

PAIN IN EUROPE XIV

COMORBIDITY OF CHRONIC PAIN AND MENTAL
HEALTH DISORDERS: BREAKING THE CYCLE



14TH CONGRESS OF THE
EUROPEAN PAIN FEDERATION EFIC®

24-26 APRIL 2025 | LYON, FRANCE

[EFIC-CONGRESS.ORG](https://efic-congress.org) #EFIC2025

Nutrition and Chronic Pain in People Living with Obesity: Addressing Eating Habits Has a Central Role in Pain Management



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<https://liu.se/en/research/pain-and-nutrition>



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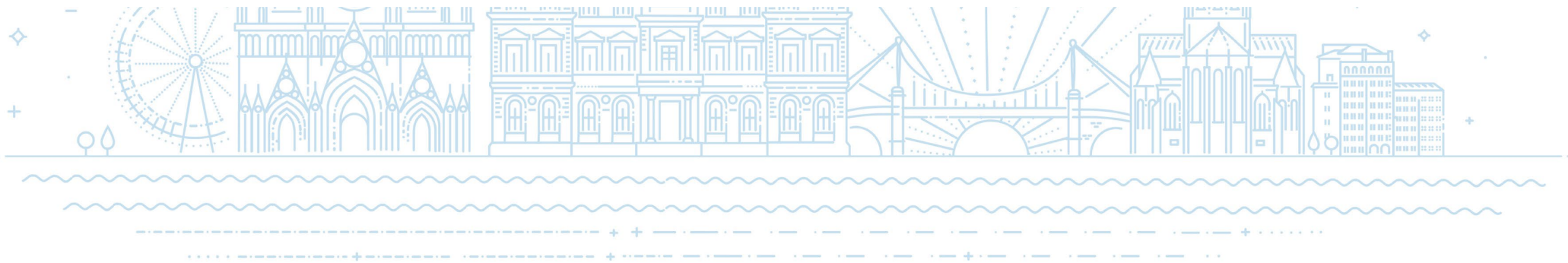
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Conflict of Interest Disclosure

In relation to this presentation, I declare the following real or perceived **conflicts of interest***:

*A conflict of interest is any situation in which a speaker or immediate family members have interests, and those may cause a conflict with the current presentation. Conflicts of interest do not preclude the delivery of the talk, but should be explicitly declared. These may include financial interests (e.g. owning stocks of a related company, having received honoraria, consultancy fees), research interests (research support by grants or otherwise), organisational interests and gifts.

Type	Company
Research Grant (P.I.)	<ul style="list-style-type: none">Fibromyalgia Association of Sweden 2023-2025Dr. P Håkansson's foundation 2025-2026



Pain management

Right approach in right time

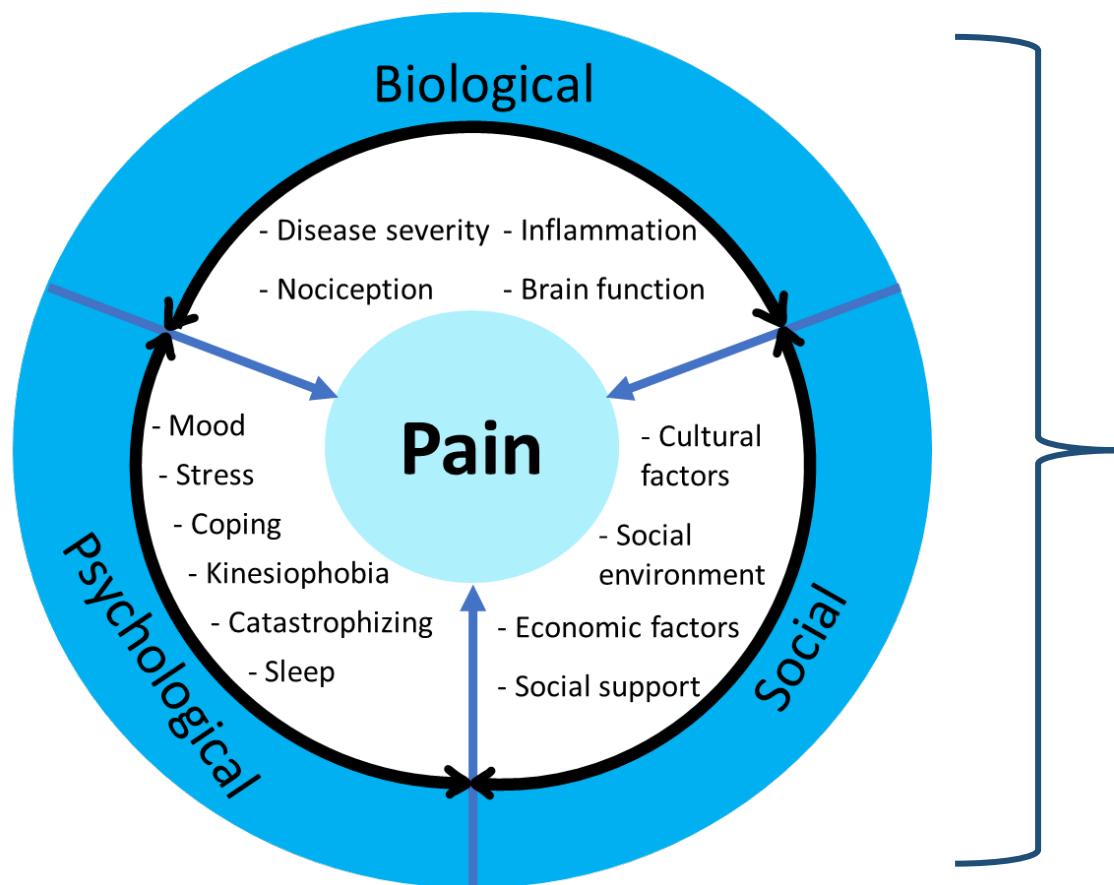


Pharmacological treatments

Invasive and Non-invasive
procedures

Pain rehabilitation

Pain rehabilitation

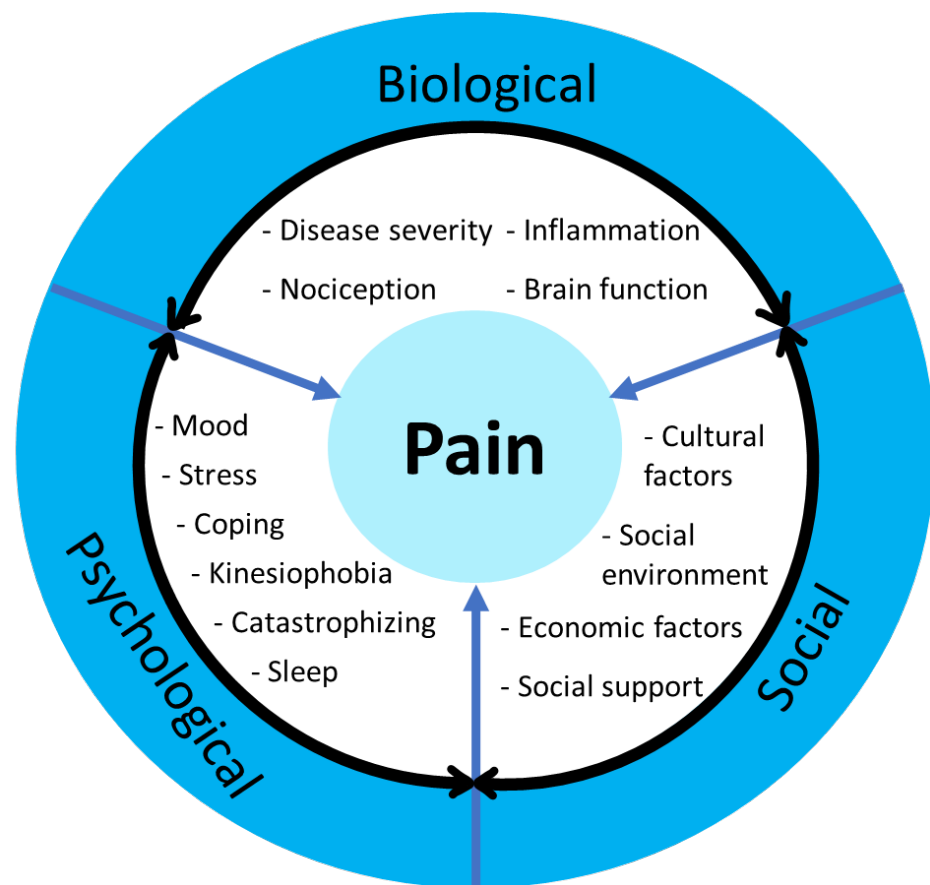


Do lifestyle factors
fit in this model?



Figure from *Dong & Bäckryd*. Patient Educ Couns **2023**

Pain rehabilitation



An interdisciplinary approach

- Physician
- Nurse
- Physiotherapist
- Occupational therapist
- Psychologist
- ??



Do lifestyle factors
fit in the model?

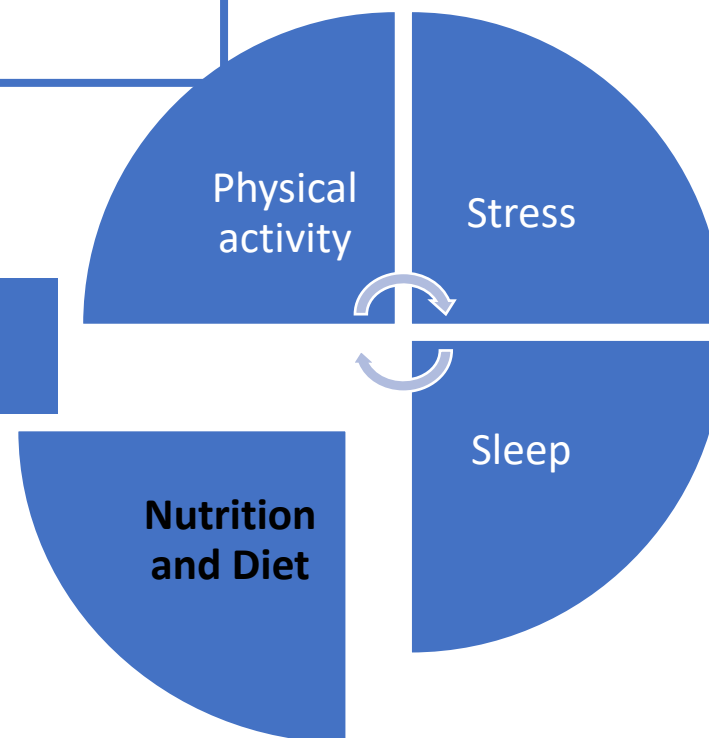


Figure from *Dong & Bäckryd*. Patient Educ Couns **2023**

A REGISTRY-BASED STUDY (2024)

20 – 35% reported **less healthy Eating Habits:**



Eating irregularly

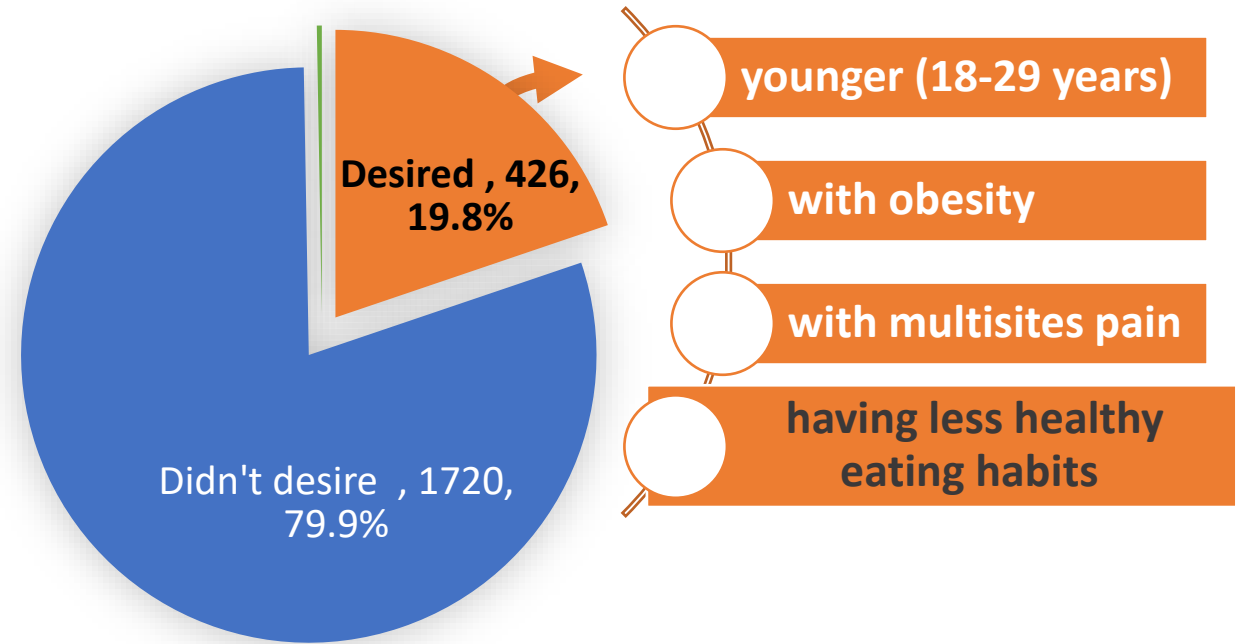


Frequent confectionary intake



Frequent fast-food intake

Who **desire to eat healthier** in a pain service?



scientific reports

OPEN

Eating habits and the desire to eat healthier among patients with chronic pain: a registry-based study

Huan-Ji Dong^{1,2}, Katherine Brain^{2,3}, Max Olsson¹, Elena Dragioti^{1,4}, Björn Gerdle^{1,5} & Bijar Ghafouri¹

Check for updates



A QUALITATIVE STUDY (2023)

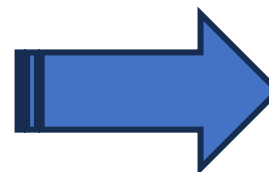
Patients' Perspectives: connection between Pain, Obesity and Lifestyle Changes

*'If I **don't** sleep, I will likely eat something. Eh. . partly because my body's signals just tell me to **go to the refrigerator.**'*

*'My **husband** cooks. I can't take it or handle it. That is why I give up and we **eat worse food** instead.'*

*'The **stress** drives me to **eat unhealthy food.**'*

*'As I **don't** move, I don't burn anything of what I have **eaten.**'*



Theme:

*Lifestyle changes are **burdensome** with a body broken by both pain and obesity*

Storm et al. *BMC Musculoskeletal Disorders* (2023) 24:840
<https://doi.org/10.1186/s12891-023-06961-2>

BMC Musculoskeletal
Disorders

RESEARCH

Open Access

Lifestyle changes are burdensome with my body broken by pain and obesity: patients' perspectives after pain rehabilitation

Elin Storm¹, Nina Bendelin¹, Kim Bergström Wessman¹, Maria M Johansson², Mathilda Björk¹ and Huan-Ji C



PREL. RESULTS (A QUALITATIVE STUDY):

Patients' Perspectives on strategies for sustainable lifestyle changes

Hold my hand and push me forward

Theme

An impassible wall

Relearning

Being stuck

My terms

Health issues

Good enough

Stigma

Knowledge

Believe in me

Maintenance

Manuscript in preparation (2025): N. Bendelin et al, Navigating Pain and Weight: Customizing Pain Rehabilitation for Patients Living with Obesity

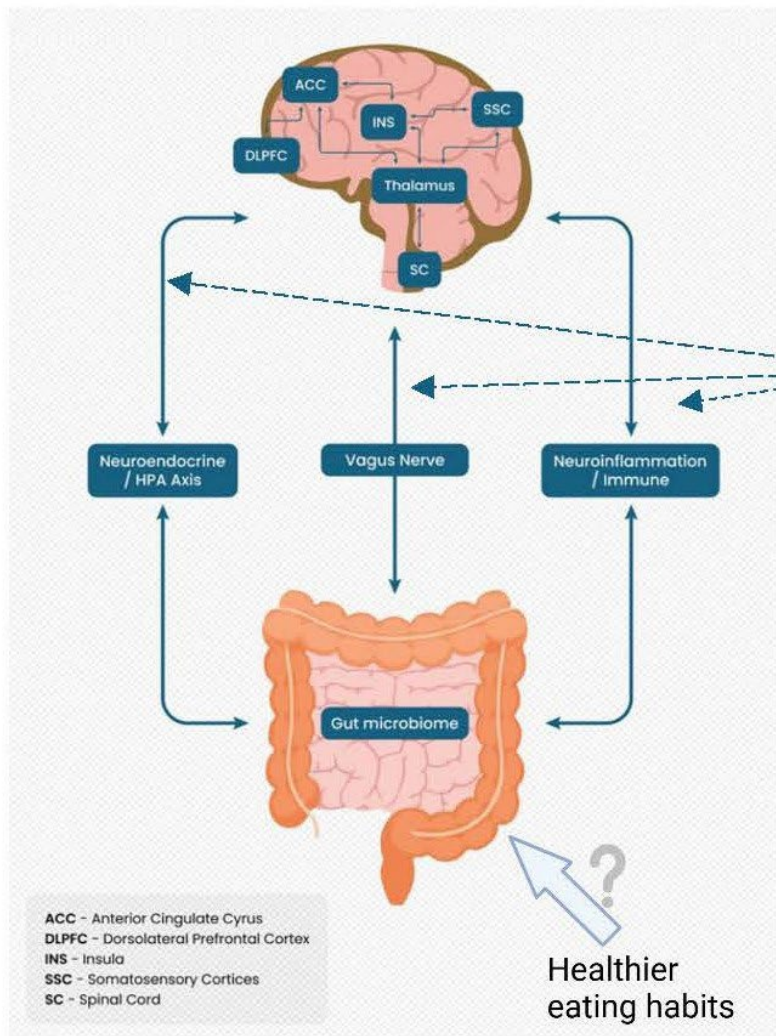
RETHINKING PAIN AND OBESITY:

Addressing Eating Habits

- ✓ Poor eating habits are common in patients living with chronic pain
- ✓ Patients express a desire to eat healthier
- ✓ Patients acknowledge the difficulty in lifestyle changes

A MINI REVIEW (2025)

Why may eating habits affect pain experience?



IPRP targeted
behaviour changes

(IPRP: Interdisciplinary Pain Rehabilitation Program)

 Frontiers in Neuroscience

TYPE Mini Review
PUBLISHED 14 February 2025
DOI 10.3389/fnins.2025.1545997



Texas A&M University Baylor College
of Dentistry, United States

The brain-gut axis and chronic pain: mechanisms and therapeutic opportunities

Tim Ho^{1*}, Ömer Elma^{2,3}, Lucy Kocanda^{4,5,6}, Katherine Brain^{6,7,8},
Thao Lam¹, Tejas Kanhere⁹ and Huan-Ji Dong¹⁰

Pain rehabilitation



- Addressing eating habits

- ✓ Regular meals (daily routine)
- ✓ Food and emotion (psychological status)
- ✓ Nutrition and Food Literacy
- ✓ Socio-economic situation
- ✓ Environmental influences (culture, religion, and interactions with other people)

2020 GLOBAL YEAR FOR THE PREVENTION OF PAIN

6 TIPS FOR NUTRITION AND PAIN MANAGEMENT

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.

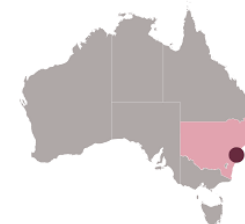
2020 EUROPEAN YEAR FOR THE PREVENTION OF PAIN

EFIC

Factsheet

Nutrition and Chronic Pain

- 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.



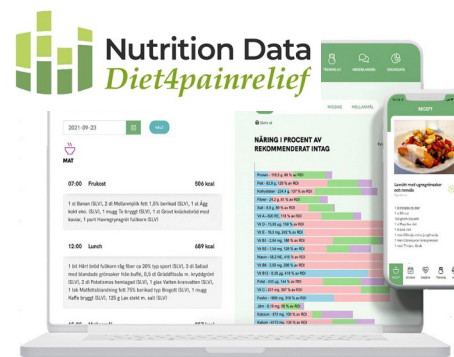
Authors: Katherine Brain, Tracy L. Burrows, Megan E. Rollo, and Clare E. Collins

Priority Research Centre in Physical Activity and Nutrition, University of Newcastle, **Newcastle, Australia**



www.iasp-pain.org/globalyear

- International dietary guidelines
- Swedish context
- Patients' preferences
- Dietitian's experience



Dietitian: Anna Wahl, Department of Rehabilitation Medicine in Linköping University Hospital, Sweden



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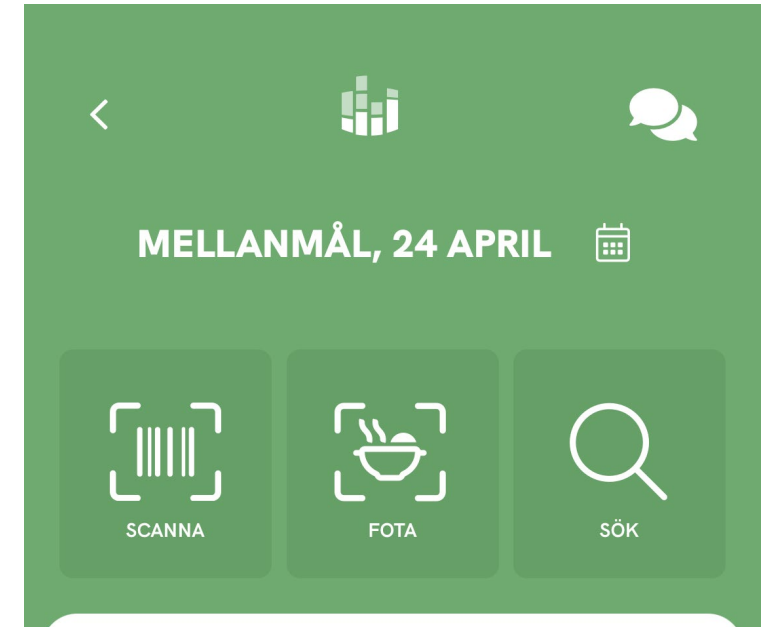
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E-health to support behaviour change

- Minimum burden to use this digital tool
- No one size fits all
- Talking to our dietitian via chat function
- The Context: patients in a pain service



Manuscript in preparation (2025): H-J Dong, et al. Nutrition Care in Pain Rehabilitation — success and lessons from practice



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Collaborations

- Painomics®, Linköping University (LiU)
- Core Facility, **Karolinska Institutet (KI)**
- Hunter Integrated Pain Service (HIPS), John Hunter Hospital, Newcastle, **Australia**
- University of Newcastle (UoN), **Australia**
- ... *we are growing...*

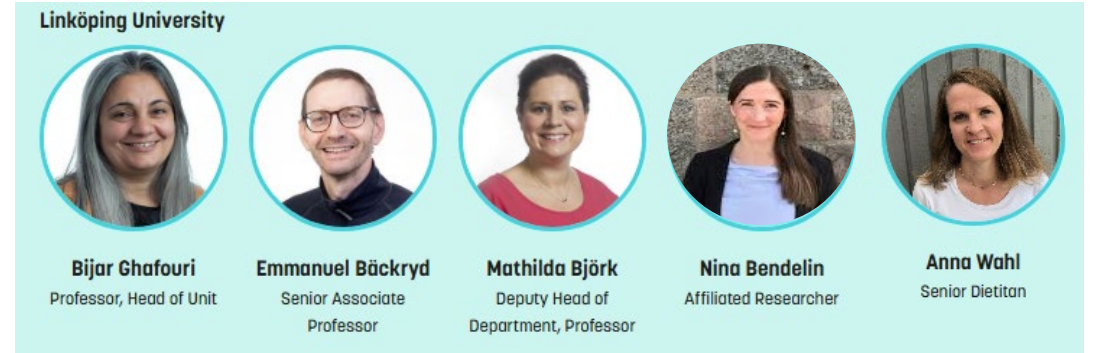
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Interest in the role of healthy eating and nutrition-related health in pain management is increasing in both the research and clinical space.



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Take home message

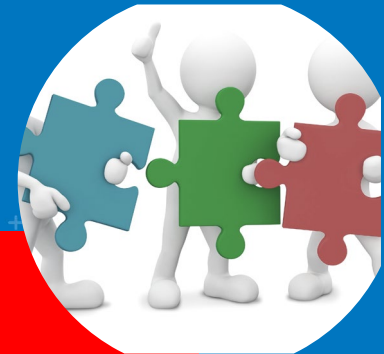


1. Pay attention to poor eating habits in patients living with chronic pain
2. An interdisciplinary approach to address eating habits

Right approach in right time, to right person

RETHINKING PAIN AND OBESITY

Let's break the ice.



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