

Topics for Today

Deliciousness

What is Taste

What is Flavor

Cooking Techniques



Chef Rebecca Peizer
C.E.C., C.H.E.

Taste vs. Flavor

the Pathway to Deliciousness

Do we all live in the same world?



Memories of Food

What childhood
memories do you
have of food?

Positive?

Negative?

How does
thinking about
them make you
feel?

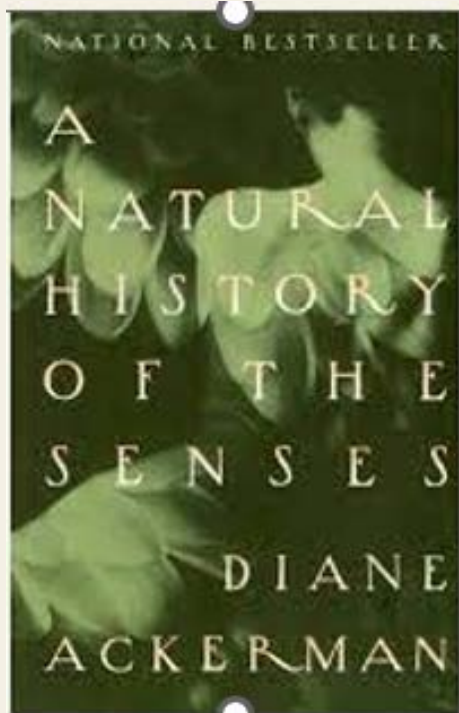




- After we Taste the food...
- Is our experience different than we created in our first impression?
- We refer to past experiences
- This is the Chef's opportunity to control the experience



Taste

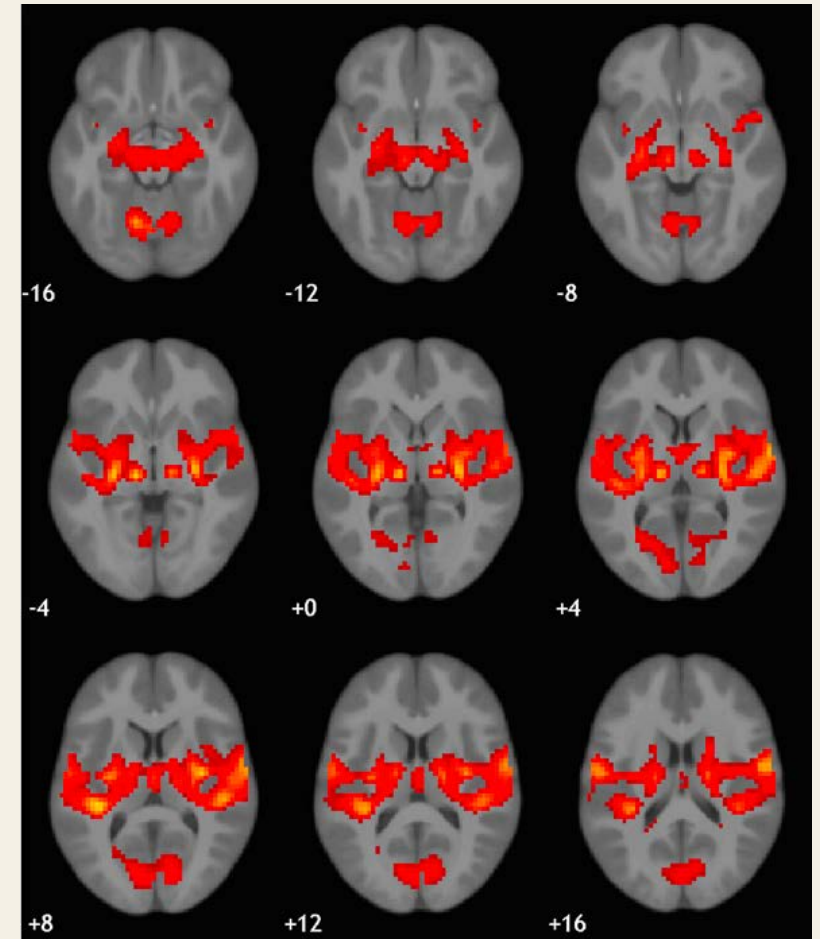


... is a big source of pleasure in most lives, a complex realm of satisfaction both physiological and emotional, much of which involves memories of childhood.”

Source: Ackerman, Diane, A Natural History of the Senses

Our brain tells us a story about what is going to happen.....

- Pleasurable sensory experiences (good meal, a hug) stimulate hedonic hotspots
- We eat because we are hungry. We dine for pleasure
- Creates a loop of pleasurable experience that fades once the stimulus decreases or stops
- Eating lesser delicious food will end the pleasure



Thomas Keller's “Law of Diminishing Returns”



- "Our whole menu is based on the law of diminishing returns.
- The most compelling portion of a dish is in the first three or four bites.
- With the first bite you're getting into it, by the second bite you start to realize it, and it is at the third or fourth bites you get the maximum appreciation and pleasure from that dish...
- and you keep eating because of that *memory* of it being really extraordinary.
- But was it as good [at the end] as it was at that second, third or fourth bite? No."

Adaptation and Palate Fatigue

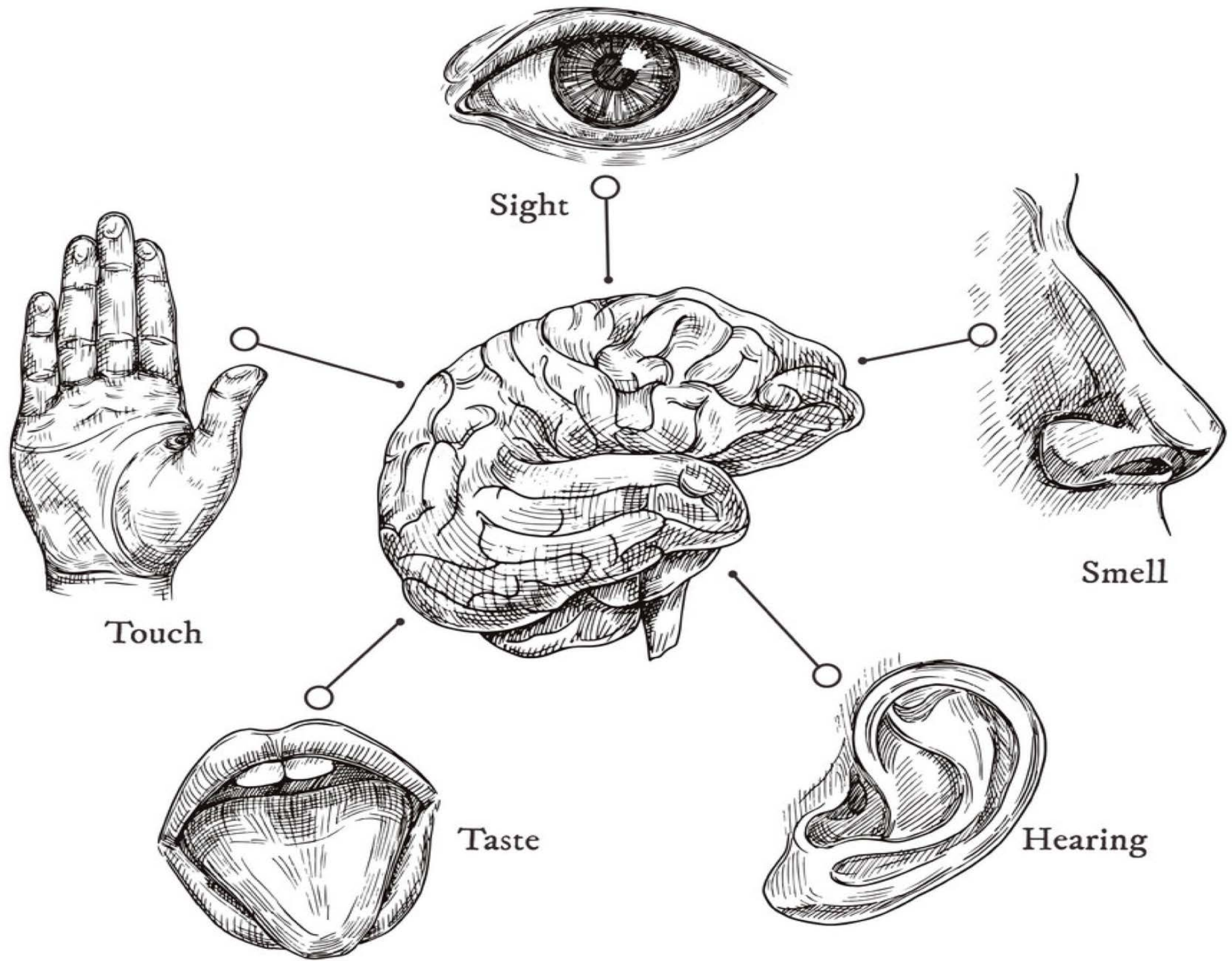
- After tasting the same thing multiple times, our brain becomes fatigued with similar sensory information and creates false readings (palate fatigue)
- But.....if the simplest combinations trigger memories of pleasure, lust and love with every bite....
- Then why is it that all it takes is one bad oyster to make you steer clear of this food for life?

The “wow what are you cooking, that smells so good” starter pack:



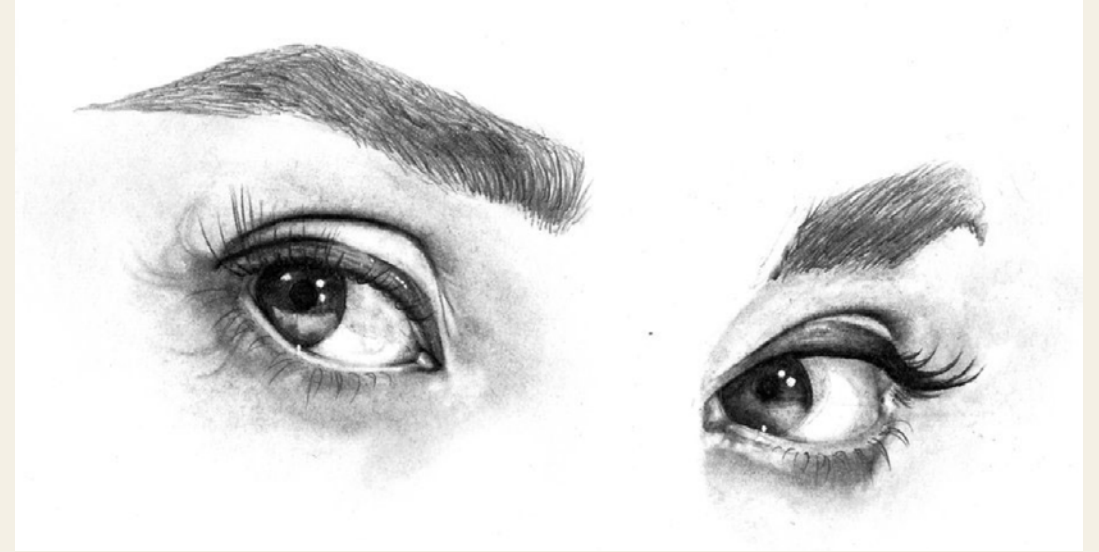
Because:

**We eat
with
ALL
our
senses**



We see the food. We are curious. We believe we know what to expect

“Eating” has already begun



**Our mouth begins to expect a sensation
Based on past experiences
Our palate moistens**

**What foods make your mouth water just SEEING
or THINKING about it?**

Seeing Flavor





Juicy Looking
Hints at
Succulence

Steaming Foods
Imply Hot Foods

Bright Colors
Indicate:
Freshness,
Proper
Doneness,
Flavor Profile

Taste Buds

The tongue acts as one of our gatekeepers by helping us distinguish between good and toxic substances, consequently guiding our food choices.



- Regenerate Every 7 - 10 Days
- Influenced by
 - Age,
 - Medication,
 - Pregnancy,
 - types of foods you eat
- They readily “learn” to love the foods they’re with
- All tastes are acquired, except sweet since sugars are the foundation of the earth’s food chain

Acquired Taste

Something that you do not like at first but that you begin to like after trying it a few times...



"I didn't always like caviar.
It's an acquired taste."

www.Idioms.Online

What Taste Means...

- **Sweet** -- signals ripeness in fruit
- **Sour**-- indicates underripe or spoiled
- **Salty** -- indicates minerals / or electrolytes
- **Bitter** -- signals poison
- **Umami** -- can indicate protein



Mixture Suppression

- When the basic tastes are combined, they mask each other
- Perceived intensity is suppressed
- Pesto has ALL the tastes... but together? HARMONY
 - Basil
 - Garlic
 - Cheese
 - Nuts



UMAMI Means ‘**Deliciousness**’

- fish sauce
- ripened cheese
- aged meat
- fermented
- mushroom, dried
- dry/cured fish
- cured meat
- browned meat
- browned vegetables



Taste + Aroma = Flavor

How are aromas used to entice customers?

- The smell of freshly baked bread, coffee, popcorn
- The aroma of cinnamon buns in the airport
- French fries at a fast food drive through
- Onions, Garlic and Simmering Soup



*Sometimes the nose picks up aroma
before any other senses engage*



Experiencing Flavor

- Are you surprised to hear that you can also...
 - Hear flavor
 - Smell flavor
 - Feel flavor



Flavour is multifaceted sensory experience involving, taste, smell, touch, temperature, sound, sight, and pain that we perceive when consuming food” (Delwiche, 2004)

Hearing Flavor

- The sounds that food makes influences the perception of its flavor
 - Sizzling platter of fajitas
 - Fizzle of champagne
 - Crunchy potato chips
 - Crisp apples

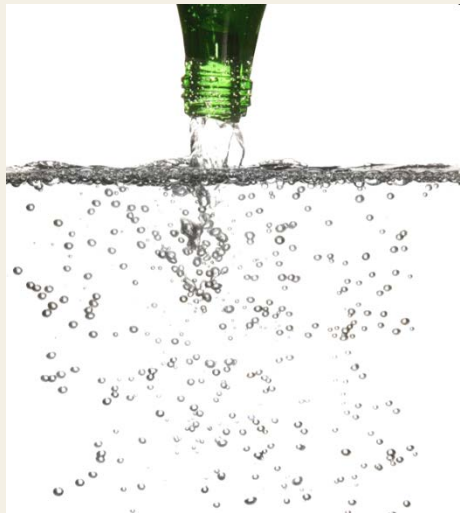


Feeling Flavor

“Carbonation”

“Cool”

“Spicy/Hot” pain



Crunchy vs. Chewy

- Chocolate chip cookies
 - Is there a difference in flavor?



Crispy vs. Crunchy

- Lay's potato chips
 - Initial sound and texture quickly lost
- Kettle Chips
 - More sustained echo of texture throughout



How Cooking Techniques Affect our Perception of Flavor

DRY

- Bake
- Roast
- Saute
- Stir Fry
- Grill
- Fry

MOIST

- Steam, Boil,
- Poach, Simmer



Cooking Plants- “Root to Stem”

We can eat all parts of the plant

- Roots
- Stems
- Leaves
- Flowers
- Seeds
- Fruits



Plant Pigments

- Small molecules create a variety of colors
- Some soluble in water, some in fat
- Different sensitivities cause breakdown
- The more colorful, the more nutritious
- Can You Taste COLOR???



Cellulose and Lignin

- Structural components of cell walls
- Resistant to heat breakdown
- Must be destroyed by long cooking, fermentation, or physical means



But Why Cook Plants at All?

- Palatability
- Digestibility
- Some nutrient retention
- Changes that Occur
 - Flavor
 - Texture
 - Water content

Cooking breaks down the plant's cell walls, releasing more of the antioxidants and nutrients bound to those cell walls.



ROASTED



AIRFRYER



BLANCHED



STEAMED



MICROWAVED

RAW



BOILED

SAUTÉED



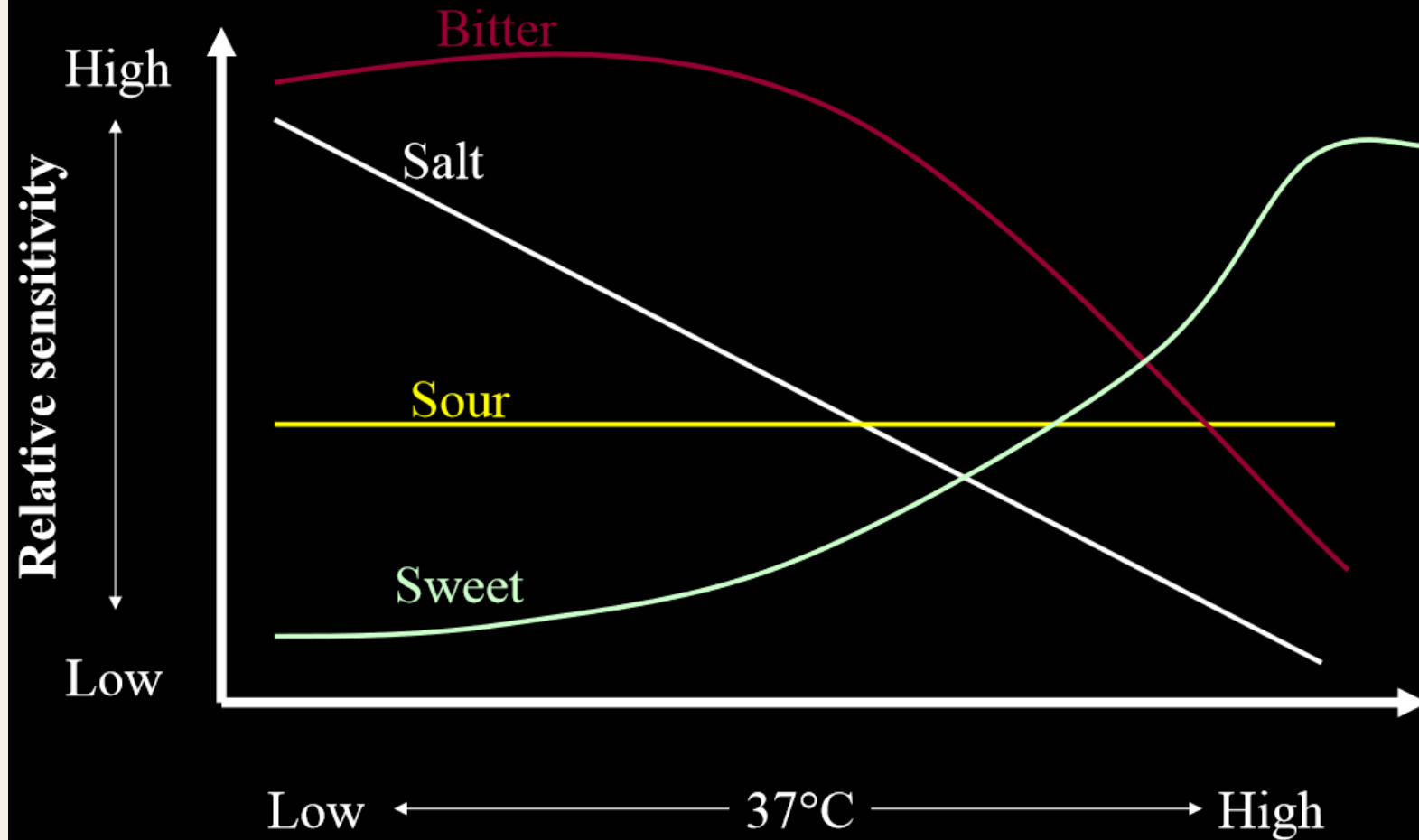
Effects of Cooking Techniques

what
do
you
notice

what
does it
mean?



Effects of temperature on taste perception



Temperature of solution consumed

(Sekuler, 2002)

How do we Harness Deliciousness? EXPOSURE

Cook often- with a variety of
foods and methods

Learn and understand why
food tastes the way that it
does- develop its story

Repeat the process- it will
teach you everything you
want to know

Cook, eat, repeat,
cook, eat, repeat,
cook, eat, repeat,
cook, eat, repeat,
cook, eat, repeat.

*Ingredients, recipes
and stories.*

Nigella Lawson

THANK YOU!