

## Review of the Literature

When we go to the store and bring home bananas somehow they always turn brown. This is because of ethylene gas. Ethylene gas is a hormone given off by fruit. Ethylene gas is the main reason fruit ripens. Usually, putting fruit in a paper bag seems to speed up the process.

The way ethylene gas works is that it starts to break down the enzymes in the banana. While it's breaking down the enzymes, it is also breaking down the chlorophyll causing the skin to change to different colors finally turning the entire banana to a dark brown. When the skin is changing color, the inside "fruit" tends to stay a creamy white color. This "fruit" also tends to taste better because a chemical called amylases turns the starch into sugar.

Most of the bananas sold in the United States are grown in tropical regions of other countries. The banana bunches are harvested extremely early when they are still very green. When the bananas arrive to the local area grocery warehouses they are placed into "Ripening Rooms" where they are exposed to ethylene gas. This exposure starts the ripening process in order that when they arrive in the grocery store the banana will just be at the beginning stages of the ripening process.

Other information found indicated:

1. That at harvest time the upper bananas in the bunch have often begun their ripening process apparently due to the ethylene gases given off by the "fruit" below
2. That there are unscientific accounts of individuals putting avocado into a paper grocery bag along with their bananas to speed up the ripening process
3. The Debbie Meyer "Green Bags" are sold with these words in the instruction page, "are made with a natural mineral that is known to extend the life of produce by absorbing and removing the ethylene gases that cause normal deterioration."