The Secret Science of... Gum

The Yum in Gum
Gum is made from three main ingredients
- Gum base
- Flavorings
- Sweeteners
It’s the flavorings and sweeteners that really put the yum in gum!

Chew a Tree?
Gum base doesn’t have much flavor: It’s the chewy part of the gum. It used be made from the sap of a tree, but now it’s made in factories.

To Bubble or Not to Bubble
Gum base contains a long molecule that helps make the gum stretchy and good for blowing bubbles. Some gum has more of this molecule and some has less. The right amount makes for the best bubble blowing.

Ancient ABC Gum (Already Been Chewed)
Scientists have found wads of gum with human teeth marks that are thousands of years old. The need to chew is nothing new!
Find Out More.

What is gum made of today?
Gum base gives gum that bounce-back texture that makes it fun to chew. Each company keeps their special recipe for gum base a secret, but there is something we can tell you. All gum bases are made of three kinds of ingredients which give gum its special properties:
- **resin** - the main part you chew
- **wax** - softens the gum
- **elastomer** - adds flexibility

Gum base often contains polyethylene, a long molecule also used to make plastic bottles and bags.

How do they make gum better?
Companies that manufacture gum have chemists working in laboratories to make gum better. One idea is to Trap the sweetener and flavoring in the gum so that it is released more slowly. This makes the great taste last longer!

Where does the flavor go?
As you chew, the sweetener and flavoring dissolves in your saliva and spreads over your tongue. Yum! Eventually most of the sweetener and flavoring slides down your throat with your saliva and the great taste becomes a memory. Gum base does not dissolve in saliva. This is why you lose the flavor, but not the gum.