



YOU ARE

getting

THAT 5 star review

(c) HOT HOPKINS KITCHEN

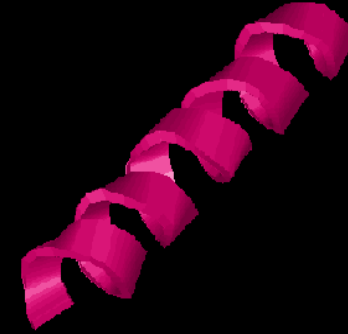
The image features six distinct protein structure models arranged in a hexagonal pattern around a central text box. The models are rendered in various colors (green, yellow, orange, red, blue, cyan) and styles (cylinders, ribbons, spheres). The central text box is a light beige rectangle with the word 'PROTEIN' in bold, black, sans-serif capital letters.

PROTEIN

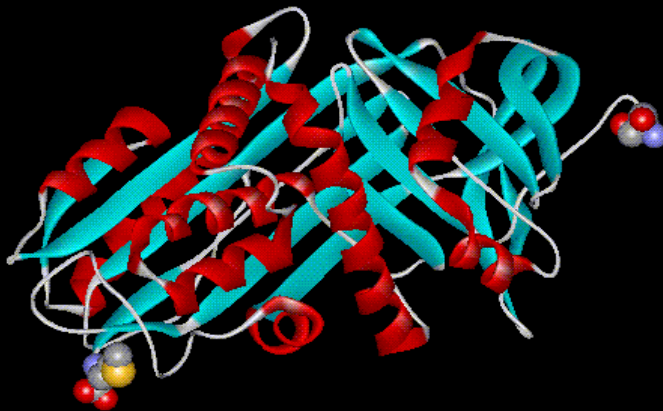
PRIMARY

LYSINE-GLYCINE-VALINE-CYSTEINE
-ARGININE-GLUTAMINE-CYSTEINE
-SERINE-SERINE-GLYCINE-VALINE
-LYSINE-GLYCINE-VALINE-CYSTEINE
-HISTIDINE-GLUTAMINE-TYROSINE
-PROLINE-SERINE-GLYCINE-PROLINE
-SERINE-CYSTEIN-GLYCINE-VALINE

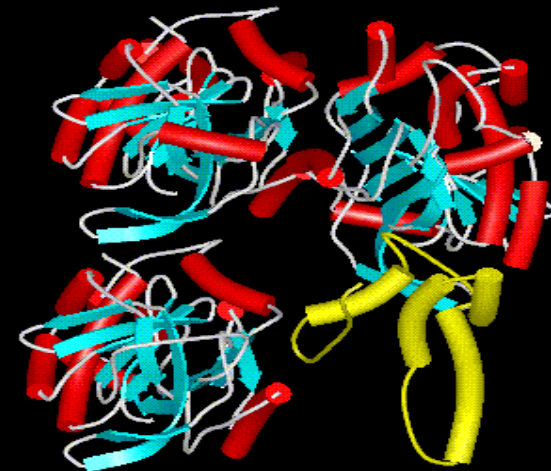
SECONDARY



TERTIARY

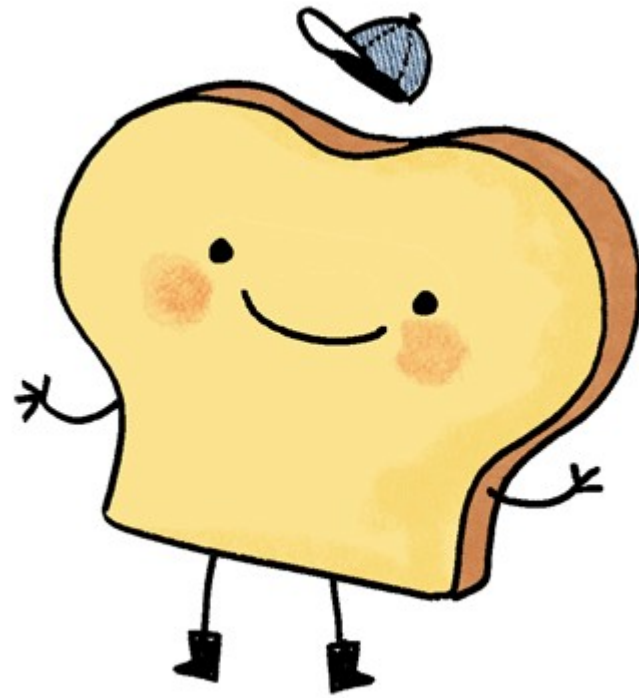


QUATERNARY

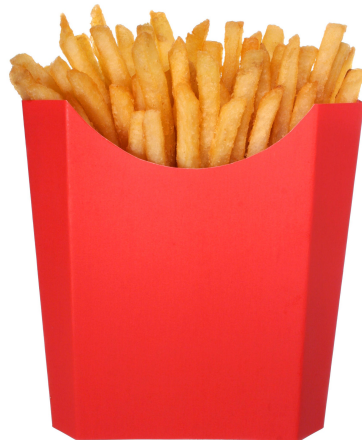


DENATURATION





MAILLARD RXNs



FUNCTIONAL GROUP REVIEW TIME

Maillard reaction

From Wikipedia, the free encyclopedia

The **Maillard reaction** (/ˈmaɪˈjɑːr/ *my-YAR*; French pronunciation: [majaʁ]) is a [chemical reaction](#) between [amino acids](#) and [reducing sugars](#) that gives brown flavor. Seared steaks, pan-fried dumplings, breads, and many other foods make use of the effect. It is named after French chemist [Louis-Camille Maillard](#) in 1912 while attempting to reproduce biological [protein synthesis](#).^{[1][2]}

The reaction is a form of [nonenzymatic browning](#) which typically proceeds rapidly from around 140 to 165 °C (284 to 329 °F). At higher temperatures, subsequently [pyrolysis](#) become more pronounced.

...

Process [\[edit\]](#)

1. The [carbonyl group](#) of the sugar reacts with the [amino group](#) of the [amino acid](#), producing N-substituted [glycosylamine](#) and water
2. The unstable glycosylamine undergoes [Amadori rearrangement](#), forming [ketosamines](#)
3. There are several ways for the ketosamines to react further:
 - Produce 2 water and [reductones](#)
 - [Diacetyl](#), [aspirin](#), [pyruvaldehyde](#) and other short-chain [hydrolytic fission](#) products can be formed
 - Produce brown nitrogenous polymers and [melanoidins](#)

BUT I GOT NO PROTEIN, BRAH...



CARMELIZATION

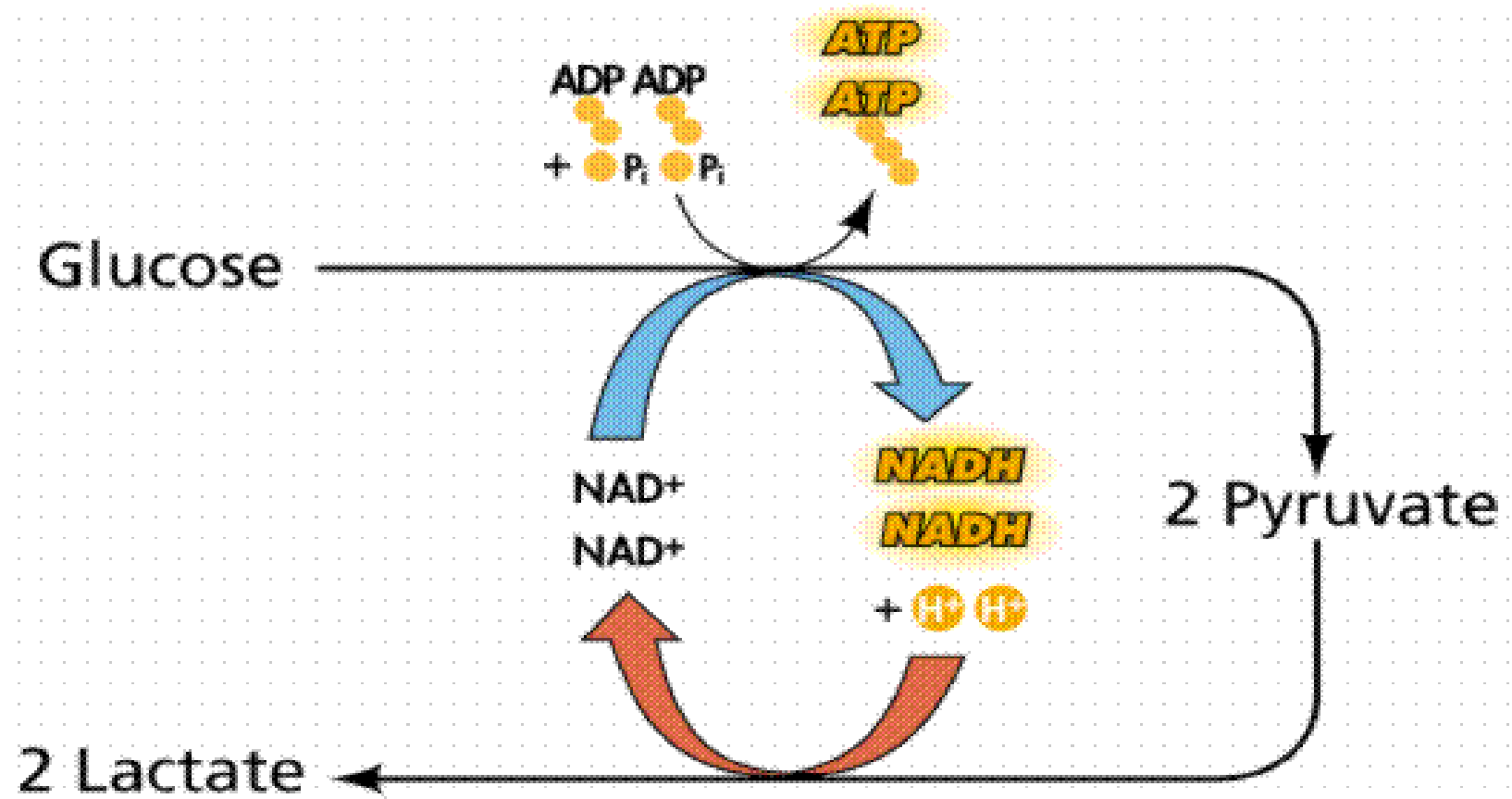
“POORLY UNDERSTOOD”

“DELICIOUS”

“SENSITIVE”

“NUTTY”





BATTLE OF THE KIMCHIs



MY pH beats your pH!

#SCIENCESWAG