

THE MANY JOYS OF GINGER

&

The Culinary Adventures of
Ginger Rhizome

BOTANY: GIVE ME A HAND



BOTANY: GIVE ME A HAND

- *Zingiber officinale* Roscoe
- Family: **Zingiberaceae** – Ginger Family
- About 50 genera and about 1600 species worldwide in the ginger family.



- Name *Zingiber* is derived from ancient Sanskrit:
 - *Srngaveram*
 - *Srngam* – “horn” and *Vera* – “root”
- Middle Indic – *Singabera*
- Greek – *Zingiberis*
- Latin - *Zingiberi*

BOTANY: GIVE ME A HAND

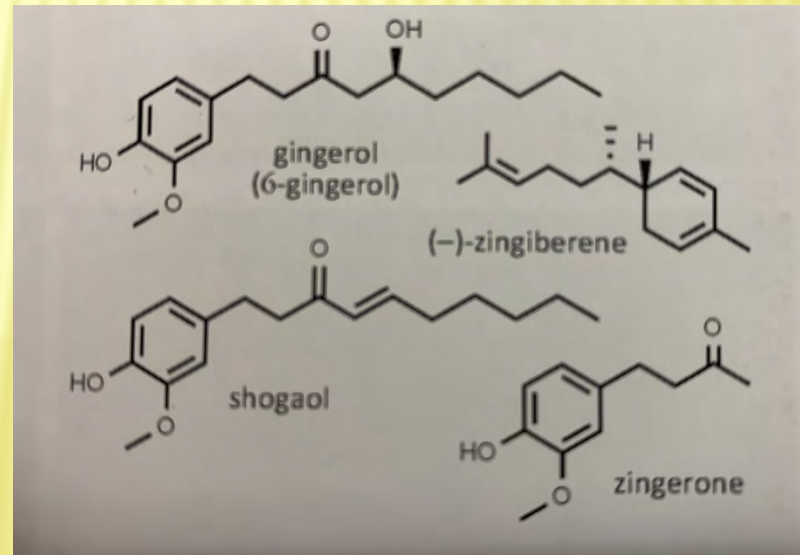
- Native to Southeast Asia (east India / southwest China)
- Earliest example of food as medicine
 - Most researched spice
 - No interactions with other drugs



- Perennial herb (2-3ft) with large leaves arising from creeping rhizomes. Yellow flowers in cone-like clusters. Rarely flowers. Rhizomes are pale brown in color and knotty (shaped like a “hand”).

BOTANY: THE CHEMISTRY

- Zingiberene – flavor
- 6-Gingerol – pungency
- Zingerone – gingerol converted when heated
 - Less pungent, more sweet and spicy
- Shogaol – gingerol converted when dried
 - More pungent



HISTORY

- Long cultivated in southeast Asia and China for medicinal and culinary purposes.
- Traded via spice route to Middle East and Europe – mainly in dried form.



HISTORY

- Arab traders misled rival traders as to the origin of ginger – said it was from “Troglodytical Arabia”



HISTORY



- Romans prized ginger and taxed it as a precious commodity.
- They introduced it into **Britain**, where it became so popular in later centuries that it was kept on the table of the wealthy alongside salt and pepper.
- Commonly sprinkled on beer – “ginger ale”
- 14th century – 1lb ginger = cost of one sheep

HISTORY

- **Spanish** – took it to New World where it thrived in tropical places such as Jamaica.
- **Portuguese** – grew it in Brazil and West Africa and it has become a staple in both regions.
- **Germany** – popular in holiday baking – gingerbread house.
- **Essential today in many cuisines.**



HISTORY

- England:



CULTIVATION: GETTING DOWN AND DIRTY

- Grows best in tropical and subtropical climates and likes a rich, moist soil.
- Plant rhizomes 2-3” deep with growth buds pointing upwards.
- Likes to be kept evenly moist.
- **PART SHADE** here.
- Like basil and tomatoes it likes **warm temperatures.**
- Tolerates short, mild winters.
- USDA zones 7-11



CULTIVATION: GETTING DOWN AND DIRTY



CULTIVATION: GETTING DOWN AND DIRTY



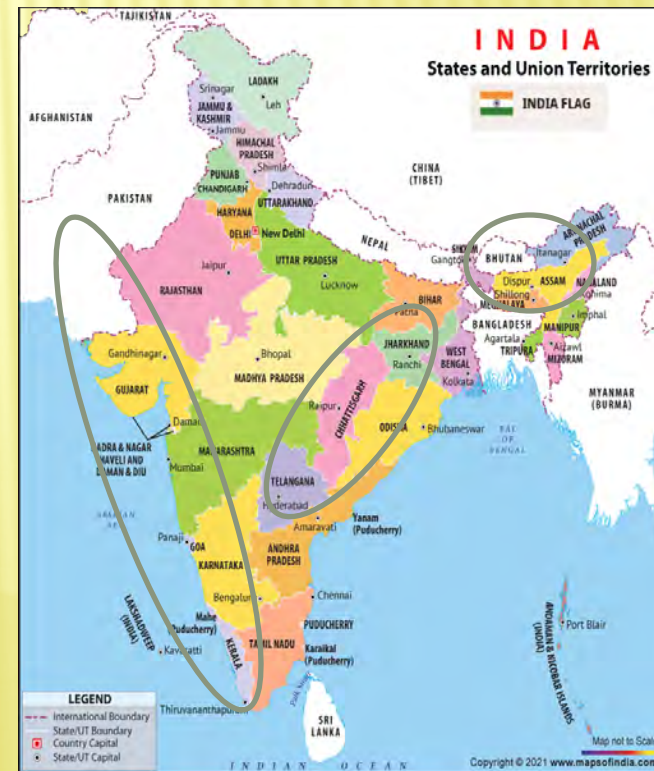
CULTIVATION: GETTING DOWN AND DIRTY

- Harvest rhizomes in 5-9 months
 - 5-7 for fresh, young ginger
 - 8-9 for mature ginger, drying or ginger oil



CULTIVATION: GLOBAL PRODUCTION

- 2019 – 4 million tons (8.6 billion pounds)
- 1. India 44% (1.78 million tons)
- 2. Nigeria 17% (691,000 tons)
- 3. China 14.5%(581,000 tons)
- 4. Nepal
- 5. Indonesia
- 6. Thailand
- 7. Cameroon
- 8. Bangladesh
- 9. Japan
- 10. Philippines



CULTIVATION: GLOBAL PRODUCTION

Quality

- Jamaica is said to produce the highest quality of ginger. (currently produces about 0.01% of world's production)
- Cochin ginger from the state of Kerala in India is reputed to be the second highest in quality.
- Ginger from Nigeria is ranked as third and is said to be the most pungent of all in taste.
- Fiji also produces very fine ginger.



COOKING WITH GINGER- MANY FORMS

-pickled (gari)

-fresh

-dried

-ground

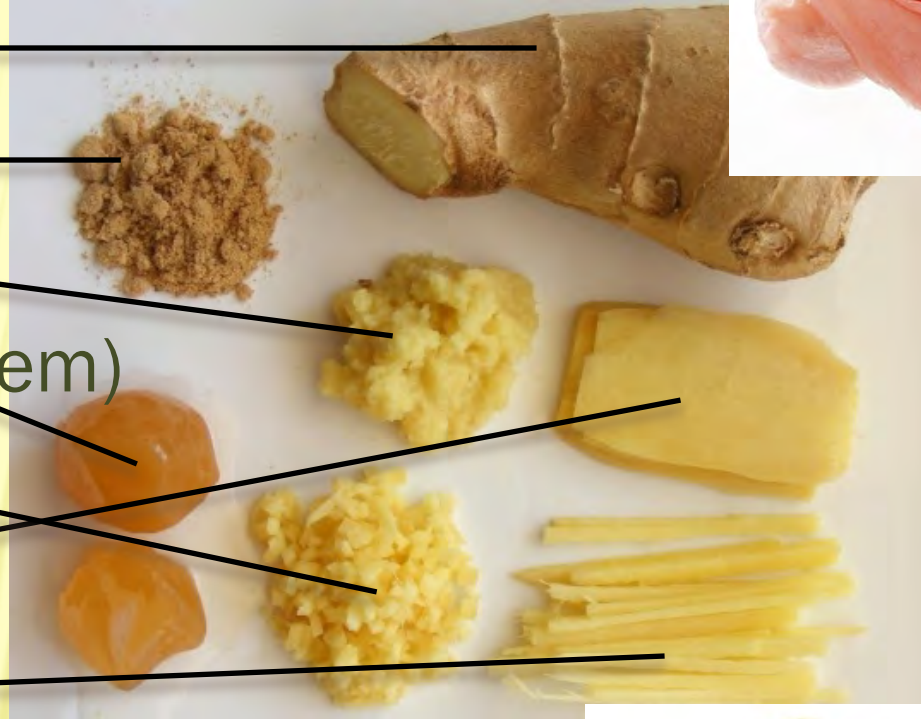
-preserved (stem)

-grated

-sliced

-julienned

-crystallized (candied)



COOKING WITH GINGER

- Forms of fresh ginger:
 - White Ginger – peeled
 - Coated - unpeeled
 - Green Ginger – young and low in fiber
- Forms of dried ginger:
 - Bleached – treated with lime for lighter color
 - Unbleached - untreated

1 Tbsp fresh = 1/8 tsp dried



COOKING WITH GINGER: TO PEEL OR NOT

- Whether or not you peel fresh ginger depends on how you are going to use it.



COOKING WITH GINGER: PUREE / GRATING

- A little:



COOKING WITH GINGER: PUREE / GRATING

- A lot:



CULINARY USES - DRIED GINGER



CULINARY USES – PICKLING

- fresh ginger, peeled
- rice vinegar
- sugar
- water
- salt



CULINARY USES – CRYSTALLIZING

- fresh ginger,
peeled
- sugar
- water



COOKING WITH GINGER - PRESERVATION

- Store fresh ginger in:
 - fridge (3 weeks)
 - freezer (6 months)
- Madalene and Gwen recommended storing it in sherry in the refrigerator and using the flavored sherry in cooking as well.
- Pureed fresh ginger can also be frozen.
- I personally find that it stores well for many weeks on the kitchen counter and I plant any that starts to shrivel or grow.



COOKING WITH GINGER – A FEW TIPS

- Add early in cooking for subtle flavor
- Add at end for more pungent flavor.
- Steep long for more flavor and benefits in a tisane.
- Goes well with sweet or savory.
- If you love it, use it often.



COOKING WITH GINGER'S ESSENCE

- Essential Oil
 - Used commercially for flavoring:
 - Candies
 - Soft Drinks
 - Condiments
 - Also used in:
 - Aromatherapy
 - Perfumery



DOCTOR GINGER

- Medicinal Values:
 - **Nausea, motion sickness**
 - cough suppressant
 - immune support
 - circulatory stimulant
 - anti-inflammatory, antibacterial, antifungal
 - digestive aid (antiseptic)
 - therapeutic dosage (ABC Clinical Guide to Herbs) -fresh/dried 2-4 grams daily



DOCTOR GINGER

- Fresh vs. Dried – Which is better?
- Generally – fresh
 - Studies have shown that when ginger is dried it loses effectiveness as an antiviral agent.
 - As an effective antiviral it should be consumed every 2-3 hours in acute conditions.
 - It takes about 30 minutes to enter the bloodstream after drinking and about 60 minutes to reach peak effectiveness.
 - Inhibits attachment of virus to cells – best against respiratory viruses.



DOCTOR GINGER – DIGESTIVE ISSUES

- Ginger has been shown to be an excellent remedy for digestive complaints such as:
 - Nausea (incl. medically induced)
 - Post-operative, chemotherapy, anaesthesia
 - Indigestion
 - Wind and Colic
 - Travel (motion) sickness
 - Morning sickness
 - Gastrointestinal infections
 - Flatulence
 - Food poisoning (some types)

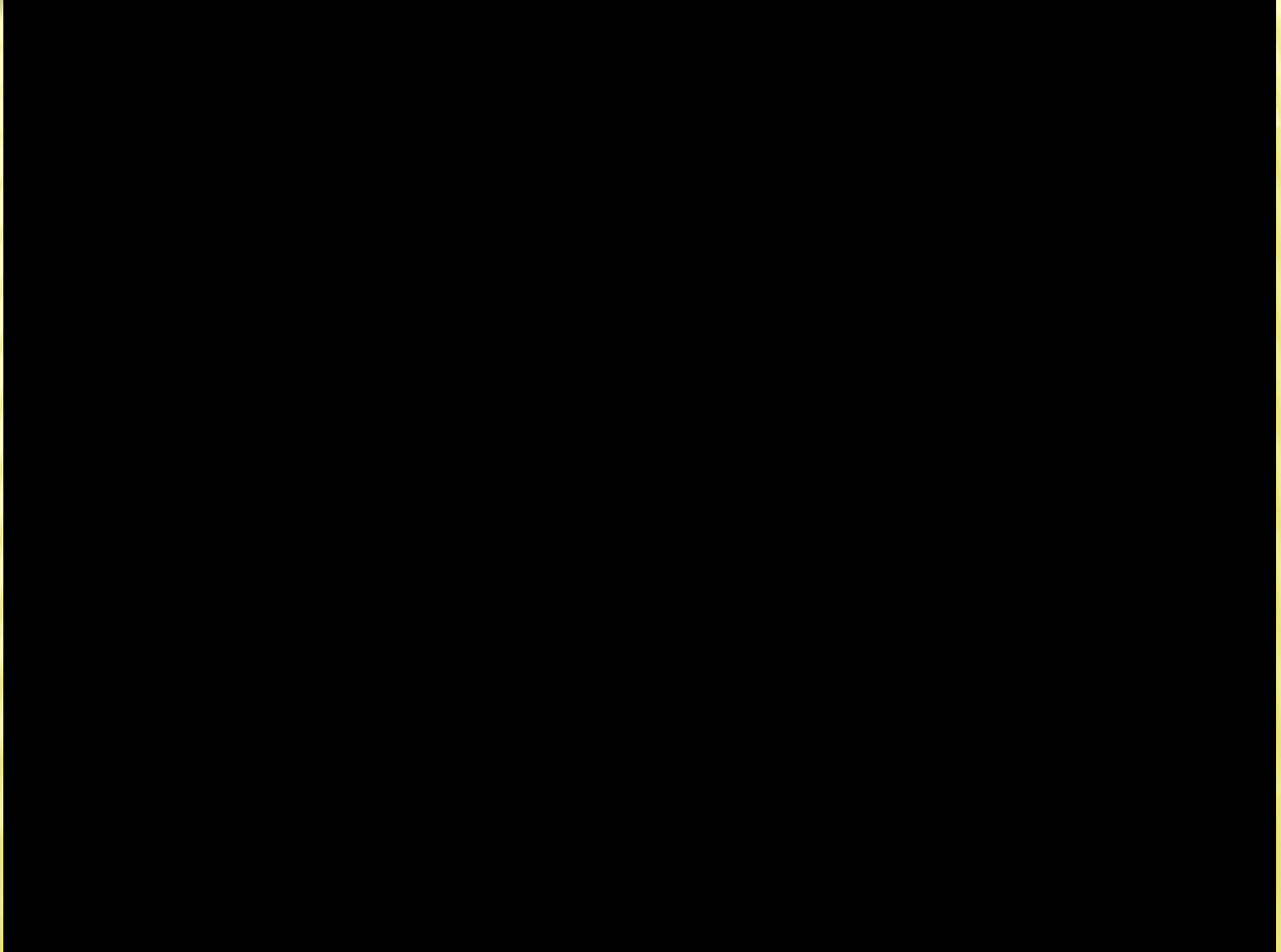


DOCTOR GINGER – DIGESTIVE ISSUES

- Motion sickness studies have shown that ginger can:
 - Reduces **tachygastria** (electrical activity in the stomach)
 - Suppresses **vasopressin** (hormone that helps regulate levels of water, salt and blood sugar) release to the central nervous system.



DOCTOR GINGER – MOTION SICKNESS



DOCTOR GINGER

Ayurveda – *vishwaghesaj* – “universal medicine”

- Used in about 1/2 of all medications

Chinese Medicine – also used in a large percentage of medications

- Commonly mixed with water and sugar
- Dry (*sheng jiang*) is used for chronic bronchitis and coldness due to shock
- Fresh (*gan jiang*) is used for coughs, colds, diarrhoea and vomiting

DOCTOR GINGER

Western Medicine – used for:

- Circulatory issues
- Respiratory issues
- Digestive issues – especially nausea and motion sickness
- Medical studies show that it might be helpful with:
 - Arthritis
 - Cancers (some)
 - Asthma, heartburn and cholesterol issues
 - Detoxification of heavy metals



DOCTOR GINGER – TOPICAL

- Great for relieving the pain of burns and speeding healing.
- Highly antimicrobial – effective against: E. coli, Shigella, Staphylococcus, Streptococcus, Salmonella, Listeria, Candida and more.



DOCTOR GINGER

Do not use ginger for:

- Inflammatory skin complaints
- digestive ulcers
- high fevers



- Acts as an emmenagogue – increases blood flow
(avoid large doses in pregnancy)
- May aggravate gallstones
- Studies have shown that ginger can boost the effectiveness of antibiotics such as tetracycline

FAMOUS GINGERS

Now for some
gingery fun!
(& program prizes
too)

FAMOUS GINGERS



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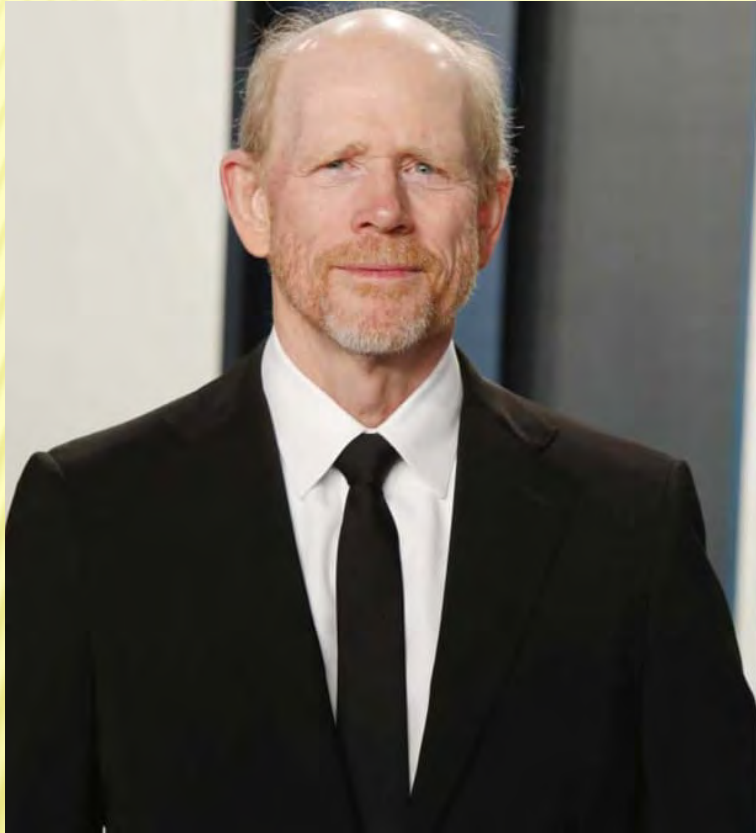
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FAMOUS GINGERS



OTHER CULINARY GINGERS TO KNOW



Turmeric – *Curcuma longa*

OTHER CULINARY GINGERS TO KNOW



Black Turmeric – *Curcuma caesia*

OTHER CULINARY GINGERS TO KNOW



Zedoary – *Curcuma zedoaria*

OTHER CULINARY GINGERS TO KNOW



Greater Galangal – *Alpinia galanga*

OTHER CULINARY GINGERS TO KNOW



Lesser Galangal – *Alpinia officinarum*

OTHER CULINARY GINGERS TO KNOW



Shell Ginger – *Alpinia zerumbet*

OTHER CULINARY GINGERS TO KNOW



Chinese Finger Root – *Boesenbergia rotunda*

OTHER CULINARY GINGERS TO KNOW



Myoga – *Zingiber mioga*
Aka: Japanese Ginger

OTHER GREAT GINGERS TO KNOW



Shampoo / Pinecone Ginger – *Zingiber zerumbet*
Awapuhi

OTHER CULINARY GINGERS TO KNOW



Cardamom – *Elettaria cardamomum*

MEET GINGER RHIZOME

- CULINARY CHEF EXTRAORDAIRE!



Ginger loves to cook with culinary ginger in a variety of creative ways.

FRESH GINGER TEA



MASALA CHAI



GINGER BEER



GINGER ALE



QISHR – YEMENI COFFEE WITH GINGER



Traditionally made with coffee husks, fresh ginger, a touch of sugar and perhaps a hint of cinnamon.

Al-Makah, Yemen – source of the term “mocha”.

VARIETY OF SPICE MIXES



Ras el Hanout - Morocco



Berberere - Ethiopia



Madras Curry - India



Old Bay Seasoning - Maryland, USA

GINGER LIQUEUR



MOSCOW MULE



Created in New York in 1941, not Moscow

DARK AND STORMY



- Gosling's Black Seal Rum
- Ginger Beer (Barritts)
- Lime Juice

GINGER VINAIGRETTE



GINGER STIR FRY



GINGER SAUCES



CURRIES



GINGER ORANGE GLAZED ACORN SQUASH



NEW POTATOES WITH GINGER AND MINT



GINGER DEVEILED EGGS



GINGER-LEMON-GARLIC HUMMUS



GINGERY FISH OR CHICKEN



GINGER CHEESE CAKE



GINGERBREAD CHEESE CAKE



GINGER ICE CREAM



GINGERBREAD WITH GINGER WHIPPED CREAM



GINGERBREAD – PARKIN CAKE



GINGER COOKIES



LEBKUCHEN AND SPECULOOS



GINGERBREAD HOUSES



HAVE A JOYFUL AND GINGERY CHRISTMAS!

