Nutrition & IBD

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Why is nutrition important?

- Increased needs
- Increased losses (e.g. diarrhoea)
- Decreased absorption
- Decreased intake (e.g. diet restriction, nausea)

Why is nutrition important?

- Prevents weight loss and regains lost weight
- Faster gut repair
- Stronger body for surgery or recovery
- Helps you cope with therapy and get full benefits

Active vs. Remission

- Active (exacerbation): inflammation and symptoms
- Remission (no symptoms): inflammation controlled

Active vs. Remission

- Active
  - Reduce fibre temporarily:
    - (low residue → low fibre)
  - May need a nutritional supplement (e.g. Fortisip).
  - Often need to also reduce foods which move through body quickly e.g. lactose, caffeine, peppermint, prunes, kiwifruit.
  - Eat small frequent meals/snacks.
  - Drink at least 6-8 glass fluid/day.
  - Relax, eat slowly and chew.

Active vs. Remission

- Remission
  - As symptoms improve gradually introduce fibre back into diet.
  - Avoid restrictions when well.

Fibre

Acute flare

- Low residue diet e.g.
  - White/refined breads and cereals
  - Skinless potato
  - Diluted/strained juice
  - Tender meat/chicken/fish
  - Egg
  - Fats to tolerance
  - ? Dairy products

As symptoms improve

- Move to low fibre diet
- Progress to modified fibre diet
- Initially introduce soluble fibre

Remission

- No restrictions (unless aggravate symptoms)

To consider….

- ✓ Protein important – meat, chicken, fish, dairy, tofu, legumes, nuts/seeds
- ✓ Omega 3 - oily fish, canola, walnuts, flaxseed
- ✓ Micronutrients can be at risk e.g. iron, calcium, fat soluble vitamins, B12, folate
- ✓ Medications can interact with nutrients
- ✓ ? Probiotics

Elemental/polymetric diet

- Research into effectiveness vs. steriods with active Crohn’s to bring remission.
- Elemental and polymetric diets similar outcome. Polymetric tastes much better!
- These liquid diets show similar effectiveness in treatment as steriods.
- Not as effective as combination drug treatments.
- More appropriate for children.

IBD & IBS

- Often those with IBD have symptoms of irritable bowel syndrome (IBS).
- If IBD is controlled (e.g. inflammation, complications) and still experiencing symptoms, consider dietary options for IBS.

What is IBS?

- A common disorder affecting 1 in 7 adults.
- Characterised by gastrointestinal symptoms in the absence of other gastrointestinal disorders.
- In some with IBD, IBS-like symptoms can occur at the same time.

What is IBS?

- Symptoms:
  - Lower abdo pain
  - Bloating
  - Wind
  - Distention
  - Altered bowels (diarrhoea and/or constipation)
- *Similar to symptoms of IBD*

IBS General Advice

- Portion size.
- Regular meals/snacks.
- Consider if fatty/spicy foods and caffeine are causing symptoms.
- Soluble fibre vs. insoluble fibre.
- Excess air? (eating fast, chewing gum, lose dentures, talking while eating….)
- Adequate:
  - Fibre
  - Fluid
  - Activity

FODMAPs

New area of nutrition; currently being researched

Poorly absorbed, short-chain carbohydrates

Fermentable

Oligo-saccharides

Di-saccharides

Mono-saccharides

And

Polyols

FODMAPs

- Fructose (e.g. apple, pear, honey, juice)
- Fructans (e.g. wheat, rye, onion, asparagus)
- Lactose (milk and milk products)
- Polyols (some artificial sweeteners, fruit & vege)
- Galactans (‘windy’ vegetables, legumes)

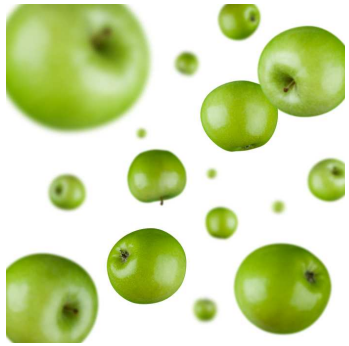
FODMAPs

Fructose Malabsorption (FM)

- Term given for those who incompletely absorb fructose leading to GI symptoms.
- 30-40% of the population malabsorb excess fructose.
- Unsure why, research is underway.

FODMAPs - how they work….

- FODMAPs are small so when malabsorbed, can have an osmotic effect = diarrhoea.
- Sugars reach large intestines, fermented by bacteria = gas.
- Gas in small and/or large intestines = wind, bloating, discomfort, nausea and abdo cramps.
- Gas can slow movement through bowel = constipation.



Diagnosis

- ✓ Hydrogen breath test (lactose/fructose)
- ✓ Dietary removal of FODMAPs and challenge to establish tolerance

Common Sources (examples)

Fructose

- Apple
- Pear and nashi pear
- Mango
- Honey
- Wine
- High fructose corn syrup
- Canned fruit in juice
- Fruit/dried fruit/juice in excess

Fructan

- Wheat (main ingredient)
- Rye (main ingredient)
- Onion
- Spring onion
- Shallots
- Leek
- Artichokes
- Asparagus
- Inulin

Common Sources (examples)

Galactans

- Broccoli
- Brussel sprouts
- Cabbage
- Legumes:
  - Baked beans
  - Red kidney beans
  - Chickpeas
  - Lentils
  - Soy beans (soy milk, tofu)

Polyols

- Apricots
- Plums
- Cherries
- Watermelon
- Avocado
- Mushrooms
- Cauliflower
- Artificial sweeteners:

→ mannitol, sorbitol, xylitol, isomalt

Common Sources (examples)

Lactose

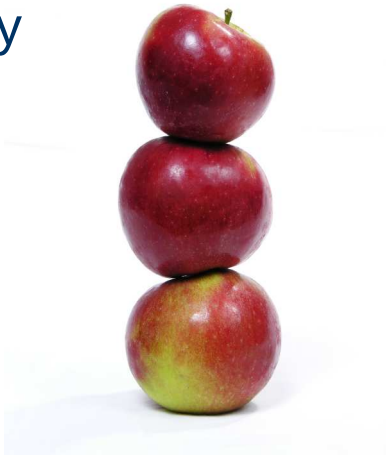
- Cow's milk
- Yoghurt
  - (2Tb/day usually tolerated)
- Soft cheese (ricotta, cottage)
  - 2Tb/day usually tolerated)
- Ice cream
- Condensed milk
- Custard
- Evaporated milk

Tolerated: hard cheese, butter, lactose free milk

Investigation into FODMAPs

Dietitian involvement vital

- 2-6 week low FODMAP diet.
- If improve, challenge to establish tolerance (want minimal avoidance). e.g.
  - Many with FM can tolerance ≥1 serve wheat/day
  - Not all will have lactose intolerance
- Education needed e.g. appropriate substitutes, label reading, eating out.



Dietary Management

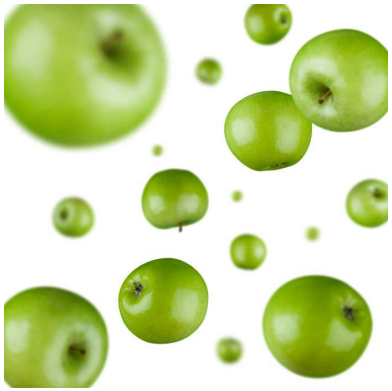
- Need to be careful if underweight as gaining weight very important
- With a dietitian, may be able to trial gradual replacement of high FODMAP with low FODMAP foods

Case Study

- 26yr old female with Crohn’s disease for 7 years.
- On Pentasa. Prednisone on and off over the years.
- Inflammation well controlled (low CRP).
- Symptoms 3-4 days/week.
- Bloating, diarrhoea and gas.

Case Study

- Already on a gluten and dairy free diet.
- Also notice apples and onions caused symptoms.
- Couldn’t understand the pattern of food and symptoms.



Case Study

OUTCOME

- Noticed improvements on low FODMAP diet after 3 days
- Commenced challenges and reacted to all 5
- Was able to include spelt, oats, barley, low lactose dairy (e.g. hard cheese), wheat or rye once a day

Case Study

- Symptoms 80% improved
- Still needed to avoid coffee & watch stress levels

→ Gluten/dairy free diet was unnecessarily restrictive

Summary

- Nutrition very important therefore essential to avoid unnecessary restrictions.
- Change in fibre important when acute vs. remission phases.
- Worth trialling a supervised low FODMAP diet if symptoms persist despite controlled inflammation.

Thank you

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Acknowledgements:

- **Monash University, Melbourne**
- **Dr Sue Shepherd, Melbourne**

References available:

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