

Objectives:

- 1) Definitions and history of herbs and spices
- 2) common herbs and spices
- 3) health benefits
- 4) uses and applications



Herbs v Spices – definitions and facts



- Herbs: Any plant with leaves, seeds, or flowers used for flavoring, food, medicine, or perfume
- Does NOT have a wood stem and is usually fresh (dried only on purpose, not naturally)
- After flowering the seed-bearing plant dies down to the ground
- The largest Herb In the world: the Banana plant
- Most are earthy, floral, sweet, grassy
- Herba Latin for grass, green crops

- Spices: An aromatic or pungent vegetable used to flavor food
- Dark in color
- Can have a wood stem, dried root, stalk or seed, or a dried part of the plant
- Spice derived from Species Latin term for "appearance, kind ", also comes from Old French Espic
- Spice in Late Latin it was a term used as goods, wares, currency
- - "spice trade" in ancient cultures

A Scarborough Fair of Herbs

- Parsley used to treat bad breath and remove bitter feelings
- <u>Sage</u> a healing herb noted to impart immortality and wisdom
- Rosemary used at weddings and funerals to symbolize love and remembrance
- Thyme gives courage and used to cleanse rooms during the Middle ages and ward off nightmares
- The Scarborough fair was a 45-day trading event held in England during the late Middle Ages
 established by King Henry VIII. Merchants would attend the fair to sell their goods. The 4 herbs
 mentioned here were used to create a love potion!

<u>Scarborough Fair: Free Download, Borrow, and Streaming: Internet Archive</u>

Fun Facts about Parsley:

- Scientific name Petroselinum Crispum
- One of the most popular garnishes
- Historical significance used by the Greeks to create a garland crown for their athlete champions, also used for funeral wreaths
- Most well-known herb in American Cuisine
- Considered a superfood
- Pungent flavor
- Very hardy to grow, biennial part of the carrot family
- Comes from the Greek meaning "Rock Celery" because it thrives on rocks and walls



Parsley Nutrition



WATER PROTEIN CARBOHYDRATES

DIETARY FIBER SUGAR

52.63 g 1.78 g (4% DV)

3.8 g (1% DV)

0.47 g (1% DV)

2 g (8% DV)

0.51 g (1% DV)

Sources: USDA National Nutrient Database for Standard Reference 1 April 2018 **Average Daily Values reference:** NHI Dietary Supplement Label Data Base

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PARSLEY

Health benefits



Anti-inflammatory

Containing high levels of vitamin C, brewing or eating parsley can help reduce symptoms of conditions such as arthritis



Diuretic

Steeping the roots of parsley is thought to help those with fluid retention and related



Bone health

High concentrations of calcium can prevent and manage osteoporosis when eaten



Anti-microbial

The chlorophyll found in both the stems and leaves of parsley has a number of anti-microbial effects



Immune system

With parsley being rich in vitamin A and C, its consumption is known to lead to a strengthened immune system



How to store



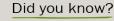
To store, trim the stems and place in water either at room temperature or in the fridge for up to two weeks



Only wash just before use as the leaves are fragile and can be easily damaged



Freeze parsley by placing washed and dried parsley into a freezer bag, rolling it up tightly to remove the air and place in the freezer





Parsley was used in ancient Rome to lessen symptoms of a hangover



The ancient Greeks thought that parsley originated from the blood of Archimedes after he slaved a dragon



Parsley is often used in soaps and lotions designed to combat dry skin

Fun Facts about Sage

- Scientific name: Salvia officinalis
- Historical significance:
- Native to the Mediterranean
- Grows as a woody perennial shrub
- Has a very earthy flavor and aroma
- "sage" is used to refer to one who is wise or learned
- Salvia = to be in good health Officinalis = pharmacy
- Compounds found in Sage may act as antiinflammatory, neuroprotective, and anti-cancer

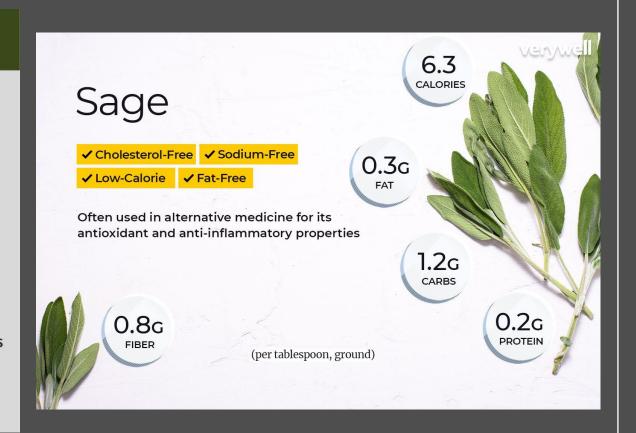


Top 5 Health Benefits of **Sage**



- Aids in digestion
- Boosts the immunity
- Rich source of antioxidants
- May help improve oral health
- Nelps reduce blood sugar levels





Fun Facts about Rosemary

- Scientific name: Salvia Rosmarinus officinalis
- Historical significance: used as a symbol during war commemorations and funerals in Europe and Australia
- Has been around since B.C, used to be burned during the Middle Ages to scare away evil spirits and disinfect the surroundings
- Grows as a bush with needle like leaves and purple flowers
- Can be used as an aromatic in soups, stews, potatoes, salad dressings
- Rosemary oil (great with mint or eucalyptus for the scalp/sore muscles, promote hair growth, stimulate the immune system and improve memory)



Rosemary - Nutritional Facts per 100 g

Nutrients mg Percentage

Folates	109 µg	27%
Niacin	0.912 mg	6%
Pantothenic acid	0.804 mg	16%
Pyridoxine	0.336 mg	26%
Riboflavin	0.152 mg	12%
Thiamin	0.036 mg	3%
Vitamin A	2924 IU	97%
Vitamin C	21.8 mg	36%
Sodium	26 mg	2%
Potassium	668 mg	14%
Calcium	317 mg	32%
Copper	0.301 mg	33%
Iron	6.65 mg	83%
Magnesium	91 mg	23%
Manganese	0.960 mg	42%
Zinc	0.93 mg	8.5%



WHY YOU MUST EAT ROSEMARY &

stepintomygreenworld.com

NOTE: Take with care and talk to your health practitioner or a qualified expert in the field of botanical medicine.



ANTI-INFLAMMATORY

Contains carnosic acid and carnosol which are natural anti-inflammatory agents

CANCER FIGHTER

Studies suggest that carnosol content may prevent tumors from forming

LIVER DETOX

Used to treat liver issues for centuries due to its liver detoxifying properties

ANTIBACTERIAL

Antibacterial powers against H. pylori which causes stomach ulcers

IMMUNE BOOSTER

Strengthens immune system due to antioxidant & anti-carcinogenic benefits

MEMORY BOOSTER

Carnosic acid has neuroprotective properties and may improve memory

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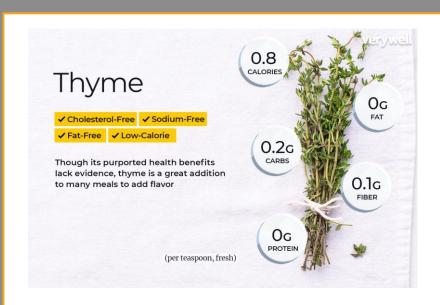
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Fun Facts about Thyme

- Scientific Name Thymus vulgaris
- Part of the Mint family
- Native to southern Europe but cultivated almost everywhere
- Comes from the Greek word Thymos = courage/strength
- Historical significance was used by Egyptians for embalming, was also burned as incense as a source of courage and used in bath water
- Helps bacterial and fungal infections, can be used for cough, hair loss







Thyme - Nutritional Facts per 100 g

Nutrients mg Percentage

Folates	45 mcg	11%
Niacin	1.824 mg	11%
Pantothenic acid	0.409 mg	8%
Pyridoxine	0.348 mg	27%
Riboflavin	0.471 mg	36%
Thiamin	0.48 mg	4%
Vitamin-A	4751 IU	158%
Vitamin-C	160.1 mg	266%
Sodium	9 mg	0.5%
Potassium	609 mg	13%
Calcium	405 mg	40.5%
Iron	17.45 mg	218%
Magnesium	160 mg	40%
Manganese	1.719 mg	75%
Manganese	106 mg	15%
Zinc	1.81 mg	16.5%





Some of my Favorite Herbs to use!

- Cilantro (coriander seeds/Chinese Parsley)
- Tarragon (French, Mexican, or Russian)
- Basil (Sweet common, or spicy)
- Oregano (Greek or common)
- Dill Bouquet, Fernleaf, Hercules
- Mint (so many varieties! My favorite is Chocolate and a pineapple variety!)
- Chives garlic or regular can be used as garlic/onion support for any recipe.
- These herbs are very easy to grow and are "staples" in my garden and home



Health Benefits of my favorite Herbs

- Cilantro (coriander seeds) detox of heavy metals, helps GI/IBS is a superfood. Great in curry/thai foods and salsas
- Tarragon anti-inflammatory. Was used to dull toothaches in Ancient Greece (contains a compound Eugenol type of anesthetic)
- Basil anti-oxidant, aids digestion, ursolic acid helps with liver health.
 Good source of calcium, magnesium and iron. Can use it in anything!
- Oregano used as an antiseptic, symbol of joy in Greek mythology.

 Hippocrates noted its medicinal use extensively. Used for respiratory and digestive health. Also used to chew Greek Salad! Meatballs, soups,
- **Dill** used by Egyptians, means to soothe or lull (dylla). Roman history symbol of good luck, To the Greeks, signified Health. Puritans gave to kids to chew as appetite suppressant. Useful in stimulating breast milk and alleviating colic (like milk thistle)Used in Pickling. Tsatziki (Greek yogurt dip with cucumbers), breads, sauces for fish, dill pickles
- Mint universal remedy for colds, tummy, aches, tension. Many varieties, helps bad breath, Tea and honey, yogurt, keftedes (Greek meatballs/vegetarian balls)
- Chives improves memory function (choline and folate), works as expectorant, antibacterial/anti-inflammatory. Can use with just about anything savory (potatoes, sauces, stews soups)











A MELANGE OF
SEASONINGS! MIX N MAKE
SOME CHEMISTRY HAPPEN IN
YOUR KITCHEN!



AND NOW TO KICK THINGS UP A NOTCH!





Spices – keep it hot!

- They are the "yang to the yin of herbs" (herbs are calming, earthy, whereas spices ignite, fire up, hit your taste buds!)
- Herbs are focused in Mediterranean cultures, whereas Spices were the hallmark of Asian, Indian, and Middle East cultures
- 8th century BC are first known documents of spices utilized
- Ayurvedic Medicine Tumeric, Cumin, asafetida (hing), black pepper, cardamom, ginger, cinnamon, nutmeg, licorice root, and cayenne. There are Warming dipanas (ginger, black pepper, hing, cinnamon and cayenne) and Cooling (coriander, cumin, fenugreek, and fennel)Dipanas are medicines that ignite Agni, the metabolic fire
- Spice blends they come together in a variety of ways (garam masala in Indian, Chines 5 spice, thai curry, etc) and can be used as a compound to improve the taste of foods (they were used to mask spoiled foods) and protect health (aid in digestion of spoiled foods)



Cinnamon

- Scientific name: Cinnamomum verum bushy evergreen tree of the laurel family
- Can be used ground or as a stick (grows as a tree)
 one of the most widely used/first known spices
- Originated in Sri Lanka (worlds largest producer of Ceylon cinnamon) and China, Ancient Egyptians were first to adapt its use. It was used by Romans and burned at funerals, during spice trade, Europe adapted it for use in foods
- In India it is used in Ayurvedic medicine as a warming/digestive aid
- It is a symbol of wealth, luxury and was a diplomatic gift between rulers
- Christopher Columbus/Vasco da Gama in search of "spice islands" to explore the origin of this spice (Portugal succeeded in controlling the cinnamon trade → Cinnamon War between the Dutch and Portuguese)



Cinnamon - Nutritional Facts per 100 g

Nutrients mg Percentage

Folates	6 µд	1.5%
Niacin	1.332 mg	8%
Pantothenic acid	0.358 mg	7 %
Pyridoxine	0.158 mg	12%
Riboflavin	0.041 mg	3%
Thiamin	0.022 mg	2%
Vitamin A	295 IU	10%
Vitamin C	3.8 mg	6%
Vitamin E	10.44 mg	70%
Vitamin K	31.2 µg	26%
Sodium	10 mg	<1%
Potassium	431 mg	9%
Calcium	1002 mg	100%
Copper	0.339 mg	38%
Iron	8.32 mg	104%
Magnesium	60 mg	15%
Manganese	17.466 mg	759%
Phosphorus	64 mg	9%
Zinc	1.83 mg	17%









- High source of antioxidants
- Has anti-inflammatory properties
- Protects heart health
- Fights diabetes
- Helps defend against cognitive decline & protects brain function
- May help lower cancer risk
- Fights infections & viruses
- Protects dental health & freshens breath naturally
- May help prevent or combat candida
- Benefits skin health
- Helps fight allergies
- Can be used to sweeten recipes without added sugar
- Can be used as a natural food preservative

Parts used: bark (prepared as sticks, chips, powder, or essential oil), twigs, dried flowers.

Plant properties: aromatic stimulant, warming, demulcent, sweet, astringent, anodyne, hypoglycemic, anti-oxidant, antimicrobial

Used for: toothache, diarrhea, move blood, infections, arthritis, insulin resistance, colds/flu, pain

Plant Preparations: decoction, tincture, culinary, powder

Learn more at www.HerbalRemediesAdvice.org







Nutmeg

Scientific name: Myristica fragrans

Historical use: Originated in Indonesia from the island of Pulau Ai (Banda Islands), was traded during 1500 BC between Australia and Indonesia. Use spread to India in $6^{\rm th}$ century AD, then further into Eastern Europe. Arab traders monopolized on the origin of the tree/spice

Medicinal use: part of Ayuvedic medicine, digestive aid, topical pain relief, neuro health. Myristicine, an active ingredient, can be neurotoxic. It has antioxidant, and anti-inflammatory properties

Fun facts: Connecticut may have received its nickname "the nutmeg state"/ "nutmegger" from the claim that some traders would create fake nutmeg out of wood (wooden nutmeg) which would become a term indicating fraud.

The word Nutmeg comes from "nois muguete" – old French origin which translates to "the nut smelling like musk"

Used in – vanilla custards, meat dishes, chai tea, pies, cakes, and stews



Nutmeg - Nutritional Facts per 100 g

Nutrients mg Percentage

Folates	76 µg	19%
Niacin	1,299 mg	8%
Pyridoxine	0.160 mg	12%
Riboflavin	0.057 mg	4%
Thiamin	0.346 mg	29%
Vitamin-A	102 IU	3.5%
Vitamin C	3 mg	5%
Sodium	16 mg	1%
Potassium	350 mg	7,5%
Calcium	184 mg	18%
Copper	1.027 mg	114%
Iron	3.04 mg	38%
Magnesium	183 mg	46%
Manganese	2.900 mg	126%
Phosphorus	213 mg	30%
Zinc	2.15 mg	20%







Nutmeg Benefits

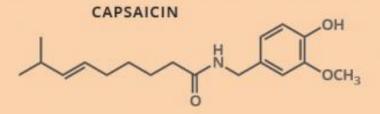
Add pinch of Nutmeg in milk/water/tea

- Promotes sound sleep
- Facilitates digestion
- Reduces tooth ache
- Reduces menstrual cramps
- Reduces fatigue
- Enhances mood
- Improves oral health
- Brain tonic
- Anti inflammatory
- Improves blood circulation





CAPSAICINOIDS

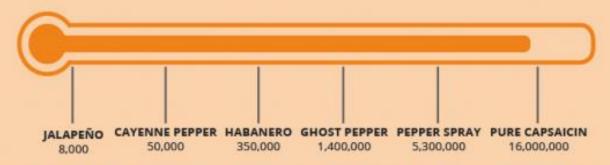


The spiciness of chillis is due to the presence of compounds called capsaicinoids. The two compounds above are the main capsaicinoids in chilli peppers. They cause a burning sensation when they come into contact with mucous membranes, due to their interaction with pain and heat sensing neurons.

Capsaicin is also used in some brands of pepper spray, and studies have shown it may be capable of killing prostate and lung cancer cells. It is toxic in large quantities.



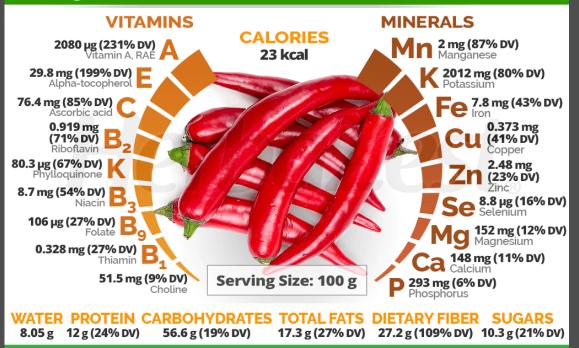
THE SCOVILLE HEAT INDEX



The Scoville scale is a taste detection based method for rating the heat of chilli peppers. A measured amount of pepper extract has sugar added to it incrementally until the heat is undetectable through taste. Though it is an imprecise method, it has been estimated that 1 unit co This Photo by Unknown Author is licensed under CC BY-NC-ND



Cayene Pepper* Nutrition



*Nutrient data for: Spices, Pepper, red or Cayene Source: USDA National Nutrient Database Average Daily Values reference: https://fdc.nal.usda.gov/fdc-app.html#/food-details/170932/nutrients

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Benefits of Cayenne Pepper



Helps to stimulate the blood flow

Relieves respiratory problems and sore throat

Helps to avoid stomachaches, gas and cramps

Aids in clearing mucus from nose and lungs

Smelling cayenne pepper helps to cure headaches

Helps to reduce cholesterol levels in the blood

Beneficial in weight loss and prevents atherosclerosis

CHILI PEPPER

CAYENNE PEPPER



143.7 mg	Vitamin C	76.4 mg
5.3 g	Sugars	10.34 g
	Folate, total	106 µg
10.9 mg	Choline	51.5 mg
0.506 mg	Vitamin B6	2.45 mg
14 µg	Vitamin K	80.3 µg
322 mg	Potassium	2014 mg
23 mg	Magnesium	152 mg
	Phosphorus	293 mg
1.244 mg	Vitamin B3	8.701 mg

The nutrient name is displayed in the color of the food we considered as

The amounts are specified per 100 gram of the product.
The infographic aims to display only the significant differences, ignoring minor ones.
The main source of information is USDA Food Composition Database.

BLACK PEPPER CAYENNE PEPPER



12.753 mg	Manganese	
1.33 mg	Copper	
443 mg	Calcium	
163.7 µg	Vitamin K	80.3 µg
9.71 mg	Iron	
171 mg	Magnesium	
25.3 g	Fiber	27.2 g
1329 mg	Potassium	
4.9 µg	Selenium	8.8 µg
158 mg	Phosphorus	

The nutrient name is displayed in the color of the food we considered as

The amounts are specified per 100 gram of the product. The infographic aims to display only the significant differences, ignoring minor $\,$

ones.
The main source of information is USDA Food Composition Database.

PERSIMMON

CAYENNE PEPPER





66 mg	Vitamin C	76.4 mg
2.5 mg	Iron	7.8 mg
27 mg	Calcium	148 mg
310 mg	Potassium	2014 mg
26 mg	Phosphorus	293 mg

The nutrient name is displayed in the color of the food we considered as $\frac{1}{2} \int_{\mathbb{R}^{n}} \left(\frac{1}{2} \int_{\mathbb{R}^{n}} \left(\frac{$ 'winner'.

The amounts are specified per 100 gram of the product. The infographic aims to display only the significant differences, ignoring minor $\,$

The main source of information is USDA Food Composition Database.



Cardamom - Nutritional Facts per 100 g

Nutrients mg Percentage

Niacin	1,102 mg	7 %
Pyridoxine	0.230 mg	18%
Riboflavin	0.182 mg	14%
Thiamin	0.198 mg	16.5%
Vitamin A	0 IU	0%
Vitamin C	21 mg	35%
Sodium	18 mg	1%
Potassium	1119 mg	24%
Calcium	383 mg	38%
Copper	0.383 mg	42.5%
Iron	13.97 mg	175%
Magnesium	229 mg	57%
Manganese	28 mg	1217%
Phosphorus	178 mg	25%
Zinc	7.47 mg	68%



BENEFITSOF CARDAMOM





WEIGHT LOSS

Cardamom contains certain nutrients that help the body burn calories and also manage fat and weight more effectively, resulting in weight loss.



LIVER

Studies have shown the positive effects that cardamom can have on the liver, preventing enlargement and risk of fatty liver disease.



NAUSEA

Studies have shown how cardamom can have an effect on relieving nausea, particularly for post surgery patients using aromatherapy methods.



ACID REFLUX

When it comes to issues with acid reflux, cardamom has been shown to have positive effects and to help reduce it.



ANXIETY

There have been studies that have shown how cardamom has the potential to help reduce and even prevent the onset of anxiety, creating a calming effect.



DIGESTION

Cardamom contains specific antioxidants that have been shown to help digestive troubles, improve pancreatic health and smooth out the intestinal lining.



SKIN

There are studies that have been done on mice skin that have shown how cardamom extracts may potentially have the ability to reduce non-melanoma skin cancer.



INFLAMMATION

Studies have shown how the antioxidants contained in cardamom can help sooth and reduce inflammation throughout the body, providing some relief.



TEETH

Cardamom has shown to have impressive effects on oral health and can help combat and prevent the development of bacteria in the mouth that can otherwise lead to cavities or infection.



DIABETES

Cardamom has shown to be able to lower blood pressure and therefore, help people who struggle with or have the risk of developing diabetes.





Nutrition Facts

Serving Size: 100g

Amount Per Serving		
Calories	80	
	% Daily Value*	
Total Fat 0.75g	196	
Saturated Fat 0.1g Trans Fat 0g	1%	
Cholesterol Omg	0%	
Sodium 13mg	1%	
Total Carbohydrate 17.77	9	
Dietary Fiber 2g	7%	
Sugars 1.7g	3%	
Protein 1.82g		
Calcium 16mg	1%	
Iron 0.6mg	3%	
Potassium 415mg	9%	
Zinc 0.34mg	3%	
Vitamin C 5mg	6%	
Vitamin K 0.1µg	0%	

^{*}Percent Daily Values are based on a 2000-caloric det.

GINGER Benefits

Restrain the growth of many types of oral bacteria

Acts against the Respiratory syncytial virus (RSV virus)

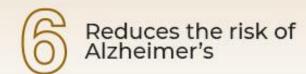
Reduce blood cholesterol level





Reduce blood sugar

Reduces the risk of cancer



Active Ingredient Gingerol

Home Remedy

- Indigestion
- Menstrual pain
- Relieves the symptoms of Osteoarthritis





Chinese 5 spice





Other types of spice mixes

- Greek Mix -
- Italian seasoning -
- Herbs de Provence -
- Curry –
- Za-Atar seasoning -













Top 10 best things said by Julia Child:

- 1. "I was 32 when I started cooking. Up until then, I just ate" Julia Child famously didn't learn how to cook until her 30s, proving that it's never too late to learn something new. Also, if you just want to eat, that's OK, too.
- 2."A party without cake is just a meeting."
- Ain't that the truth? If you ever invite us to a party without a cake, consider yourself unfriended. And pie will not do.
- 3. "I think every woman should have a blowtorch."
- Her TV show began before the feminist movement, making this quote even more profound. Recommending power tools to housewives in the 1960s? We love it!
- 4. "People who love to eat are always the best people."
- Have you ever gone to dinner with a person on a diet? Not fun.
- 5. "It is hard to imagine a civilization without onions."
- According to Child, the flavor of <u>onions</u> blends perfectly into any dish (except dessert). Would civilization turn to chaos without onions? We don't want to find out.
- 6. "With enough butter, anything is good."
- Her love of butter went against the mainstream attitude at the time. Most feared that butter would raise their cholesterol. Child was once again ahead of her time. Experts now advise that it's fine in moderation (like pretty much everything!).
- 7. "Find something you're passionate about and keep tremendously interested in it."
- Her passion for cooking made her an icon, and it all started as a hobby while she lived in France. She said you can never learn enough about the things you love.
- Advertisement
- 8. "Always remember: If you're alone in the kitchen and you drop the lamb, you can always just pick it up. Who's going to know?"
- In a world of perfectly polished social media posts, a little imperfection is more than refreshing. She wasn't afraid of making mistakes and always taught us to learn from them.
- 9. "I enjoy cooking with wine. Sometimes I even put it in the food..."
- Feeling intimidated by a recipe? Make like Julia and pour a glass of wine (or two!).
- 10. "Just speak very loudly and quickly, and state your position with utter conviction, as the French do, and you'll have a marvelous time!"





resources

- Homemade Spice Mixes and Seasoning Blends: 33+ DIY Recipes (bakeitwithlove.com)
- The Power Of Herbs and Spices Cooking your way to better Health – Crystal Pace MS RD
- www.anticancerlifestyle.org
- www.lifestylemedicine.org
- Jiang TA. Health benefits of culinary herbs and spices. *Journal of AOAC International*. 2019;102(2):395-411.
 doi:10.5740/jaoacint.18-0418
- Opara E, Chohan M. Culinary herbs and spices: Their bioactive properties, the contribution of polyphenols and the challenges in deducing their true health benefits. *International Journal of Molecular Sciences*. 2014;15(10):19183-19202. doi:10.3390/ijms151019183
- Best 101 Herbs and Spices for Healing Dr. Axe (draxe.com)
- Zingiber officinale Root Capsule Extract Synergistically Enhance the Anti-Inflammatory Effects of Diclofenac Sodium in Experimental Acute Inflammation - PubMed (nih.gov)

