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## A magic spell for children's health

Wave the magic wand to eliminate fats and corn syrups by Dr. Susan Maples.

Q: If, in the quest for children's health, you could wave a magic wand and instantly reduce the intake of one "food" additive what would it be?

A: That'd be a toss up between High Fructose Corn Syrup (HFCS) and Hydrogenated Fat so let me touch on both.

**HFCS** is a low cost, high volume solution to sweetening foods. In the past thirty years Americans' consumption has increased more than 1000%. It comes as no surprise considering HFCS is the sole caloric sweetener in soft drinks. Many researchers believe HFCS has been a major contributor to our obesity epidemic, along with obesity related illnesses (type 2 diabetes, chronic inflammation, heart disease, and mineral depletion)—AND dental caries.

Here's the danger. When we eat something containing old fashioned sugar (sucrose), our body glucose rises, insulin is released, our cells are fed, and our body secretes the hormone leptin, signaling satisfaction. HFCS (fructose) bypasses normal cell metabolism, entering the cell directly so it doesn't stimulate insulin secretion or leptin production. The body gets no indication that it's satisfied, which in turn leads to greater consumption of the foods and beverages that contain HFCS. It's a vicious cycle.

Eliminating all soda pop and "juices" with added HFCS would be a great magic wand trick.

**Hydrogenated Fats** are widely used because they are inexpensive, improve taste, and increase shelf life. Here's some history: Saturated fatty acids (mostly animal fats) have long been recognized as unhealthy. Unsaturated fatty acids are less stable—they spoil faster. To increase stability and shelf-life, food manufacturers "hydrogenated" them. Hydrogenated and partially hydrogenated fats (containing trans-fatty acids) are difficult for the body to break down and impair the normal metabolism of healthy fats by hardening the cell membrane. They also raise LDL (bad) cholesterol and lower HDL (good) cholesterol, pushing both in the *wrong* direction.

The best way to know if a food contains trans-fats is to read the label. When the words "hydrogenated" or "partially hydrogenated" appear in the ingredient list, the product contains trans-fatty acid—regardless of whether the packaging says zero trans-fats.

One of the most dramatic experiments we do with kids is "Gooey Hands" and you can do it at home. Have them rub a teaspoon of olive oil into their hands. Then wash off the excess with warm soap and water. Notice the soft feeling of the skin, as the cells have absorbed the oil. Now repeat the process

with a teaspoon of solid shortening. They will notice the slimy feel, as the soap and water is repelled. It will not absorb into the cells and the excess will be more difficult to remove. Watch how easy it is for children to deduce which fat sample is more compatible with the human body!

Switching to real peanut butter (just peanuts on the ingredient list) shifts an inherently *poor* food choice to an inherently *good* choice. Now that's magic!