

This is an example of an Internet message falsely claiming the authority of a well known institution to make false or misleading claims. See for yourself at:

<http://www.snopes.com/medical/disease/cancerupdate.asp>

TEXT IN GREY IS THE FALSE INTERNET CLAIM – TEXT IN BLUE AND BLACK IS FROM JOHN HOPKINS

http://www.hopkinsmedicine.org/kimmel_cancer_center/news_events/featured/cancer_update_email_it_is_a_hoax.html

John Hopkins on Chemotherapy

AFTER YEARS OF TELLING PEOPLE CHEMOTHERAPY IS THE ONLY WAY TO TRY (TRY THE KEY WORD) AND ELIMINATE CANCER, JOHN HOPKINS IS FINALLY STARTING TO TELL YOU THERE IS AN ALTERNATIVE WAY

Cancer Update from John Hopkins

Cancer Update Email -- It's a Hoax!

Updated April 2009

[View Spanish Version of Statement](#)

STATEMENT: EMAIL HOAX REGARDING CANCER

Information falsely attributed to Johns Hopkins called, "CANCER UPDATE FROM JOHN HOPKINS" describes properties of cancer cells and suggests ways of preventing cancer. Johns Hopkins did not publish the information, which often is an email attachment, nor do we endorse its contents. The email also contains an incorrect spelling of our institution as "John" Hopkins; whereas, the correct spelling is "Johns" Hopkins. For more information about cancer, please read the information on our web site or visit the National Cancer Institute's web site at www.cancer.gov. Please help combat the spread of this **hoax** by letting others know of this statement.

Another **hoax** email that has been circulating since 2004 regarding plastic containers, bottles, wrap claiming that heat releases dioxins which cause cancer also was not published by Johns Hopkins. More information from the [Johns Hopkins Bloomberg School of Public Health](#).

Mythbusters: Please help curb the spread of this hoax by sending a link to this page to individuals that forward you this email.

The Truth about the "Cancer Update" Email

It has become such a problem, that the National Cancer Institute, American Cancer Society, and individual cancer centers like the Johns Hopkins Kimmel Cancer Center have posted warnings on their Web sites. Emails offering easy remedies for avoiding and curing cancer are the latest Web-influenced trend. To gain credibility, the anonymous authors falsely attribute their work to respected research institutions like Johns Hopkins. This is the case with the so-called "Cancer Update from Johns Hopkins."

The gist of this viral email is that cancer therapies of surgery, chemotherapy, and radiation therapy do not work against the disease and people should instead choose a variety of dietary strategies.

Traditional therapies, such as surgery, chemotherapy, and radiation therapy, work. The evidence is the millions of cancer survivors in the United States today who are alive because of these therapies. We recognize that treatments don't work in every patient, or sometimes work for awhile and then stop working, and there are some cancers that are more difficult to cure than others. These problems are the focus of ongoing cancer research.

We'll go through each statement in the email **hoax** and provide real responses from Johns Hopkins Kimmel Cancer Center experts.

1. Every person has cancer cells in the body. These cancer cells do not show up in the standard tests until they have multiplied to a few billion. When doctors tell cancer patients that there are no more cancer cells in their bodies after treatment, it just means the tests are unable to detect the cancer cells because they have not reached the detectable size.

2. Cancer cells occur between 6 to more than 10 times in a person's lifetime

Email hoax contentions #1 and 2: Everyone Has Cancer Cells

Cancer is a genetic disease resulting from a variety of mutations and alterations either inherited from our parents or, more commonly, acquired over time due to environmental exposures and behaviors, such as smoking and poor diet. These alterations turn off important cell growth regulators allowing cells to continually divide unchecked, explains [Luis Diaz](#), a clinician-scientist in Ludwig Center for Cancer Genetics. This type of cell is called a malignant or cancer cell. Among the trillions of cells in the human body, inevitably everyone has some abnormal or atypical cells that possess some of the characteristics of cancer cells, most resolve themselves and never result in cancer, says Diaz.

There is no single or standard test for cancer. There are ways to screen for certain cancers with tests such as colonoscopy for colon cancer, mammography for breast cancer, PSA for prostate cancer, and the Pap smear for cervical cancer, and these tests can detect cancers in a very early and curable stage. For many cancers, there currently are no screening tests, and they are diagnosed when they begin to cause symptoms.

Diaz and other Kimmel Cancer Center researchers are working on new tests that detect abnormal DNA shed by cancer cells into blood and body fluids and have the ability to find cancers before they cause any symptoms. Approaches like this could lead to a broad-based screening test for cancer.

Tests like these also are being used to detect cancer recurrences and malignant cells left behind following surgery, and can find cancers that are not detectable under the microscope or in x-rays.

Other researchers are studying cancer stem cells. They are stealth cells that make up just a tiny fraction of a tumor. While small in number, investigators believe they may be the cells that drive certain cancers and lead to cancer recurrence. Therapies that target these cells are now being tested in clinical trials.

A team of our breast cancer researchers has developed a method that could make it possible to detect breast cancer from the DNA contained in a single drop of blood.

But, while evasive cancer cells are a challenge and the focus of ongoing research, it does not mean, as the email contends, that all patients, even those treated successfully for cancer, have cancers-in-waiting—undetectable but still there. People are treated and completely cured of cancer everyday.

3. When the person's immune system is strong the cancer cells will be destroyed and prevented from multiplying and forming tumors.

Email hoax contention #3: A Strong Immune System Destroys Cancer

When it comes to cancer and the immune system, it is not a matter of strong or weak as the fictional report contends, but rather an issue of recognition. "The immune system simply does not recognize cancer. In its complexity, the cancer cell has learned to disguise itself to the immune system as a normal, healthy cell. Cells infected with viruses or bacteria send out danger signals setting the immune system in action. But cancer cells do not, explains Elizabeth Jaffee, co-director of cancer immunology and leading expert on cancer and the immune system." By deciphering the methods cancer cells use to make them invisible to the immune system, Jaffee and team have developed cancer vaccines that have successfully triggered immune reactions against prostate cancer, pancreatic cancer, leukemia, and multiple myeloma.

4. When a person has cancer it indicates the person has multiple nutritional deficiencies. These could be due to genetic, environmental, food and lifestyle factors.

5. To overcome the multiple nutritional deficiencies, changing diet and including supplements will strengthen the immune system.

Email hoax contention #4 and #5: Cancer is caused by Nutritional Deficiencies and Supplements Will Correct Them

Dietary habits and lifestyle choices, such as smoking, contribute to the development of many human cancers, says Kimmel Cancer Center director [William Nelson](#). Our experts recommend a balanced diet (see response #11) as a way of reducing cancer risk. In terms of supplements, Nelson points out that while they may help mediate vitamin deficiencies, taking doses above what the body needs provides no added benefit.

6. Chemotherapy involves poisoning the rapidly-growing cancer cells and also destroys rapidly-growing healthy cells in the bone marrow, gastro-intestinal tract etc, and can cause organ damage, like liver, kidneys, heart, lungs etc.

7. Radiation while destroying cancer cells also burns, scars and damages healthy cells, tissues and organs.

8. Initial treatment with chemotherapy and radiation will often reduce tumor size. However prolonged use of chemotherapy and radiation do not result in more tumor destruction.

9. When the body has too much toxic burden from chemotherapy and radiation the immune system is either compromised or destroyed, hence the person can succumb to various kinds of infections and complications.

10. Chemotherapy and radiation can cause cancer cells to mutate and become resistant and difficult to destroy. Surgery can also cause cancer cells to spread to other sites.

Email hoax contentions #6, 7, 8, 9, and 10: Chemotherapy and Radiation Therapy Harms Normal Cells. Surgery Causes Cancer to Spread

Chemotherapy and radiation therapy kills cancer cells with remarkable selectivity, says Nelson. There are some temporary and reversible side effects common to cancer therapies, including hair loss and low blood counts. Limiting and managing these side effects is an integral part of treatment.

Surgery is the first line of treatment for many types of cancer. It does not cause cancer to spread. Cancers spread to other tissues and organs as a tumor progresses and cancer cells break away from the original tumor and travel through the bloodstream to other body sites.

11. An effective way to battle cancer is to starve the cancer cells by not feeding it with the foods it needs to multiply.

CANCER CELLS FEED ON:

- a. *Sugar* is a cancer-feeder. By cutting off sugar it cuts off one important food supply to the cancer cells. Sugar substitutes like NutraSweet, Equal, Spoonful, etc are made with Aspartame and it is harmful. A better natural substitute would be Manuka honey or molasses but only in very small amounts. Table salt has a chemical added to make it white in color. Better alternative is Bragg's aminos or sea salt.
 - b. *Milk* causes the body to produce mucus, especially in the gastro-intestinal tract. Cancer feeds on mucus. By cutting off milk and substituting with unsweetened soya milk cancer cells are being starved.
 - c. Cancer cells thrive in an acid environment. A *meat*-based diet is acidic and it is best to eat fish, and a little chicken rather than beef or pork. Meat also contains livestock antibiotics, growth hormones and parasites, which are all harmful, especially to people with cancer.
 - d. A diet made of 80% fresh vegetables and juice, whole grains, seeds, nuts and a little fruits help put the body into an alkaline environment. About 20% can be from cooked food including beans. Fresh vegetable juices provide live enzymes that are easily absorbed and reach down to cellular levels within 15 minutes to nourish and enhance growth of healthy cells. To obtain live enzymes for building healthy cells try and drink fresh vegetable juice (most vegetables including bean sprouts) and eat some raw vegetables 2 or 3 times a day. Enzymes are destroyed at 104 degrees F (40 degrees C).
 - e. Avoid *coffee, tea, and chocolate*, which have high caffeine. Green tea is a better alternative and has cancer-fighting properties. Water—best to drink is purified water, or filtered, to avoid known toxins and heavy metals in tap water. Distilled water is acidic, avoid it.
12. Meat protein is difficult to digest and requires a lot of digestive enzymes. Undigested meat remaining in the intestines become putrified and leads to more toxic buildup.
13. Cancer cell walls have a tough protein covering. By refraining from or eating less meat it frees more enzymes to attack the protein walls of cancer cells and allows the body's killer cells to destroy the cancer cells.
14. Some supplements build up the immune system (IP6, Floressence, Essiac, anti-oxidants, vitamins, minerals, EFAs etc.) to enable the body's own killer cells to destroy cancer cells. Other supplements like vitamin E are known to cause apoptosis, or programmed cell death, the body's normal method of disposing of damaged, unwanted, or unneeded cells.

Email hoax contentions #11, 12, 13, and 14: Cancers Feed on Certain Foods

The premise is that cancer cells feed on certain foods, and if a person refrains from eating these foods, the cancer will die. According to our experts, a poor diet and obesity associated with a poor diet is a risk factor for the development of cancer. However, there is no evidence that certain foods alter the environment of an existing cancer, at the cellular level, and cause it to either die or grow.

While there is such a thing as tumors that produce mucus, the mucus made by a tumor does not result from drinking milk. And, eating less meat, while a good choice for cancer prevention, does not free up enzymes to attack cancer cells, explains cancer prevention and control expert Elizabeth Platz.

Moderation is key, says Platz. As part of a balanced diet, sugar, salt, milk, coffee, tea, meat, and chocolate—the foods the “Update” calls into question—are all safe choices, she says. The real concern with many of these, particularly sugar, is that it adds calories to a diet and can lead to obesity, and obesity is a major risk factor for cancer. A balanced nutritious diet, healthy weight, physical activity, and avoiding alcoholic drinks may prevent as many as 1/3 of all cancers. Platz recommends eating at least five servings of fruits and vegetables per day and limiting red and processed meats, like hot dogs.

Several Johns Hopkins experts participated in the World Cancer Research Fund - American Institute for Cancer Research report *Food, Nutrition, Physical Activity, and the Prevention of Cancer: A Global Perspective*, published in November 2007, which is considered by cancer prevention experts to be an authoritative source of information on diet, physical activity and cancer. Their recommendations for cancer prevention and for good health in general are:

1. Be as lean as possible without becoming underweight.
2. Be physically active for at least 30 minutes every day.
3. Avoid sugary drinks. Limit consumption of energy-dense foods (particularly processed foods high in added sugar, or low in fiber, or high in fat).
4. Eat more of a variety of vegetables, fruits, whole grains and legumes such as beans.
5. Limit consumption of red meats (such as beef, pork and lamb) and avoid processed meats.
6. If consumed at all, limit alcoholic drinks to 2 for men and 1 for women a day.
7. Limit consumption of salty foods and foods processed with salt (sodium).
8. Don't use supplements to protect against cancer.

Our experts recommend that people meet their nutritional needs through their food choices. While vitamin supplements can be helpful in people with nutritional deficiencies, evidence suggests that supplementation above what the body can use provides no added health benefit.

15. Cancer is a disease of the mind, body, and spirit. A proactive and positive spirit will help the cancer warrior be a survivor. *Anger, unforgiveness and bitterness put the body into a stressful and acidic environment.* Learn to have a loving and forgiving spirit. Learn to relax and enjoy life.

Email hoax contention #15: Cancer is a Disease of Mind, Body, and Spirit

Cancer is a disease caused by genetic alterations. Many times, these alterations occur through our own behaviors—cigarette smoking, a poor and unbalanced diet, virus exposures, and sunburns, says cancer prevention and control expert John Groopman.

How stress, faith, and other factors influence this is largely unknown. We would like people to be happy, loving, and stress free, simply because it is a nice way to live and can contribute to an overall feeling of well being, says Platz. There is no evidence, however, that a person prevents or causes cancer based on his or her state of mind.

Still, we understand that a cancer diagnosis can make patients and families feel stressed and anxious, and these are not pleasant feelings. So, we offer extensive patient and family services, including a cancer counseling center, pain and palliative care program, chaplain services and a meditation chapel, an image recovery center, and the Art of Healing art and music program.

16. Cancer cells cannot thrive in an oxygenated environment. Exercising daily, and deep breathing help to get more oxygen down to the cellular level. Oxygen therapy is another means employed to destroy cancer cells.

Email hoax contention #16: Oxygen Kills Cancer Cells

Platz recommends regular exercise as a part of any healthy lifestyle, but says there is no evidence that breathing deeply or receiving oxygen therapy prevents cancer.

On its Web site, the American Cancer Society includes the following statement about oxygen therapy, “Available scientific evidence does not support claims that putting oxygen-releasing chemicals into a person's body is effective in treating cancer. It may even be dangerous. There have been reports of patient deaths from this method.” [Read more](#)

Please pass this information on to family and friends.

Questions?

Contact:

Johns Hopkins Kimmel Cancer Center
Office of Public Affairs

410-955-1287

CANCER UPDATE FROM JOHN HOPKINS HOSPITAL , U S

1. No plastic containers in microwave.
2. No water bottles in freezer.
3. No plastic wrap in microwave.

Fact Finding

Date: 07/24/2008

http://www.hopkinsmedicine.org/news/publications/johns_hopkins_health/Summer_2008/_fact_finding

Myth | Heating or freezing plastic releases carcinogens called dioxins into water or food.

Truth | Plastics don't contain cancer-causing dioxins. They may contain chemicals called phthalates that are released during heating, but it's not clear whether these chemicals affect our bodies.

Myth | As women age, their bladders shrink.

Truth | Studies show no difference in bladder capacity—whether you're 22 or 90. The increased need to urinate as you get older may be muscle spasms caused by an age-related condition called overactive bladder.

Get more information about health topics or sign up for FREE e-mail health alerts at johnshopkinshealthalerts.com.

Johns Hopkins has recently sent this out in its newsletters. This information is being circulated at Walter Reed Army Medical Center as well.

Dioxin chemicals causes cancer, especially breast cancer.

Dioxins are highly poisonous to the cells of our bodies.

Don't freeze your plastic bottles with water in them as this releases dioxins from the plastic.

Recently, Dr. Edward Fujimoto, Wellness Program Manager at Castle Hospital , was on a TV program to explain this health hazard. He talked about dioxins and how bad they are for us.

He said that we should not be heating our food in the microwave using plastic containers.

This especially applies to foods that contain any type of fat or oil. He said that the combination of fat, high heat, and plastics releases dioxin into the food and ultimately into the

cells of the body. Instead, he recommends using glass, such as Corning Ware, Pyrex or ceramic containers for heating food. You get the same results, only without the dioxin. So such things as TV dinners, instant ramen and soups, etc., should be removed from the container and heated in something else.

Paper isn't bad but you don't know what is in the paper. It's just safer to use tempered glass, Corning Ware, etc. He reminded us that a while ago even some of the fast food restaurants moved away from the foam containers to paper. The dioxin problem is one of the reasons.

Also, he pointed out that plastic wrap, such as Saran, is just as dangerous when placed over foods to be cooked in the microwave. As the food is nuked, the high heat causes poisonous toxins to actually melt out of the plastic wrap and drip into the food. Cover food with a paper towel instead.

This is an article that should be sent to anyone important in your life.

<http://www.jhsph.edu/dioxins>



Public Health News Center

January 15, 2008

Email Hoax Regarding Freezing Water Bottles and Microwave Cooking

The Internet is flooded with messages warning against freezing water in plastic bottles or cooking with plastics in the microwave oven. These messages, frequently titled “Johns Hopkins Cancer News” or “Johns Hopkins Cancer Update,” are falsely attributed to Johns Hopkins and we do not endorse their content.

Freezing water does not cause the release of chemicals from plastic bottles.

In general, it is best to follow the manufacturer’s recommendations when using any plastic products. When cooking with plastics, only use those plastic containers, wraps, bags and utensils for their intended purposes.

The U.S. Department of Agriculture Food Safety Inspection Service (FSIS) has some [helpful guidelines](#) for cooking with plastics in microwave ovens.

http://www.fsis.usda.gov/Fact_Sheets/Cooking_Safely_in_the_Microwave/index.asp

[Johns Hopkins Sidney Kimmel Comprehensive Cancer Center responds to questions about cancer-related hoax emails](#)

[Additional information about chemicals and water bottles](#)

Public Affairs media contact for the Johns Hopkins Bloomberg School of Public Health: Tim Parsons at 410-955-6878 or paffairs@jhsph.edu.

http://www.jhsph.edu/publichealthnews/articles/2008/goldman_schwab_bpa.html

Q&A: Bisphenol A and Plastics

Concerns about the chemicals contained in many plastic bottles and containers leaves many consumers wondering if these products are safe to use. [Lynn R. Goldman, MD, MPH, professor in the Johns Hopkins Bloomberg School of Public Health's Department of Environmental Health Sciences, and Kellogg Schwab, PhD, associate professor and director of the School's Center for Water and Health, separate fact from fiction.](#)

Question: What is bisphenol A and where does it come from?

Goldman: Bisphenol A or BPA is one of the highest volume chemicals produced worldwide. Over six billion pounds are produced each year. BPA is a manmade chemical that is used in the production of many plastic-containing consumer products. These products include polycarbonate water bottles, epoxy-lined metal food cans and even some dental sealants. Trace amounts of residual BPA are often present in the final product as a result of the manufacturing process. Many scientific studies have shown that this residual BPA can be released from these types of products, particularly if the product is heated.

Question: Is exposure to BPA harmful?

Goldman: In the U.S., the Centers for Disease Control and Prevention (CDC) has monitored urine levels of BPA across the population and has confirmed that exposures are widespread throughout all age and racial groups. We don't know enough to say whether these levels of BPA are harmful. However, recent studies indicate that current levels of exposure to BPA in early life may have long-term health consequences.

In laboratory animal studies, exposure to BPA in utero and during infancy was found to adversely affect brain development and behavior. Laboratory animal studies also showed that early life exposures may alter development of the prostate gland in males and the mammary gland in females, as well as trigger an earlier start to puberty in females. While this research is limited, these effects occurred at exposure levels to bisphenol A similar to those seen in humans, which led the U.S. [National Toxicology Program](#) (NTP) to posit that there is "some concern" about the risk of BPA exposure. Some studies have also shown that laboratory animals exposed to very high levels of bisphenol A during pregnancy have increased fetal death and reduced birth weight and reduced pup growth during infancy. The NTP was less concerned about these effects for two reasons. First, the amounts of BPA that have been found in humans are much lower. Second, human studies conducted to date have not found any evidence for reduced birth weight or other adverse birth outcomes with BPA exposures.

Question: Is it safe for people to drink out of plastic water bottles?

Schwab: Consumers should be more concerned with the initial quality of the drinking water inside a container than they should be about the composition of the container. Many people buy bottled water because they do not feel comfortable drinking tap water. The truth is that tap water in the United States is more highly regulated and monitored for quality compared to bottled water. Also, it is important to drink enough water and to remember that our requirements for water are greater in the heat and when we exercise.

Most single-use water bottles sold in the United States are made from BPA-free plastic, but some reusable containers are made from plastic containing BPA. Given a choice, a product absent of BPA should be considered. It is a good idea to bring water with you for long car trips and activities like sports and hiking. Since

these water supplies are likely to be in hot vehicles and in the hot sun, BPA-free containers should be considered. Remember to clean reusable bottles between uses and let them dry upside down so they are ready the next time you need them.

Consumers should also consider the environment when purchasing bottled water. Single-use water bottles make a substantial contribution to our landfills. According to the U.S. Environmental Protection Agency, about 20 percent of disposable plastic water bottles are recycled. It also takes additional energy and resources to bottle water and ship it to store shelves. Thus it is probably wiser, environmentally, to drink water from the tap, from reusable containers.

Question: What about BPA in baby bottles, infant formulas and human milk?

Goldman: We know that the time of greatest sensitivity to BPA occurs in utero (passed directly from mother to baby) and during infancy and early childhood. By far, the highest estimated exposures are to infants who are fed liquid formula that has been packed in food cans with epoxy linings, and served in BPA-containing polycarbonate bottles. We also know that the metabolic pathways for eliminating BPA have not matured in newborns.

Given its many nutritional and immunologic benefits, human milk is considered to be the most appropriate food for nursing infants. The American Academy of Pediatrics recommends exclusive breastfeeding for approximately the first six months of life. Human milk also has much lower levels of BPA than all forms of infant formula.

If infant formula is needed, powdered infant formula has lower levels of BPA than liquid formula. As a precaution, glass bottles or BPA-free plastic bottles can be used for bottle feeding. You should avoid using polycarbonate bottles that have the recycling code “7” on the bottom. (The code “7” includes a number of other plastics as well as polycarbonates.) If you do use plastic bottles, do not heat them in the microwave and, after washing, allow them to cool off before adding formula.

Question: Water bottles aside, are plastic products for daily use a potential concern?

Goldman: We use plastics for many purposes. They are everywhere in our environment. If you are concerned about exposure to chemicals in plastics, a common sense approach would be to use alternatives when it is practical and safe. For instance, when cooking you may wish to use products made from inert materials like stainless steel or glass instead of plastic. It is also good advice to follow directions and to only use plastic products as they were intended by the manufacturer, particularly when cooking. Metal items and many plastic containers are not safe to use in a microwave oven. For microwaving, use glass or plastic containers that are labeled “microwave safe”.

Question: Are there concerns about cooking with plastics?

Schwab: Whenever you heat something you increase the likelihood of pulling chemicals out. This is the same process we use in the lab to extract chemicals from materials we want to analyze. Chemicals can be released from plastic packaging materials like the kinds used in some microwave meals. The same can occur with the use of polycarbonate plastic eating utensils.

Again, the best thing to do is to follow the directions and only use plastics that are specifically meant for cooking. Newer biodegradable products or stainless steel are good alternatives to polycarbonate plastic eating utensils.

Question: What are phthalates?

Schwab: There is another group of chemicals, called phthalates that are also associated with manufacture of plastics. Phthalates are sometimes added to plastics, like polyvinyl chloride or PVC, to make them flexible and less brittle. Although they are not typically found in plastics used for water bottles sold in the U.S., they used to be found in baby bottle nipples and teething toys. Phthalates are environmental contaminants that can exhibit hormone-like behavior by acting as endocrine disruptors in humans and animals. If you heat up plastics, you could increase the leaching of phthalates from the containers into water and food. Containers labeled “microwave safe” should have less leaching than other plastic containers.

Microwaving food in contact with plastic wrap is another potential source of exposure, but a few years ago manufacturers in the U.S. replaced PVC plastic wrap with low-density polyethylene (LDPE), which does not contain phthalates. Plastic wrap from other countries or marketed for commercial or non-food uses may still contain PVC.

The Food and Drug Administration has found that only small amounts of phthalates migrate from plastic containers and plastic wrap into food. However, you can reduce the potential for exposures by using glass containers or plastics that are known to be free of phthalates, as well as plastic wrap that are known to be phthalate-free. In any case, make sure that the plastic wrap is not in contact with the food (which can melt plastic onto the food).

The U.S. Department of Agriculture Food Safety Inspection Service (FSIS) has some [helpful guidelines for cooking with plastics in microwave ovens](#).

Question: There are numerous emails warnings that claim dioxins can be released by freezing water in plastic bottles. Are they true?

Schwab: No, it’s a hoax. There is no truth to that myth.

Dioxins are organic environmental pollutants, which include 75 different chlorinated molecules of dibenzo-p-dioxin and 135 chlorinated dibenzofurans. Some polychlorinated biphenyls (PCBs) also are referred to as dioxin-like compounds.

Dioxins are formed in the environment by combustion, including wildfires and volcanic eruptions. Today scientists are concerned about the incineration of waste, particularly hospital waste, which contains large quantities of PVC and aromatic compounds that can serve as dioxin precursors. When dioxins are sent into the atmosphere they can become attached to particles and fall back to earth where they bind, or are taken up by fish and other animals. The dioxins get concentrated and stored in animal fat. People are exposed to them mostly from eating meat and fish rich in fat.

While dioxins are extremely toxic, there are no dioxins in plastics. In addition, freezing actually works against the release of chemicals. Chemicals do not diffuse as readily in cold temperatures, which would limit chemical release.--Tim Parsons

Public Affairs media contact: Tim Parsons at 410-955-6878 or tmparson@jhsph.edu.