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# Infographic Contest Winner

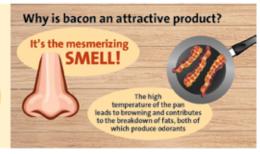


Are you someone who agrees with the idea that "everything's better with bacon"? This month's winning infographic by Morgan Fritze and Annette Mikolajczyk from Maine East High School in Park Ridge, Ill., shows the chemistry behind why some of us find bacon such a tasty addition to our lives. Learn about the compounds and reactions that come together to result in "bacon-y" goodness!

# WHY BACON SMELLS SO GOOD

Bacon is a popular flavor used in products such as: gum, lip balm, and even soda!









The Maillard Reaction involves the reaction of amino acids and carbohydrates at high temperatures This is what allows the browning of food to take place.

> In bacon, the molecules formed from the Maillard reaction combine with molecules from the breakdown of fat to produce the distinctive aroma.

### MAILLARD REACTION + BREAKDOWN OF FAT = INCREDIBLE AROMA



# AROMA COMPOUNDS

There are approximately 150 AROMA COMPOUNDS that give bacon its famous smell.

Aroma compounds are substances that can vaporize and, when combined, give off specific scents.

of the AROMA COMPOUNDS are

Hydrocarbons are hydrogen and carbon atoms I chained together in various ways.

Aldehydes contain a -CHO aldehyde group.

## NITROGEN-CONTAINING COMPOUNDS

It is also probable that the wondrous smell of bacon is due to its various nitrogen compounds.

These compounds are called pyridines and pyrazines. Pyridines contribute to the "meaty" aroma in bacon. When combined with other aroma compounds, they help produce the smell of "bacon-y" goodness.





BACON-Y

SOURCES

www.youtube.com/watch?v=2P\_0HGRWgXw www.compoundchem.com/2014/16/why-does-bacon-smell-so-good-the-aroma-of-bacon

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