

DE ROL VAN VOEDING EN OVERGEWICHT BIJ LAGE RUGPIJN

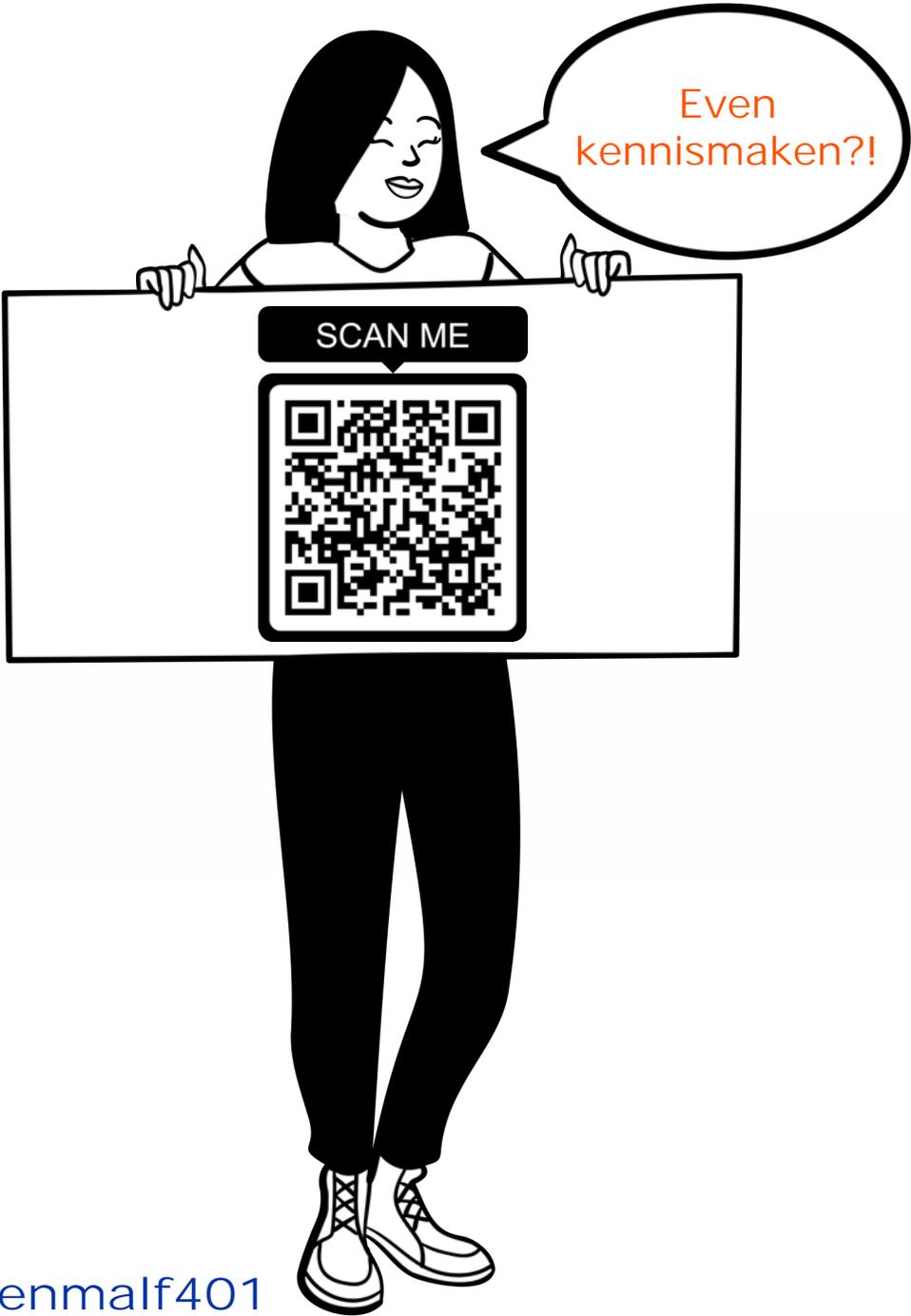
Prof. dr. Anneleen Malfliet



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Dienstmededeling



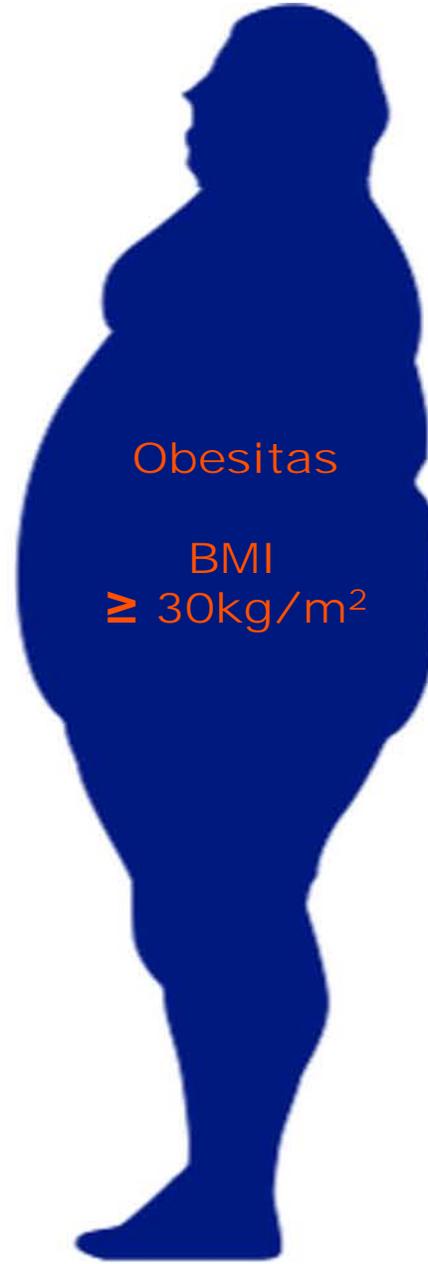
De cijfers

SCAN ME

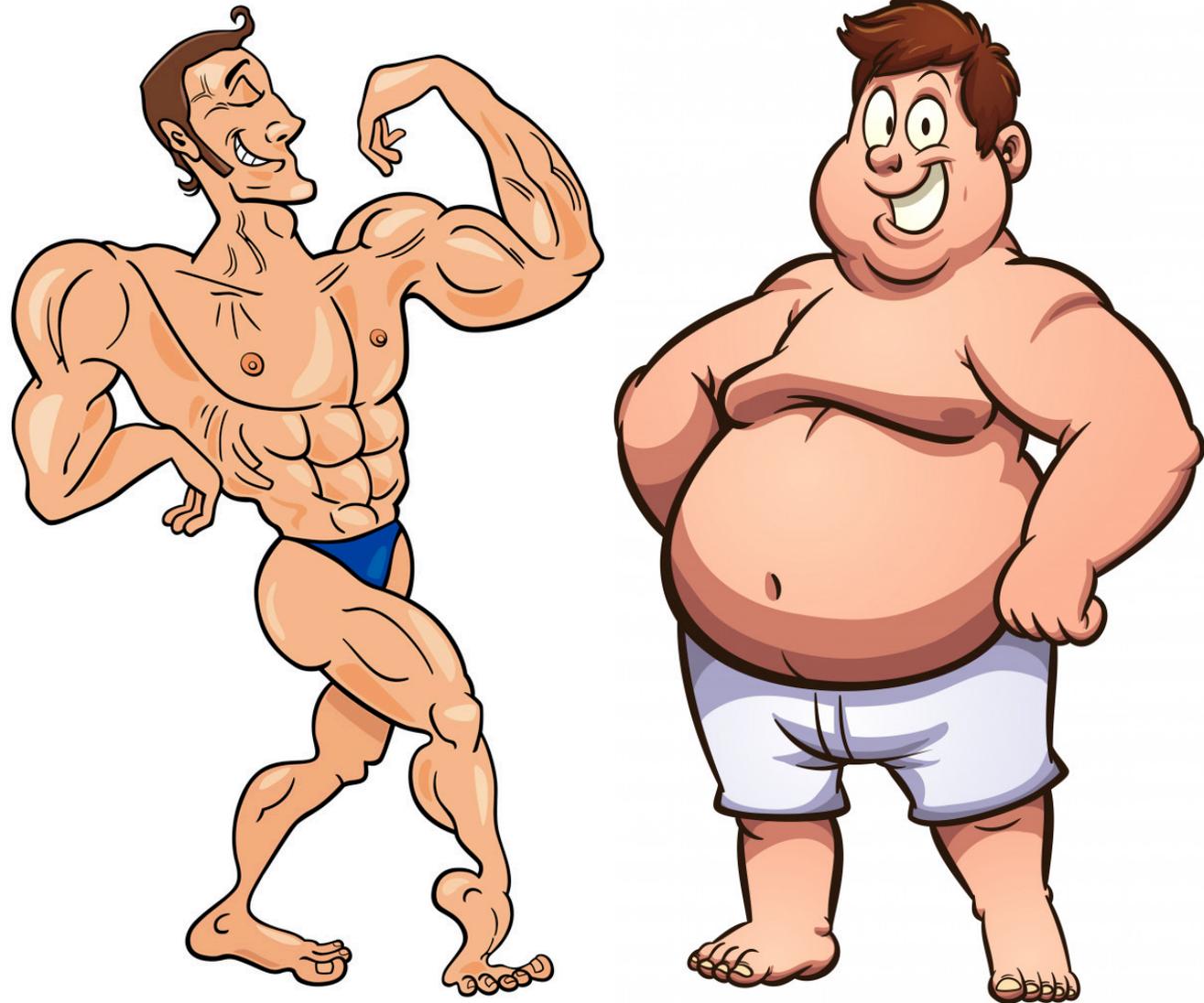


PolIEV.com/anneleenmalf401





Wie heeft de hoogste BMI?



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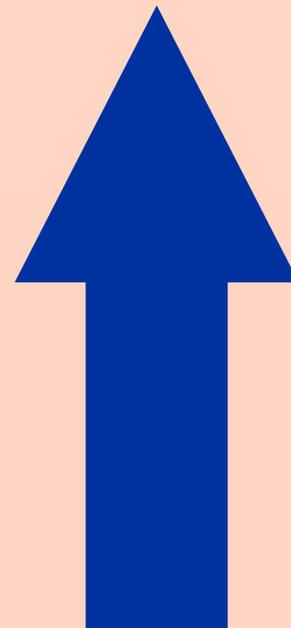
SCAN ME



Pijn intensiteit



Functionaliteit



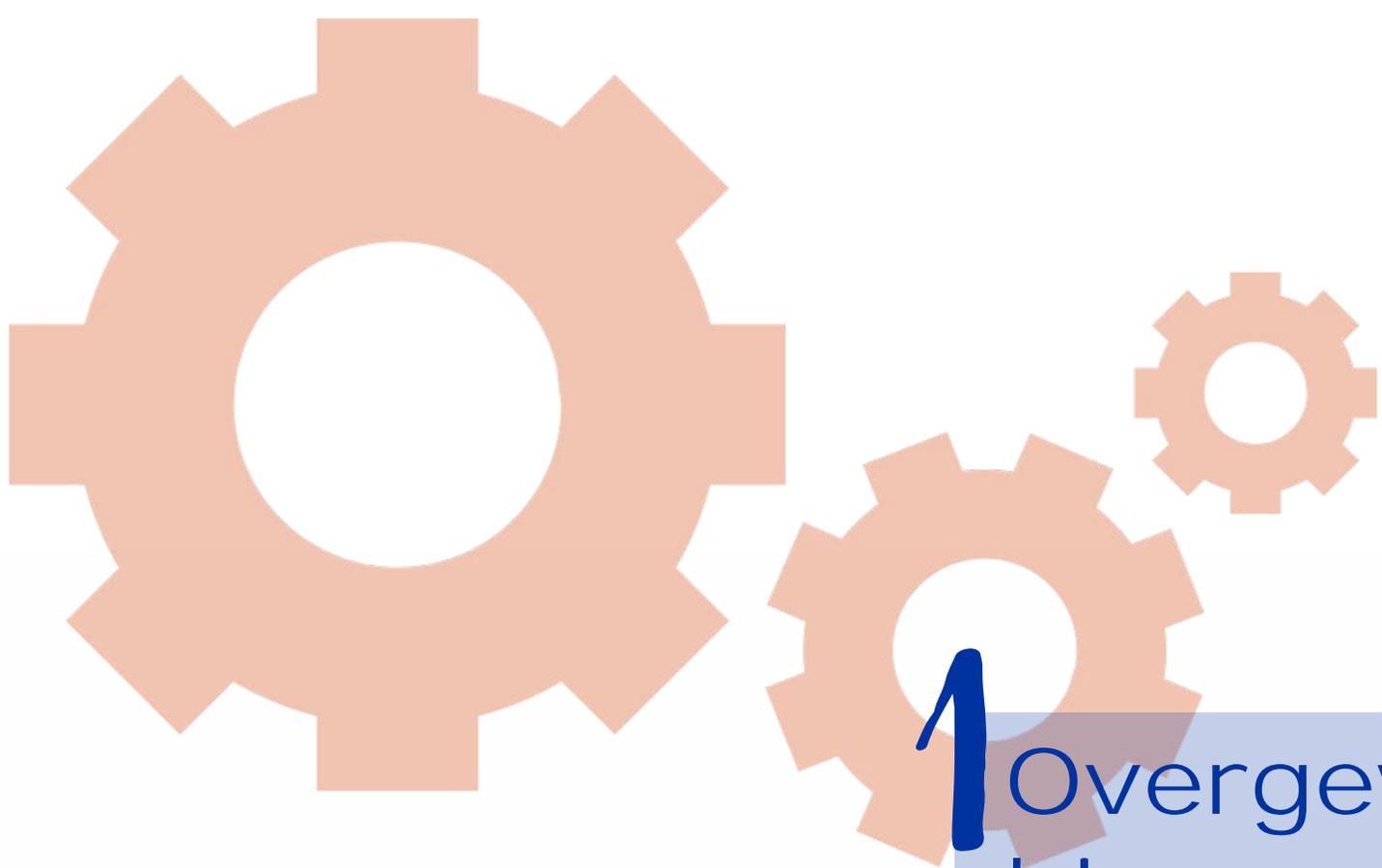
BMI

Taille-omtrek

Vetpercentage

Vetmassa





1

Overgewicht geïnduceerde
biomechanische belasting

2

Darm microbioom

3

Low-grade inflammatie

Centrale sensitizatie

Geactiveerde glia-cellen in het centrale ZS

Low grade
inflammatie

Oxidatieve stress /
weefsel schade / necrose

Veranderingen in
darm microbiom

Voeding / dieet



Waarvan
verwacht je een
positief effect?



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SCAN ME

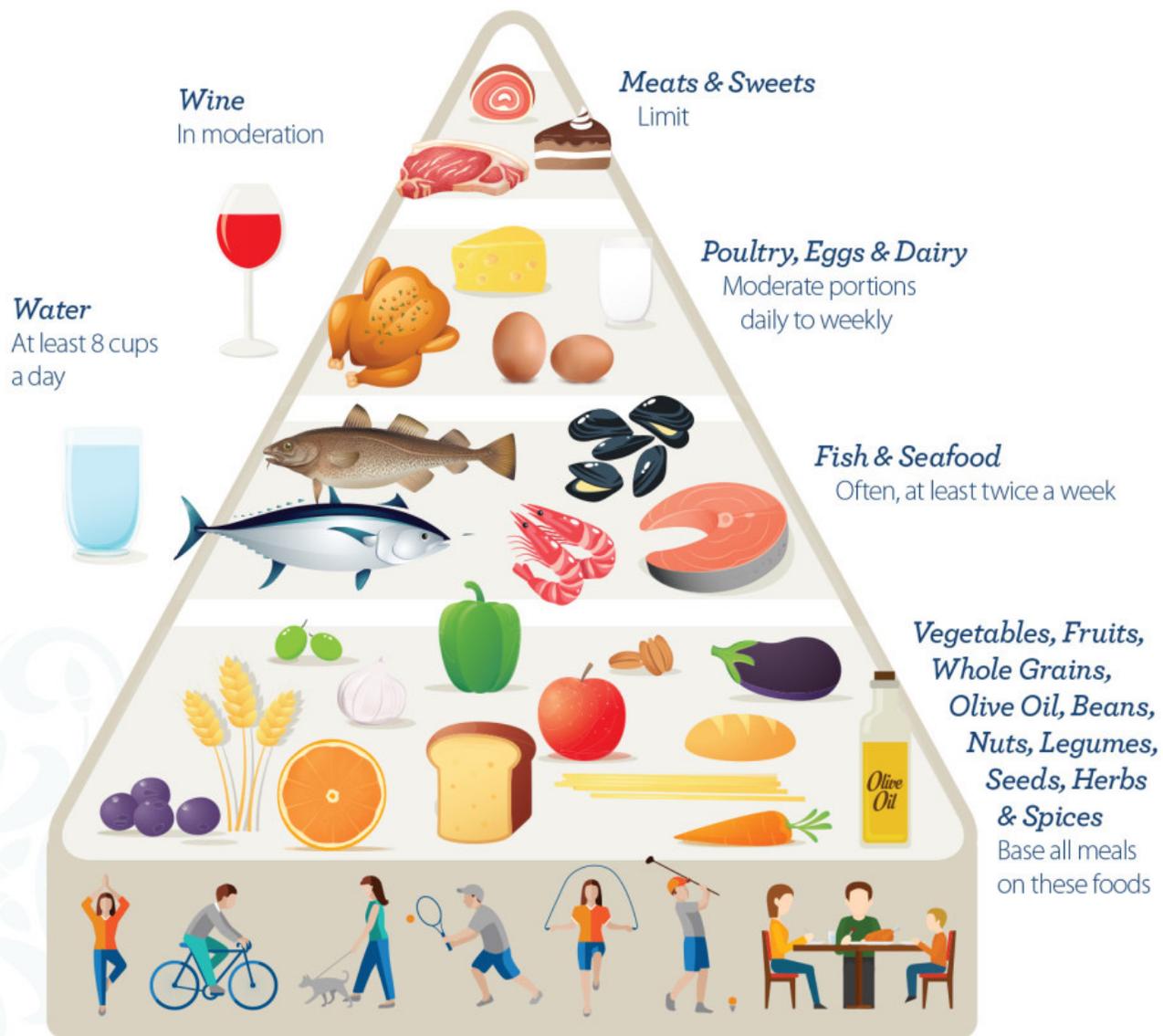


Fibromyalgia and Nutrition: An Updated Review

Laura Tomaino ^{1 2}, Lluís Serra-Majem ^{2 3}, Stefania Martini ⁴, Maria Rosaria Ingenito ⁵, Paola Rossi ⁶, Carlo La Vecchia ¹, Fabrizia Bamonti ⁷, Luisella Vigna ⁴

1. Glutenvrij vs hypocalorisch dieet
2. Vitamine D supplementatie
3. Hoger BMI
4. Lagere consumptie van volkoren graanproducten en fruit.
5. Cross-sectioneel: minder klachten door dagelijkse consumptie van fruit, groenten en vis; toename in klachten door bewerkt vlees en gesuikerde dranken (+meer depressieve klachten)
6. Mediterraans dieet

THE MEDITERRANEAN DIET

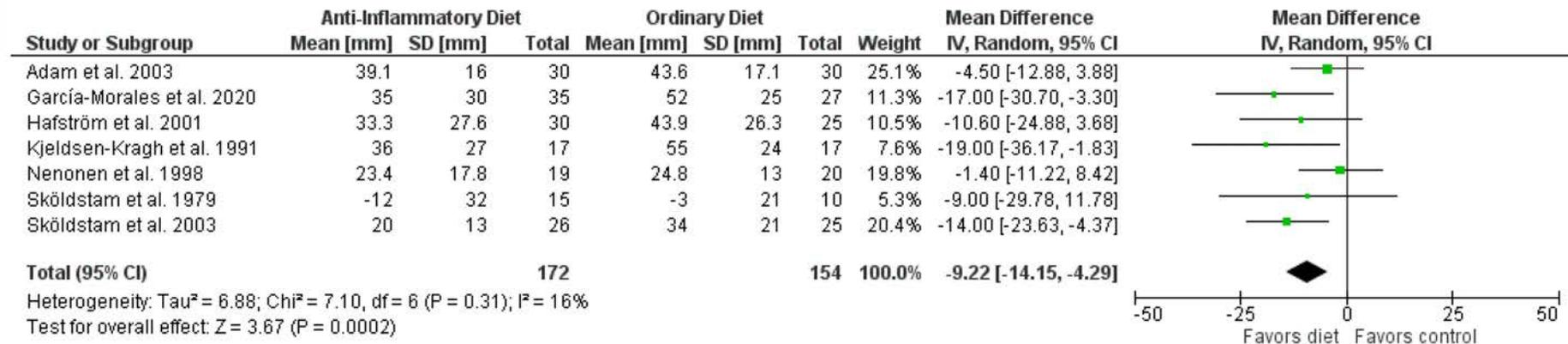


Savor meals with loved ones and be active every day.

Effect of Anti-Inflammatory Diets on Pain in Rheumatoid Arthritis: A Systematic Review and Meta-Analysis

Katja A Schönenberger ^{1,2}, Anne-Catherine Schüpfer ¹, Viktoria L Gloy ³, Paul Hasler ⁴, Zeno Stanga ¹, Nina Kaegi-Braun ⁵, Emilie Reber ¹

1. High risk of bias
2. Visolie supplementen (omega-3)
3. Anti-inflammatoire dieet resulteert in minder pijn dan 'gewone' diëten
 - a. Mediteraans dieet
 - b. Vegeeratisch / veganistisch dieet



Chronische lage rugpijn

HOT OF THE PRESS!!

- Lower diet quality
- Higher inflammatory scores
- Lower intake of total protein, total fat, dietary fibre, omega-3 fatty acids
- Lower intake of VitB6, vitA, beta-carotene, vitE, Mg

- Neg association between pain scores and intake of anti-inflammatory elements (Vit E/D/A/B6/B12/Zinc)



Chronische niet-kanker pijn

Gewichtsreductie interventies

Gewicht ↓
Pijn ↓
Functioneren ↑

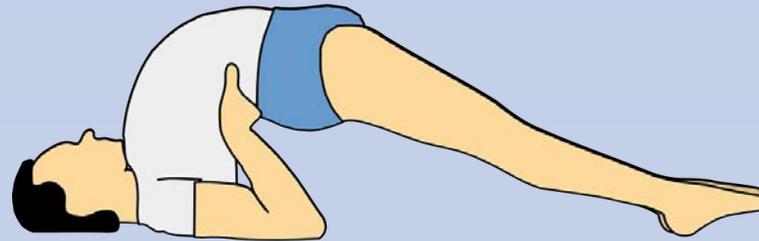
Fibromyalgie



Pijn ↓
Depressie/angst ↓
Lichaamstevredenheid ↓
Levenskwaliteit ↑

Chronische lage rugpijn

en/of



Pijn – 48%
Functioneren ↑
% lichaamsvet ↓
Visceraal vet ↓
Taille-heup-verhouding ↓
Spierweefsel ↑

Focus op
pijn + gewicht

Focus op
pijn

Focus op
gewicht

Overgewicht / obesitas

Hoge glycemische load

Rood vlees, suiker, bewerkte
granen, gefrituurde voedingswaren,
witte rijstproducten, etc.

Overmatige (lege) calorieën

Toegevoegde suikers en verzadigde
vetzuren

Caffeïne

Lage consumptie van mineralen
en vitaminen

Vitamine D supplementatie

Groenten, fruit, vezels

Gezonde oliën zoals olijfolie

Plantaardige eiwitten

Gewichtsverlies

Low-fat plant-based diets

Gember?



De praktijk

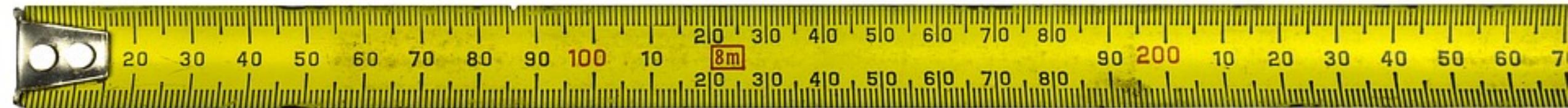
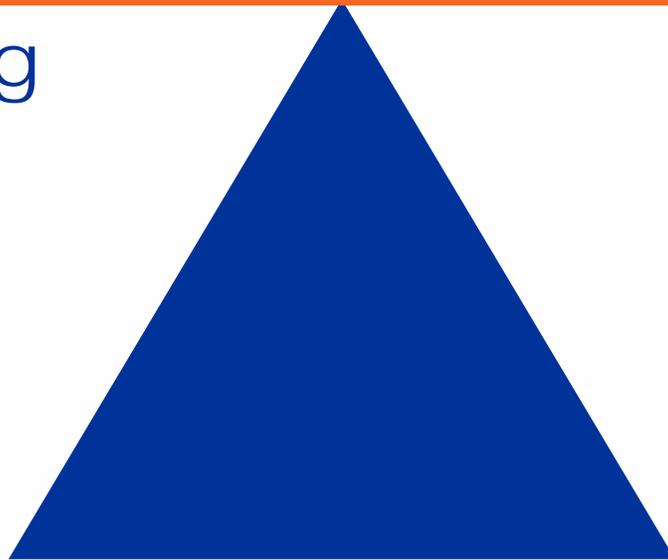


Energie
opname

Energie
verbruik

Voeding

Fysieke
activiteit



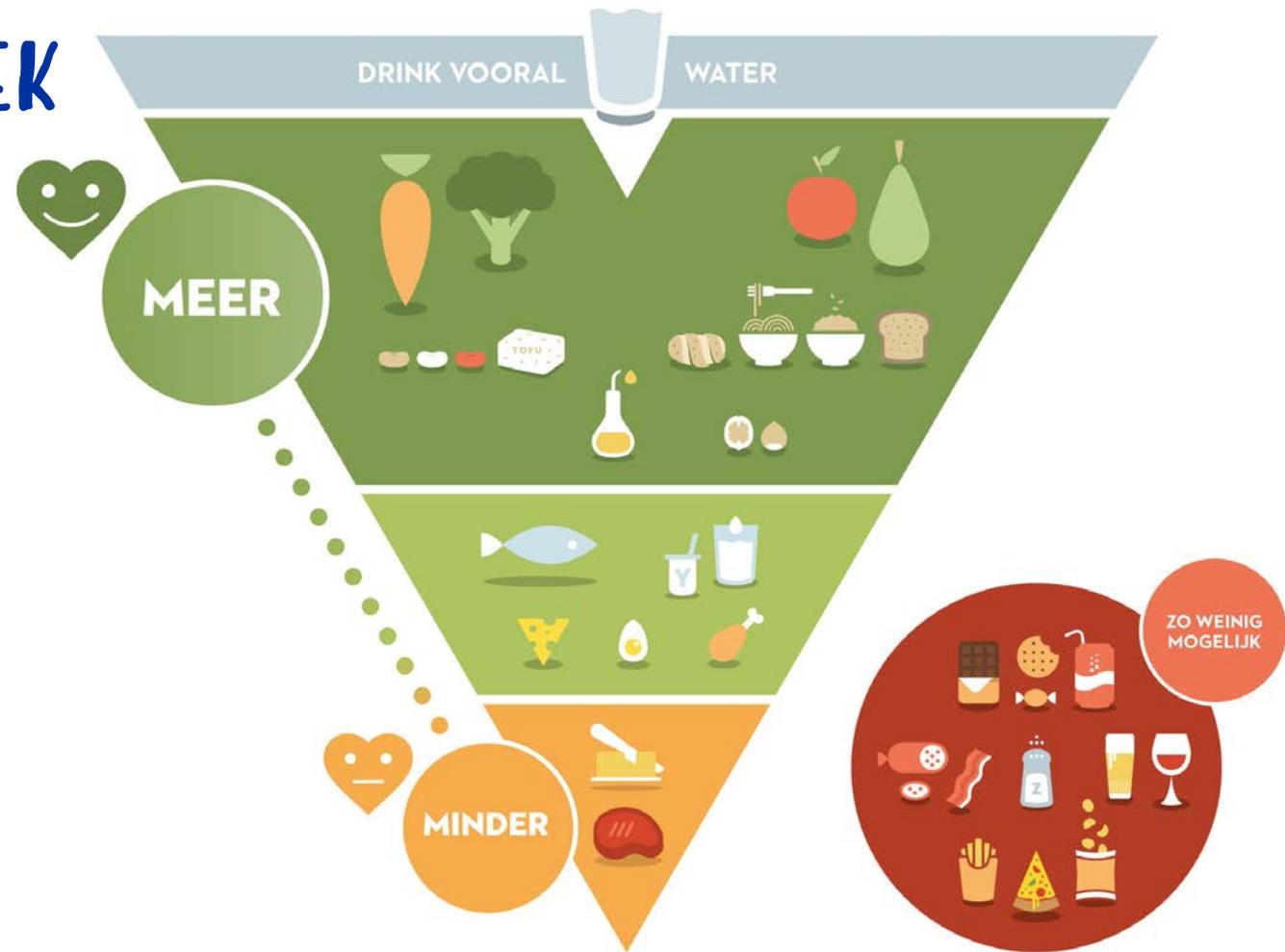
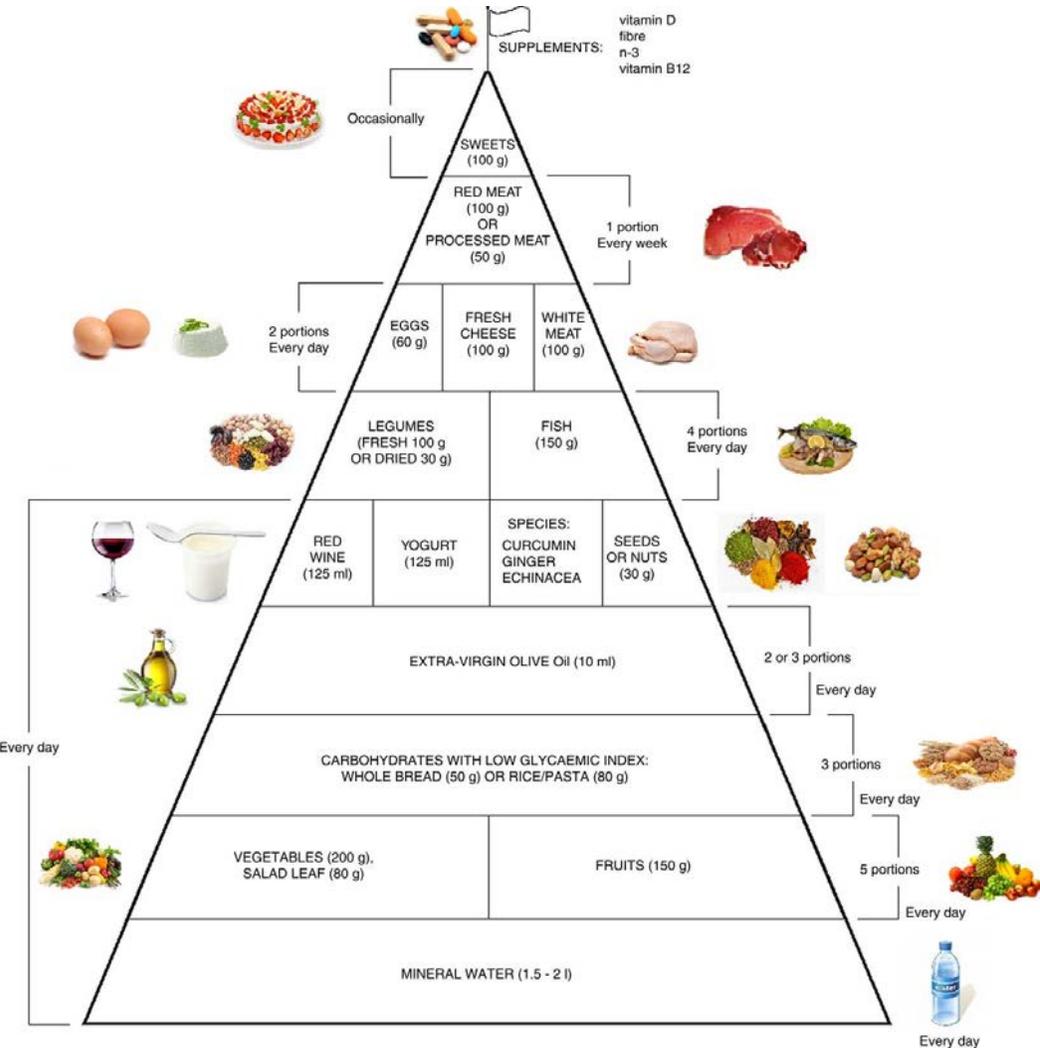


Educatie over (on)gezonde levensstijl

Link tussen voeding en pijn

Gezonde levensstijl en dieet

VOEDINGSDRIEHOEK GEZOND LEVEN



FOOD PYRAMID FOR SUBJECTS WITH CHRONIC PAIN

(RONDANELLI ET AL)



2020 GLOBAL YEAR FOR THE
PREVENTION OF PAIN

6 TIPS FOR NUTRITION AND PAIN MANAGEMENT



<https://www.iasp-pain.org/resources/fact-sheets/nutrition-and-chronic-pain/>

1

REDUCE INFLAMMATION TO HELP PROTECT YOUR BODY FROM OXIDANT DAMAGE:

Polyphenols are compounds found in fruit and vegetables and have antioxidant and anti-inflammatory properties.



2

GOOD QUALITY FATS

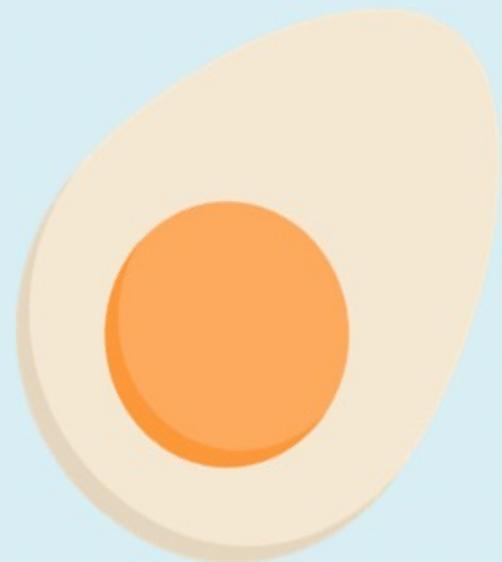
Omega-3 fats and olive oil both help to reduce inflammation and enhance the immune system.



3

PREVENT VITAMIN AND MINERAL DEFICIENCIES

Common micronutrient deficiencies in people experiencing pain include Vitamin D, Vitamin B12 and magnesium.



4

WATER INTAKE

Dehydration can increase sensitivity to pain. It can also have other effects on health outcomes, especially in older populations, such as poor wound healing and constipation.



5

INCREASE FIBRE

Fibre is important for proper digestion and maintenance of a healthy microbiome and weight management.



6

REDUCE AND LIMIT ULTRA-PROCESSED FOODS AND SUGAR INTAKE

These foods and drinks contain high amounts of energy and very low (or no) amounts of beneficial nutrients [12]. These foods can increase inflammation and oxidation which can worsen pain experiences.





Educatie over (on)gezonde levensstijl

Link tussen voeding en pijn

Gezonde levensstijl en dieet



Identificeren van (on)gezond gedrag

Voedingsdagboek

Prioriteiten stellen



Plannen van maaltijden

Supervisie therapeut gradueel laten afnemen

Gewoonte creëren om planning te maken

Opletten voor moeilijke situaties



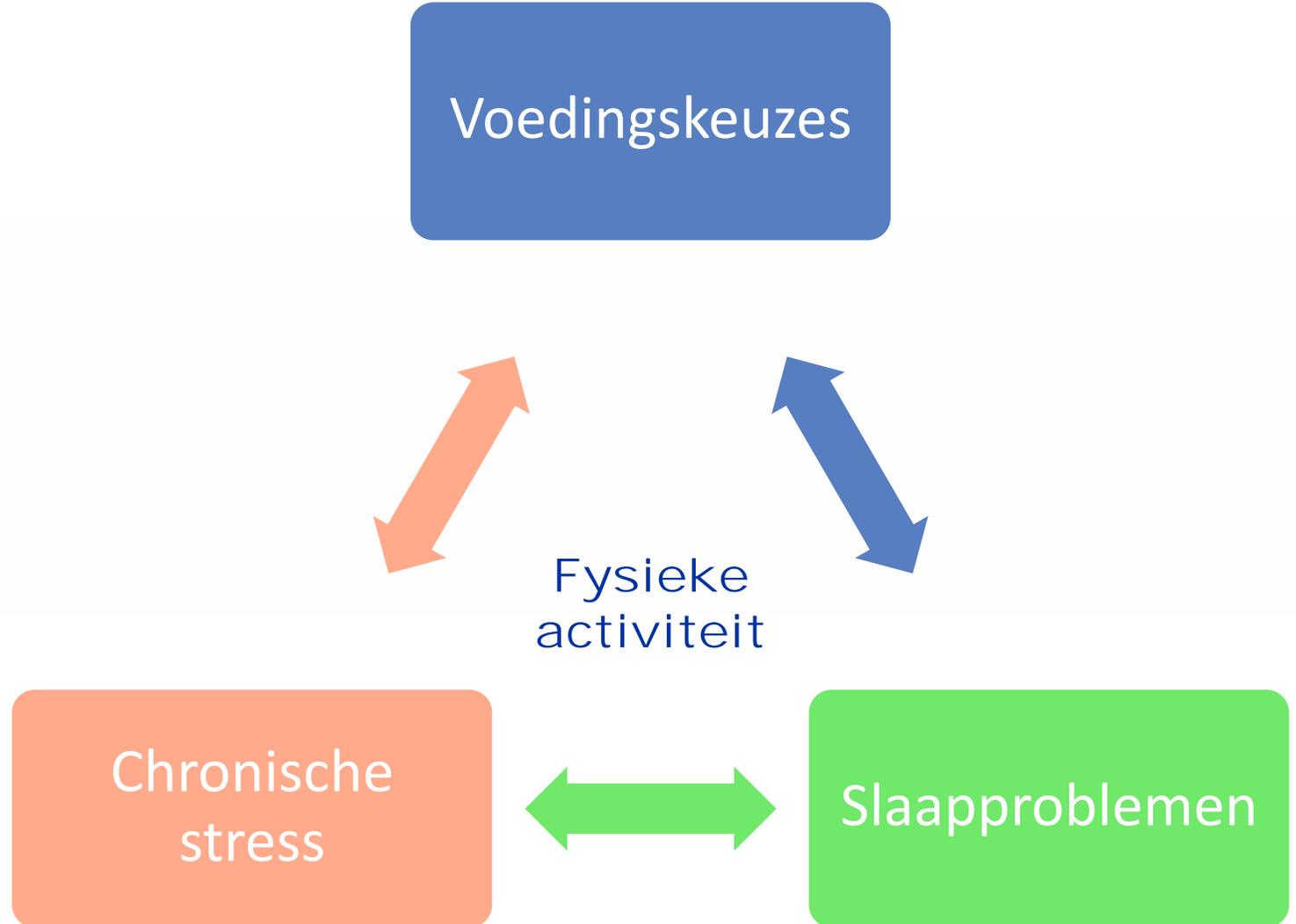
Combinatie met bewegprogramma

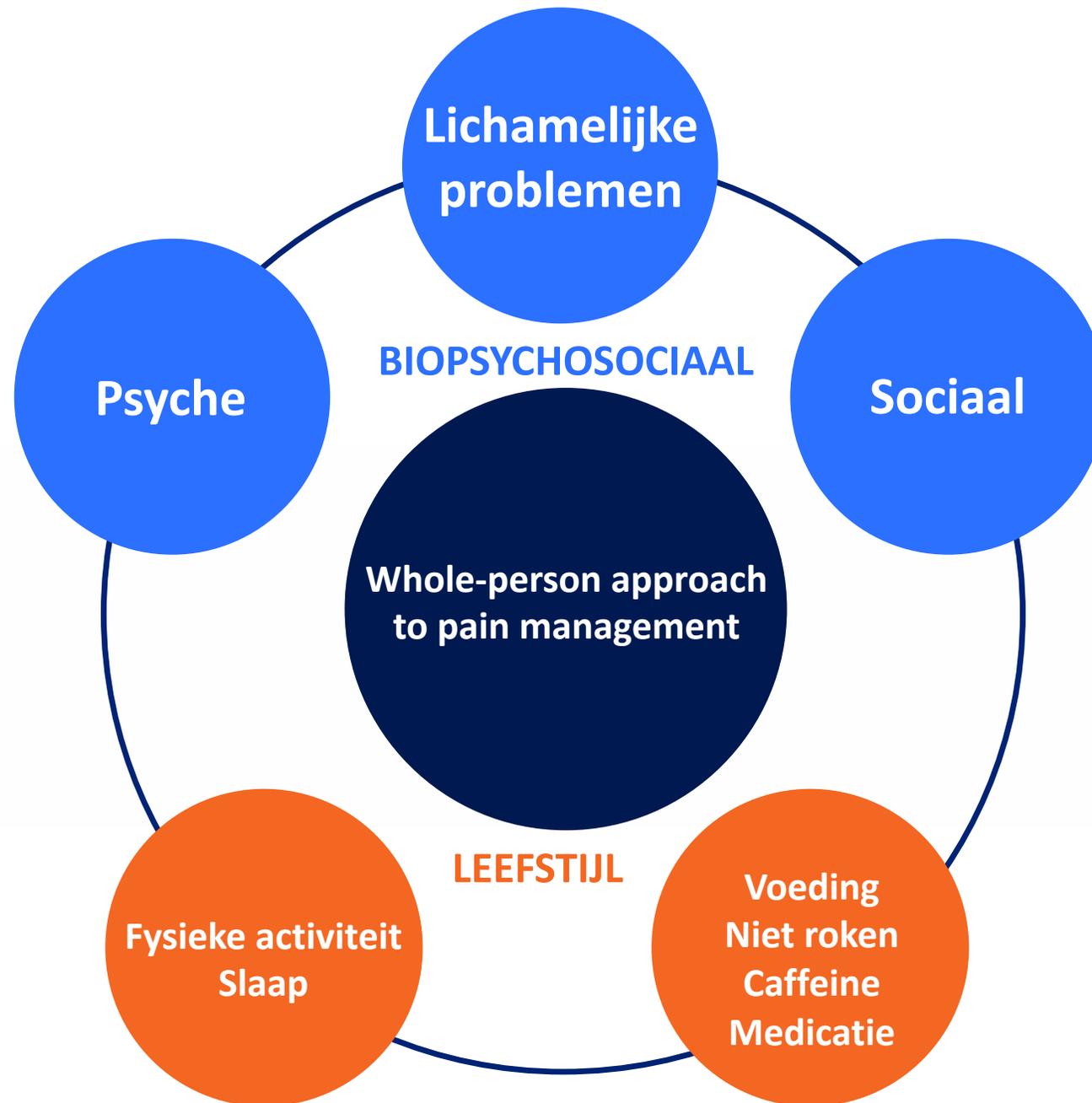
Afname sedentair gedrag

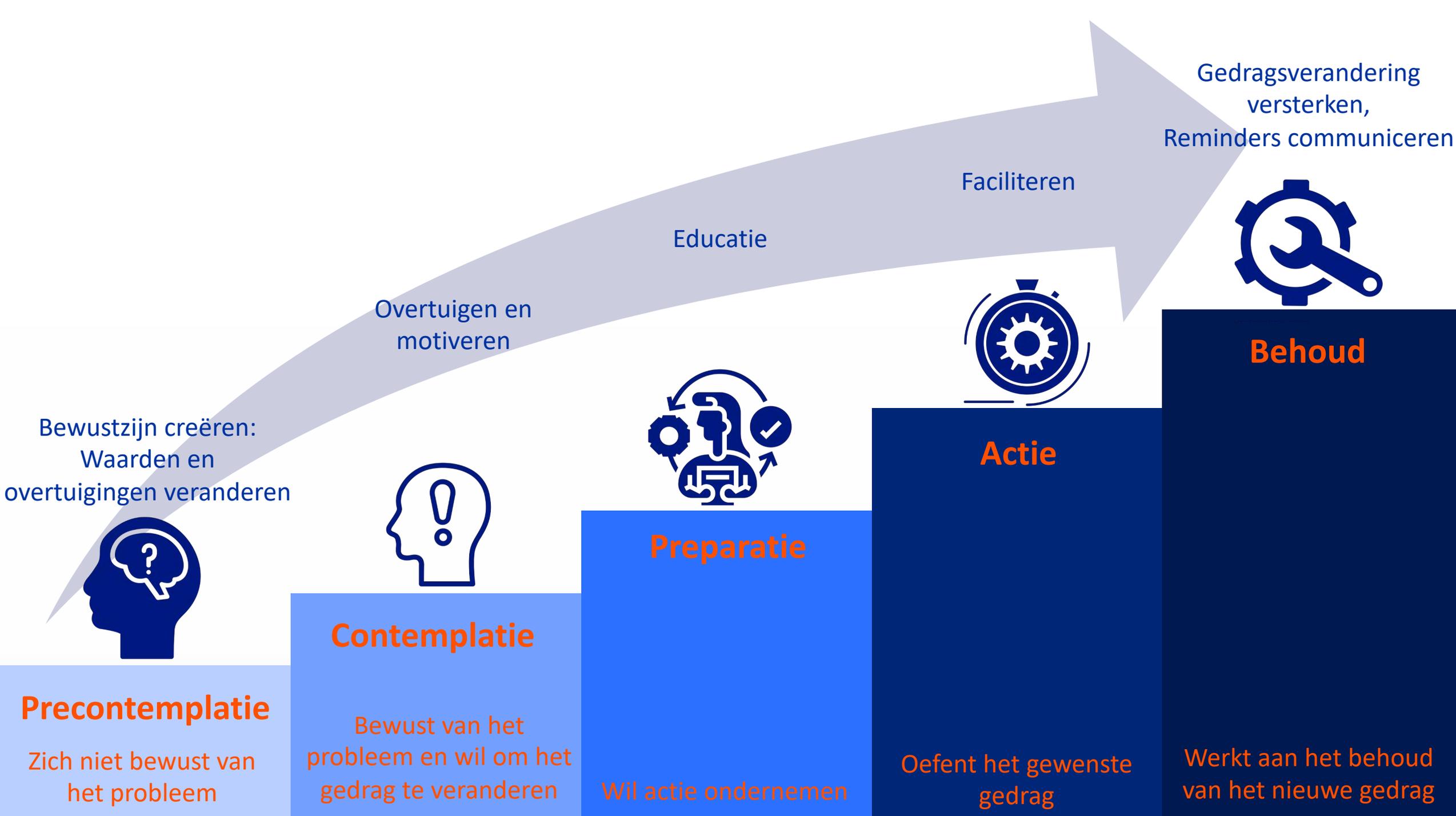
Toename fysieke activiteit

Integratie in pijnmanagement

LIFESTYLE COMBINATIE MET STRESS EN SLAAP









www.PainInMotion.be



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REFERENTIES

- IASP – The Global Burden of Low Back Pain
- Andersson GB. Epidemiological features of chronic low-back pain. *Lancet* (London, England). 1999; 354(9178):581-585.
- Hartvigsen J, Hancock MJ, Kongsted A, et al. What low back pain is and why we need to pay attention. *Lancet* (London, England). 2018; 391(10137):2356-2367.
- Schönenberger et al. Effect of Anti-Inflammatory Diets on Pain in Rheumatoid Arthritis: A Systematic Review and Meta-Analysis. *Nutrients* (2021).
- Tomaino et al. Fibromyalgia and Nutrition: An Updated Review. *J Am Coll Nutr* (2021).
- Nijs et al. Nutritional neurobiology and central nervous system sensitisation: missing link in a comprehensive treatment for chronic pain? *British Journal of Anaesthesia* (2019).
- Elma et al. Chronic Musculoskeletal Pain and Nutrition: Where Are We and Where Are We Heading? *PMR* (2020).
- Dragan et al. Dietary Patterns and Interventions to Alleviate Chronic Pain. *Nutrients* (2020).
- Mathieu et al. A Meta-Analysis of the Impact of Nutritional Supplementation on Osteoarthritis Symptoms. *Nutrients* (2022).
- Mendonça et al. Effects of Nutritional Interventions in the Control of Musculoskeletal Pain: An Integrative Review. *Nutrients* (2020).
- Elma Ö, Tumkaya Yilmaz S, Clarys P, Nijs J, Deliens T, Malfliet A. The diet of chronic low back pain patients is of lesser quality than healthy, pain-free subjects. Paper submitted, 2023.
- Elma Ö, Yilmaz ST, Deliens T, et al. Nutritional factors in chronic musculoskeletal pain: unravelling the underlying mechanisms. *Br J Anaesth*. 2020; 125(2):e231-e233.
- Brain K, Burrows T, Rollo M, et al. A systematic review and meta-analysis of nutrition interventions for chronic noncancer pain. *Journal of Human Nutrition and Dietetics*. 2018; 32.
- Bjørklund G, Aaseth J, Doşa MD, et al. Does diet play a role in reducing nociception related to inflammation and chronic pain? *Nutrition*. 2019; 66: 153-165.
- Barbaresko J, Koch M, Schulze MB, Nöthlings U. Dietary pattern analysis and biomarkers of low-grade inflammation: a systematic literature review. *Nutr Rev*. 2013; 71(8): 511-527.
- Backonja MM, Coe CL, Muller DA, Schell K. Altered cytokine levels in the blood and cerebrospinal fluid of chronic pain patients. *Journal of Neuroimmunology*. 2008; 195(1): 157-163.
- Medawar E, Huhn S, Villringer A, Veronica Witte A. The effects of plant-based diets on the body and the brain: a systematic review. *Translational psychiatry*. 2019; 9(1): 226.
- Hussain SM, Urquhart DM, Wang Y, et al. Fat mass and fat distribution are associated with low back pain intensity and disability: results from a cohort study. *Arthritis research & therapy*. 2017; 19(1): 26.
- Paulis WD, Silva S, Koes BW, van Middelkoop M. Overweight and obesity are associated with musculoskeletal complaints as early as childhood: a systematic review. *Obesity reviews : an official journal of the International Association for the Study of Obesity*. 2014; 15(1): 52-67.
- Shiri R, Karppinen J, Leino-Arjas P, Solovieva S, Viikari-Juntura E. The association between obesity and low back pain: a meta-analysis. *American journal of epidemiology*. 2010; 171: 135-154.



HET DENKEN MAG ZICH
NOOIT ONDERWERPEN.



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