

Vision

Olfaction

Salty

Sour

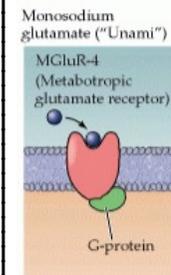
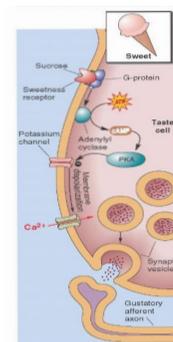
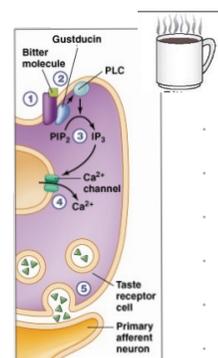
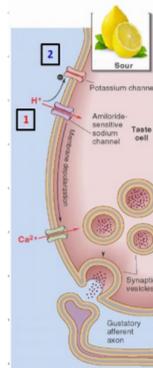
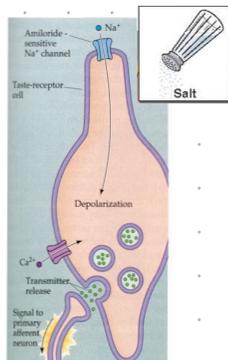
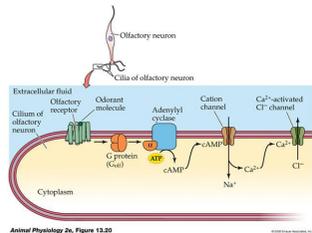
Bitter

Sweet Natural

Sweet artificial

Umami

Pathway



2nd Messenger

cGMP

cAMP

IP3

cAMP

IP3

IP3

Source of Ca2+ intracellularly

↑ cAMP → open cAMP gated cation channels → influx of Na+

Influx of Ca2+ through voltage-gated Ca2+ channel

Influx of Ca2+ through voltage-gated Ca2+ channel

IP3 cause the release of Ca2+ from intracellular stores.

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activation of these receptors causes Ca2+ to be released from intracellular stores [ER]

Receptor type

GPCRs

The receptor GPCRs

Amiloride Na+ channel

Amiloride Na+ channel

GPCRs of the family T2R with gustducin

GPCRs heteromeric T1R3 T1R2

GPCRs T1R1 T1R3