

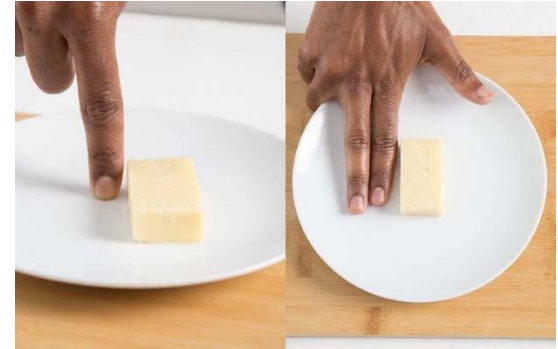
Pain and Nutrition – Part 2

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

Check the label on packaged foods

Each serving (150g) contains

Energy	Fat	Saturates	Sugars	Salt
1046kJ 250kcal	3.0g	1.3g	34g	0.9g
	LOW	LOW	HIGH	MED
13%	4%	7%	38%	15%

of an adult's reference intake

Typical values (as sold) per 100g: 697kJ/ 167kcal

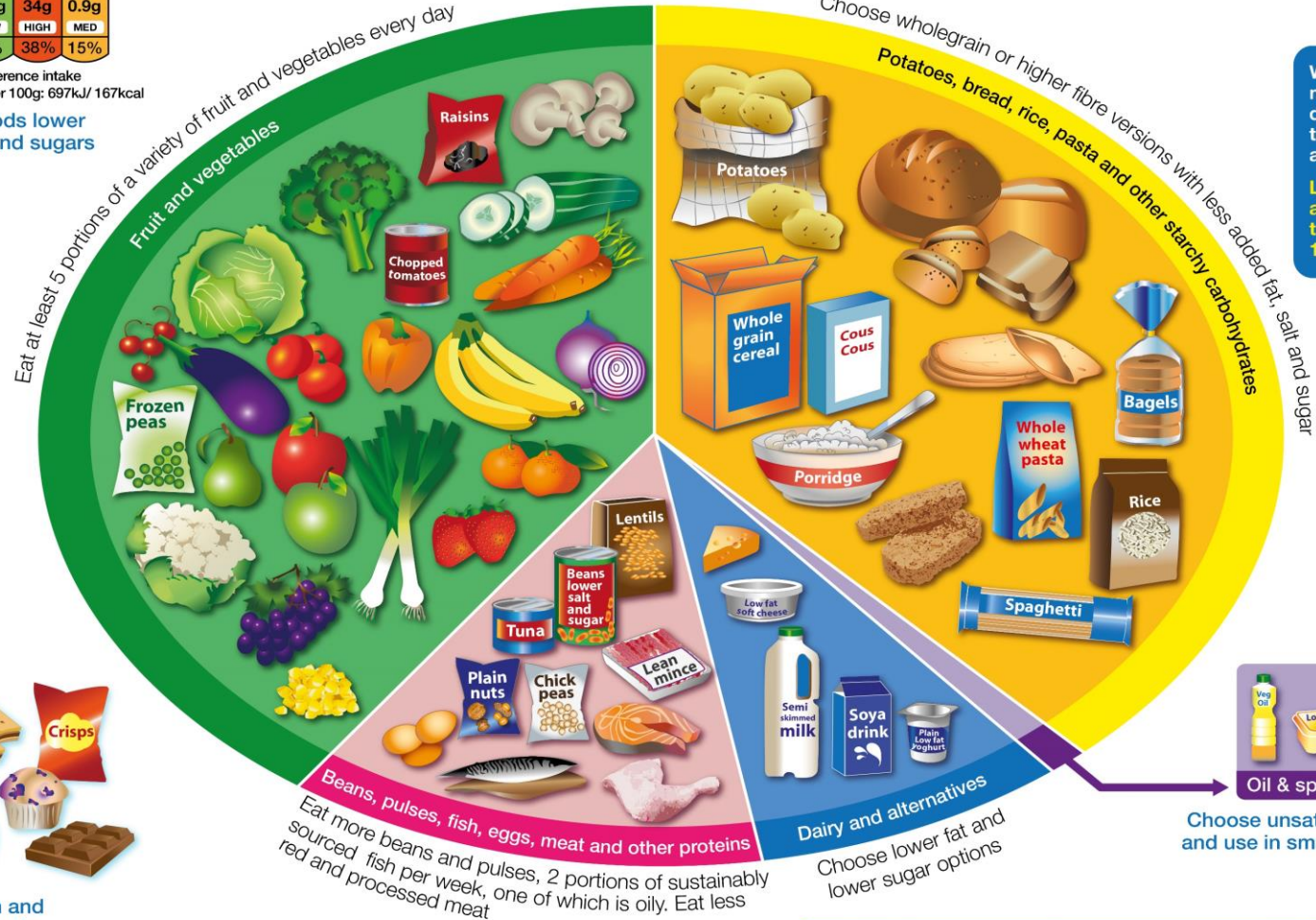
Choose foods lower in fat, salt and sugars

Use the Eatwell Guide to help you get a balance of healthier and more sustainable food. It shows how much of what you eat overall should come from each food group.



Water, lower fat milk, sugar-free drinks including tea and coffee all count.

Limit fruit juice and/or smoothies to a total of 150ml a day.



Per day 2000kcal 2500kcal = ALL FOOD + ALL DRINKS

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)

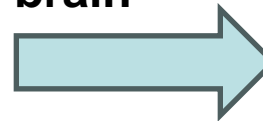
- Sugary drinks, foods high in saturated fats, sugars and salt contain high amounts of energy with very low or **no nutritional content** or **no fibre** (takeaways, ready meals, cereal bars, energy drinks).
- **Increase inflammation** which can worsen pain experiences and lead to a higher risk of other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

