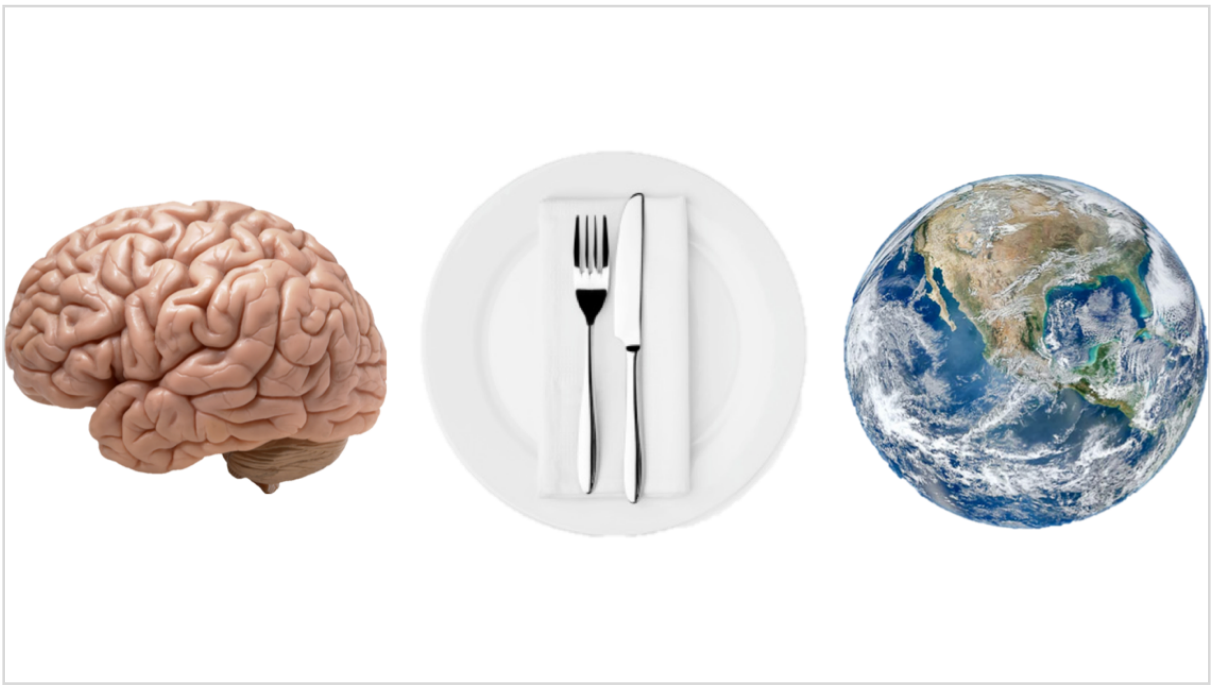
Ecological Foodways

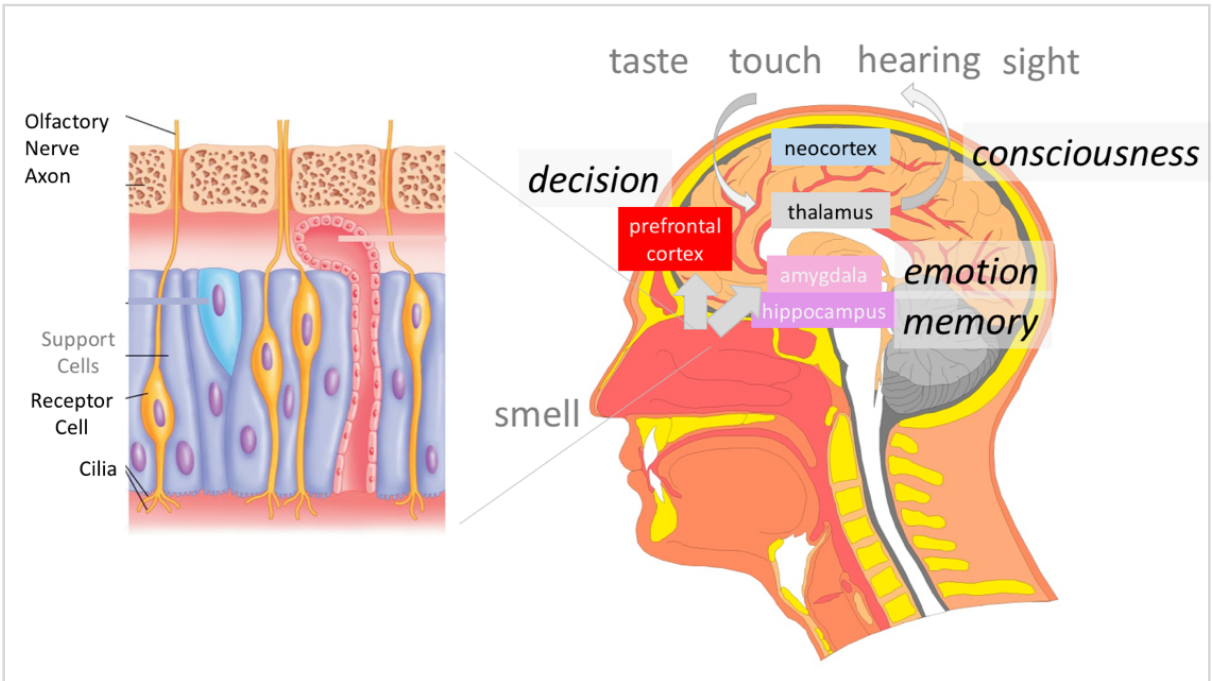
Day 2: Food in Your Head and Intro to Tasting Wine



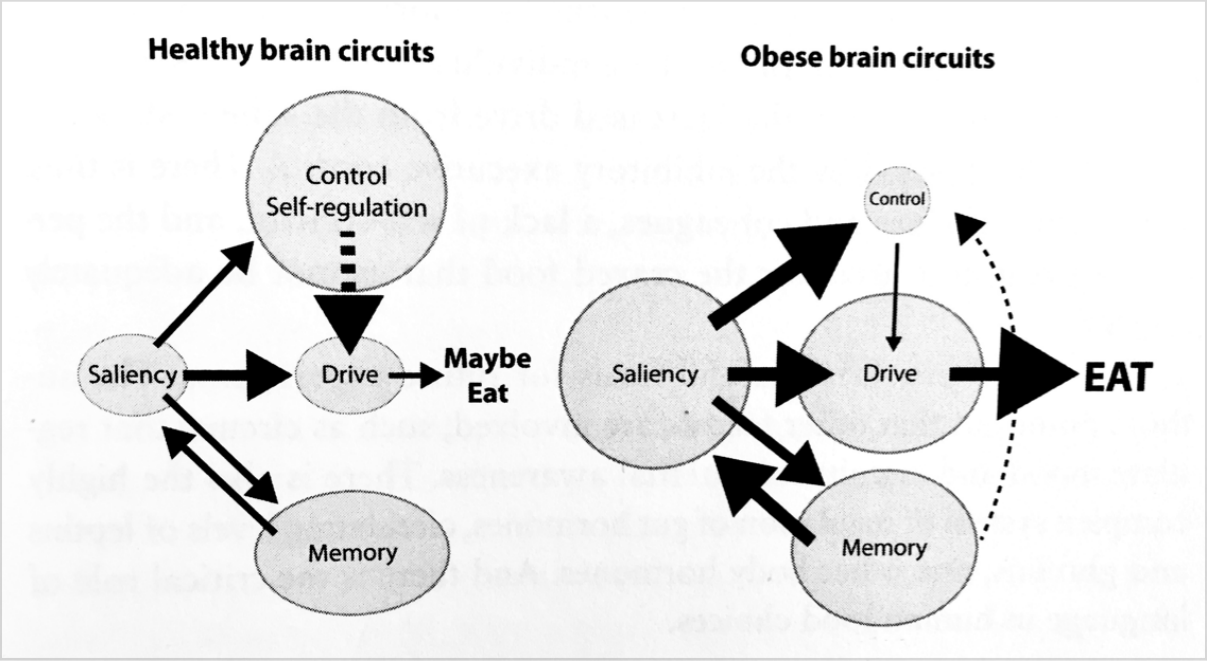
Last Week, Today

- Recap: discussed our motivation and ability to observe the world through food and flavor, examined the components of flavor and investigated the basic tastes and the difference between taste, smell and ortho- vs. retro- nasal olfaction.
- Readings: Barber, Shepherd, Davis (in Kurlansky).

Talk: Food in Your Head



- Flavor is a synthesis of sensory input and past experience.
  - Sensory Organs and Senses
    - Ears = Sound
    - Eyes = Sight
    - Tongue (skin in general) = Touch
    - Nose = Smell (ortho- and retro-olfaction)
    - Tongue (possibly gastrointestinal) = Taste
  - Neural Pathways and Brain Regions
    - *Sound, sight, touch and taste* are routed through the thalamus, which coordinates their inputs, and then passed to the neocortex, the center of consciousness.
    - *Smell* is not routed through the neocortex but is instead interacts directly with the prefrontal cortex, amygdala and hippocampus, which control decisions, memory and emotions.
  - Smell is Unique: what does that mean?
    - Decisions, emotions and memories from smell (and potentially flavor) are created prior to conscious experience and awareness.
    - Evolutionary Perspective
      - Smell is a basal sense that developed before the development of the conscious centers of the brain.
      - Advantageous to override the conscious centers of the brain: e.g., disgust associated with bad experiences.
      - Spatial recall important for locating and detecting food.
  - Flavor impacts behavior *and visa-versa*



    - Food decisions and behaviors can become reinforced via flavor-value-action systems comprised of:

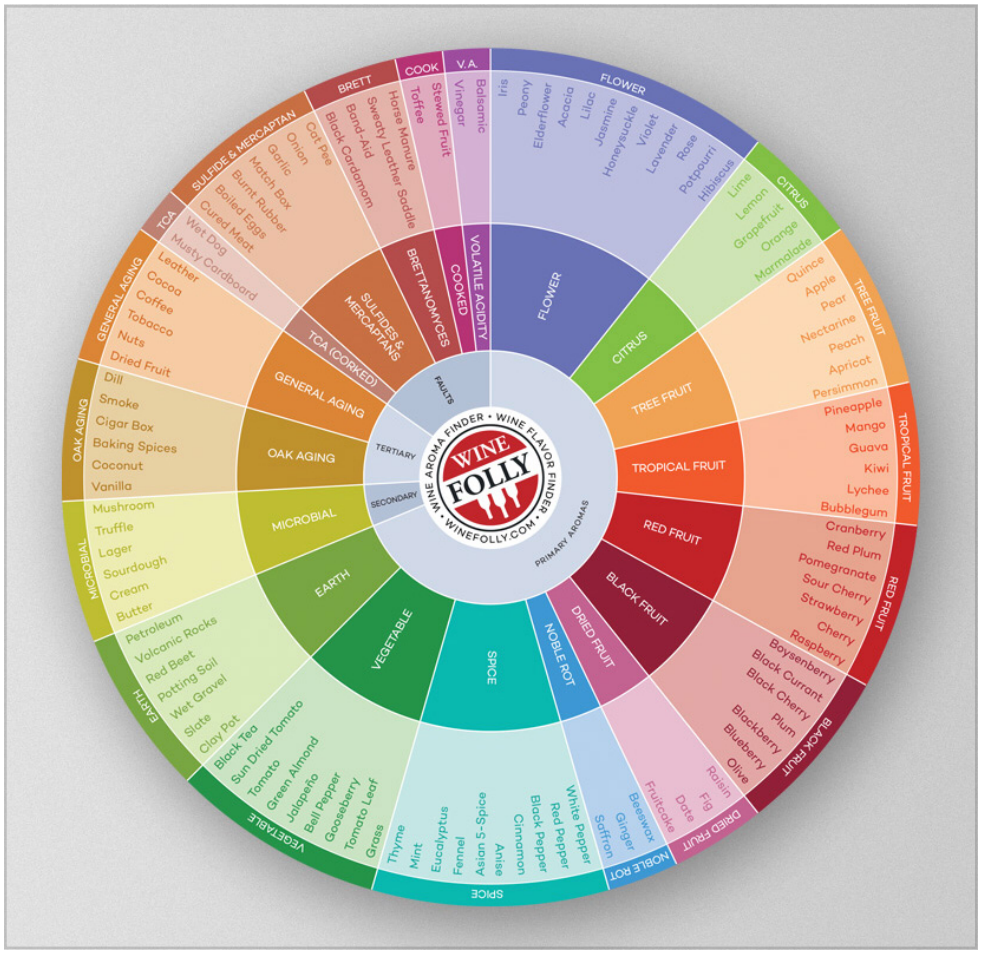
        - Saliency: the desirability of something (i.e. food).
        - Drive: the desire to obtain something (i.e. eat).
        - Control: ability to choose not to act on desires.
        - Memory: in this context, what was the reward in the past.
    - Perception and thoughts (smells bad or good) impact flavor.
    - Because of smell's unconscious impact, this is a critical point influencing decisions and values without our knowing it.
    - Smell is highly plastic, and changing perception of aromas can alter sensory cells and neurons, altering their physical sensation.
- *What does this mean for ecosystems when the deliciousness in out heads is the arbiter of their physical reality?*
- Readings: Barber pg. 78-99, Shepherd pg. 155-162, 165-173, 192-199, 210-211, and Davis (in Kurlansky) pg. 103-106.

Lab: Intro to Tasting Wine

- Wine tasting developed from a need to assess the value of wine.
- Wine tasting is now often conducted purely for sensory experiences.
- It is perhaps the most refined mode of identifying flavors, esp. aromas.
- **Process**:
    - *Tilting* the glass can help in examining the color and clarity.

- *Swirling* both helps to assess viscosity and aerosolizes aromas.
- *Sniffing* with short and long inhalations with your nose in the glass maximizes the amount of aromas that pass through the nose.
- *Sipping* a sufficient quantity of both wine permits the movement of the wine over the tongue and space for *air* inside the mouth.
- *Swishing* facilitates the movement of wine in the mouth and the aerosolization of aromas for exhalation out through the nose.
- *Spitting* permits successive tastes with minimal palette fatigue.

- **Mechanics**
  - Tilting and Swirling
    - This is assuming the wine glass is in the right-hand.
    - Hold the wine glass with your index and middle fingers on the opposite side of the stem from your thumb and ring fingers about half to two thirds up the stem.
    - *Tilt the glass to about a 75 degree angle away from you.*
    - Visually assess the wine and then bring the glass back to vertical.
    - *Swirl by keeping the glass vertical and moving your hand in a small circular motion (counter-clockwise).*
    - Stop swirling, *breath out* before putting your nose in the glass.
  - Sniffing
    - *Sniff by taking a full inhalation and pay attention to aromas.*
    - *Swirl again, and take several shorter inhalations.*
    - *Sip by bringin the glass to your mouth and take in enough to cover your tongue and fill your mouth without puffing out your cheeks.*
  - Swishing
    - *Swish by moving your tongue up and down in your mouth.*
    - *Draw in air over the wine by pursing your lips, dropping your jaw and carefully inhaling.*
  - Spitting
    - Spitting is a common and accepted practice in wine tasting. Just try to your best to be unobtrusive.
    - Slowly set down the wine glass and bring the spittoon to you.
    - *Spit by pursing your lips then opening your lips and gently forcing the wine out into the bucket.*
    - Feel free to use a napkin to help with drips.
- **Activity 1: Wine Tasting Practice**
  1. Take a wine glass 10-20% full of water.
  2. *see, swirl, sniff, sip, swish, spit*
  3. REPEAT until you feel comfortable with the whole process.
  4. Now try it with some wine.

- *Things to Think and Talk About*
  - What is the color and clarity of the wine?
  - What is the viscosity of the wine?
  - What aromas are detectable in the glass?
  - How does the wine taste, smell and feel in the mouth?
  - How does the wine taste and smell after leaving the mouth?
  - **NOTE:** do your best to reserve your thoughts and expressions to yourself and wait until others have tasted.
- **Activity 2: Wine Standards**
  - *Purpose:* learn how to use wine standards to improve your palette.
    - From neurogastronomic research, we know that the physical and neurology attributes of flavor limits how we can communicate and perceive flavor.
    - Everyone experiences flavor uniquely, but concepts of aromas and flavors can be established through shared experience.
    - We can to taste and name the same things to establish "flavor standards".
    - *The Wine Wheel* developed originally by Ann Noble (UC Davis)
      - Useful to guide from general to more specific aroma concepts.
      - 

      - https://winefolly.com/review/identifying-flavors-in-wine/
      - *Primary*: originate from characteristics of the grapes.
      - *Secondary:* arise through the fermentation process.

        - *Tertiary:* develop in the aging process.
        - *Fault:* indicate (not always) production or storage mistakes.
    - *Aroma standards* can be created by taking aromatic materials and combining them with a neutral wine.
- **Using the Aroma Standards**
    1. Pick up one of the standards.
    2. Holding the lid* on with your other hand, swirl the standard.
    3. Remove the lid and sniff, * don't taste *.
    4. Make a note of what you think the aroma is.
    5. Repeat two more times, use the wine wheel as a reference.
    6. Repeat with another standard.
        - *Keeping lids on keeps aroma concentrations high in the glass and keeps them away from your nose.
- **NOTE:** if you can't identify the aroma, don't worry. Make sure you are your nose is working properly, but palette development takes time and attention. Remember, you can develop your palette any time you have something around to smell.

- **Activity 3: Chardonnay, oaked and un-oaked**
    - The majority of wine we drink is made from one species: *Vitis vinifera*.
    - Chardonnay is a wine varietal originating in Burgundy, France.
    - Has few unique varietal characteristics, and strongly reflects the how and where it is grown.
    - Typically, chardonnay based wines produced with minimal or no use of oak typically have flavor and aromatic components that are characterized as fresh and clean: such as, *apple, pear, citrus, herb, stone or mineral*.
    - However, chardonnays made using oak, primarily through aging in oak barrels, often aromas and flavors that are "richer": such as, *butter, vanilla, pineapple, toast or caramel*.
    - **Blind Tasting**
        - *Purpose:* using flavor standards to detect the characteristic effects of aging in oak.
        - There are two wines, one aged in oak and another in stainless steel.
            1. Taste the first wine and make tasting notes.
            2. Taste the second wine and make tasting notes.
            3. Refer to the aroma standards and wine wheel as needed, and remember to take a break and cleanse your palette.
        - *Which wine do you think was "oaked"?*

The Weekly Forage

- Saskatoon (*Amelanchier* spp.)
    - Cree: *misaskatowami*

- *Identification*: usually shrub-like. Leaves are similar to rose leaves in shape and size. Leaves are oval with teeth on the edges and fine hairs on the underside. Berries have a "crown", like a blueberry, and range in color from red to purple.
- *Time*: also known as juneberry and shadbush, because it flowers in early spring. Fruit is usually ripe in late spring to early summer, June-July.
- *Environment:* occurs along streams and rivers naturally, but is a common landscaping plant.
- *Method*: berries can be used like any other berry. Similar in texture to blueberries. Has a slight almond flavor. Like other members of the rose family (e.g., almonds, apples, plums) parts of the plant contain small to large quantities of cyanide producing compounds. Only eat the berries once they are ripe.
- More info: http://www.eattheweeds.com/matricaria-matricarioides-for-your-tea-salad-2/

- Restaurant: The Loyal Nine (Cambridge, MA). Focused on New England regional cuisine reviving historic recipes. Try the lobster with hickory sauce if it's on the menu when you go!