

# Malnutrition in problem-drinking homeless people

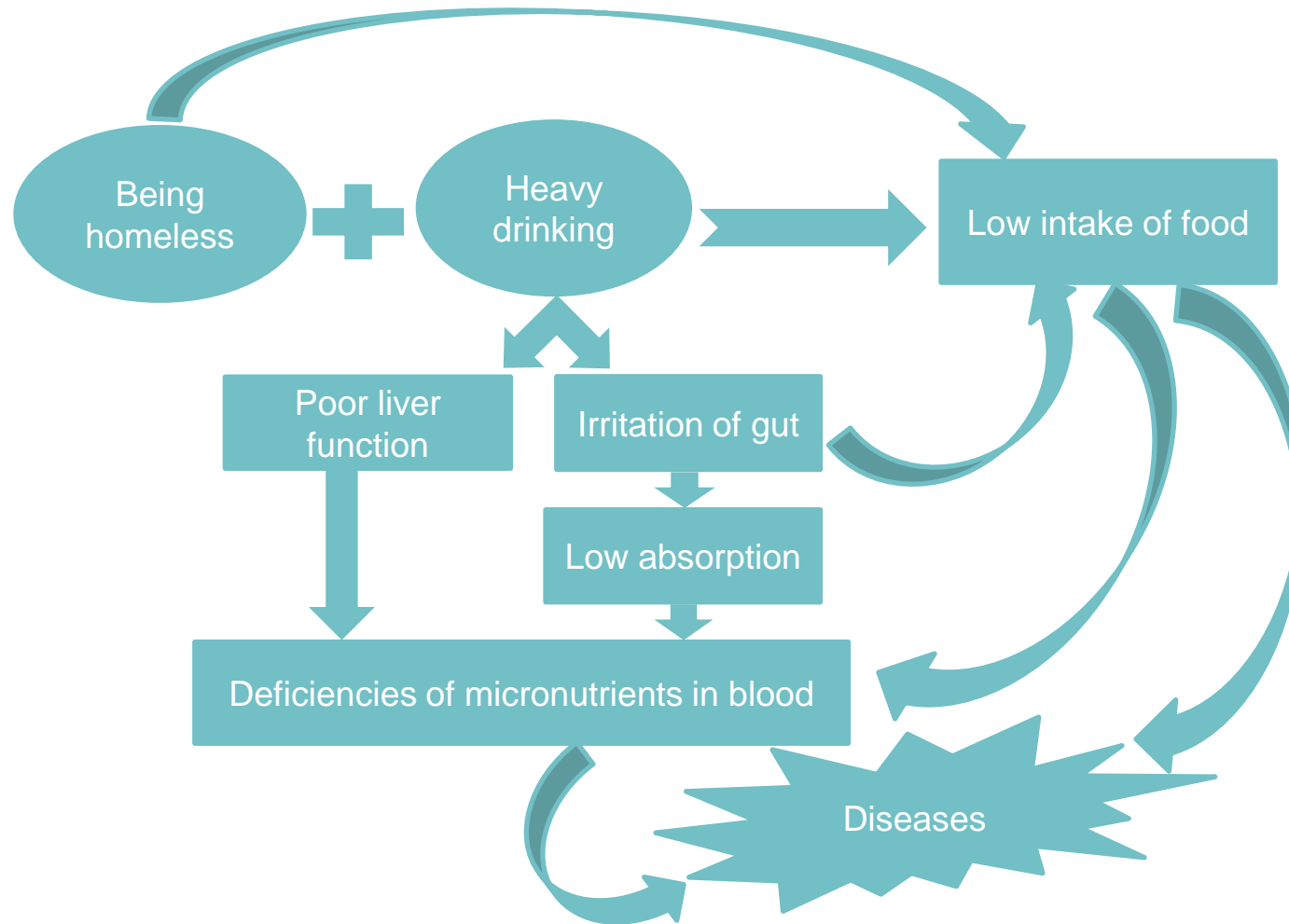
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# How alcohol causes malnutrition



# How the project came about

- Katie Porter
  - Alcohol Strategy Manager, Bristol City Council
- Clare Fleming
  - GP The Homeless Health Service, Compass Health, Bristol
- Adrian Bonner
  - Salvation Army, alcohol & nutrition expert

# The question

- What are the key nutritional deficiencies
- Is a good solution already there
  - effective
  - cost effective



# What we did



- Two sister reviews
  - Range of nutritional deficiencies in homeless drinkers
  - Interventions that improve nutrition in homeless drinkers
- 9 scientific databases
- 13 grey literature sources (e.g. charities, associations, theses)
- Contacting authors and organisations for unpublished data
  - 9216 references → 257 full text papers
  - Review of deficiencies – 9 studies
  - Review of interventions – 25 studies
- Data extraction and quality assessment
- Narrative synthesis

# What we found

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- Deficiencies exist
- Most commonly studied: Vitamin B1
- Most often found deficient: Vitamin B1, B6, C
- Not studied enough: Vitamin B3, B5, B7, D, A, and E
- No UK study on deficiency profile
- No clear subgroups
- Regional differences possible
- Need a new study locally

# What we found

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- Interventions
  - Education and support
  - Food/ meals
  - Fortification or supplementation
- Outcomes
  - Intake (nutrients or energy)
  - Acceptability
  - Cost
  - No disease outcomes

# What we found



- Education and support (*9 studies – shelters*)
  - could improve nutritional behaviour, i.e. eating healthier food
- Food provision (*5 studies – shelters and cafes*)
  - acceptable to clients (one in UK) (Pelham-Burn 2014)
  - may not fulfil daily energy needs
- Supplement or fortification (*3 studies – rough-sleeping and shelter*)
  - effective for blood indicators of deficiency
  - fortified chocolate spread is acceptable
- Multicomponent interventions (*8 studies – all types of homeless*)
  - could improve nutritional behaviour, i.e. eating healthier food
  - no effect on liver function
  - some acceptable (Kendzor 2016), some not (Grazioli 2015)



# What we found



- No cost effectiveness analyses
- Cost in four studies
  - Vitamin supplement (B complex plus C tablets)/ day USD 0.16 (1986)
  - Vitamin fortified chocolate packet plus meal/ day USD 5 (2009)
  - Food pack/ day USD 1.5 (2013)
  - One meal 1200 kcal USD 1 (2013)
- Only two studies from the UK
  - Education and support- Hinton 2001
  - Meal provision- Pelham-Burn 2014

# What next



- Disseminate findings to:
  - Frontline workers dealing with homeless problem drinking people
  - Homeless organisations and charities
- Possible next steps:
  - Assess the local homeless drinking population's nutritional needs and wants
    - Survey + qualitative design
  - Develop an intervention based on these needs
  - Test any ongoing interventions
    - e.g. Pabrinex IV at BRI

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Thank you