Plastic Wraps—Helpful Kitchen Aid or Health Hazard?

Q. How safe are plastic cling wraps?

A. It depends on what the wrap is made of and how you use it. There’s no question that chemicals in plastic can migrate from the wrap into the food it comes in contact with. More debatable is what effect these chemicals have on your health. But everyone—including the plastics industry—agrees that you should use them with care.

Plastic films are made from several different plastic resins, each having different traits. While all have some flexibility, films made from polyvinyl chloride (PVC) contain “plasticizers,” making them especially stretchy and clingy. But consumer groups contend that they can also be harmful to your health. Generally, the more flexible the product, the more plasticizers it contains.

Plastic Problems? Of concern is that plasticizers in PVC cling wraps—namely diethylhexyladipate (DEHA)—can migrate into food, especially if the food is high in fat or is heated. As suspected endocrine disruptors, these chemicals have been linked to hormonal abnormalities in animals. A few years ago, scientists at Consumers Union detected high amounts of DEHA in cheeses that had been wrapped in PVC films. And hamburgers wrapped in these plastics and reheated in a microwave showed evidence that plastic compounds had migrated into the meat.

While the Food and Drug Administration maintains that the amount of plasticizers that likely migrates into food is safe, critics argue that the chemicals haven’t been adequately tested in humans.

What’s In Your Wrap? Supermarkets and delis use PVC films to wrap meat and cheese. PVC is also in Reynolds Plastic Wrap. Although packages don’t list it, most other cling wraps sold for home use are made from DEHA-free plastics, such as polyethylene, which is considered safer.

EN’s Bottom Line. Don’t assume all plastic films are the same. Here are some tips to minimize exposure to plastic contaminants in your food.

- Use glass (such as Pyrex) or lead-free ceramics (such as Corningware) in the microwave.
- Never let plastic wraps touch the food when microwaving; cover bowls loosely, leaving one inch or more of space between the plastic and the food and pull back a corner to vent. Discard after a single use.
- If you buy cling-wrapped cheese and meat, remove the film when you get home and wrap it in something safer.

From Antinutrient to Phytonutrient: Phytic Acid Gains Respect

Q. I’ve heard that phytic acid interferes with the body’s ability to absorb important minerals. Now I see it sold as a supplement in the health food store. Is it one and the same?

A. Yes. Phytate or phytic acid, also known as inositol hexaphosphate or IP6 (the name used by one supplement manufacturer), has long been considered a nutrition “bad guy” because it latches on to minerals such as iron, zinc and calcium, reducing their absorption. Phytate is bound to the fiber in plant foods, including whole grains, legumes, nuts and seeds.

However, new research from animal and test tube experiments has shown that phytate also functions as an antioxidant and may actually play more of a protective role in health.

Can IP6 Combat Cancer? Most of the research on IP6 has focused on its potential role in cancer prevention and treatment. In laboratory experiments, IP6 appears to have a tumor-blocking effect on many types of human cells including breast, lung, colon and prostate, explains Ivana Vucenik, Ph.D., of the University of Maryland School of Medicine in Baltimore. IP6 appears to work on cancer cells by normalizing cell growth and increasing apoptosis (cell suicide), says Vucenik.

A Helping Hand With Heart Disease? IP6 may provide similar protection against heart disease, explains Harvard’s Simin Liu, Ph.D., head researcher of the Nurses’ Health Study. He found that women who ate two to three servings a day of whole grains had about 30% less risk of heart disease compared to those who ate less than half a serving a day.

“There are many possible mechanisms that might be responsible for the beneficial effects seen in our study,” he says, “one of which may certainly include phytates.”

Mineral Loss a Cause for Concern? Phytic acid’s mineral-binding action may be less of a concern, especially for calcium, than previously believed. “While phytates have a strong inhibitory effect on iron and zinc, their effect on calcium is small,” says Connie Weaver, Ph.D., of Purdue University, who has conducted research in this area. Just be sure you get enough of all three minerals in your diet or from a multi, she advises.

EN’s Bottom Line. It’s premature to rush out and buy IP6 supplements. Instead, aim for 20 to 35 grams of fiber from a variety of sources, including fruits, vegetables, whole grains, nuts and seeds, every day. EN will keep you posted as we learn more.