



Staberco

The Fundamentals of Flavor

Humans perceive five core tastes



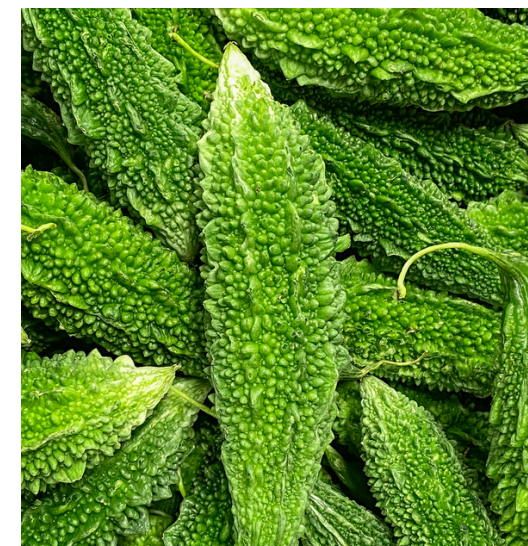
Sweet



Salty



Sour



Bitter



Umami (savory)



Flavor

fla·vor

/ˈflāvər/

- 1.(noun) the distinct taste of food or drink; an indication of the essential character of something
- 2.(verb) alter or enhance the taste of (food or drink) by adding a particular ingredient

Sweet

- Adds richness, balance, and warmth to a dish
- Can enhance other flavors, soften sharp or bitter notes, and even bring out the natural taste of ingredients
- If your dish is too sweet, counterbalance it by adding a sour ingredient like lemon juice or vinegar
- Dilute the sweetness by adding more of the other flavor elements like salt, bitterness, sourness, or umami
- Common sources - sugar, honey, maple syrup, or fruits



Sour

- Cuts through richness
- Brightens up heavy flavors
- Provides a refreshing contrast by layering various sources of sour
- Counterbalances sweetness; too much acid is balanced by adding sweetness or salt
- Common sources - citrus, vinegar, fermented ingredients, or dairy products





Salt

- Brings out the natural flavors in individual ingredients, making them taste fuller and more vibrant
- Balance the overall taste of a dish
- Various types of salt, such as kosher salt, sea salt, and Himalayan pink salt each have their own unique flavor profile



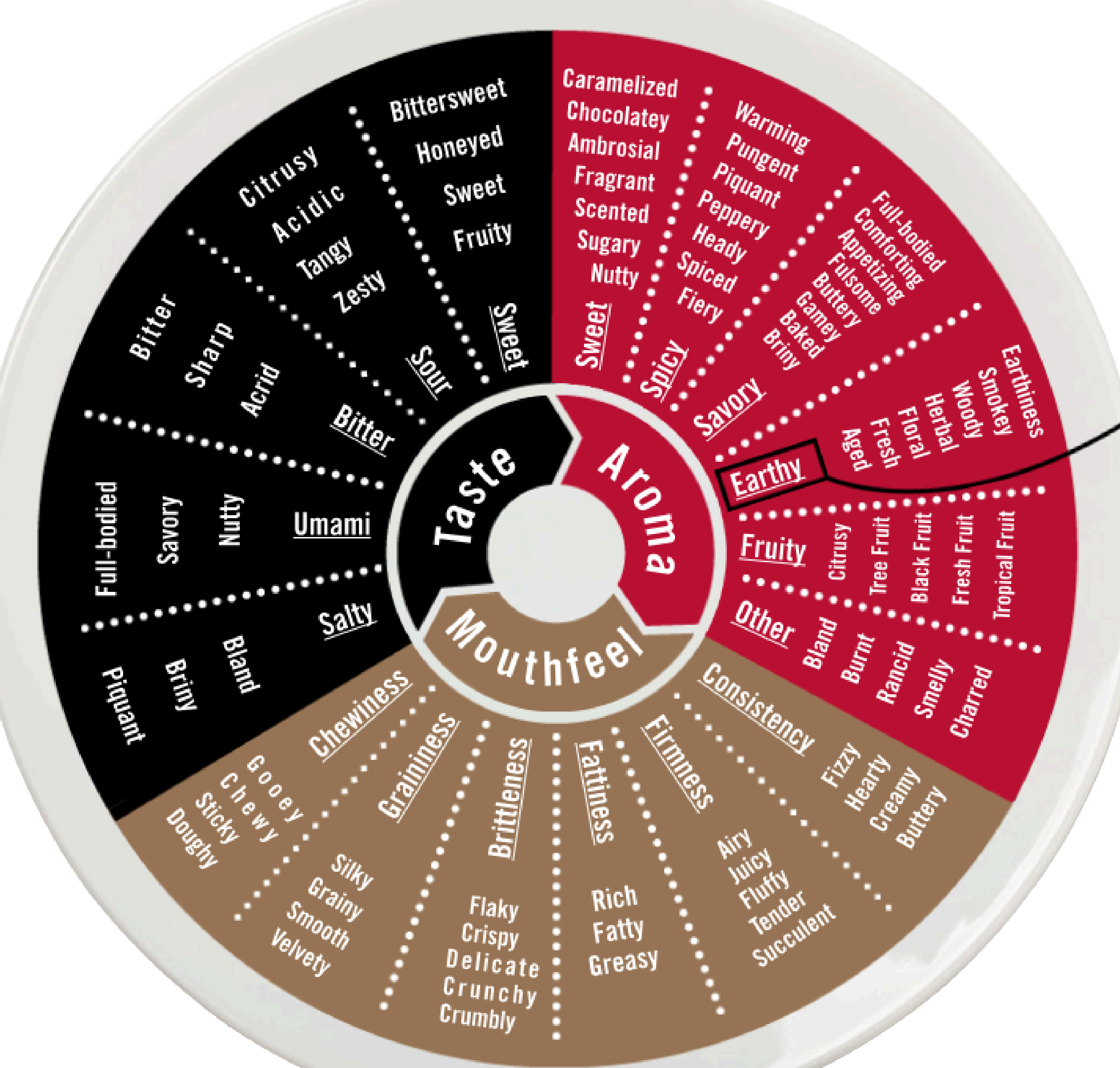
Bitter

- Bold and often acquired taste that can add depth and complexity to dishes
- Provide contrast to richness or sweetness and create a more layered flavor profile.
- Fatty ingredients help mellow bitterness
- Common sources - coffee, dark chocolate, leafy greens, and certain herbs



Umami

- Translates to 'pleasant savory taste' in Japanese
umami and sweetness work wonderfully together
to create complexity
- Cooking techniques like roasting, grilling,
simmering, or braising can also enhance the umami
taste
- Umami adds richness, it can easily overwhelm a
dish if used too much
- Common sources - mushrooms, soy sauce, miso
paste, Parmesan cheese, and anchovies



Taste . Aroma. Mouthfeel.

credit to Escoffier School of Culinary Arts

Flavor is Subjective

A.

Biology

- We all have the same 5 flavor receptors on our tongue, but the number of taste buds and their sensitivity varies individually

B.

Smell

- We all have the same 5 flavor receptors on our tongue, but the number of taste buds and their sensitivity varies individually

C.

Texture

- Mouthfeel of food affects the perception of flavor

D.

Temperature

- Heat and cold affect the perception of flavor and ability for flavors to be received by taste buds

E.

Perception

- Heat and cold affect the perception of flavor and ability for flavors to be received by taste buds

The bottom line –
every human
experiences,
receives, and
perceives food in a
different capacity



Ways to Impart Flavor

Infusion, Addition, Inclusion

Infusion- adding flavor to a liquid by soaking or steeping

Hot Steep

- heat the liquid, add the aromatics, allow it to steep for 5-15 minutes, remove and cool

Cold Steep

- allow the liquid to sit for 24 hours with the aromatics then strain

Under pressure

- sous vide; introducing liquids into solids
- iSi canister; solids into liquids

Benefits of infusing

- ability to introduce flavor without adding additional solids or sugars to the liquids

Examples

- Spices, herbs, teas, coffee, citrus peel, charcoal, cereal, croissants/baked goods, rice, wood, leather, mushrooms, corn cobs, bones, shells, fats



Addition- a component introduced into a mix to contribute flavor, fully integrating and blending into the final product

Flavor Compounds

- Flavor reduction designed to impart maximum flavor with minimal effect to the mix
- Minimal moisture
- Sugar addition to the mix

Melted chocolate

- Adds flavor, texture, and mouthfeel

Powders

- Adds flavor and color
- Cocoa powder, matcha powder, activated charcoal

Puree

- Adds flavor and color by replacing some of the liquid in the recipe

Juice

- Adds flavor and color by replacing some of the liquid in the recipe when a puree is not available

Fats

- Provide additional flavor and mouthfeel
- Cheese, avocado, buttermilk, crème fraiche, sour cream, yogurt, egg yolks



Inclusion- an ingredient added to the finished product to enhance flavor and texture

Unlike blended components, an inclusion maintains its own distinct texture and flavor within a final product

Sauces

- Adds complimentary or contrasting flavor and mouthfeel plus an eye-catching decorative element
- Fruit sauces, chocolate sauce, butterscotch, peanut butter, caramel, toffee, salsa, compotes

Toppings

- Adds complimentary or contrasting flavor and mouthfeel, plus an eye-catching decorative element, something that is fluid but not a sauce
- Pop coating, marshmallow cream, whipped cream, honey, olive oil

Garnish

- Something to add texture and flavor, either complimentary or to contrast. Makes the dessert visually appealing

Examples: Cookie crumbs, fresh fruits, salt, sprinkles, toasted nuts, cookies or tuiles, chocolate décor, candies





Flavor Compounds

What is an Itaberco Flavor Compound?

A concentrated flavor solution crafted from natural ingredients to deliver an authentic, true-to-profile taste experience. Depending on the specific flavor, these are available in liquid or paste-like forms. They are composed of a blend of fruit juices, purees, natural flavors, natural sugars, and natural coloring agents, resulting in a clean-label product that is free from preservatives and artificial chemicals.

The high concentration of these compounds means that only a small amount is needed to infuse robust flavor, making them a more economical and efficient alternative to traditional purees or extracts. Their versatility shines through in their ability to elevate the flavor profile of a wide range of applications, from beverages and frozen desserts to baked goods and beyond.

Key Features

- Bold, Consistent Flavor
- Naturally Flavored and Colored
- Highly Concentrated & Efficient
- Versatile – Works in soft serve, baked goods, gelato, beer, cocktails, & more
- Made in the USA – SQF, Kosher, & TTB Certified

What its made of

- Flavoring Agents- Natural flavors like extracts, sometimes combined with fruit purees
- Carriers- water
- Sugar– to round out flavor and improve functionality
- Optional Colorants & Acids – Natural colorants like fruit juices for appearance, citric acid for flavor or shelf life, and occasionally trace amounts of agar gum for texture and performance



Usage

- Ratio of 3-5% to total overall weight of recipe as a starting point
 - Higher fat recipes need less flavor compound; fat is the flavor transporter
 - Higher sugar recipes need more flavor compound
 - Baked applications need more flavor compound
- Can always add more, but can't add less
- Remember subjectivity of flavor
 - Get multiple taste testers and test at various times during the day



When to add a flavor compound

- For frozen dessert applications, add at end before blending and freezing
- For baked applications, add with liquids of the recipe
- For cooked applications like stirred custards, add after cooking but before cooling
- For cream applications (buttercream, mousse, or cold process pastry cream) add flavor compounds at the end
- There's always an exception

When to add a flavor compound in beverage

- Beer – Typically added during second fermentation
- Batched Cocktail – Added after water and alcohol are included
- Batched Frozen Beverages – Add after water and alcohol, but mix before pouring into the frozen drink machine. Option to add flavors after for more flavor variety.
- Single Serving Cocktails - add anytime
- Single Serving Frozen Cocktails - add before blending
- RTD - Consult with our beverage specialist



Use flavor compounds as a complete flavorant

- A. Flavor compound can be the major source of flavor
- B. Contrasting flavor element
 - i. Add sour component to sweet component for depth
- C. Enhancing flavor element
 - i. Add a small amount of strawberry compound to fresh strawberries to elevate their natural flavor

Unexpected Uses

- Flavored Sugars
- Flavored Honey
- Tossed with Fresh Fruit
- Compound butter





Question & Answer

Itaberco

Thank you for joining us today