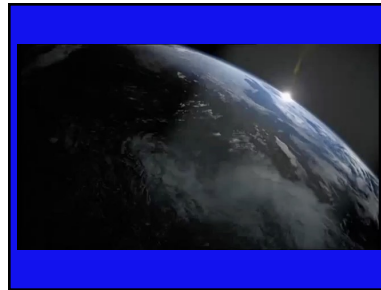
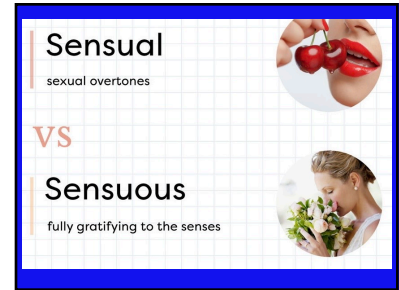


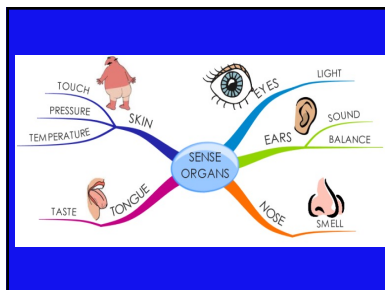
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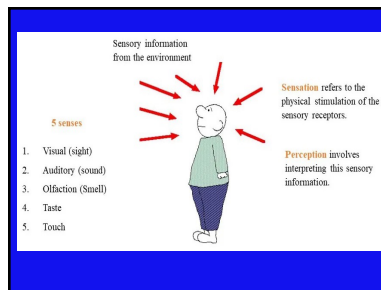
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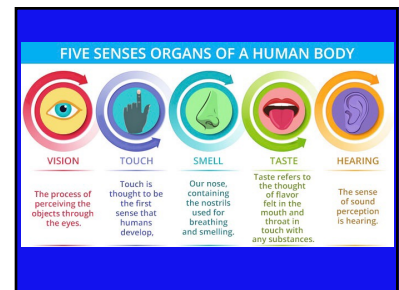
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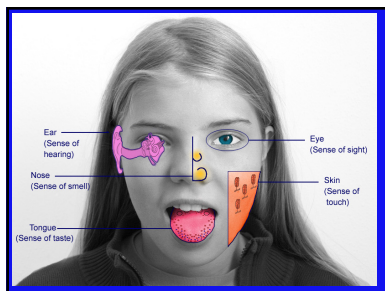
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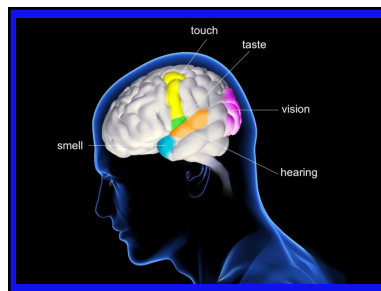
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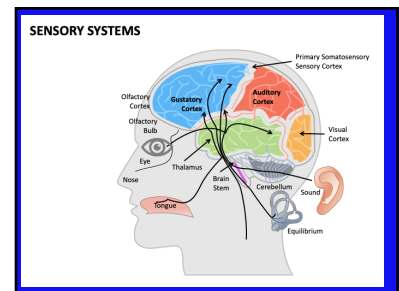
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9

Receptors and Sensations

Sensory Receptors

1. Detect change, trigger nerve impulses.
2. Five general types
 - a) Chemoreceptors
 - b) Pain receptors
 - c) Thermoreceptors
 - d) Mechanoreceptors
 - e) Photoreceptors

10

METHOD	NORMAL TEMPERATURE RANGE
RECTUM	97.9°F to 100.4°F
MOUTH	95.9°F to 99.5°F
ARMPIT	97.8°F to 99.5°F
EAR	96.4°F to 100.4°F

11

Nonhuman Senses

- Infrared imaging
- Electrosense
- Vomerofaction
- Ultrasound detection
- Infrasound detection
- Magnetoreception
- Cutaneous chemosense

12

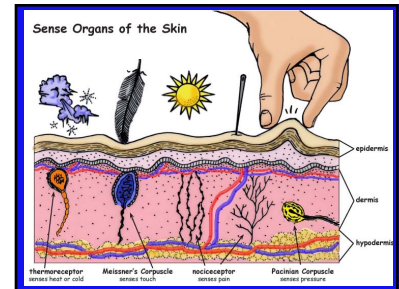


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Touch.

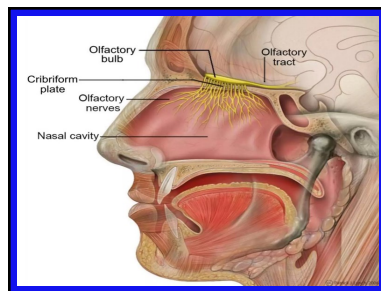
- We use our skin to feel. It is our organ of touch.
- Through our skin we feel temperature, texture and pain.
- By touching things we know if something is wet or dry, hot or cold, or hard or soft. Nerve endings send the information to the brain.

14



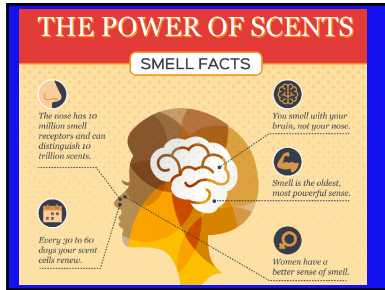
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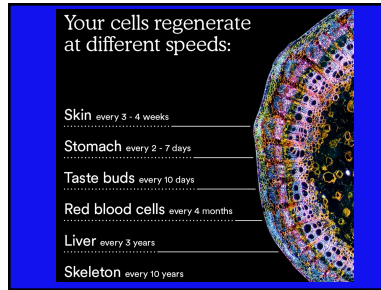


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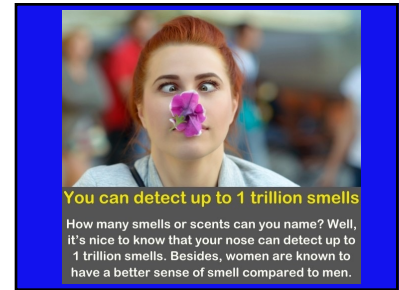
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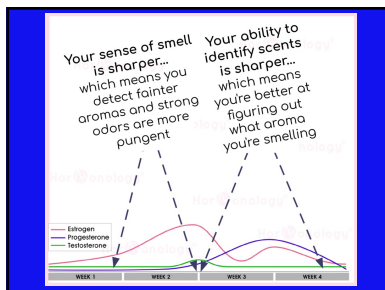
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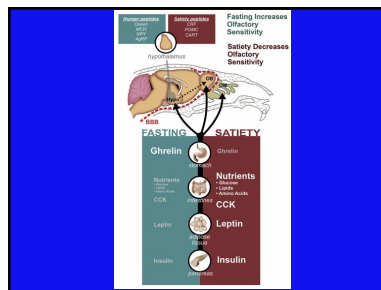
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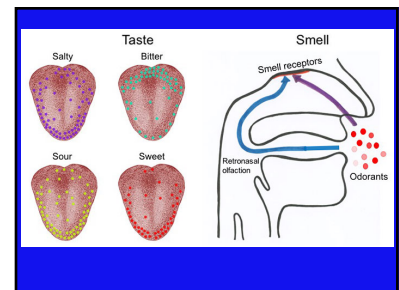
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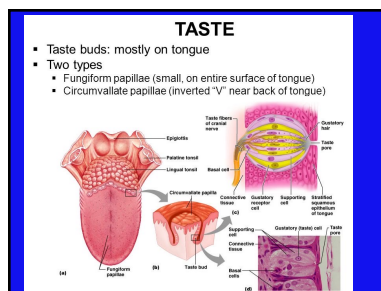
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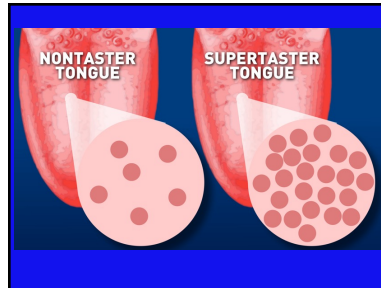
27

Children have three times the taste buds as adults, which means some foods, like vegetables, can overpower sensitive palates.¹



As a result, more than 9 in 10 kids did not consume the USDA-recommended amount of veggies in 2007-2010.²

28



29

What is flavor?

- Flavor is the result of sensory interaction – smell, texture, temperature, appearance & taste combine to form flavor.
- Close your eyes, hold your nose shut and try to distinguish between different foods. Taste stays the same but flavor changes with how a food looks or what temperature it is served at.
- Your sight and especially smell have an effect on what you experience as flavor.

30

Taster Facts

- Women are more likely to be super tasters.
- Taste receptors reproduce themselves so if you burn your tongue they come back. Age though causes number of taste buds to decrease.
- Alcoholics tend to be non-tasters. Alcohol and tobacco kills taste buds permanently and prematurely.
- Sensitivity to taste changes with age. The number of taste buds deteriorates as we get older.

31



32



The fastest human sense is hearing

Have you ever heard that your brain can recognize a sound as little as 0.05 seconds? That is 10 times faster compared to a blink of an eye.

33



When Beethoven went deaf, he composed his music by hacking the legs off his piano and sitting on the floor so he could feel the vibrations.

34

The single biggest problem in communication is the illusion that it has taken place.

George Bernard Shaw



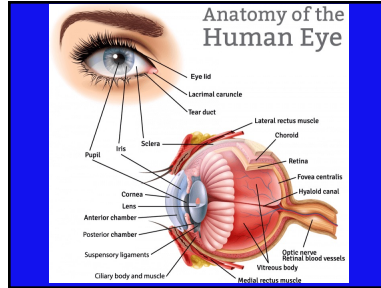
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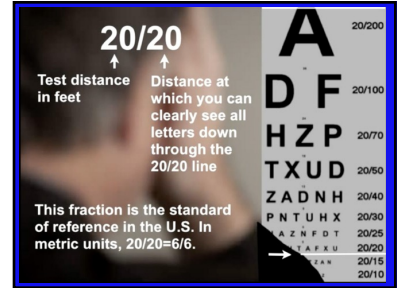
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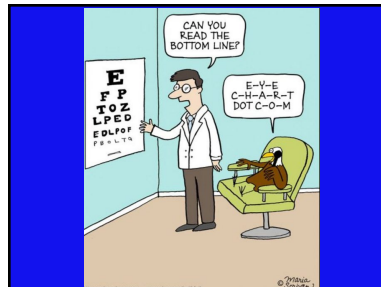
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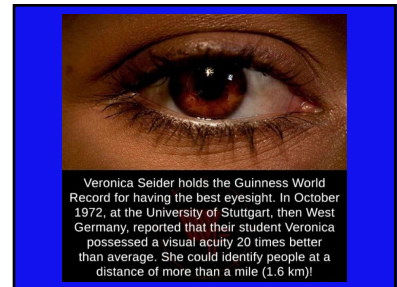
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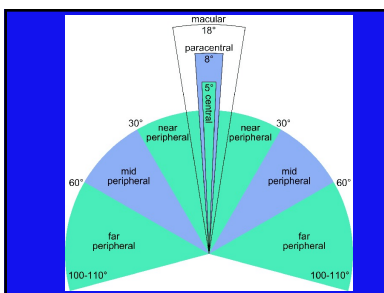
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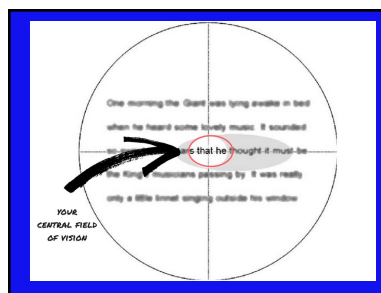
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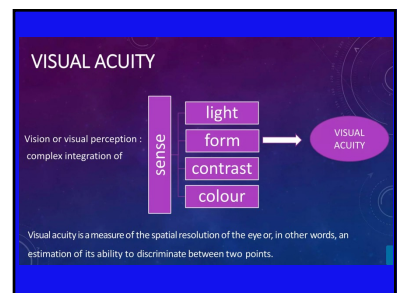
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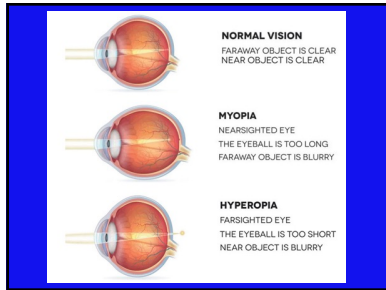
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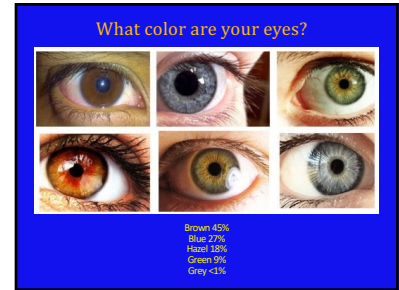
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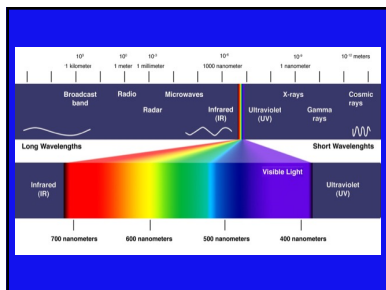
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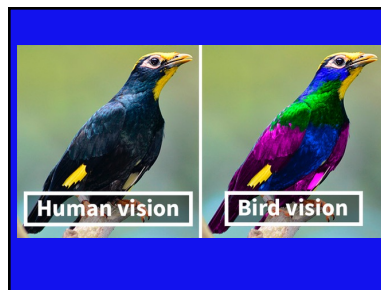
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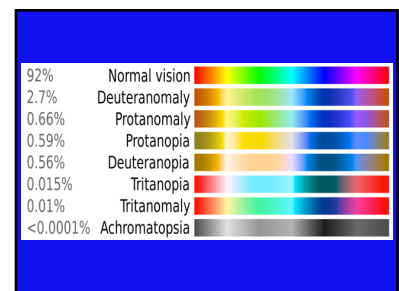
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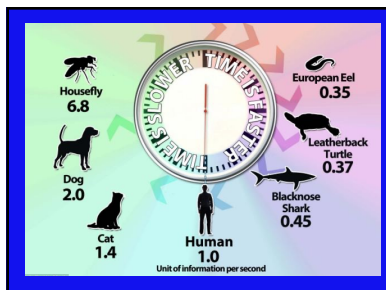
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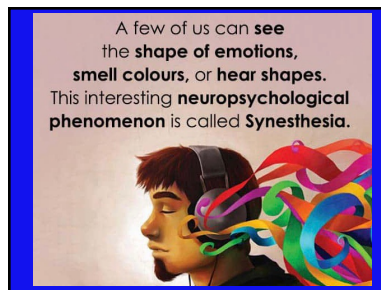
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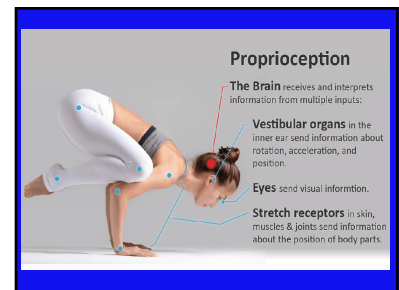
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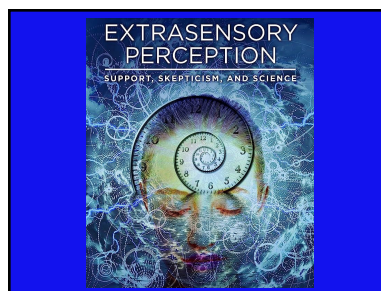
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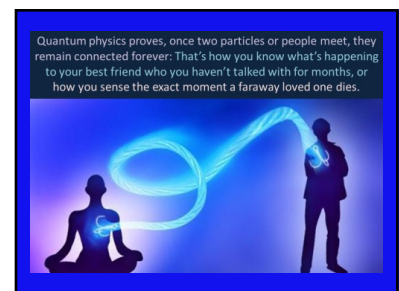
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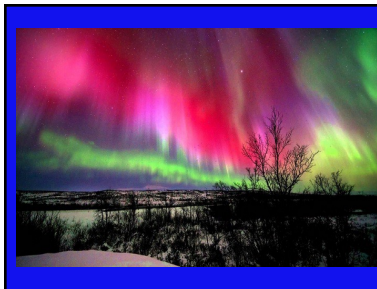
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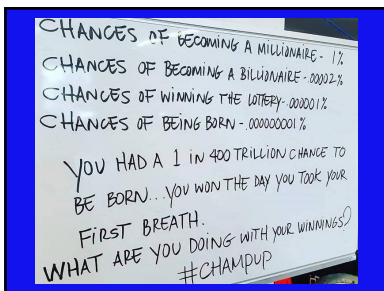
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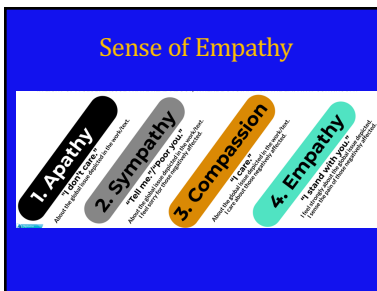
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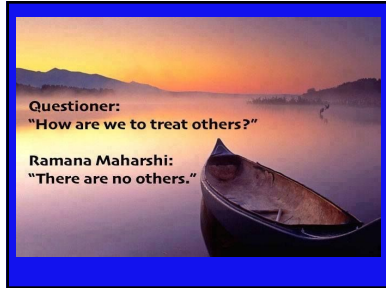
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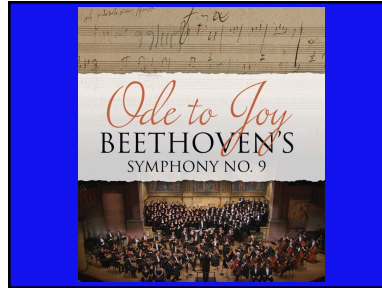
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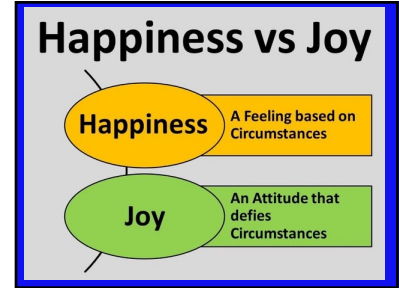
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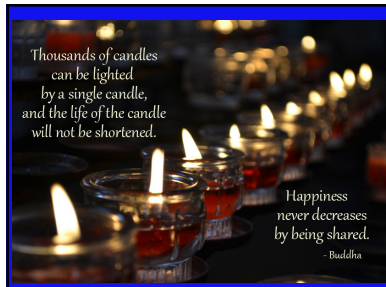
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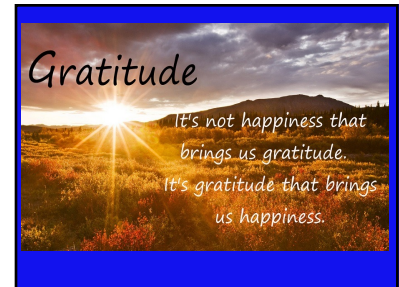
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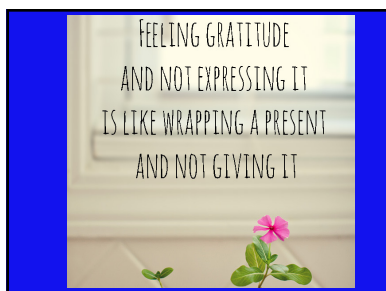
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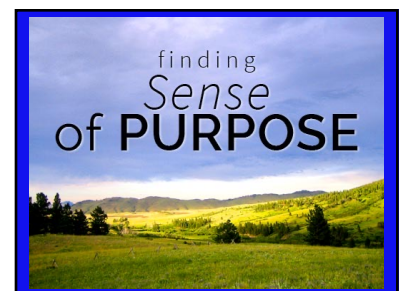
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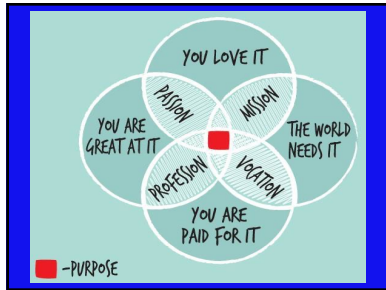
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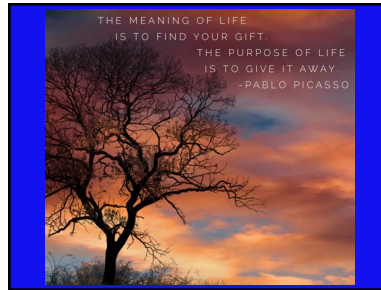
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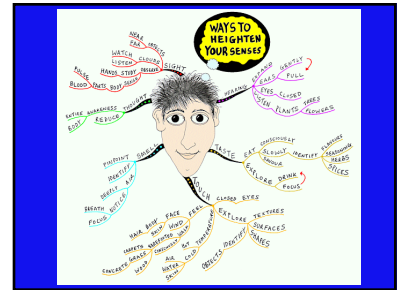
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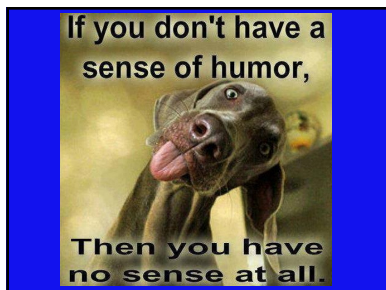
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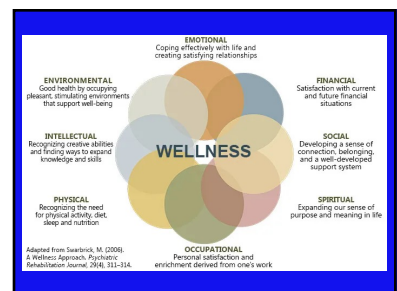
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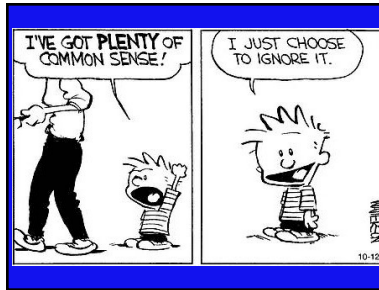
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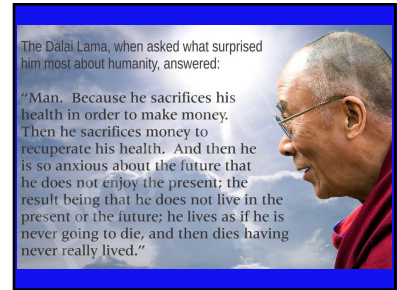
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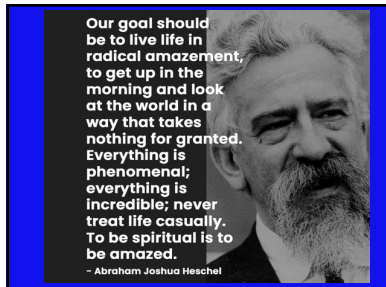
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