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CULINARY HERBS AND SPICES



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Using Culinary Herbs and Spices

- Flavour and texture are a huge issue when it comes to introducing new foods to a client
- Herb and spices can help make a new food seem like an old one
- The strong aromatic flavour of herbs and spices stimulates the palette and the digestive juices
- Each culinary herb plays a role in the GI tract
- Every herb and spice has several phytonutrients giving each numerous benefits
- This can include benefits to the GI tract



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Antimicrobials and Good Bacteria

- There is no evidence that natural antimicrobials can interfere with good bacteria
- One study found that good bacteria builds a tolerance to oil of oregano and that superbugs do not
- Often studies are in vitro so any negative effects cannot be translated to the in vivo
- Some research indicates that dilution helps good bacteria while still maintaining the ability to inhibit bad bacteria
- Consuming herbs in food everyday is going to aid inhibition of bad bacteria and not affect good bacteria

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Action of Herbs on Bacteria

- Bad bacteria can form biofilms which are polysaccharides and protein substances that become mineralized with calcium and other minerals.
- Built on body surfaces including the gut lining, and can protect bacteria from the immune system, antibiotics, and other bacterial species (such as good bacteria).
- Enzymes such as hemicellulase, cellulase, glucoamylase, chitosanase, and beta-glucanase can digest (in supplement form)
- Extracts of various berries were effective as quorum sensing inhibitors (QSIs) (involved in biofilm signaling pathway) as were oregano, basil, rosemary and thyme, turmeric, ginger and kale

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Two categories

- Some herbs and spices are antimicrobial
- Some aid digestion and other aspects of GI tract function
- Some do both
- All have other health benefits



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Forms of Herbs and Spices

- Supplements (often not whole herbs and spices - standardized extracts) – many of them are being studied
- Tinctures – herbs and spices soaked in alcohol – not for cooking
- Dried herbs and fresh herbs – use twice as much fresh as dried. Dried can lose flavour over time
- Essential oils – the most potent form of herb or spice – food grade can be used in cooking and baking



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Pepper

- Stimulates the taste buds which signals the stomach to secrete HCl
- Helps prevent the formation of gas (carminative)
- Promotes sweating and urination
- Is an antioxidant and antibacterial
- It is also an anti-inflammatory
- # 1 Benefit: Aids the absorption of other nutrients



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Oregano

- Antimicrobial and anti-inflammatory – may protect against cancer and may help with diabetes type II
- Helps with IBS and diarrhea, soothes muscle cramps and stomach pain, ease gas and bloating, and helps stimulate gastric juices
- Inhibits bad bacteria, yeast and fungus while not harming the good bacteria
- Antioxidant



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Dill and Parsley

- Dill stimulates gastric juices, bile production and aids peristalsis
- Has anti-microbial properties including being an anti-fungal
- Can act as a diuretic and flush out toxins and has anti-cancer and antioxidant properties
- Parsley aids the kidneys and help flush toxins and prevent kidney stones – also improves elimination through colon
- Relieve gas, bloating and has anti-inflammatory properties and improves the digestion of fat and protein



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Thyme

- Supports the good bacteria and inhibits bad bacteria
- Helps with smooth muscles contractions, aids gas and bloating
- It is also antimicrobial, antispasmodic and an antioxidant
- Helps to prevent production of excess bile, mucous and gastric juices
- Also relieves pain in the intestinal tract
- Has anti-cancer properties



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Basil

- Antibacterial and anti-inflammatory - includes helping with IBS)
- Can aid cholesterol and improve circulation
- Is helpful for acne and skin issues
- May help stabilize blood sugar
- Helps with nausea and cramping
- Aids digestion



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Cinnamon and Fennel

- Cinnamon helps with a sluggish digestive system and aids, gas, bloating and flatulence, increases appetite, soothes muscles and aids contractions
- Is anti-microbial including anti-fungal (inhibits h pylori)
- Fennel has helped with colitis and IBS
- Chewing fennel seeds is a traditional method to help secrete gastric and digestive juices and it gets rid of bad breath
- Has several anti-inflammatory phytonutrients that can ease stomach pain and help babies with colic
- Anise is not fennel but has similar properties



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Ginger, Cloves and Nutmeg

- Ginger prevents nausea and indigestion
- It also soothes inflammation in the GI tract and studies show it may be helpful for colorectal cancer
- A combination of honey and ginger inhibits superbugs and it is also anti-fungal
- Cloves, known as "thieves" is anti-microbial and is used for Candidiasis and parasites
- Relieves, gas, bloating and flatulence
- Aids the smooth muscle functioning
- Nutmeg is similar to ginger and cloves for the GI Tract



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Coriander and Cilantro

- Coriander is from the seed of the cilantro plant and cilantro are the leaves of the plant
- One study found that people suffering from IBS saw significant improvement taking coriander for eight weeks versus a placebo
- It acts like an antispasmodic drug and relaxes by gut muscles
- Cilantro is anti-bacterial and aids nausea, gas, bloating digestion and heartburn



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Cumin and Cayenne

- Cumin contains cuminaldehyde which activates the salivary glands, helps break down food and prepare it for absorption
- Also contains thymol prevents food from fermenting in the digestive tract
- Cumin also stimulates the release of bile and digestive enzymes and helps with gas, bloating, indigestion, nausea, diarrhea and flatulence
- Cayenne helps with muscle contractions in the GI tract and helps promote the secretion of gastric acids
- Stimulates mucosal blood flow and mucus secretions which helps heal ulcers and the gut lining



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Turmeric

- It is a powerful anti-inflammatory and can aid digestion
- It inhibits gastric acid and helps with ulcers and reflux
- It has strong astringent properties (shrinks tissue) and can help heal the gut lining and prevent leaky gut
- One study found that it helps participants with IBS symptoms
- Improves liver function and bile stimulation
- Soothes muscles and helps with cramping
- Decreases congestion and inflammation of the mucous membranes



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Peppermint

- Mint contains menthol which helps fight the common cold and can help with allergies by acting as a decongestant
- Can aid with digestive upset by increasing bile flow which can speed up digestion
- Also is helpful for IBS discomfort
- Best herb for gas and gas pain.
- Aids tooth and oral health
- Spearmint also helpful but not as effective



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Marjoram

- Anti-bacterial, anti fungal, and antiviral
- Increases digestive enzymes and saliva
- Calms the stomach and improves appetite
- Helps with stomach and intestinal cramps
- Relieves diarrhea and constipation
- Anti-inflammatory
- Reduces stress, anxiety and insomnia
- Marjoram tea: 1 or two ground tsp in 8 oz (225 ml) boiling water and steep for 15 minutes. Drink 2-4 cups over two hours to stimulate digestion
- Add to soups, salads, sauces and meat dishes



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Tarragon

- Stimulates appetite
- Helps with gas and flatulence
- Helps stimulate bile in the liver
- Helps with toothaches
- High in phytonutrients and antioxidants
- Supports heart health and female reproductive function
- Helps calm stress and anxiety
- Works well in any dish, add fresh to salads, or use in meat, soups and vegetables dishes.



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Sage

- Help with mild gastrointestinal issues and can soothe the gut lining
- It is antifungal and antibacterial and can help with intestinal infections and may help with diarrhea
- Helpful for throat infections, and oral health
- Beneficial for the liver and helps with nausea caused by excess bile
- Rosmarinic acid (also found in rosemary) is an antioxidant and anti-inflammatory



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Rosemary

- Relaxes the smooth muscle of the GI tract
- Stimulates appetite, bile and gastric juices
- Helps gas, bloating and constipation
- Reduces colon tissue lesions for colitis and has analgesic and anti-inflammatory properties
- It is also an antimicrobial and an antioxidant
- It is also a high source of cysteine which can convert to glutathione – which protect the gut lining (as is oregano and turmeric)



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Using Herbs

- With all herbs and spices – if you or clients have allergies, be sure to check to make sure they are not in the same family – chamomile and ragweed belong to the same family
- Also sniff the herb first – although there are exceptions – you probably won't like the taste if you don't like the smell
- Don't sniff too much – it will make you sneeze
- If cooking is not your or client's thing, then all these herbs and spices can be made into a tea – one teaspoon herb to one cup water
- Tea clients to add an herbal tea after a meal



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Chamomile and Green Tea

- Chamomile: Has anti-inflammatory and anti-cancer properties
- Aids colic, diarrhea and eczema and helps with gas and bloating
- Relaxes muscles that move food through the intestinal system, lowers gastric acid, and helps with ulcers and hemorrhoids
- Green tea: An antioxidant and anti-inflammatory with anticancer properties
- Tea catechins can help you excrete more calories
- Helpful with IBS



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Other Teas

- Many other teas have digestive and intestinal benefits
- Gentian root: Stimulates the secretion of digestive juices, and helps gall bladder function
- Dandelion root stimulates bile and improves intestinal excretion and the leaves help with reducing bloat
- Lemon Verbena helps with gas, stomach and intestinal cramps
- Milk thistle supports liver health which is connected to gut health



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Steps

- Always start small when adding to your recipes and work up
- Start experimenting and combining – having more than one per dish increases the benefits to the GI Tract and digestion
- Understand that the smell and taste mean something – to you or to the client – what herbs you or the client likes may have the most benefit – in other words we may naturally respond to what we need



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Final Thoughts

- Lack of herbs and spices in the diet is new
- Chemicals and artificial flavours have replaced herbs and spices in the diet
- It is not fully understood how the sense of smell, herbs and spices increase signalling in the body and improving function but this is a focus of ongoing research
- Using them will increase client compliance with new foods and help aid healing


