MAKING

Arctic EVEN BETTER

HOW APPLES BROWN

When an apple is cut, bitten or bruised, an enzyme called Polyphenol Oxidase (PPO) triggers the browning reaction







ARCTIC® APPLE



Kids eat 71% more apples when they're pre-sliced



CONSUMERS LOVE ARCTIC® APPLES

After learning that the browning reaction can be turned off, the majority of consumers expressed interest in buying Arctic® apples



CONVENIENCE





PACKAGING

HOW DO WE STOP BROWNING?



Using apples' own genes, we simply "turned off" the enzyme that makes apples brown when cut.



Another way to think of it

ARCTIC® APPLES ARE JUST AS SAFE & HEALTHY AS ALL APPLES

Convenient snack

> Likely better retains antioxidants and Vitamin C, which are diminished by browning

Doesn't brown when bitten, sliced or bruised!



We introduce apple genes to shut off the PPO genes already present in the apple



A successful transformation is confirmed by growing this tissue under special conditions



Arctic® trees can then be planted and grown just like any other apple tree!



tissue has grown into plantlets we graft it onto rootstock

Once the











