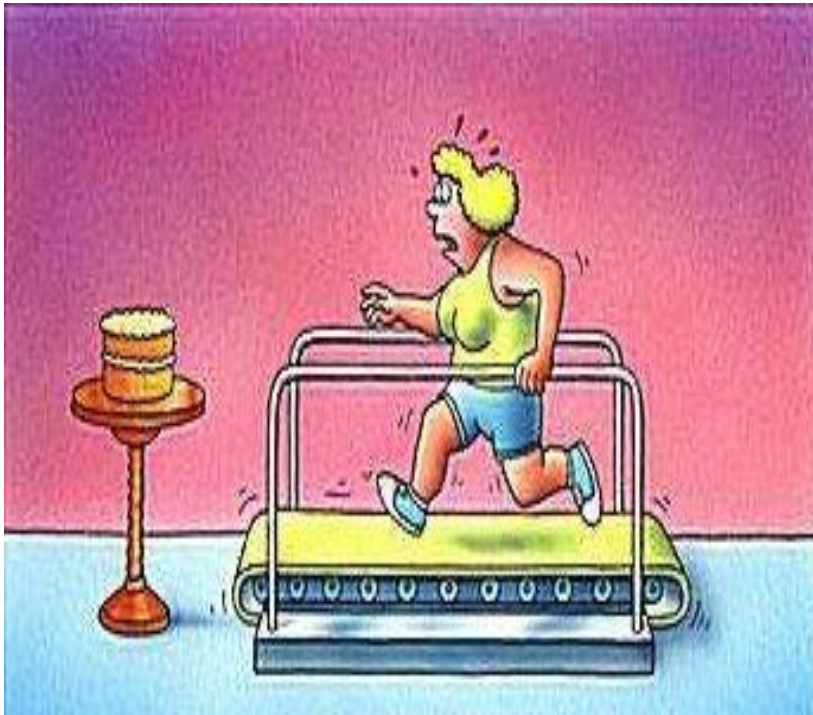
100 pas/min = intensité modérée



(Tudor-Locke, *Can J Appl Physiol*, 2005)

Quelques trucs et astuces

Chercher à se faire plaisir !



Quelques trucs et astuces

Pratiquer à son rythme !



"To help you keep a healthy pace, I'm going to release Bruno here one minute after you start."

Quelques trucs et astuces

Etre régulier !



"Here comes the 7:15....."

Quelques trucs et astuces

Bien s'organiser !



"If I have to be at these boring meetings, I might as well get something out of it."

Eppes ass besser wéi näischt!



Jonk stierwen ... sou spéit wéi méiglech

Journée „Gesond iessen, Méi beweegen“ 2023

GIMB pour tous



Conférence Mercredi, 26 avril 2023

Beweeegung ass Medezin

Merci !

Daniel Theisen, PhD
*ALAN a.s.b.l. Maladies Rares
Luxembourg*



ALAN
MALADIES RARES
LUXEMBOURG