## In a World Without Corn.



**No frozen pizza!** Freezing pizza is a problem, because the moisture in the sauce can migrate into the crust, making it so soggy it's unappealing to eat. Modified corn starch is used to provide a barrier that prevents water migration and keeps the crust crisp.



**No more low-fat diets.** Many low-fat foods depend on corn-derived food starches to provide qualities that used to come from fats. Examples include everything from low-fat salad dressing to baked goods and meat products.

**Frustrating wallpaper.** Repositioning wallpaper is possible because the wallpaper paste is made with corn starch modified to slow down its adhesive action.

**Daily bread buying.** Corn syrup prevents waste and saves consumers money by keeping bread fresh longer. By retaining moisture, corn syrup keeps baked goods from drying out too quickly and going stale.

**No more coloring.** Whether playing with chalk on the sidewalk or crayons in school, American children rely on corn. Corn starch is used as a binder to help such products hold together better when in use.

**Drippy lollipops.** Candy makers began using corn syrups in lollipops and other hard candies generations ago because the syrups hold moisture and prevent drips.

**No More Crunch.** When Americans reach for a snack, corn products are more popular than potato chips. In addition to corn and tortilla chips (20% of the snack foods we eat), other snacks such as cheese puffs rely on corn ingredients to provide their crunch.

**No More Cardboard.** Corn starch provides the adhesive to glue down every ridge in corrugated cardboard. So next time you are using a cardboard box. Remember you are moving with corn.

**No Ice cream.** As a box of ice cream goes in and out of freezers on the way home from the store and in the kitchen, it's natural for crystals to develop in it. Part of the role corn sweeteners play in ice cream and other frozen desserts is to keep crystals from developing.

A less healthy environment. Corn contributes in many ways to reducing pollution. Ethanol, used to reduce air pollution, is probably the best-known example. Others include the use of corn starch in industrial filters to reduce water pollution, and corn-based plastics like PLA (polylactic acid), which composts back into natural components after use.



**Want S'more? Not without corn!** Marshmallows stay fresh longer because corn syrup keeps them from drying out too quickly. Corn ingredients are also used to make graham crackers, which means you can't enjoy S'mores without corn!



**Penicillin rationing?** Early forms of penicillin were tricky to grow. Steepwater, a corn processing co-product, turned out to be the answer for growing large batches. It became the medium to produce the penicillin used by Allied troops in World War II. Today, fermentation processes to make antibiotics often use dextrose, a corn sweetener.









**Brown lettuce leaves.** Many fruits and vegetables start to turn an unattractive brown once they're cut and exposed to air. Citric acid, recognized as a safe food ingredient, can prevent browning... and much of the U.S. supply of citric acid is made from corn sweeteners.



**Overweight pets.** More pets these days suffer from obesity. Corn gluten feed is a mainstay of diet dog foods because it offers a good source of fiber with only medium levels of protein and carbohydrates.

**Pale egg yolks.** Americans like their egg yolks bright yellow, not pale and colorless. Corn gluten meal provides the nutrients that result in a health yellow color, not only in egg yolks but in chicken's skins.



Ack, hack, cough, gag. Corn contributes in many ways to reducing pollution. Ethanol, used to reduce air pollution, is probably the best-known example. Others include the use of corn starch in industrial filters to reduce water pollution, and corn-based plastics like PLA (polylactic acid), which composts back into natural components after use.



**Grilling is cleaner with corn.** When it's time to fire up the grill, loose charcoal is a thing of the past. Instead, people count on handy charcoal briquettes that make grilling more predictable and easier to clean up. The charcoal briquettes rely on corn flour as the binder that holds them together.

**Love those gummy critters?** The biggest use of corn starch in candies and confections is for molding candy into detailed shapes. A dusting of starch helps release candies from their molds without crumbling or breaking.



**Americans are sleeping with corn.** A whole new family of corn products, marketed under the Ingeo trademark, includes pillows and comforters stuffed with 100% corn fill and blankets woven from the Ingeo fiber. Ingeo products are environmentally friendly because they take less energy to produce than many synthetics and they can be composted back into natural components.

**Helping clothes smell fresh.** One newer use for corn products is an active ingredient in some spray products that remove odors from clothes (helping some get through one more day without doing laundry).