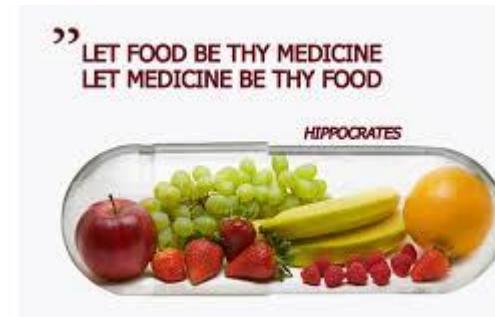


# Pain and Nutrition – Part 2

## Healthy Eating Effects Persistent Pain:

- **Food is medicine** - it can switch on our natural defence systems, or it can turn them off.
- **Microbiome** – largest immune organ (39 trillion micro-organisms) closely linked to our immune system and needs fibre to give our body benefits e.g. serotonin “happy hormone.”
- **Fibre & Wholegrain Carbohydrates** – Fibre (prebiotic) and fermented food (probiotic) feeds good bacteria in the microbiome - 30g fibre intake daily.



# Healthy Eating Effects Persistent Pain: Portion Sizes



# Healthy Eating Recommendations

## Eatwell Guide



# Tips for Nutrition and Pain Management

## Good Quality Protein

- Our nervous systems moderate pain and need **amino acids** which are the building blocks of protein to function.
- Contain healthy fats which **reduce inflammation**.
- Swap processed meats for lean meats, nuts, seeds, tinned fish, peas, beans and lentils.



# Tips for Nutrition and Pain Management

## Good Quality Dairy 2-3 portions a day

- Contains protein to build strength, variety of fats and good source of **vitamins** and **minerals (B12)**
- The main dietary source of B12 for vegetarians.
- **Fermented foods (probiotic – live bacteria)**  
e.g. natural yoghurt, cheese, kefir, kombucha, kimchi, unpasteurised sauerkraut cabbage



# Tips for Nutrition and Pain Management



## Good Quality Fats (Monosaturated, Polyunsaturated, Omega 3 & Omega 6)

- **Omega 3 Fats reduce inflammation, boost the immune system and are good for brain health** e.g., oily fish, flaxseed oil, rapeseed oil, linseed and walnuts.
- **Reduce Saturated Fats** - processed red meats and replace with unsaturated fats – (Monounsaturated / Polyunsaturated fats).
- Limit vegetable oils - e.g. sunflower, soybean oil used in fast food and snacks.



**2-3 portions of oily fish**  
– salmon, trout, herring, mackerel and sardines - **High levels of Omega 3**

# Tips for Nutrition and Pain Management



## Reduce Ultra Processed Foods and Sugar (Pro-Inflammatory)

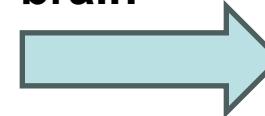
- Sugary drinks, foods high in saturated fats, sugars and salt contain high amounts of energy with very low or **no nutritional content** or **no fibre** (takeaways, ready meals, cereal bars, energy drinks).
- **Increase inflammation** which can worsen pain experiences and lead to a higher risk of other chronic diseases (imbalance in microbiome).



Poor nutrition



Changes  
In gut and  
brain



Sensitisation  
of nervous  
system



Worsening of pain

# Tips for Nutrition and Pain Management

- Positively impact gut health and the microbiome due to their **prebiotic** and **antimicrobial** properties. Turmeric, ginger, peppermint, garlic, fennel, rosemary, cumin, and oregano are among the most beneficial.

## HERBS & SPICES



basil



parsley



mint



cilantro



cayenne pepper



curry powder



cumin



cinnamon

# Tips for Nutrition and Pain Management

## Water Intake 1.5 - 2 litres a day recommended (6-8 glasses)

- **Dehydration** can **increase sensitivity to pain**. Other effects include poor wound healing, constipation, irritability, fatigue, headaches, difficulty concentrating and contributing to poor sleep.
- Water is essential for **circulation** of **nutrients** and **waste elimination** both of which can influence healing and pain.



Tip - drink glass of water when getting up as likely to be dehydrated in the morning

# Tips for Nutrition and Pain Management

## Vitamin D



10-15 mins of sunshine recommended

Found in eggs, oily fish, margarine, some breakfast cereals

## Mediterranean Diet



### PROTEIN, DAIRY & HEALTHY FATS

Wide range of fruit and vegetables, olive oil, proteins, herbs, spices, nuts, seeds, beans and wholegrains

## Breakfast



Avoid skipping breakfast which deprives the body of nutrients, and can lead to fatigue and impaired cognitive function

# Nutrition and Persistent Pain

## Diet is in your control!!!

**Small changes** can make a big difference!!!

There is no need to change everything all at once – focus on 1 thing

**TASK** Please complete sheet “What I ate yesterday” and look at portions of protein, dairy, sugars, fats and fluids.

If there are changes to your diet that you would like to make, please complete food diary – use this to set SMART goals.

**ANY QUESTIONS?**

