


PrimaryCare  
**Network**  
HIGHLAND

A, B, C and  
Ds of  
Digestion

Main line  
587-287-1727




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## Ice Breaker

- Introduce yourselves-what's your name? Tell us a bit about you.
- What are your expectations of today?



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## Group Norms

- Hope to create a safe and supportive environment for you to share
- Privacy
- Class duration approx. 2 hours
- Feel free to stand up or move around if needed
- If you need to leave during the class, please let us know

**Virtual Norms:**

- By participating in remote learning today, you agree that you may not save, record, share, or post this session or any photos from this session.
- Participants agree to participate in these virtual sessions in a quiet, private area free of distraction.



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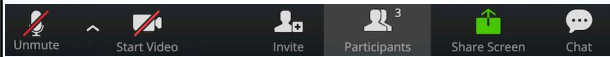
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## Zoom Basics (Virtual)

- You may have your video on or off.
- Please mute when your not speaking.
- Please feel free to ask questions either by unmuting or using the chat box.
- Any questions?



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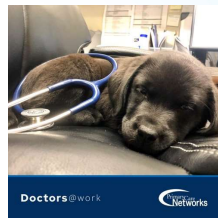
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## What is the Highland Primary Care Network?

- A group of family doctors who work together with the Highland Health Team (Nurses, Social Workers, Dietitian, Kinesiologist, Pharmacist & Provisional Psychologist)
- **Covers area from Airdrie to Didsbury. Each doctor's office or medical home has a Nurse and Social Worker attached.**



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## What is the Health Improvement Program?

- Guides individuals who are ready to take their health in their own hands and improve their quality of life.
- A variety of group classes you can choose what you would like to take when
- Flexible schedules
- Option of 1:1 visits in the medical home (phone/virtual)



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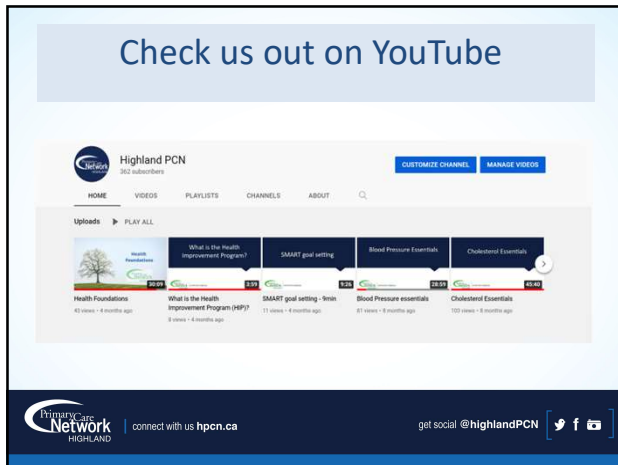
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## Check us out on YouTube




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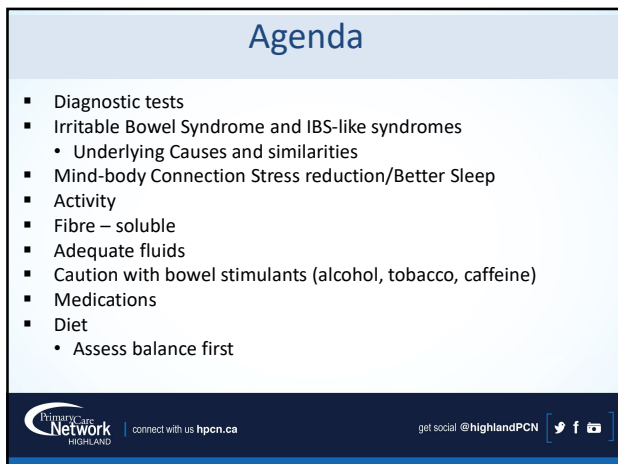
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## Agenda

- Diagnostic tests
- Irritable Bowel Syndrome and IBS-like syndromes
  - Underlying Causes and similarities
- Mind-body Connection Stress reduction/Better Sleep
- Activity
- Fibre – soluble
- Adequate fluids
- Caution with bowel stimulants (alcohol, tobacco, caffeine)
- Medications
- Diet
  - Assess balance first




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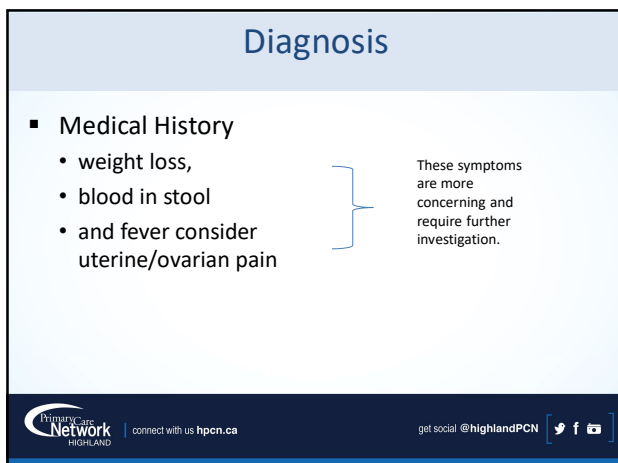
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## Diagnosis

- Medical History
  - weight loss,
  - blood in stool
  - and fever consider uterine/ovarian pain



These symptoms are more concerning and require further investigation.




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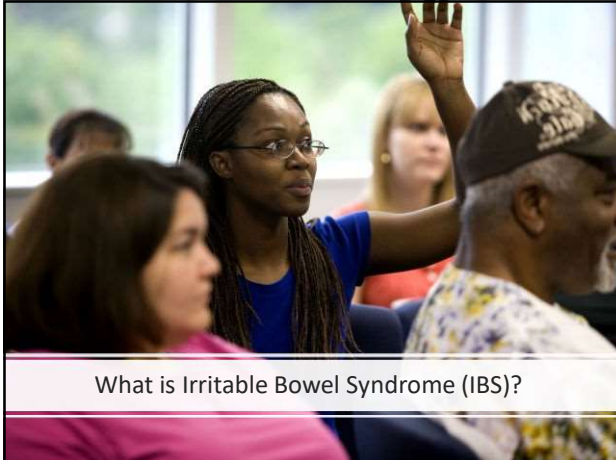
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### What is IBS?

#### Irritable Bowel Syndrome Diagnosis

- Affects 13-20% of Canadians
- Greater in women
- Ages 30-50 first seeking medical help
- World wide health costs \$200 billion dollars
- Characterized by ABCD's
  - Abdominal Pain
  - Bloating
  - Constipation or Diarrhea
- If pain or discomfort sometimes gets a little better after a bowel movement, and other cause has been ruled out this indicates IBS.


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### Diagnosis

- Physical exam
- Lab test to rule out other diseases with similar symptoms, for example:
  - Lactose Intolerance
  - Celiac screen
  - Ulcers
  - Inflammation: Crohn's or Inflammatory Bowel Disease
  - Reproductive or lower GI Cancer


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## Diagnosis: Is it IBS?

1. Have you had abdominal pain at least one day a week during the past 3 months?
2. If yes to above, have you experienced at least two of the following:
  - Pain associated with bowel movements?
  - Pain associated with a change in the frequency of bowel movements?
  - Pain sometimes associated with constipation or diarrhea?



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## The good news... long term prognosis

- IBS does not predispose to risk of any diseases including Cancer.
- \*\*If something should change in your symptoms (eg. bloody diarrhea or increased pain patients are encouraged to see their doctor)**



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## Not so good news...

- **At this time** there is no known cure for IBS so efforts are focused on managing symptoms
- There is a lot of promising research being done
- Not everyone with IBS will become symptom free



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## IBS

- Symptoms and presentation varies dramatically from person to person.



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## IBS or IBS like symptoms

Underlying similarities:

- irregular bowel peristalsis
- increased sensitivity of the bowel to pain
- “gas tank” theory of IBS



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## Theorized causes

- Precipitating factor or event – gut infection never the same after (between 6-17% of folks with IBS)
- Sensitivities to hormones (serotonin; cyclical for women)
- Environmental (mood, lifestyle, stress, sleep)



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### Theorized causes

- Bile acid malabsorption
- Abnormalities in GI secretions
- Abnormalities in GI contractions or peristalsis
- Excess alcohol and/or caffeine consumption



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### Theorized causes

- Environmental (mood, lifestyle, stress, sleep)
- SIBO or Small Intestinal Bowel Overgrowth (could be up to 50% but needs more research)
- Relation to ?low stomach acid; lots of unknowns here
- Imbalance in the bacteria of the gut or dysbiosis (antibiotics/probiotics)



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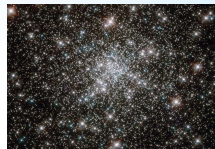
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### Microbiota: You are an ecosystem

- 100 trillion cells
- 2-3 pounds of bacteria
- 70% of the cells of immune system reside in the gut



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## Video



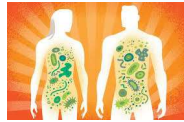
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## Factors that influence the microbiome...

- Birthing,
- Dietary patterns,
- Frequency and dosing of medication- especially antibiotics
- Genetics, physiology
- Environment and
- Hygiene



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## Imbalanced microbiome... holy cr\*p!

- Early research reveals unbalanced microbiome links to:
  - Allergies
  - Autoimmune
  - Certain cancers
  - GERD, IBD, IBS and functional bowel disorders,
  - Mental health disorders such as depression and schizophrenia and
  - Metabolic syndrome



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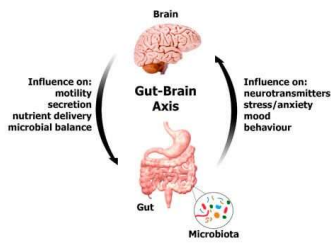
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## Enteric Nervous System- Brain in Your Gut

- **Brain-gut axis** brain and your gut in constant communication
- This second brain controls peristalsis and enzyme secretion that fuels the digestive process. It can also influence the way we feel.



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## What can help?

- Stress reduction/Better Sleep
- Active lifestyle
- Fibre – soluble
- Adequate fluids
- Diet
  - Assess balance first
  - Fructose, Lactose and Sugar Alcohols... oh my



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## Stress Reduction and Sleep

## Mind-body Connection

- Breathing can change how you digest and assimilate food (deep breathing or 4-7-8 breathing)
- Mindfulness, stress reduction strategies think parasympathetic rest and digest
- Tai chi, yoga, meditation and hypnotherapy have been shown to be very helpful in reducing or preventing IBS symptoms



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## Psychological therapies

Psychological stress and disorders affect the gut by releasing corticotrophin-releasing hormone, influence mood, motility, permeability and sensitivity

Moderate evidence:

- CBT
- Psychotherapy
- Hypnotherapy
- Relaxation therapy

Focus on normalizing the enhanced sensitivity.



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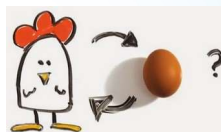
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## Sleep

- Sleep issues are more common with IBS
- Poor sleep -> hormonal changes; change in biome -> hypersensitive gut -> intestinal symptoms -> poor sleep



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### Activity

- Active patients show improvement in overall IBS score and improved QOL scores.
- Inactive patients report progressive worsening of symptoms over time.
- Mechanisms unknown (? stress reduction, improved muscle contraction, passage of gas)



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### Physio

- Beneficial if there is any pelvic floor dysfunction
- Relaxes the pelvic floor
- Gently stimulate propulsive forces in the gut



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## Fluids

- 9-12 cups of fluid per day for digestive issues is recommended



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## Fibre - Prebiotic

- Soluble fibre – makes the gut happy
  - Oat bran, oatmeal, ground flaxseed, chia seed, barley, applesauce, pears, sweet potatoes and psyllium
- Psyllium 1-2 tsp per day
- Flax Seed 1-3tsp up to a max 4 Tbsp for IBS
- PHGG Guar Gum 5g/day improve pain



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## Insoluble fibre

- Helps bulk stool, can make IBS symptoms worse in some people
  - Wheat bran, corn bran skins, and seeds of fruits and vegetables
  - Legumes and lentils (both soluble and insoluble)
  - Nuts and seeds (both soluble and insoluble)
  - Inulin (foods with added fibre and benefibre)



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## Caution with bowel stimulants

- Nicotine (reduction can improve symptoms)
- Alcohol (may benefit from limiting or abstaining)
- Caffeine (no more than 300mg per day  
2-3 small cups; less is better)



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## Probiotic and Medicines

## A word on probiotics

- Try probiotic yogurt, fermented foods (kefir, refrigerated sauerkraut, kimchi, kombucha )
- Fermented dairy products that contain Bifidobacterium animalis, Streptococcus thermophilus and Lactobacillus bulgarius have also been shown to improve symptoms of IBS-constipation compared to placebo.



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## Probiotics – showing promise

- Bifidobacterium infantis 35624 (Align) note contains lactose
- *Lactobacillus acidophilus* CL1285®, *Lactobacillus casei* LBC80 R® and *Lactobacillus rhamnosus* CLR2® (Bio-K+ IBS Control)
- *L. acidophilus* CUL-60, *L. acidophilus* CUL-21, *B. animalis* subsp. *lactis* CUL-34, *B. bifidum* CUL-20 (HMF Genstra)
- Visbiome® \$\$\$ approx \$114 for 1 month
- *Lactobacillus plantarum* 299V (TuZen®) \$\$\$
- *Saccharomyces boulardii* (Florastor®)



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## Prebiotic

support the body's  
natural defenses



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## Choosing a probiotic

- See <http://www.probioticchart.ca/>

**AEProBio** Clinical Guide to Probiotic Products Available in Canada  
A Practical, Evidence-Based, and Clinical Decision-Making Tool (2022 Edition)

Introduction | Adult Health | Women's Health | Pediatric Health | Functional Foods | References | About

Find the appropriate probiotic:

Adult Health | Women's Health | Pediatric Health | Functional Foods

Select your option from the top menu

Find Probiotic that applies to you in:

Adult Health | Women's Health

**WHAT is this:**  
A Practice Tool to Assist with Clinical Decision Making for Appropriate Probiotic Therapy for Your Patients

**WHO is the intended user:**  
This Clinical Guide is designed to translate scientific evidence available for probiotic products to practical, clinically relevant information. It is intended to be used as a clinical decision-making tool, enabling clinicians to easily select the appropriate product, dose, and formulation for a specific indication.

**WHY is this needed:**  
Currently, the body of evidence for probiotic interventions is growing along with popular demand for these products. There is evidence to support the use of probiotic products for a variety of indications beyond gut health, however, applications and results are strain-specific. Due to frequent changes in commercial availability of probiotic strains, new published evidence, and growing research, an annual review and updates of this Clinical Guide have been conducted since 2008. A general lack of adverse effects attributable to probiotics supports the widespread use of these products but an ongoing investigation is recommended.

**HOW is this tool reviewed:**  
A systematic literature review using pre-defined inclusion criteria was undertaken to identify studies of defined clinical outcomes for specific probiotic strains. Commercially available products containing said strains were identified, and the levels of evidence were used to rate the strength of expected benefit. This information was compiled into a chart format. Data were assessed by a group of independent assessors.

## Medications – Abdominal Pain

- Antispasmodics – reduce GI contractions (eg. Bentylol, Dicetel, Buscopan, Modulon)
  - May use before meals for post-meal symptoms or as needed
  - Side effects: constipation, dry mouth, fatigue



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## Medications

- Lifestyle modifications provide more benefits than medications!
- Investigate possible drug-induced causes (eg. Some medications can cause diarrhea or constipation. Have your pharmacist do a medicine review if you have a concerns. Tell your pharmacist about any natural health products you are using.)



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## Medications

- Drug therapy may be started when IBS symptoms start to affect quality of life
- Medications treat symptoms only
- There is no single medication to treat all IBS symptoms
  - Target the most bothersome symptoms



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## Medications - Bloating

- Alleviate constipation
- Caution with fibre supplements – may worsen bloating, especially insoluble fibres
- Medications generally not useful for bloating



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## Medications - Constipation

- Increase dietary fibre intake, activity, fluid intake
- Soluble fibre supplement (eg. Metamucil)
  - Insoluble fibre (eg. Wheat bran) not very beneficial, may worsen pain/bloating
- Osmotic laxatives – if fibre supplement fails (eg. Lax-A-Day, lactulose)



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## Medications - Constipation

- Selective Serotonin Reuptake Inhibitor (SSRI) (Paxil, Prozac, Celexa)
  - May benefit for abdominal pain and constipation symptoms in IBS
- Constella
  - Increase GI movement and fluids
  - Side effects: diarrhea, dehydration



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## Medications - Diarrhea

- Imodium (loperamide) – reduce GI motility
  - Drug of choice for painless diarrhea in IBS
- Tricyclic Antidepressants (TCAs) (amitriptyline, nortriptyline)
  - May benefit for abdominal pain and diarrhea symptoms in IBS, or people who also have mental health diagnosis



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## Complimentary medicines

- Peppermint Oil 450 mg enterically coated capsule three times daily one hour before meals reduce abdominal pain, bloating and distention, diarrhea, constipation, feelings of fullness, urgency, gas and mucous production (not for GERD) anti-spasmodic
- Iberogast (STW 5) global symptom improvement



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## Medical Nutrition Therapy

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## Diet Interventions

- Food does not cause IBS but dietary changes may be used in the management
- High percentage 62-92% report modifying diet to manage symptoms
- Evidence for dietary changes (including but not limited to FODMAPS) to manage symptoms in IBS is limited to small number of RCT's



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## General Diet Interventions

- Strive for:
  - Regular meals at regular times – smaller meals more often
  - Balance (independent indicator of diet quality - fruit and vegetable consumption)
  - Fibre
  - Fluids



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## General Diet Interventions

- Be cautious and watch for symptoms:
  - Fructose (high sugar foods juice, honey, pop, candy, high fructose corn syrup, apples, grapes mangoes)
  - Sugar Alcohols (sugar substitutes diabetic candy and products, gum)
  - Lactose fluid milk, yogurt and dairy should be less of a problem



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## Most commonly reported triggers:

- Alcohol, caffeine, fatty foods, fructose, wheat/gluten, meat, dairy, and spices.



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## Health journal

- Complete at least 7 days of a health journal.
- Include information on sleep and stress.
- Take note of foods causing an increase in symptoms within 1-3 days of consumption.



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## Elimination Diets (including FODMAPS) – Medical Nutrition Therapy

- Should be delivered by Dietitian or specifically trained health care professional.
- Individualized** based on symptoms
- Need to be nutritionally balanced so as not to exacerbate symptoms
- Short term 5-8 weeks maximum with detailed reintroduction plan (takes time and support)



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## A word on FODMAPS



- Highly experimental quality of evidence is much higher for lifestyle;
- In terms of diet - soluble fibre and water intake much better evidence
- High quality evidence lacking
- Important to have skilled health care provider involvement
- Complexity is high and adherence is quite low



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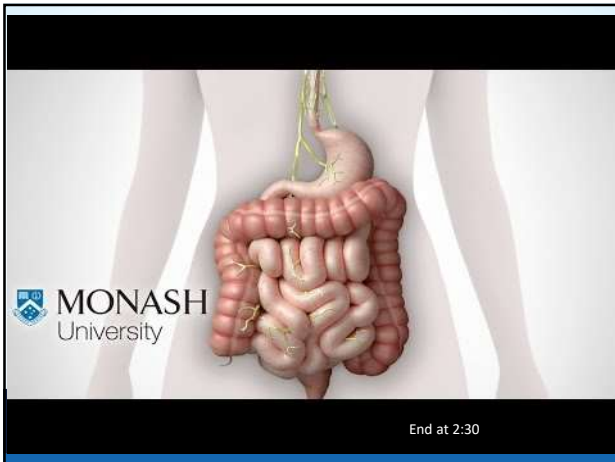
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## Summary

- Stress reduction/Better Sleep
- Activity
- Fibre – soluble
- Adequate fluids
- Caution with bowel stimulants (alcohol, tobacco, caffeine)
- Medications
- Diet
  - Assess balance first



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