The natural wax added to protect Washington apples is usually carnauba or shellac. Both are approved by the U.S. Food and Drug Administration and have been used on a variety of foods for decades. These wax formulations are natural, non-petroleum based coatings.

Waxing Washington apples are known worldwide for their beauty and crunch. One of the reasons these apples are able to maintain their attractiveness and quality during transport and marketing is the thin coat of natural wax applied in the warehouse.

Freshly harvested apples have their own waxy coating that protects them from shriveling and weight loss. Apples are washed at the fruit packing sheds to remove dust and chemical residues. This washing removes about half of the original apple wax which is replaced by a natural coating.

The natural wax added to protect Washington apples is usually carnauba or shellac. Both are approved by the U.S. Food and Drug Administration and have been used on a variety of foods for decades. These wax formulations are natural, non-petroleum based coatings.

Whether natural or applied, wax may whiten on the surface of fruits or vegetables if they have been subjected to excessive heat and/or excessive moisture. This whitening or chalky appearance is similar to that of a candy bar when you place it in the freezer.

Research has shown that apple waxing prevents moisture loss, enhances firmness retention and slows down the apple respiration rate.

In the most recent study conducted at the U.S. Department of Agriculture's Agricultural Research Service Laboratory in Wenatchee, WA, Red Delicious apples from Controlled Atmosphere (CA) storage were held at room temperature for eight days (duplicating how apples are treated in grocery stores). The unwaxed apples lost firmness faster than the waxed apples.

A second study showed the waxed apples also had less weight loss after eight days at room temperature. Research horticulturists from the USDA report "the use of wax on Red Delicious apples improved firmness and color, and reduced weight loss."

Other varieties of apples have also been shown to benefit from waxing.

All Washington apples are thoroughly washed and rinsed before they are waxed.

According to new U.S. Food and Drug Administration rules effective May 1994, retailers must list coated produce they sell in their produce department. Apples are frequently on the list which may include up to 21 other produce items that may have wax applied to them.

Some historians report wax has been used on produce since the early 1920s, but other experts say fruits and vegetables were waxed by housewives long before that to improve storage life.

As little as one pound of waxy coating will cover approximately 160,000 pieces of fruit and vegetables, according to the United Fresh Fruit and Vegetable Association. Only a drop or two of wax is needed to give a Washington apple a shiny, protective coating and help keep the crunch to the last bite.

Washing Wax off Apples

Although the wax used on Washington apples is safe to consume, according to the US Food and Drug Administration, it is important to wash all fresh fruits and vegetables before eating. Use cool tap water when washing to avoid causing the wax to turn white or cloudy. Washing with soap or detergents is not recommended. For more information on wax and safe handling of produce, please visit the US FDA website at www.fda.gov

Apple Information – see also: