

SCIENCE OF SPICES: *Ginger*

I must be honest I'm a bit biased towards ginger. Seems like a cheat code on a Nintendo video game.. (Yes, I'm THAT old). It just seems that this substance that can do so many magical things AND make your food OR beverage taste better is too good to be true.

For many cultures of the world especially east Asia it is an essential part of their diet and can be found in almost every meal. The health benefits have been known for centuries.

What you may not know is that it is also used in various perfumes and cosmetics and is a very old remedy for nausea and motion sickness.

It is also believed to reduce the growth of bacteria and may help in reducing the incidence of various cancers.

For the record, it's gluten-free, sodium-free, fat-free, sugar-free, cholesterol-free (whey) and low in calories.

Ladies and gentlemen, I give you GINGER.

[insert applause]

Dr. Kent L. Bazard B.Sc. M.Sc. (Sports Medicine) NASM-PES, M.B.,B.S.

Sports Physician | Sports Performance Coach | Sports Nutrition Specialist

Empire Fitness and Sports Performance

Empire Sports Medicine

Office: 242-364-2001

Mobile: 242-376-9407

kent@empirefitness.fit

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Woody | Hot | Citrucy

Ginger is a tropical, rhizomatous flowering plant. It grows up to 3ft (1m) tall.



BOTANICAL NAME

Zingiber officinale

MAJOR FLAVOR COMPOUND

Gingerol, shogaol, and zingiberene.

PARTS USED

Rhizomes (fleshy underground stems).

REGION OF CULTIVATION

Ginger is native to tropical Asia. Today it is mainly cultivated on India's Malabar Coast (which produces 50% of the world's fresh crop), and through tropical and subtropical parts of Asia. It is also found in parts of Africa, Jamaica, Mexico, North America and Peru.

METHOD OF CULTIVATION

Rhizomes are harvested 2-5 for fresh usage and 8-10 months for dried usage.

PREPARATION

*Fresh: Young rhizomes are cleaned and dried for 1-2 days.
Dried: Mature rhizomes are peeled, dried, and ground.*

NON-CULINARY USES

Perfumery, and cosmetics; in traditional medicine for indigestion and nausea.

POWDER

Do not use ground dried ginger to substitute the fresh spice, as it has a different flavour profile.

FRESH

Avoid older rhizomes with signs of shrivelling, which can mean the flesh is fibrous.



Kitchen Creativity

Ginger has a hot-spice, citrusy, woody taste. The dried spice has a stronger, more aromatic flavour than fresh ginger, and is commonly used in baking and in spice blends. Fresh ginger is most commonly used in Asian cuisine.



RELEASING THE FLAVOUR

Peeling the ginger bursts open the outer layer of cells, allowing fragrant oils to evaporate. Cooking converts the ginger's mouth-watering flavour compounds into a much milder zingerone.

FOOD PARTNERS

- **Baking.**

Try adding ground ginger to carrot cake, lemon cake and coconut or dark chocolate cookies.

- **Pork.**

Add slices of fresh ginger to slow-cooked pork dishes to offset the fattiness.

- **Fish.**

Use julienned ginger with shredded leek or spring onions when steaming fish.

- **Squash & coleslaw.**

Mix grated fresh ginger into Asian-style coleslaws, or fry with the onion base of a squash soup

- **Mango, pears & rhubarb.**

Pair with mango in puddings, and poach with fresh slices with pears and rhubarb.



BLENDS TO TRY

Advieh

A heady blend of Persian spices to sprinkle over savoury rice, rub over meats, or add to stews. It is also good on Persian rice pudding.

- 2 tbsp. dried rose petals
- 2 tbsp. cardamom seeds
- 1 tbsp. cumin seeds
- 2 tbsp. ground ginger
- 2 tbsp. ground cinnamon

Grind the whole spices and combine with the ground ginger and cinnamon.



Yaji

This is a spice blend used to marinate the meat for suya, West Africa's street food kebabs.

- 10 strands of grains of Selim
- 1 tbsp. whole Ashanti pepper
- 5 tbsp. crushed kuli-kuli or peanut puffs, e.g. Osem Bamba
- 5 tbsp. ground ginger
- 2 tbsp. cayenne pepper flakes
- 1 dry stock cube, crumbled
- ½ tsp salt
- Black pepper, to taste



Break up the grains of Selim and grind the Ashanti pepper; you may need to sieve out any fibres. Combine with the remaining spices and mix well.

Leche de tigre

Translating as 'tiger milk', this is the marinating liquid for ceviche, the raw fish dish from Peru and now enjoyed all along the Pacific Coast.

- ½-1 aji limo, habanero, or other hot chili, finely chopped
- 1 large garlic clove, crushed
- 1 in (2.5cm) piece of ginger, coarsely grated
- 1 tbsp. fresh coriander stalks, finely chopped
- ½ small red onion, finely chopped
- Juice of 5 limes
- Salt, to taste

Combine all ingredients and refrigerate for 1 hour before using to marinate fresh white fish. Leche de tigre is traditionally drunk after the fish has been eaten.



Source: Dr Stuart Farrimond 'The Science of Spices'