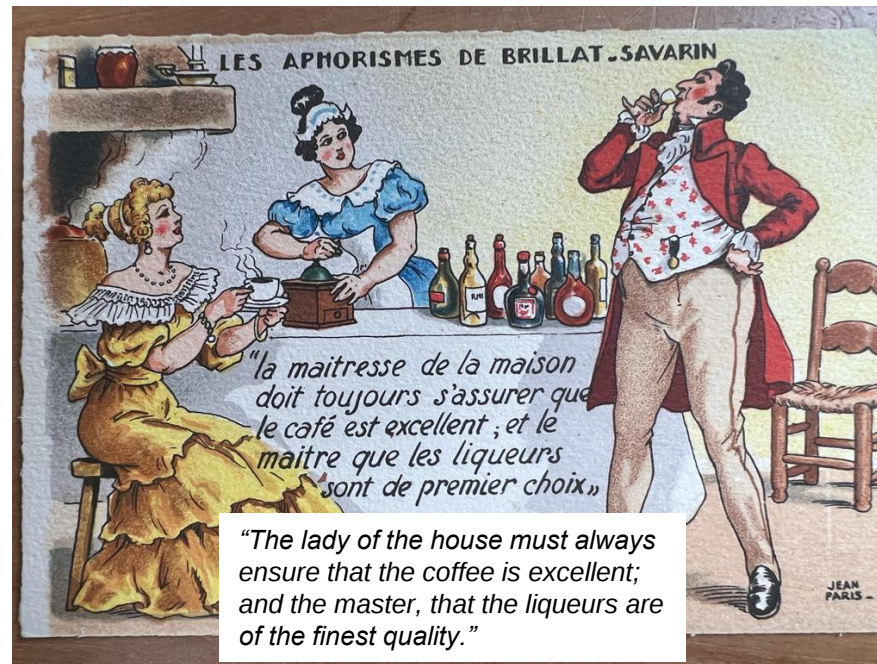


What should/could we drink when eating?

Some thoughts (for discussion)



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MUSÉUM NATIONAL
D'HISTOIRE NATURELLE



What's the point of drinking?

Hydration

Our body is 60% water; we need about 2L/day
(without oxygen / water / food: 3 min / 3 days / 3 weeks)

Nourishment

Hydromel, beer (= “liquid bread”), wine, (fermented) milk, ...

“Wine is the healthiest and most hygienic of beverages” (Louis Pasteur)

Pleasure (+ medicinal use)

Hydromel, beer, wine, fermented milk, ... + tea, coffee, ...

Pairing?

The “gastronomic meal of the French” (UNESCO, 2010)

<https://ich.unesco.org/en/decisions/5.COM/6.14>

“The important elements [of this gastronomic meal] include the careful selection of dishes from a constantly growing repertoire of recipes; the purchase of good, preferably local products whose flavours go well together; *the pairing of food with wine*; the setting of a beautiful table; and specific actions during consumption, such as smelling and tasting items at the table”

“The order of consumables is from the most substantial to the lightest; the order of beverages is from the mildest to the most fragrant and aromatic” (JA Brillat-Savarin, 1826)



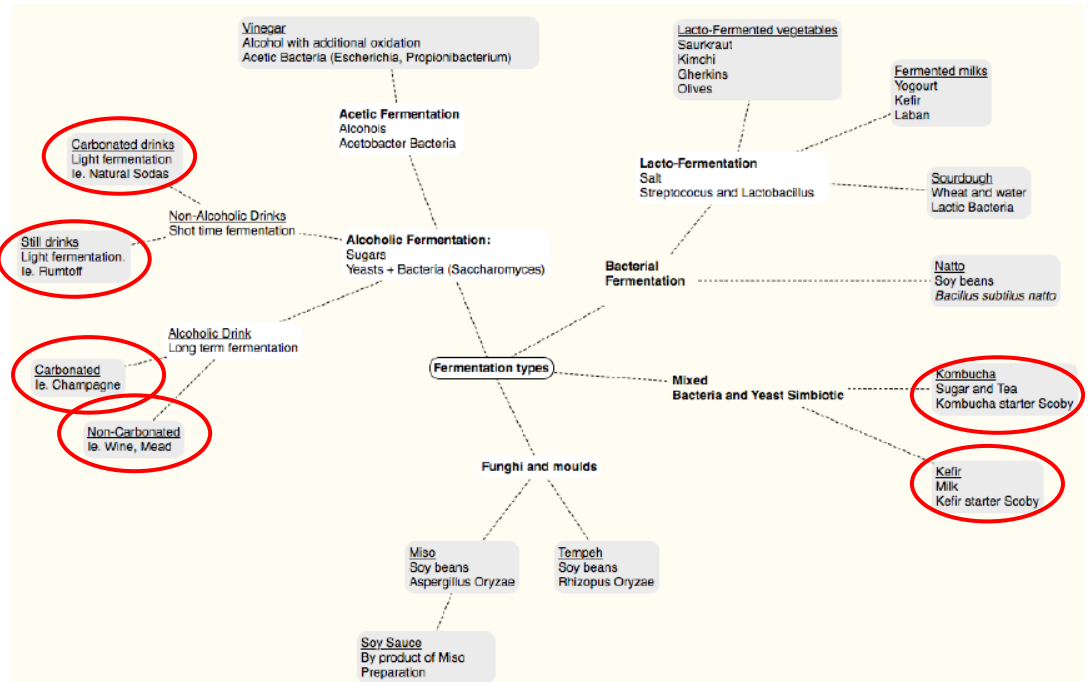
We have the choice!

- Water (tap, spring, mineral): hydration, minerals... (and taste?)
- Tea (white, green, oolong, black, pu-erh, flavored): caffeine/theanine/catechin, hydration, taste (bitterness)...
- Coffee (arabica/robusta, decoction/infusion/leaching/percolation): caffeine, taste (bitterness)...
- Beer (lager/ale/lambic, wheat/pale/amber/brown/dark): hydration (refreshment), taste (bitterness, effervescence)...
- Wine (white/rosé/red/orange/sparkling): terroir (climate, soil, grape variety, vine training), winemaking, aging
- Cider: terroir, hydration, taste (effervescence, sugar)
- Soda: hydration, sugar, effervescence (and no alcohol)
- Kefir, kombucha: health (probiotics, antioxidants), taste, home-made (usually), no alcohol...
- Spirits: taste, sharing/sociability (aperitifs, digestifs)



FermentationS in the glass

Food	Raw Material	Fermentors (selected species)
Beer	Grain malt	<i>Saccharomyces cerevisiae</i>
Bread	Grain flour	<i>Saccharomyces cerevisiae</i>
Butter	Milk	<i>Streptococcus</i> spp. <i>Leuconostoc</i> spp.
Cheese	Milk	<i>Lactobacillus</i> spp. (primary) <i>Lactococcus</i> spp. (primary) <i>Pediococcus</i> spp. (primary) <i>Streptococcus</i> spp. (primary) <i>Leuconostoc</i> spp. (secondary) <i>Propionibacter</i> spp. (secondary)
Chocolate	Cacao bean	<i>Saccharomyces cerevisiae</i> <i>Candida rugosa</i> <i>Kluyveromyces marxianus</i>
Coffee	Coffee bean	<i>Erwinia dissolvens</i>
Kefir	Milk	<i>Saccharomyces kefir</i> <i>Torula kefir</i>
Kimchi	Napa, Daikon	<i>Lactobacillus plantarum</i> <i>Lactobacillus brevis</i> <i>Streptococcus faecalis</i> <i>Leuconostoc mesenteroides</i> <i>Pediococcus pentosaceus</i>
Miso	Soy bean	<i>Aspergillus oryzae</i>
Olives	Olives	<i>Candida</i> spp. <i>Cryptococcus</i> spp. <i>Debaryomyces hanseii</i> <i>Lactobacillus</i> spp.
Pickles	Cucumber	<i>Leuconostoc mesenteroides</i> <i>Lactobacillus</i> spp.
Sauerkraut	Cabbage	<i>Coliform</i> spp. <i>Leuconostoc plantarum</i> <i>Lactobacillus</i> spp.
Sausages	Meat and spices	<i>Pediococcus</i> spp. <i>Lactobacillus</i> spp.
Soy Sauce	Soy bean	<i>Aspergillus oryzae</i>
Tempeh	Soy bean	<i>Rhizopus oligosporus</i>
Vinegar	Fruit juice	<i>Saccharomyces cerevisiae</i> <i>Gluconobacter</i> spp. <i>Acetobacter</i> spp.
Wine	Grapes	<i>Saccharomyces cerevisiae</i> <i>Saccharomyces bayanus</i>
Yogurt	Milk	<i>Lactobacillus bulgaricus</i> <i>Streptococcus thermophilus</i>



José Luis Cabañero Gutiérrez

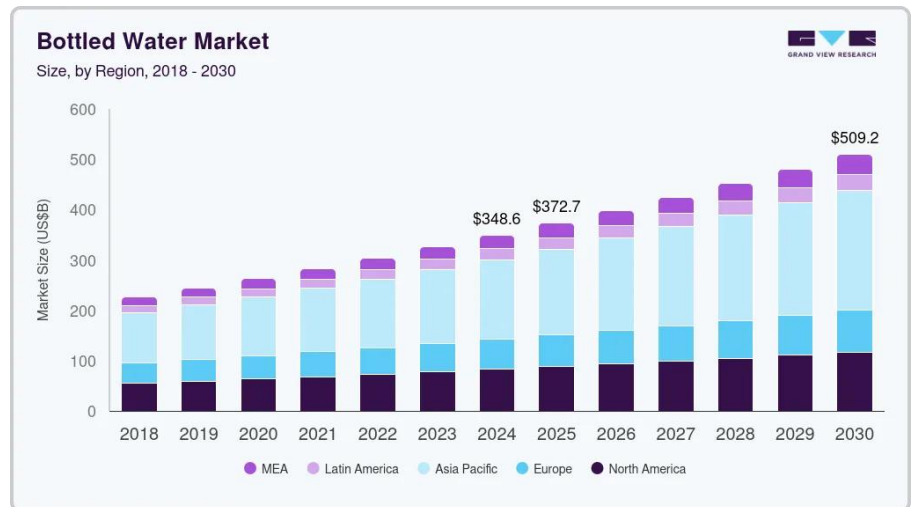
Remembering the future: the role of fermentation in modern cuisine (HEG Thesis) 2016

Water



Any pairing?

- About 100 billions bottles per year sold in the world
- Bottled water is 100 times more expensive than tap water
- Market worth more than \$300 billion per year (Coca-Cola, PepsiCo, Danone, Nestlé)



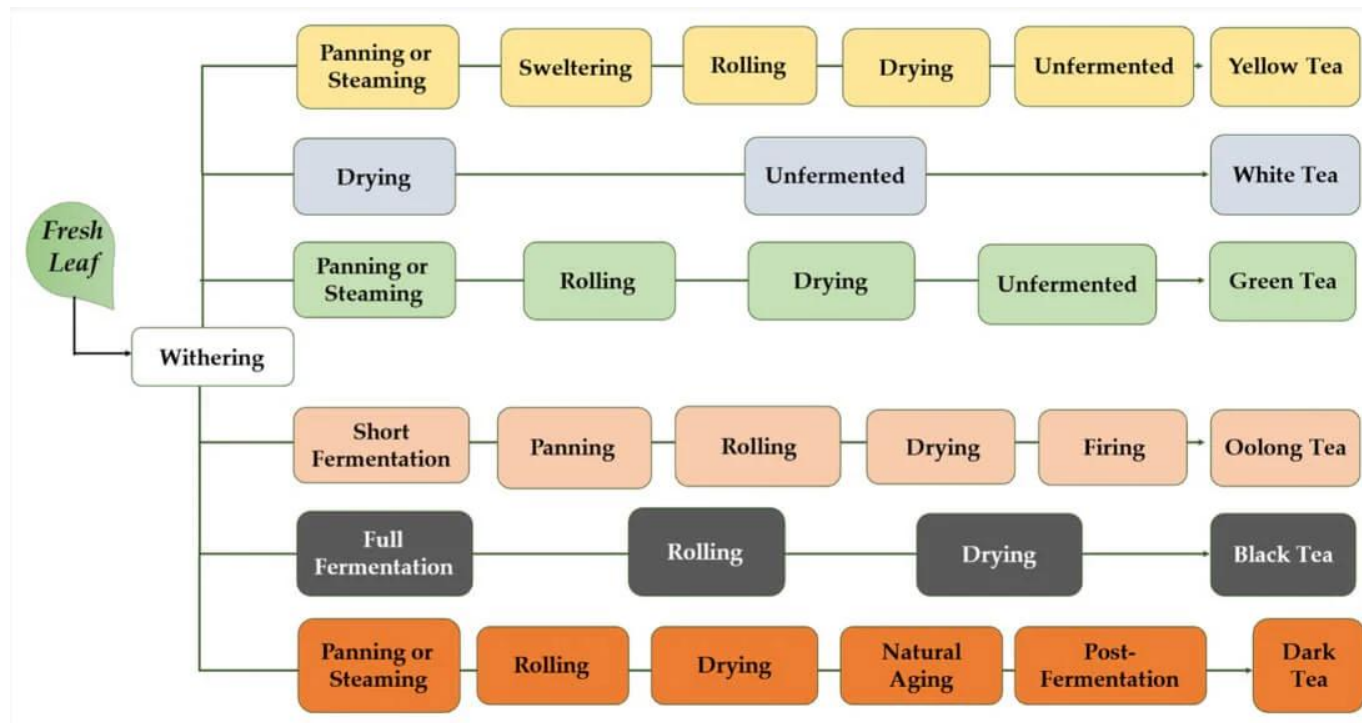
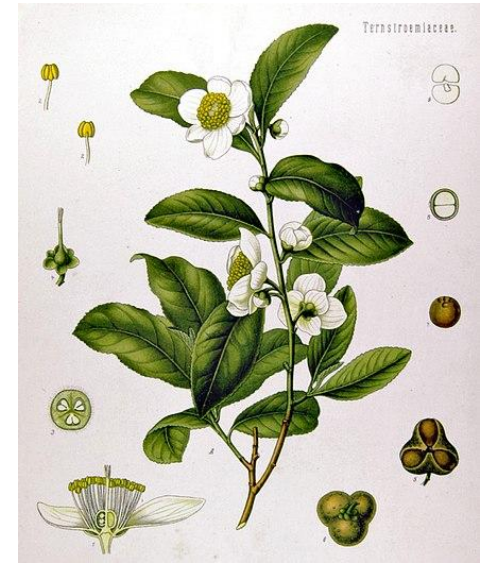
Tea (& else)

1,5 billion cups per day in the world
(2d most consumed drink, after water)

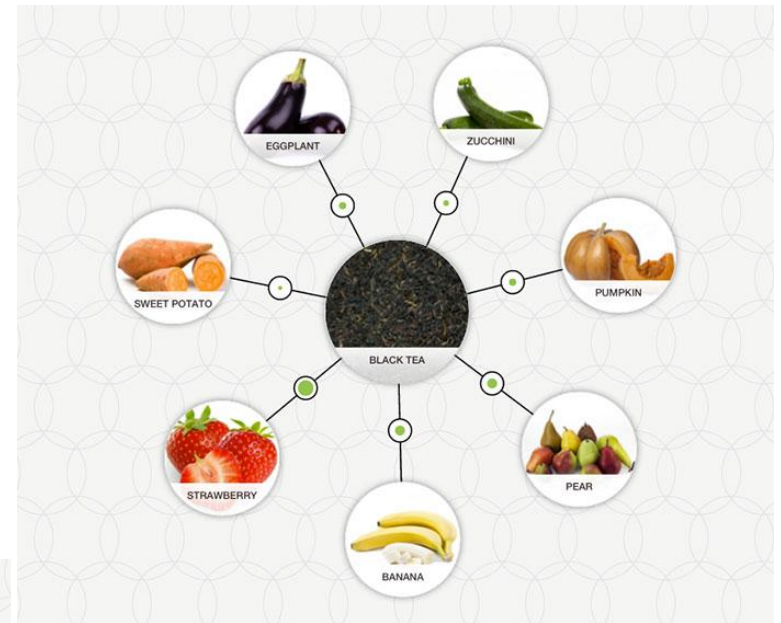
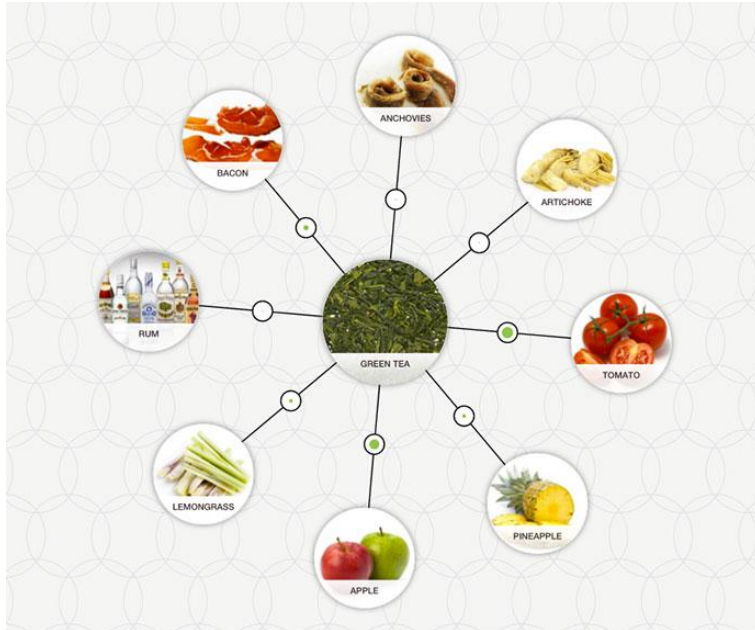


lapacho, mate, rooibos, green tea, black tea

Tea(s)



Food and tea pairing



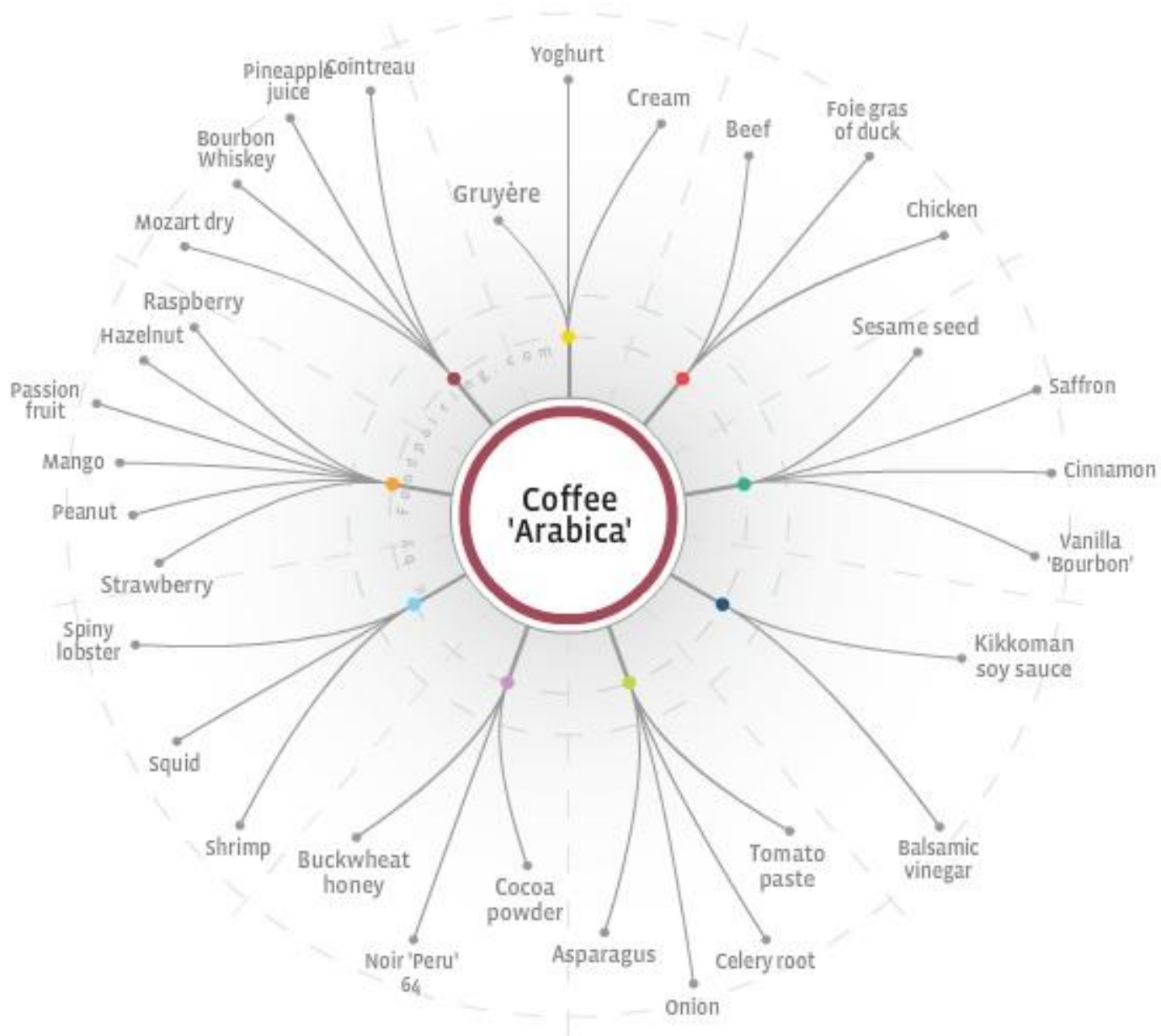
Coffee(s)



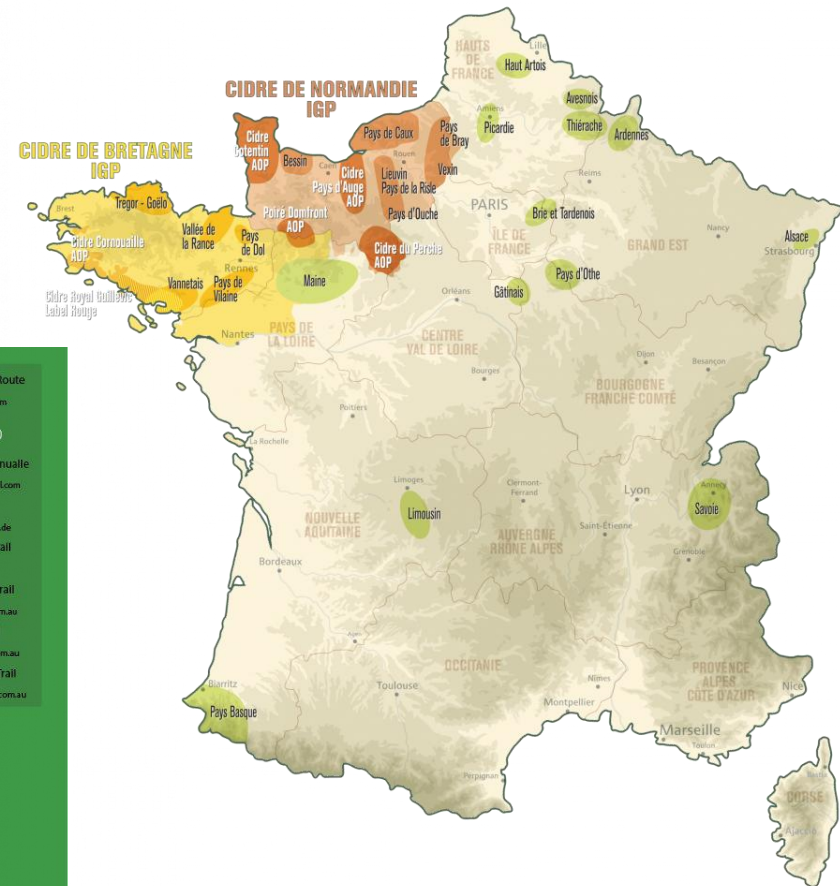
1,5 billion cups per day in the world
(also 2d most consumed drink, after water)



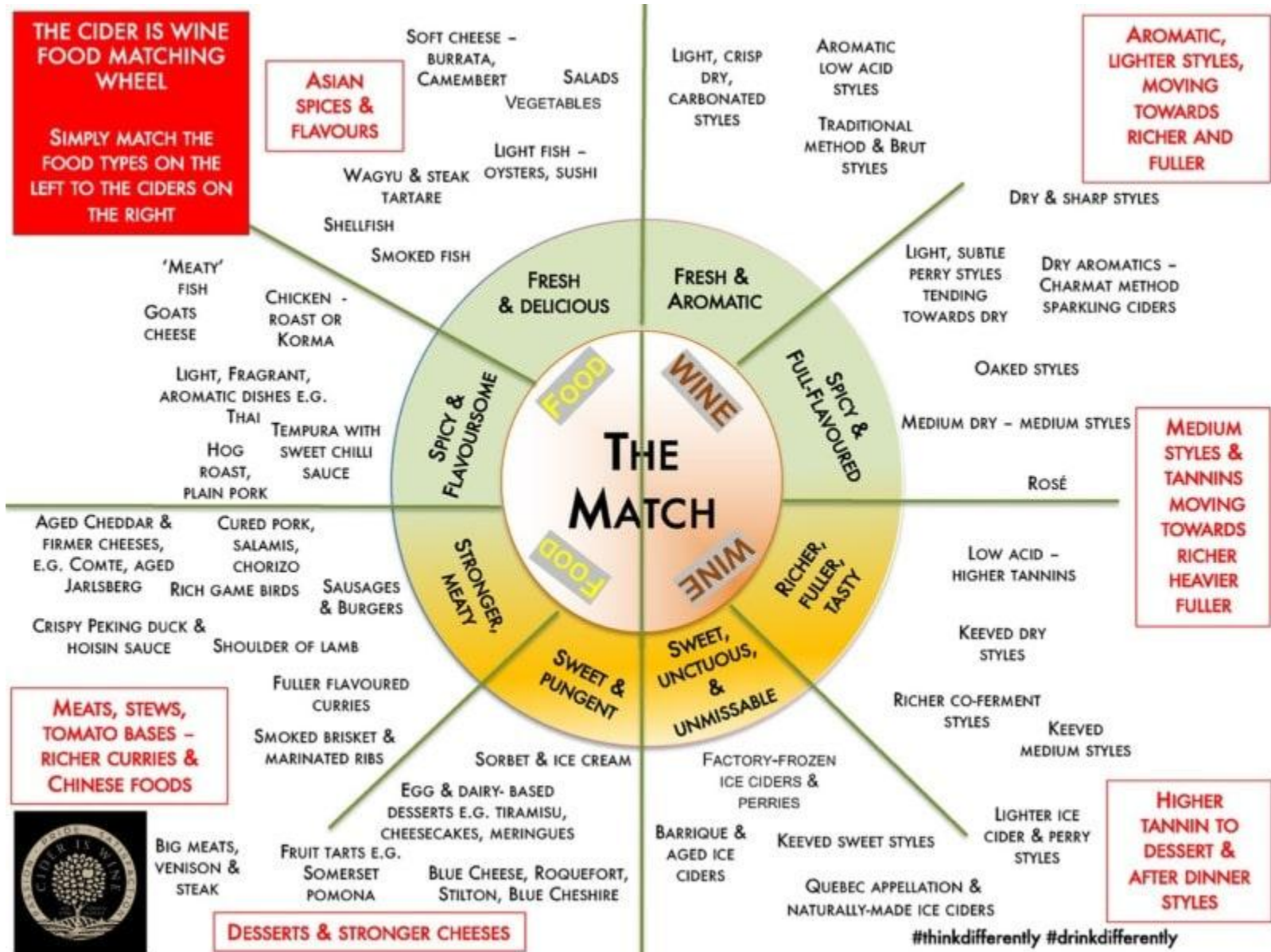
Food and coffee pairing



Cider(s)



Food and cider pairing



Beer(s)



beer/bi(ə)r/

Noun:

an alcoholic drink made from yeast-fermented malt flavored with hops.

"For a quart of ale is a meal for a king"
- William Shakespeare

Stout

Flavor: Chocolate/Mocha
Example: Guinness
In the hands of: Every Irish person ever
Fun fact: Stout originally meant any strong beer but now refers to dark, full-bodied beers

Golden Ale

Flavor: Clean crisp flavor, light color and good balance between hops and malt
Example: Ballantine XXX, Redhook Blonde Ale
In the hands of: Microbrew enthusiasts who scoff at the likes of light ales.
Fun fact: This style traces its roots back all the way to 873 AD in Köln, Germany

IPA

Flavor: Extremely hoppy
Example: Dogfish Head 60 Minute
In the hands of: The man who just explained the entire history of the beer when you ordered a pint
Fun fact: Originally formulated to handle the voyage from England to India

Dark Lager

Flavor: Chocolate/black licorice
Example: Michelob Dark
In the hands of: Unemployed couchpot loafers selling off-brand candy out of vans or working as extras on the Jersey Shore
Fun fact: Originally from Bavaria and has surprisingly crisp flavor despite its dark color

Wheat Ale

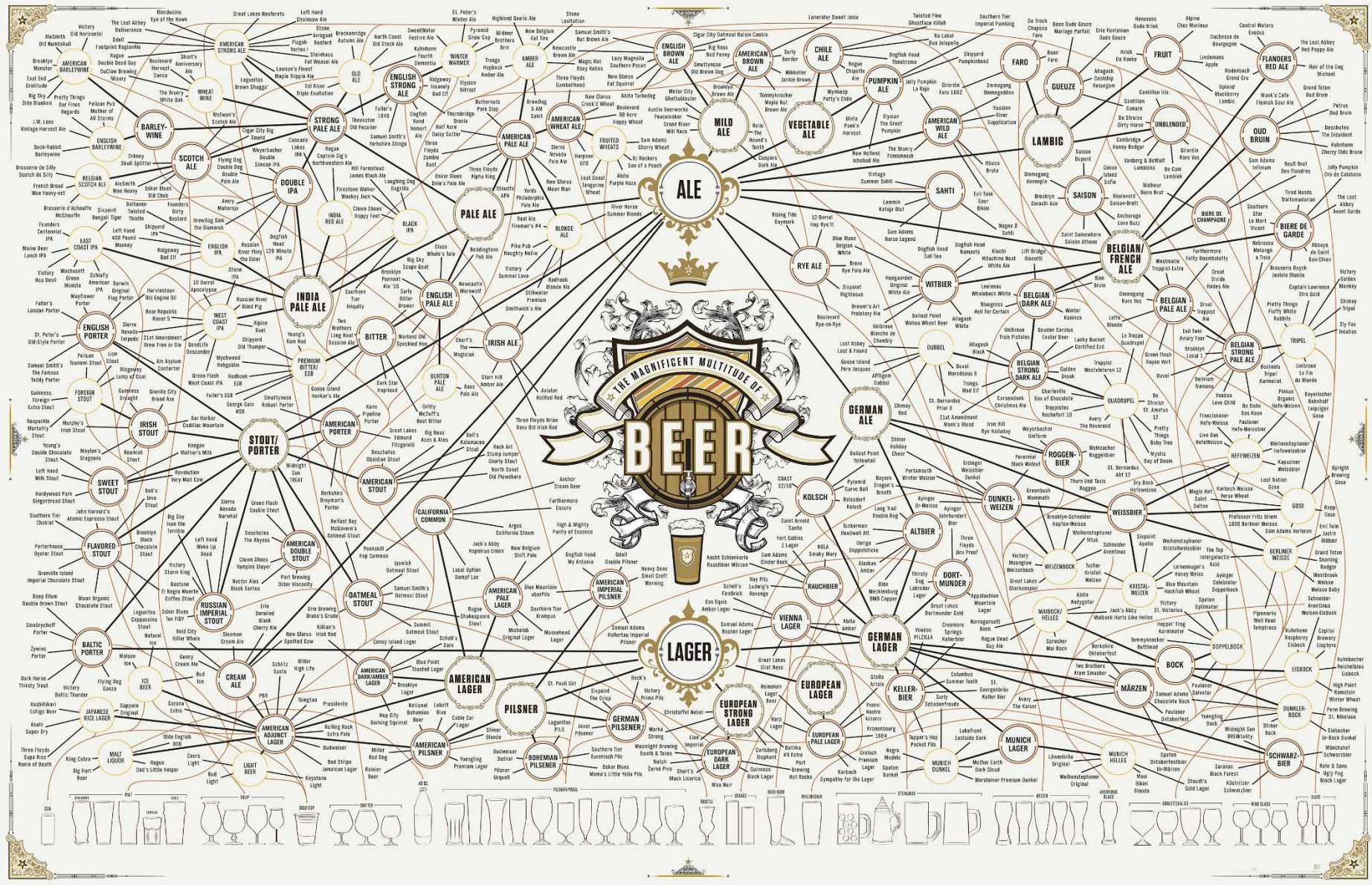
Flavor: Malty sweetness and smooth, a Belgian style with spices such as coriander and citrus
Example: Blue Moon, Oberon
In the hands of: A bearded European man explaining the comfort of Lederhosen whilst sipping out of "das boot"
Fun fact: Typically called "white beers" because historically there is a hazy appearance due to the wheat yeast

Lager

Flavor: Mild
Example: PBR (American Style)
In the hands of: A hipster in an underground bar you've probably never heard of
Fun fact: On average, strongest in alcohol content

As the seasons change so does the color of beer. In the darkening winter months, there is a rise to the top of the spectrum with its colder colors and bold, hearty flavors. As the days get brighter, the hues lighten to the paler yellows. The summer sun is at its zenith, and the refreshing yellows emerge. As the leaves change, we return to earthy tones that precede the darkness of winter.

Beer(ssssssssss)



Food and beer pairing

Pale Lager

Chicken • Salads • Salmon • Fried Food

Blonde Ale

Seafood • Salads • Mac & Cheese • Fried Chicken

Hefeweizen

Tacos • Seafood • Salad • Cream Sauces

Pale Ale/Ipa

Burger • Chips • Salad • Thai Food

Amber Ale

Sandwiches • Pizza • Cheese • Burger

Red Ale

Beef • Pork • Reuben • Barbeque

Brown Ale

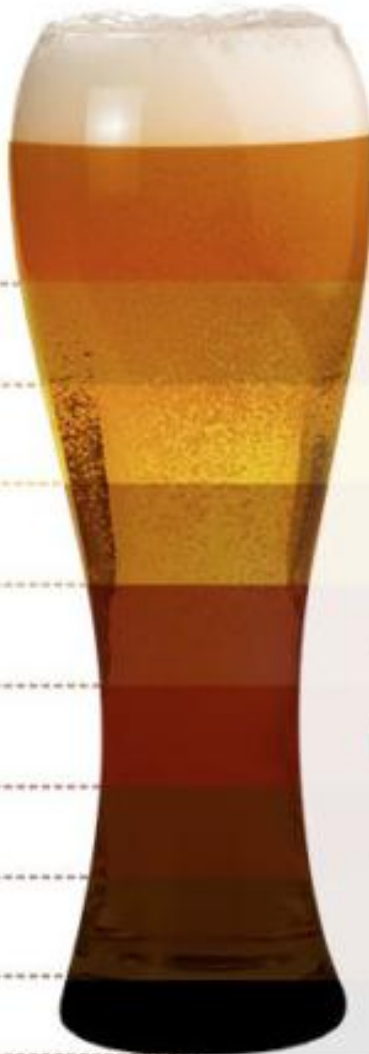
Universal Pairing • Barbeque • Mac & Cheese • Pork

Porter

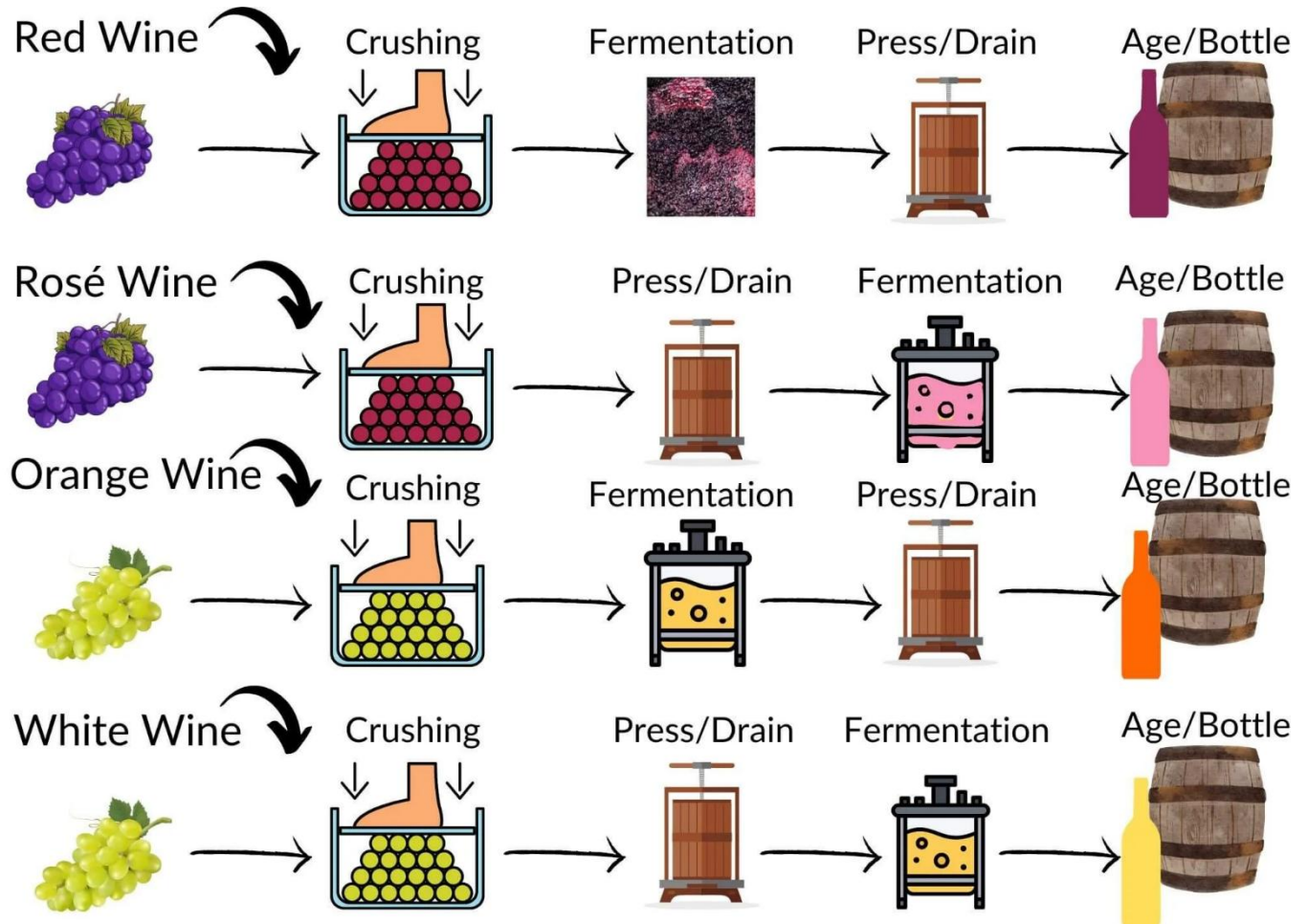
Meatloaf • Fish • Beef • Barbeque

Stout

Beef • Barbeque • Burger • Onion Rings



Wine(s)



Spirit(s)



Food and alcohol (spirits/cocktails) pairing

SPIRITS & FOOD PAIRING



GIN

Seafood
Fish
Nuts
Lamb
Berries



VODKA

Smoked Fish
Chocolate Desserts



WHISKEY

Barbequed Dishes
Steaks
Cheesecake Desserts
Haggis
Fish & Sushi



RUM

Barbequed Dishes
Cheese
Chocolate Desserts
Chicken
Brisket

The world's favourite foods and their cocktail pairings

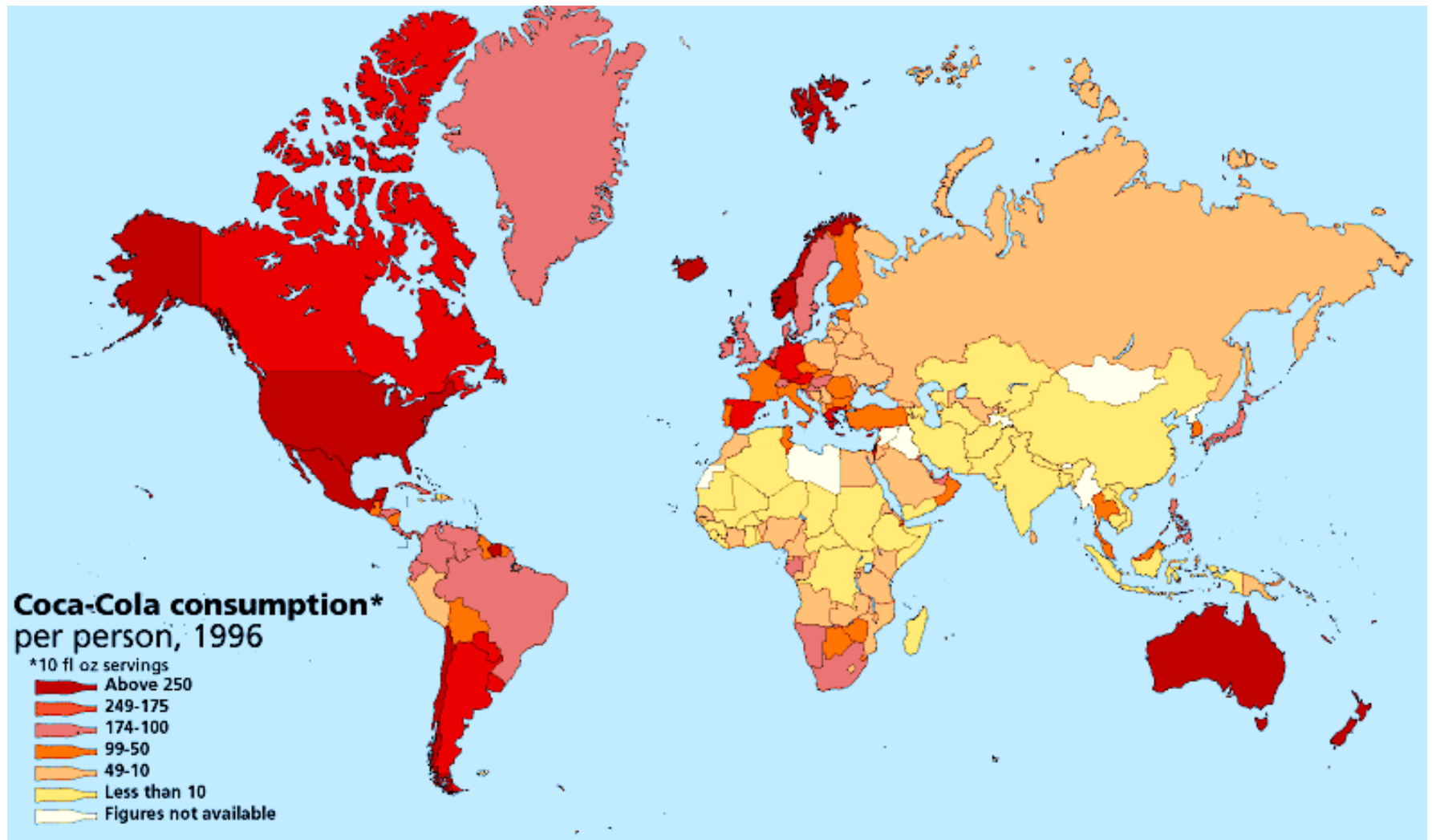
What are the most popular dishes enjoyed around the world and what cocktails should you pair them with?



Sources: YouGov | Taste Atlas | Instagram | AHREFS | TikTok | NIO Cocktails

NIO
COCKTAILS

Soft drink(s) (any pairing?..)



Fermented soft drinks

(any pairing?)

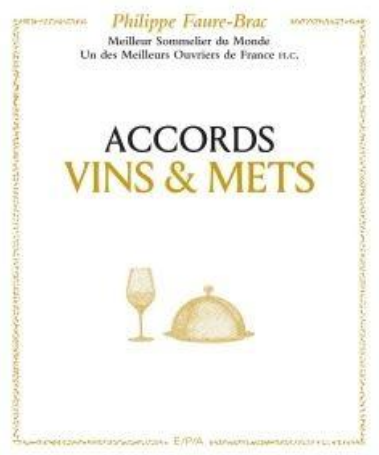
Kombucha Tea vs Water Kefir

INGREDIENTS	Tea, Sugar, SCOBY, Starter Liquid	Water, Sugar, & Kefir Grains
TASTES LIKE	Sweet tart fizzy	Lightly sweet & Fizzy
TURNAROUND TIME & YIELD	7-14 days per 1 gallon	24-72 hours per pint or quart
BENEFICIAL BUGS	<i>Gluconacetobacter</i> , <i>Brettanomyces bruxellensis</i>	<i>Zymomomas mobilis</i>
PRIMARY BENEFITS	Digestive aid & Liver support	Diversify gut microbiome
FERMENTATION PROS	SCOBYs easy to store long term if need to take a break	Quick turn around time means small batches for fresh product can be consumed daily
FERMENTATION CONS	Slower brewing process may mean making multiple batches to meet demand (Continuous Brew solves this)	Rapid fermentation means frequent maintenance; Cultures don't store well unless dehydrated
TASTE PROS	Can make in a zillion different flavor combinations; great soda substitute & naturally fizzy	Lightly sweet, refreshing and hydrating flavor
TASTE CONS	Vinegary flavor may not appeal to some people	Can be too sweet for some or overly sour depending on sugar source

KombuchaKamp.com



Just one reference (if you really wants one)...



... but most of all, just (eat and) drink, responsibly...
...and experimentate, endlessly!

Thanks