

### IBS-C



- Individuals experience a range of symptoms in addition to constipation (straining and hard stools) but also report abdominal pain and bloating as particularly troubling.

### Carminatives



- Estimated average prevalence of bloating is 64% in IBS.
- No approved treatments that specifically address treatment of bloating and/or gas in IBS.
- Carminatives are spices and herbs that have traditionally been used for bloating and gas.

#### Partial List of Carminatives and Secondary Benefits

- |  |   |
|--|---|
| • Anise<br>– URI, congestion, cough        | • Fennel<br>– URI, congestion, cough    |
| • Basil<br>– Anti-inflammatory             | • Ginger<br>– Prokinetic, antiemetic    |
| • Caraway<br>– Slows GI transit time       | • Lemon balm<br>– Anxiolytic            |
| • Catmint<br>– Nervine relaxant            | • Peppermint<br>– Slows GI transit time |
| • Cinnamon<br>– Reduces insulin resistance | • Sage<br>– Hot flashes, sore throats   |
| • Dill<br>– Lactagogue                     | • Thyme<br>– Cough, colds, congestion   |

#### Partial List of Carminatives and Secondary Benefits

##### Anise

- URI
- Congestion
- Cough



#### Partial List of Carminatives and Secondary Benefits

##### Basil

- Anti-inflammatory



#### Partial List of Carminatives and Secondary Benefits

##### Caraway

- Slows GI transit time



**Partial List of Carminatives and Secondary Benefits**

Catmint

- Nervine relaxant



**Partial List of Carminatives and Secondary Benefits**

Cinnamon

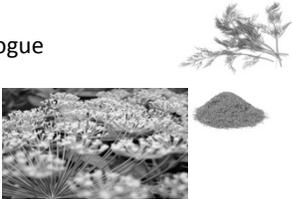
- Reduces insulin resistance



**Partial List of Carminatives and Secondary Benefits**

Dill

- Lactagogue



**Partial List of Carminatives and Secondary Benefits**

Fennel

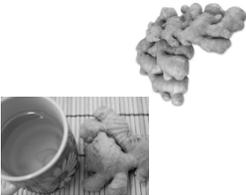
- URI
- Congestion
- Cough



**Partial List of Carminatives and Secondary Benefits**

Ginger

- Prokinetic
- Antiemetic



**Partial List of Carminatives and Secondary Benefits**

Lemon balm

- Anxiolytic



### Partial List of Carminatives and Secondary Benefits

#### Peppermint

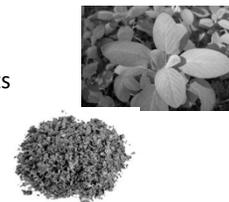
- Slows GI transit time



### Partial List of Carminatives and Secondary Benefits

#### Sage

- Hot flashes
- Sore throats



### Partial List of Carminatives and Secondary Benefits

#### Thyme

- Cough
- Colds
- Congestion



### Ginger (*Zingiber officinale*)



- Most widely cultivated spice
- Anti-inflammatory
- Warming agent
- For coughs, congestion, colds
  - In vitro activity against a variety of rhinovirus.



### Gastroparesis

- Ginger may be of benefit in patients with gastroparesis, which can present with signs and symptoms such as heartburn, gastroesophageal reflux, early satiety, abdominal bloating, and nausea and/or vomiting several hours after eating a meal.



### Ginger (*Zingiber officinale*)

- Compounds in ginger are 5-HT<sub>3</sub> antagonists; ginger is a prokinetic and antiemetic agent.
- A study of 24 healthy human volunteers found that 1200 mg dried ginger accelerated gastric emptying and stimulated antral contractions greater than placebo.

Wu KL, et al. Eur J Gastroenterol Hepatol. 2008

## Ginger for Morning Sickness



- Six RCT show ginger (1.0-1.5 g/d) is safe and effective for reducing NVP.
- Two additional studies found ginger (1000 mg/d and 650 mg TID) superior to vitamin B6 (40 mg/d and 25 mg TID) for nausea and equal for vomiting episodes.
- One trial found dimenhydrinate (50 mg BID) superior to ginger (500 mg BID) for vomiting episodes first 48 hours, no difference days 3-7.

Borrelli, et al. *Obstet Gynecol* 2005;105(4):849-56  
 Ensiyeh, et al. *Midwifery* 2008 Feb 11  
 Pongrojpraw D et al. *J Med Assoc Thai.* 2007 ;90:1703-9  
 Chittumma P ,et al *J Med Assoc Thai* 2007;90(1):15-20,

## Chemotherapy Induced Nausea

- NCI funded study found if patients take 0.5 – 1.0 grams ginger three days before and after chemotherapy along with prescription anti-emetics, reduced nausea by additional 40%.
- Studies that did not give ginger before the chemotherapy was administered did not see the same results.

Ryan JL. Ginger for chemotherapy-related nausea in cancer patients: A randomized, double-blind, placebo-controlled clinical trial of 644 cancer patients. 2009 ASCO Annual Meeting May 14. Abstract #9511.  
 Zick SM, et al. Phase II trial of encapsulated ginger as a treatment for chemotherapy-induced nausea and vomiting. *Support Care Cancer.* 2009 May;17(5):563-72.

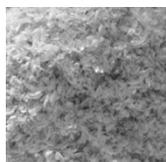
This is right product for morning sickness

Supplement Facts		
Serving size 1 Capsule		
	Amount Per Capsule	% Daily Value
Freeze Dried Ginger Root(Zingiber officinale)	500 mg	*

\* Daily Value not established.

## Concentrated Extract

Supplement Facts		
Serving Size 1 Softgel		
Servings Per Container 60		
	One softgel contains	% DV
Ginger (rhizome) 94 mg supercritical extract (30% pungent compounds - 16.2 mg, 8% zingiberene - 4.3 mg) and 96 mg ethanolic extract (3% pungent compounds - 2.8 mg)	150 mg	*
Rosemary (leaf) supercritical extract (23% total phenolic antioxidants - 1.15 mg)	5 mg	*



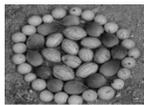
## Ispaghula Husk *Plantago ovata*; *P. psyllium*

- The bulking agent with best evidence is ispaghula husk - efficacious in the treatment of constipation symptoms, such as straining and formed stools.
- Common side effects of bulking agents include bloating, intestinal gas and additional abdominal pain.

Quarтеро AQ, et al. *Cochrane Database Syst. Rev.* CD003460 (2005).

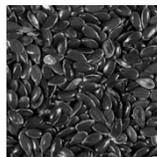
## Psyllium

- Psyllium is mainly used as a dietary fiber, which is not absorbed by the small intestine.
- Mechanical action of psyllium mucilage is to absorb excess water and stimulate normal bowel elimination.
- Although primary use is as laxative, it is a true dietary fiber and can help reduce symptoms of both constipation and mild diarrhea.



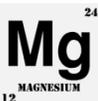
### Triphala

- Common Ayurvedic remedy for constipation is Triphala, made from the dried fruits of three fruits:
  - *Terminalia chebula*
  - *Terminalia bellerica*
  - *Phyllanthus embelica*
- I use for IBS – constipation or diarrhea
- Children and elders with hard, dry stools.
- 1-2 grams per day for 5-7 days, increase to 3-4 grams per day if needed.



### Flax Seed (*Linum usitatissimum*)

- Rich in omega-3 fatty acids
- Mucilaginous
- 1-2 Tbsp flaxseeds steeped in 2 cups water for 5-10 minutes. Strain. Drink throughout day.



### Magnesium

- Magnesium is often my choice in IBS-C because:
  - Many people have low level deficiency
  - Useful and effective stool softener
  - It can help with sleep if taken in evening
  - Reduces insulin resistance
  - Helps maintain healthy blood pressure and stabilizes heart rhythm
  - Can eliminate menstrual cramping
  - Can help reduce frequency of migraines
- Dose is typically 300-600 mg per day.
- Aspartate, bisglycinate, chelate - preferred