







Cream of Tartar

Potassium tartrate – adds acid
Prevents disulfide bond formation

Proteins need to interact, but not TOO strongly

2 Cys residues

Image: http://en.wikipedia.org/wiki/File:Weinstein_Strukturformel.png
Image: http://kuweb2.gonzaga.edu/faculty/cronk/biochem/D-indices.cfm?definition=disulfide_bond

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2 Cys residues

cystine residue
+ 2e⁻ + 2H⁺

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Setting White Foams

Heating dehydrates
Ovalbumin denatures at higher T
Secondary network, reinforces
Role of sugar
Strengthens “cages” with sugar strands
Delays dehydration (ovalbumin denature)

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Whipped yolks

Fat prevents foam

A little yolk ruins a meringue

Air bubbles lighten color

Low "free" water content

The beginnings of a custard

Network of egg proteins

Suspends milk fat



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Whipped Whole Eggs

Not as fluffy as whites

Not as silky as yolks

Will they foam?



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Cooking Eggs

Balance of fat, protein, water, air

Water – high heat capacity

Fat – solidifies, liquifies, separates

Protein – denatures or not?

Air – excellent insulator {Why?}



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