

From Last Time:



Flavoring Foods

Salt and other minerals
Herbs & Spices



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Spring 2014 - Bodwin*

Herbs & Spices

Plant-based foods

Intense flavor, color, odor

Herbs = green parts (leaves)

Spices = other parts



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Chemical Defense!

Essential oils often poisons

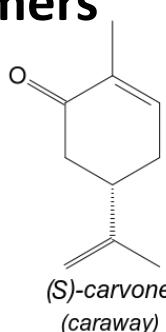
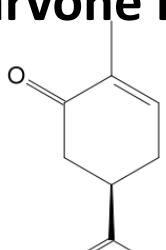
Dose makes the poison...

MSDS and LD50 (*vanillin, menthol, carvone*)



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Carvone Isomers



Source: <http://weakinteractions.wordpress.com/primer/chirality/>



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Terpenes

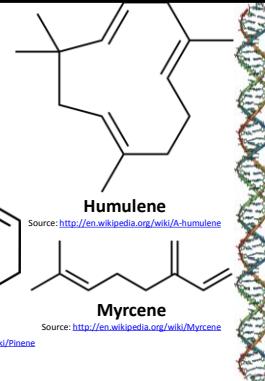
“Turpentine”

Coniferous trees

Citrus

Flower

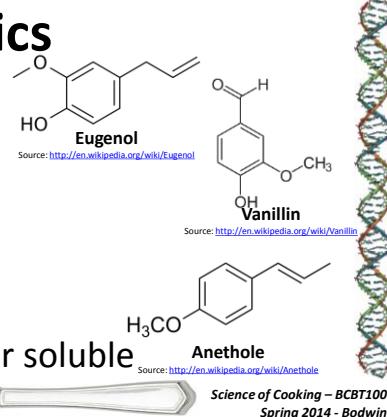
“fresh” character



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Phenolics

"phenyl"



Clove

Cinnamon

Anise

more water soluble



Matching Flavors

Look at molecular components

McGee p. 392-393

Peppermint vs. Spearmint



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Pungents

"Feel" vs. "taste"

Thiocyanates

(mustard, horseradish)

Alkylamides

(peppers, ginger)

Solubility?

