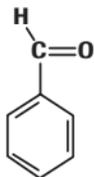


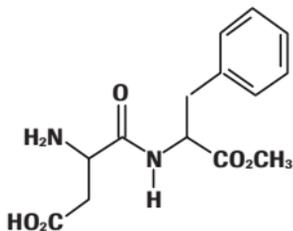
Flavor-Food Interactions & Flavor Imbalance

Reactions: Flavors + Amino Groups

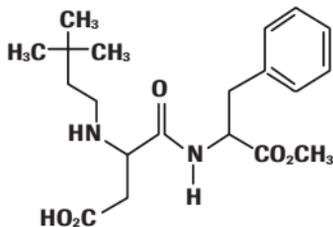


Benzaldehyde
(Cherry)

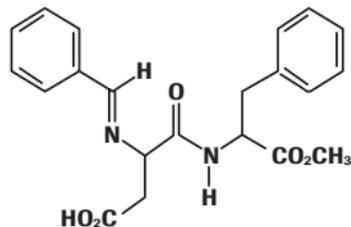
+



Aspartame



Neotame



“Schiff Base”



ADAPTED FROM: CHOBPATTANA, W. ET AL. J. AGRIC FOOD CHEM. 48 3885-3889 (2000)

Aldehydes will chemically react with proteins to form irreversible bonds called Schiff bases. In this diagram, benzaldehyde (cherry flavor component) reacts with aspartame, a protein dipeptide. The reaction degrades at 8% per month, resulting in complete loss of cherry flavor and sweetness after a year. Neotame can block this reaction.