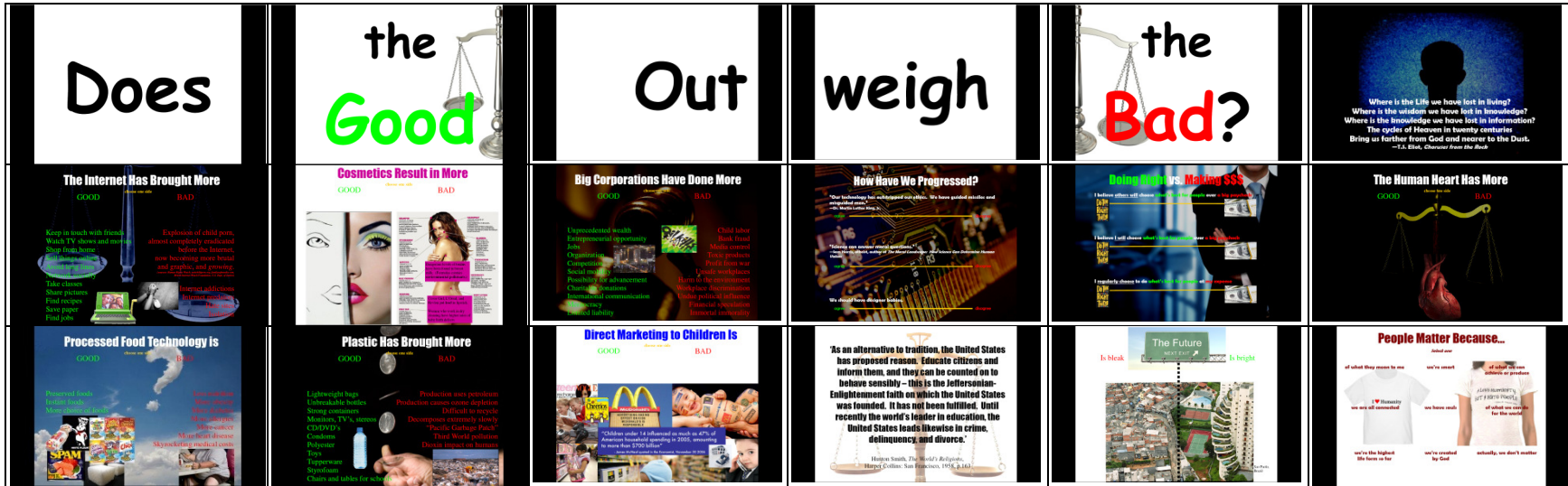


Does the Good Outweigh the Bad?

Proxe Station Instructions

Last modified: April 19, 2011 by Mako Nagasawa



Purpose

The goal behind this proxe station is to engage business majors, technology-lovers, socially conscious activists, and those who think that we just need the right technological tools to solve human problems. We seek to engage the already public discussion about injustice, waste, unintended consequences, progress vs. justice, and remind people that there is a spiritual side to the discussion. Namely, we seek to contribute a uniquely Christian viewpoint: that evil is ultimately not just external to us – in government, broken families, etc. (although it is certainly there and needs to be addressed) – but it has lodged itself within us, within our nature, and corrupted us. We need healing and an internal transformation – the one that only Jesus gives us.

Conceptually, the first four rows are structured to deal with issues related to the certain industries or technologies, and asks whether the good outweighs the bad. In the fifth and sixth rows, the questions deal ask whether we have adequate courage to make costly decisions, an adequate foundation from which to understand human evil, an adequate understanding of the human heart, and an adequate reason to value human life.

As participants move along the proxe station from left to right, each panel is intended to uncover connection points for communicating something about Jesus during the follow-up interview.

'Does the Good Outweigh the Bad?' Proxe Station Introduction

1. Invite people to participate: 'Hi, I'm _____ and I'm with InterVarsity Christian Fellowship. We're asking people what they think we can do about evil?'

2. Give them a set of 'dots' and a quick overview: 'Answer the questions with the dots. Go from the left column to the right column.'
3. Tell them that you'll 'When you're done, if you have time, I'd like to ask a few follow-up questions.'
4. Give them time to engage with the material.

Starting Personally:

1. So what stood out to you? How come?

The Big Picture Conversations: The conversations I'm hoping to have are:

1. *The Social Justice Question*: Prepare a personal response involving your own wrestling and struggle. Don't come at this from a 'know it all' standpoint. Invite the person to struggle with you. Were you planning on being involved in any of these fields? Even if not, how did you feel about seeing the good and bad aspects of the internet, cosmetics, etc.?
 - a. Technology cannot 'save us' from human evil. Technology enables people to do both good and bad. That's why unintended consequences happen – because of the badness in the human heart
 - i. The Internet caused the explosion of child pornography, child sexploitation, and ultimately child sex trafficking. Before the Internet, all this was almost eradicated around the world. But the Internet makes it easy for pedophiles to see pictures, get hooked, and go on from there.
 - ii. Plastic involves gross shortsightedness. Since it's floating all around the Pacific and Atlantic Oceans, we're starting to ingest it. Plastic ingestion is linked to cancer and other diseases. It also has estrogen in it and will probably mess with our hormones.
 - iii. Processed food technology involves willful ignorance first and then lying and greed. 'Better living through chemistry' was a corporate motto in the 1950's – 1970's but we had no idea what we were putting in our bodies and what effects that causes. The FDA was run by corporations, not nutritionists or scientists who were looking out for us. Now, food companies like Monsanto prevent packagers of dairy products from putting 'RBGH-free' on their boxes because they don't want you to know what the good products are. They would rather have you drink/eat dairy that has Bovine Growth Hormone! Have you seen the video documentaries *King Corn* or *Food Inc.* or *The Future of Food*?
 - iv. Corporate abuse means making other people deal with the consequences of your actions. The idea of 'externalities' (in economic terms) is that there are costs that are absorbed by society and nature and future generations that aren't paid for by the corporations. We really do have immortal immorality. Have you seen the video *The Corporation*?
 - b. So how do you, in your major and career, think about doing what's right vs. just make money?
 - i. Health-related and pharmaceuticals: Look at how our bad food and cosmetics and other things we've made that cause all kinds of health problems. Are you going to deal with the underlying causes of our sicknesses? Or are you just going to make a lot of money treating symptoms that the system is causing?
 - ii. Business: Besides making profit, what can you do? Bear the true costs of the externalities that companies push off onto other people. Like stupid products. Or harming the environment.
 - iii. Finance: how are you going to help put pressure on banks to have integrity and care for the poor?
 - iv. Education: inequalities are rampant because public schools are funded by local property taxes. This means rich neighborhoods have rich schools and poor neighborhoods have poor schools. What can be done about this?
2. *The Human Worth and Dignity Question*:
 - a. What makes something good or bad? (Most people say: 'The impact on humans.')
 - b. So then what makes human beings valuable?
 - i. If they answer, 'Because we're all connected,'

1. Ask: So what would you change specifically? So how does that affect your career goals?
2. Ask: What about survival of the fittest? Doesn't our connection involve more competition than cooperation?
 - What about *controlled inequality*? Tell them, 'I'm going to role play a Machiavellian person. Why invest equally in all children? It doesn't really matter if an inner city kid discovers the cure to cancer one day. What matters is system of incentives that will produce someone else who will discover that same cure. And most of those people will come from smart, stable, and wealthy families. They'll probably grow up in smart, stable, wealthy school districts. In fact, even though in 1984 – 2007, the racial wealth gap between white and black families quadrupled from \$20,000 to \$95,000,¹ and where racial segregation and inequality in public schools got so bad that educator Jonathan Kozol called it the restoration of apartheid schooling in America,² look at pharmaceuticals, banking, and high-tech! High-tech was driven by white, middle-class young people who started their own businesses with a computer in the garage. So just do what is necessary to keep peace. Food stamps, child tax credits, and some minor welfare assistance are enough. The Romans used bread and circuses. We use government welfare. What's wrong with *controlled inequality*?'
 - Gorillas fight other gorillas. Why shouldn't we? Nietzsche said that human beings who have a will to power should triumph over others. Resources are scarce. If we have to share the whole planet, it's possible that none of us will survive. So why don't the strong compete with the weak and beat them? Why should we really care about the life expectancy of people in the developing world. If they lived longer, they'd consume more resources.
3. Ask: So if you're connected to me, can I tell you what to do?
 - Can the U.S. dictate to the rest of the world what they should do? They're connected to us, so why don't we give them our opinion? Can the developed world tell the developing world to have fewer babies? Can we do that? If you're connected to me, then can I tell you to have only 1 child? Or no children? Your decisions to bring children into the world affect me, right?
 - We abort 92% of Down's Syndrome babies. Can I say that abortion is wrong because I'm affected by a life in another woman's womb? (I expect a pro-choice answer because social justice types are typically pro-abortion. Point out that this is not about *birth control* but about *child selection*.) Or, can I say that you *should* abort a Down's baby if you have one? After all, it affects me if we bring babies into the world who take up resources.
 - One of the agree-disagree questions was 'We should genetically modify babies.' How would you answer that question if we're all connected? Should I have the right to tell people what to do with their children because I say I'm affected?
 - The point is: Is that a way to say something nice that doesn't have any practical implications?
4. Ask: Well, maybe the planet would be better off with fewer humans? Just because we're connected doesn't mean we're objectively valuable. Why are we objectively valuable? How would you argue with someone who said 'we don't matter'?
5. So I'm a Christian. It used to be that Christian philosophers said that human beings are valuable because there is a loving God who acts on behalf of us, who loves each and every person. What you're trying to do is hold on to the worth and value of each person without a God who loves each person.
 - Nietzsche said, 'If you cut the root, you lose the fruit.' If you cut belief in a God who loves every person, you lose

¹ Thomas M. Shapiro, Tatjana Meschede, and Laura Sullivan, *The Racial Wealth Gap Increases Fourfold*, Institute on Assets and Social Policy, Brandeis University, May 2010

² Jonathan Kozol, *Shame of the Nation: The Restoration of Apartheid Schooling in America* (New York, NY: Crown Publishing, 2005)

- the worth and dignity of every person.
 - John Gray, professor of European Thought at the London School of Economics, says, ‘Secular humanism is a Christian heresy.’ It only emerges in places where Christianity has been before.
 - Stephen Pinker, professor of psychology at Harvard, an atheist, recently wrote an article called ‘The Stupidity of Dignity.’ In an atheist framework, is there special human dignity? Doesn’t seem like it.
 - 6. In our culture, all we’ve been able to do is to say, ‘You can live your life as long as it doesn’t hurt other people.’ We say it negatively, because we start from our rights. But is that the best we can do? It takes a spiritual framework to say, ‘You have a responsibility to other people.’ That’s saying it positively. It’s rooted in a larger vision that God has for humanity.
 - ii. If they answer, ‘We’re smart’ or ‘Because of what we can do for the world’ or ‘Because of what we can achieve or produce,’
 1. Ask: Are you valuable because you *do* something? Because you have *the potential* to do something? What if someone doesn’t have a lot of ‘potential’ like if they are mentally handicapped, or just dumb? In other words, do you have intrinsic worth as a human being? Or do you only have instrumental worth towards some other end?
 2. Princeton philosopher Peter Singer says that we should euthanize elderly people and people with Alzheimers. He even thinks infanticide is okay. How would you argue against that?
 - iii. If they answered, ‘Actually, we don’t matter,’ ask: What makes us different from animal life? If the firefighters are at your door and tell you they can save your mother or your dog, what do you choose? Is that the same moral choice?
- c. Science and morality: Science alone cannot tell us what is moral.
 - i. Science by itself supposes that competition and survival of the fittest is a law of nature. So all these human problems are just nature working itself out through humanity?
 - ii. Science does not tell us what the worth of each human life is. Science can’t even tell us what the worth of the human species as a whole is, because in the atheistic science story, it’s possible that nature would just evolve another intelligent life form better than us.
 - iii. Science cannot tell us what is the highest good. Atheist Sam Harris says that science can give us a morality, but fellow atheist physicist Sean Carroll objected by asking essentially, ‘What is the highest good? What if you prefer the freedom of the individual as the highest good, and I prefer socio-economic benefits to a certain group? There is no way to decide which is the higher good. So we’re stuck.’ His actual question was phrased this way: ‘What if I believe that the highest moral good is to be found in the autonomy of the individual, while you believe that the highest good is to maximize the utility of some societal group? What are the data we can point to in order to adjudicate this disagreement? We might use empirical means to measure whether one preference or the other leads to systems that give people more successful lives on some particular scale—but that’s presuming the answer, not deriving it. Who decides what is a successful life? It’s ultimately a personal choice, not an objective truth to be found simply by looking closely at the world. How are we to balance individual rights against the collective good? You can do all the experiments you like and never find an answer to that question.’ (<http://www.scienceandreligiontoday.com/2010/03/29/can-science-answer-moral-questions/>)
3. *The Internal Question*: Do you think that there is a deeper evil within us? Within human nature? Of course, we know that bad families or bad laws or bad circumstances contribute to evil in the world. But fundamentally, I don’t think we can just blame external factors all the time. I think the problem is internal to us. I think human nature itself is corrupted.
 - a. Technology cannot ‘save us’ from evil. Technology enables people to do both good and bad. That’s why unintended consequences happen - because of the badness in the human heart
 - b. Why do we believe we are special or more moral than others? Most of us think that other people will just choose money and not do the right thing. But what makes you think you will do the right thing?
 - c. The quote from Huston Smith on the slide in the fourth column: What do you think about it? We tend to think that education will solve our problems. Smith believes that it hasn’t. What do you say?

- d. Why do you think so many people say our hearts have more good, and then say people will choose to make money rather than do the right thing? What's going on there?
- e. Many people will say that human beings are only good, and that evil is external to us. It's rooted in bad families, laws, or circumstances. But I don't think it is. I think it's internal to us.
 - i. So what do you think about Bernie Madoff? The guy who pretended to run a multi-billion dollar investment fund, but only ripped people off? He was pretty educated. What do you think about educated people who do evil? Most of the people doing these things are actually starting off rich and getting even more rich doing them.
 - ii. So then are we individually responsible for our actions? Or did our environment make us do it? I totally believe that if we work on families, laws, and circumstances, it would be important. But I think we also have an internal problem, a leaning towards self-centeredness. It's not just external forces.
 - iii. I'm not saying that we are totally and only evil. But I am saying that I think the line between good and evil cuts right down the center of who we are.
 - iv. Don't you think we tend to shift the blame from ourselves? A lot of studies report that we (this generation of young people) have high self-esteem and mediocre competence. We have been affirmed, affirmed, and affirmed, until we actually try to do something challenging. Then we fail, or are mediocre, but expect to be affirmed. Do you think that's influencing our view of ourselves nowadays?
- f. Be prepared to illustrate this personally. Tell your story if it seems appropriate.
 - i. 'Don't we feel a need to be absolved and cleansed?' From the movie *Sicko* by Michael Moore: There's a man who used to disqualify people from medical coverage intentionally to save the company money, and then he quit the industry, said that that didn't 'atone' for his participation in the system, but he's glad to be out of it. What does it mean to have 'atonement' for the evil in us?
 - ii. I'm a Christian, and I believe Jesus fundamentally changes our identity and our human nature, and helps us engage more deeply with our own evil and self-centeredness. So it's not that we suddenly become perfect people. But Jesus heals and transforms us. He always has us return to the areas of life in which we failed, and he retells our story, to redeem it.
 - 1. In the late 1700's, Jesus got a hold of William Wilberforce, a minister in the British Parliament. Wilberforce grew up as a rich, spoiled partier. But Jesus opened his eyes to the poor who worked in English factories, and especially African slaves. He led a Bible study called the Clapham Sect which brought people face to face with Jesus and his heart on these issues, and he campaigned for the abolition of slavery and better care for the poor. He campaigned for forty years, and succeeded just before he died. Jesus moved him.
 - 2. Jesus also gripped the heart of Mark Whitacre, the guy in the movie *The Informant!* played by Matt Damon; he exposed corporate corruption at Archer Daniels Midland. Mark is the highest level executive at a Fortune 500 company to be a whistleblower, and it's because his wife Ginger loves Jesus and got him to confess. Ginger is the real hero because she didn't value the money or their lifestyle, because she loved Mark throughout his career and his bipolar disorder and his time in federal prison. Jesus brought about reform in him and in the system.
 - 3. Jesus also worked in the heart of Gordon Pennington, former marketing director for Tommy Hilfiger. He was a media consultant to Apple, Sony, Pepsi, and Mercedes-Benz. Yet when he gave his life to Jesus, he had a crisis of meaning and resigned from Tommy Hilfiger because he felt he was manipulating people to buying stuff that nobody needs. He now works for Universal Literacy Project. He said, 'Truth is the search for the things that are most reliable, sustainable, absolute. Truth is the desire to have something that we really can put our trust in. Truth deserves to be tested. Truth is being tested in this age like no other. The pursuit of truth ultimately necessitates a kind of struggle...The risks of pursuing truth are tremendous and what could be a greater adventure than to risk everything in pursuit of the one thing that endures.'

- g. Other sources outside the Bible that point out human evil:
- i. Pop culture: Woody Allen ran off with his wife's adopted daughter. Even the liberal New York Times reporter asked him, 'Come on – this is a little far. Even if she's not your biological daughter, she's still your wife's adopted daughter, and your daughter.' His response was, 'The heart wants what it wants.'
 - ii. Literature: 'Because it seemed clear that wars were not made by generations and their special stupidities, but wars were made instead by something ignorant in the human heart' (John Knowles, *A Separate Peace*, p.193 paperback edition).
 - iii. Literature: '“There isn't anyone to help you. Only me. And I'm the Beast...Fancy thinking the Beast was something you could hunt and kill!” said the head. For a moment or two the forest and all the other dimly appreciated places echoed with the parody of laughter. ‘You knew, didn't you? I'm part of you? Close, close, close! I'm the reason why it's no go. Why things are what they are?’” (William Golding, *The Lord of the Flies*, p.130 – 131)
 - iv. Economics: Blamed by some for not doing more to prevent the crisis, Mr. Greenspan denied any responsibility for the problems gripping the global economy. 'It's *human nature*, unless somebody can find a way to change human nature, we will have more crises and none of them will look like this because no two crises have anything in common, except *human nature*.' (<http://news.bbc.co.uk/2/hi/8244600.stm>, *Market crisis 'will happen again'*, September 2009)
 - v. Psychology: 'We need more understanding of human nature, because the only real danger that exists is man himself... We know nothing of man, far too little. His psyche should be studied because we are the origin of all coming evil.' (Carl Jung, BBC interview, 1959)
 - vi. Psychology: Reviews of Cordelia Fine's book *A Mind of Its Own: How Your Brain Distorts and Deceives*, From Publishers Weekly. 'Vain, immoral, bigoted: this is your brain in action, according to Fine, a research associate at the Centre for Applied Philosophy and Public Ethics at Australian National University. Fine documents a wealth of surprising information about the brain in this readable account that adopts a good-humored tone about the brain's failings without underestimating the damage they do. The brain, she shows, distorts reality in order to save us from the ego-destroying effects of failure and pessimism. For example, an optimist who fails at something edits the truth by blaming others for the failure and then takes complete credit for any successes. The brain also routinely disapproves of other people's behavior (how could he do that?), while at the same time interpreting one's own actions in the best possible light (I would never do that!). The brain also projects stereotypes onto others that reflect prejudicial beliefs rather than objective reality. Despite the firm hold these distortions have on our brains, Fine is not a pessimist. The path to overcoming stereotypes and other distortions of the brain, she says, may be gained through self-awareness and knowledge provided by experimental psychology, a field that explores and exposes unconscious mental influences.'
 - vii. Pop culture: Hannibal Lecter, *Silence of the Lambs*. In response to the question, 'What happened to you?' Hannibal Lecter says, 'Nothing has happened to me, officer Starling. I happened. You can't reduce me to a set of influences. You've given up good and evil for behavioralism, officer Starling. You've got everybody in dignity pants. Nothing is ever anybody's fault. Look at me, officer Starling. Can you stand to say, 'I'm evil?'

BACKGROUND DATA USED FOR THE PROXE SLIDES

Food Processing Technology

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Resources Consulted:

- Video documentaries:
 - *Food Inc*
 - *King Corn*
 - *The Future of Food*
- Websites:
 - The Story of Stuff: www.storyofstuff.org
 - Puristat Digestive Wellness Center: <http://www.puristat.com/standardamericandiet/processedfoods.aspx>
- Books
 - The Omnivore's Dilemma by Michael Pollan
 - In Defense of Food by Michael Pollan
 - Nourishing Traditions by Dr. Sally Fallon

Excerpted from the Puristat Digestive Wellness Center website, above:

Processed, Junk, and Fake Foods¹

Processed food is made from real food that has been put through devitalizing chemical processes and is infused with chemicals and preservatives. Beef jerky, canned tea, jam, hot dogs, and low-fat yogurt with sugar or aspartame are a few examples of processed food. **Junk foods** contain very little real food. They're made of devitalized processed food, hydrogenated fats, chemicals, and preservatives, and include anything made with refined white flour. Canned breakfast drinks, cold/sugary cereals, doughnuts, drive-through foods, and soda are examples of junk foods. **Fake foods** are made primarily of chemicals, and often contain gums and sugar fillers. Examples include bacon bits, bottled salad dressing, dehydrated soups, and instant coffee.

Energy Output > Exceeds Nutritional Input

These non-foods have one thing in common; it costs your body a great deal more to digest, absorb, and eliminate them than they offer your body in nutritional value – an extremely poor return on your investment that leaves your body sluggish and depleted.

Toxins, Poisons, Processed Food, And The Body

Our ancestors preserved foods naturally, using salt, fermentation, and sun drying. Food processing has evolved away from these simple practices into more complicated and dubious methods. Today, nearly six thousand additives and chemicals are used by food companies to process our food. Many of them can have a devastating effect on our health. It is important to note the fact that additives and preservatives cannot always be painted with a negative brush. The addition of vitamins to bread and milk has helped to stamp out diseases such as pellagra and rickets. Unfortunately, the good intentions that characterized the processed food industry during the early days have now de-evolved to finding ways to cheaply process food and manipulate buyers, regardless of the detrimental affects on the health of Americans. Today, many additives and preservatives are harmful toxic chemicals as problematic as the decay they are used to prevent.

Preservatives

Preservatives are a type of additive used to help stop food from spoiling. **Nitrates and nitrites** are used to preserve meats such as ham and bacon, but are known to cause **asthma, nausea, vomiting, and headaches** in some people. In addition to allergic reactions, the same is true for **sulfites (sulfur dioxide,**

metabisulfites, and others), which are commonly used to prevent fungal spoilage, as well as the browning of peeled fruits and vegetables. **Sodium nitrite** in some foods is capable of being converted to nitrous acid when ingested by humans. While animal testing showed that **nitrous acid caused high rates of cancer**, it is still in use. **Benzoic acid aka sodium benzoate** is added to margarine, fruit juices, and carbonated beverages. It can produce **severe allergic reaction and even death** in some people. **Sulfur dioxide** is a toxin used in dried fruits and molasses as well as to prevent brown spots on peeled fresh foods such as potatoes and apples. **Sulfur dioxide** bleaches out rot, hiding inferior fruits and vegetables. In the process, it **destroys the vitamin B** contained in produce.

Antioxidants

While antioxidants such as alpha-carotene are recommended by health specialists to prevent premature aging, some of the antioxidants used as food preservatives may be unhealthy. Contained in nearly every processed food on the market, antioxidants prevent fatty foods from spoiling when exposed to oxygen. **BHT (butylated hydroxytoluene) and BHA (butylated hydroxyanisole)** are two of the most widely used, yet controversial of all antioxidants. So alarming were the results of BHT and BHA in animal testing, that a number of countries have severely restricted their use. Some people have difficulty metabolizing these chemicals, which is thought to result in health and **behavioral problems**, and **hyperactivity**. They cause **allergic reactions**, may also contribute to the development of **tumors and cancer**, as well as be **toxic to the nervous system and liver**. In spite of these findings, the use of BHT and BHA has increased, rather than decreased, in the U.S.A.

Coloring

Each year, the American food industry uses three thousand tons of food color. Many coloring agents are derived from **coal tar**, and nearly all coloring is synthetic. Norway has a total ban on all products containing **coal tar**. Though some artificial food dyes have been banned because they are **believed to cause cancer**, most dyes used today are of the artificial variety. They are also linked to **allergies, asthmas, and hyperactivity**. The long list of foods and beverages in which color is altered includes butter, margarine, the skins of oranges and potatoes, popcorn, maraschino cherries, hot dogs, jellies, jellybeans, carbonated beverages, and canned strawberries and peas. Even the chicken feed on large-scale egg farms is colored so that chickens will lay golden-yolked eggs similar to those laid by free-range chickens. Talk about the goose that laid the golden egg!

Sweeteners

Most processed foods contain sweeteners, many of which are artificial sugar substitutes containing no natural sugars, such as **saccharine and aspartame**. Artificial sweeteners are linked to **behavioral problems, hyperactivity, and allergies**. Because saccharin was shown to **increase the incidence of bladder cancer** in animal testing, all foods containing this sugar substitute are required to carry a warning label.

Emulsifiers, Stabilizers, and Thickeners

These additives alter the texture of foods. Emulsifiers, for example, prevent ingredients from separating into unappealing globs in food such as mayonnaise and ice cream. A first cousin to anti-freeze, **propylene glycol** is a synthetic solvent used as an emulsifier in foods. Although it is recognized as **toxic to the skin** and other senses, and is considered a **neurological toxicant**, the Food and Drug Administration (FDA) has deemed it generally recognized as safe (GRAS).

Flavorings

The most common food additive, flavorings – of which there are over 2000 in use – may be natural or artificial, and are usually comprised of a large number of chemicals. Peruse the [ingredient list for the strawberry flavoring](#) in one popular fast food outlet's strawberry milk shake. Artificial flavors are linked to **allergic and behavioral reactions**, yet these ingredients are not required to be listed in detail as they're generally recognized as safe. **MSG (monosodium glutamate)** is another popular flavor enhancer. Found to cause damage in laboratory mice, it has been banned from use in baby foods, but is still used in numerous others. It causes common **allergic and behavioral reactions including headaches, dizziness, chest pains, depression, and mood swings**, and is also a **possible neurotoxin**.

Refining

Refined flour has had the brown husk of the grain stripped away, leaving the white, refined starch found in white bread, white rice, pasta, cookies, and numerous other junk foods. Without the fibrous husk, refined starches are broken down quickly into sugar and absorbed immediately into the bloodstream **causing glucose levels to rise, and increasing the risk of obesity**. In contrast, whole grains – such as whole grain bread and cereals, brown rice, and barley – retain the bran surrounding the starch, so they're absorbed more slowly into the bloodstream than refined starches. This slows sugar absorption from the intestine, and reduces the risk of obesity.

Refining Destroys and Devitalizes Most of Foods' Goodness:

[Healthy unsaturated fatty acids](#) – high in food value – are lost during the milling process. Half the vitamin E is destroyed when the wheat germ and bran are removed. Refining wheat into white flour removes between 50 and 93 percent of wheat's magnesium, zinc, chromium, manganese, and cobalt.² Additionally, approximately 50 percent of calcium, 70 percent of phosphorus, 80 percent iron, 50 percent potassium, 65 percent of copper, 80 percent thiamin, 60 percent of riboflavin, 75 percent of niacin, 50 percent of pantothenic acid, and about 50 percent of pyridoxine is lost.³ Refining sugar cane into white sugar depletes it of 99 percent of its magnesium and 93 percent of its chromium. Polishing rice removes 75 percent of its zinc and chromium.⁴ Refined table salt has had most of the trace minerals removed during processing. It contains no sodium chloride, sugar as filler, and may even contain aluminum.⁵

Bleaching

Part of the process wheat undergoes to become the white flour in popular baked goods involves bleaching. Various chemical bleaching agents are used including **oxide of nitrogen, chlorine, chloride, nitrosyl, and benzoyl peroxide** mixed with a variety of chemical salts. **Chloride oxide** – which catalyzes a chemical reaction that **destroys beta cells in the pancreas** – is now being **linked to diabetes**.⁶ This toxic effect is common scientific knowledge in the research community. In spite of this, the FDA still allows companies to use chloride oxide in processed food.

Notes:

1. Hanley, J.L., M.D. and Deville, N., Tired of Being Tired, Berkley Publishing Group, NY, 2001. (p. 66)
2. Wilson, Lawrence, M.D., F.I.C.B., Why Take Nutritional Supplements, article on www.drlwilson.com.
3. Hull, Janet, M.D., Bleaching agent in flour linked to diabetes, from The Idaho Observer, July 2005, cited on www.detoxprogram.net.
4. Wilson, Lawrence, M.D., F.I.C.B., Why Take Nutritional Supplements, article on www.drlwilson.com.
5. Hanley, J.L., M.D. and Deville, N., Tired of Being Tired, Berkley Publishing Group, NY, 2001. (p. 220)
6. Hull, Janet, M.D., Bleaching agent in flour linked to diabetes, from The Idaho Observer, July 2005, cited on www.detoxprogram.net.

Cosmetics

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Resources Consulted:

- Websites:
 - The Story of Cosmetics: <http://storyofstuff.org/cosmetics/>
 - On Dry Cleaning Chemicals: <http://www.babycentre.co.uk/pregnancy/isitsafeto/drycleaningexpert/>

Plastic

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Resources Consulted:

Dioxin Impact on Humans

Quoted from <http://www.mindfully.org/Pesticide/EDs-PWG-16jun01.htm>. 'Dioxin is what made Agent Orange such a nightmare for Vietnam vets and their offspring...A few of the possible health effects include; birth defects; alterations in sexual and functional development[17]; neurologic disorders, diabetes mellitus[18], immunologic disorders,[19],[20] early puberty in young girls,[21],[22] cancers: breast,[23],[24] colon, vaginal, endometriosis, cervix, testicular[25], sexual differentiation of the brain and other estrogen target tissues,[26] structural abnormalities of the oviduct, uterus, cervix and vagina, a contributing factor to subfertility,[27] non-Hodgkin's lymphoma,[28],[29], [30] reduced physical stamina,[31] genital birth defects: hypospadias & cryptorchidism,[32] altered anogenital distance in male,[33] reduced sperm counts,[34] and enlargement/reduction of prostate,[35] developmental, behavioral and mental disorders,[36] anger, inattention, decreased mental capacity, learning disabilities,[37] dyslexia, attention deficit/hyperactivity disorder (ADHD),[38] autism, propensity to violence,[39] reduced motor skills, and gross and fine eye-hand coordination...The incidence of all cancers among infants less than one year old, both sexes, age adjusted, has risen 36% when comparing the years 1976-1984 to 1986-1994. The incidence for germ cell cancers in that same group has increased 124%. The increases were lower for older children, but still, they were increases.'

[17] Thomas, K and T Colborn. 1992. Organochlorine Endocrine Disruptors in Human Tissue in Chemically Induced Alterations in Sexual and Functional Development: The Wildlife/Human Connection. eds, T Colborn and C Clement, Princeton Scientific Publishing Co, NJ, 1992.

[18] Kaltreider, R.C., A.M. Davis, J.P. Lariviere, and J.W. Hamilton 2001. Arsenic Alters the Function of the Glucocorticoid Receptor as a Transcription Factor. Environmental Health Perspectives 109:245-251. See Higgins, M. Heavy metal: Arsenic is an endocrine disruptor. Environmental News Network 5mar01

[19] Smoger, G, P Kahn, G Rodgers, S Suffin, and P McConnachie. 1993. In Utero and Postnatal Exposure to 2,3,7,8-TCDD in Times Beach, Missouri: 1. Immunological Effects: Lymphocyte Phenotype Frequencies. Dioxin '93, 13th International Symposium on Chlorinated Dioxins and Related Compounds, Vienna.

[20] Weisglas-Kuperus N, Patandin S, Berbers G, Sas T, Mulder P, Sauer P, Hooijkaas H. Immunologic Effects of Background Exposure to Polychlorinated Biphenyls and Dioxins in Dutch Preschool Children. Environmental Health Perspectives v.108, n. 12, Dec00

[21] Colón, I., D.Caro, C.J.Bourdony, and O.Rosario. Identification of Phthalate Esters in the Serum of Young Puerto Rican Girls with Premature Breast Development. Environmental Health Perspectives v.108, n.9, Sep00

[22] Zacharias, L., RJ.Wurtman, and M.Schatzoff. 1970. Sexual Maturation in Contemporary American Girls. American Journal of Obstetrics and Gynecology 108: 833-846.

[23] Wolff, M, P Toniolo, E Lee, M Rivera and N Dubin. 1993. Blood Levels of Organochlorine Residues and Risk of Breast Cancer", Journal of the National Cancer Institute 85(8):648-652, 1993.

[24] Steingraber, Sandra, Women's Community Cancer Project, Cambridge, Massachusetts. Mechanisms, Proof, and Unmet Needs: The Perspective of a Cancer Activist. Environmental Health Perspectives v.105, n.3 Supplement March 1997

[25] Crisp, T.M., E.D.Clegg, R.L.Cooper, W.P.Wood, D.G.Anderson, K.P.Baetcke, J.L.Hoffmann, M.S.Morrow, D.J.Rodier, J.E.Schaeffer, L.W.Touart, M.G.Zeeman, and Y.M.Patel. Environmental Endocrine Disruption: An Effects Assessment and Analysis, A U.S. EPA Risk Assessment Forum Project. Environmental Health Perspectives 106, Supplement 1, February 1998

[26] Montano, MM , WV.Welshons and FS.vom Saal. Free estradiol in serum and brain uptake of estradiol during fetal and neonatal sexual differentiation in female rats. Biology of Reproduction, Vol 53, 1198-1207

[27] Newbold, Retha. Cellular and Molecular Effects of Developmental Exposure to Diethylstilbestrol: Implications for Other Environmental Estrogens. Environmental Health Perspectives 103, Supplement 7, October 1995

[28] Buckley, J.D., A.T.Meadows, M.E.Kadin, M.M.LeBeau, S.Siegel, L.L.Robison. Pesticide exposures in children with non-Hodgkin lymphoma Cancer v.89, i11, 6dec00

[29] Hardell, L., M.Eriksson. A case-control study of non-Hodgkin lymphoma and exposure to pesticides Cancer v.85, i.6 12mar99

[30] Hardell, L., M.Eriksson, G.Lindstrom, B.vanBavel, A.Linde, M.Carlberg, and G.Liljegren. Case-Control Study on Concentrations of Organohalogen Compounds and Titers of Antibodies to Epstein-Barr Virus Antigens in the Etiology of Non-Hodgkin Lymphoma. Leukemia and Lymphoma. 2001, v.00.

[31] Guillette, EA, MM Meza, MG Aquilar, AD Soto, and IE Garcia. 1998. An Anthropological Approach to the Evaluation of Preschool Children Exposed to Pesticides in Mexico. Environmental Health Perspectives 106:347-353.

[32] Weidner, I.S., H.Møller, T.K.Jensen, N.E.Skakkebaek. Cryptorchidism and Hypospadias in Sons of Gardeners and Farmers. Environmental Health Perspectives Volume 106, Number 12, Dec98

[33] Gupta, Chhanda. 2000. Reproductive malformation of the male offspring following maternal exposure to estrogenic chemicals. Proceedings of the Society for Experimental Biology and Medicine 224:61-68.

[34] Graph of Sperm Count 1938 to 1990 from

Toppiari, J., J. Larsen, P. Christiansen, A. Giwercman, P Grandjean, L.J. Guillette Jr., B. Jegou, T.K. Jensen, P. Jouannet, N. Keiding, H. Leffers, J.A. McLachlan, O. Meyer, J. Muller, E. Rajpert-De Meyts, Thomas Scheike, R. Sharpe, J. Sumpter, and N.E. Skakkebaek. 1996. Male Reproductive Health and Environmental Xenoestrogens. Environmental Health Perspectives 104(Suppl 4):741-803.

[35] vom Saal, F.S., B.G.Timms, M.M.Montano, P.Palanza, K.A.Thayer, S.C.Nagel, M.D.Dhar, V.K.Ganjam, S.Parmigiani, and W.V.Welshons. Prostate enlargement in mice due to fetal exposure to low doses of estradiol or diethylstilbestrol and opposite effects at high doses. Proceedings of the national Academy of Sciences v.94, pp.2056-61 Mar97

[36] Weiss, B. 1997. Pesticides as a source of developmental disabilities. Mental Retardation and Developmental Disabilities Research Reviews 3: 246-256.

[37] Yu, M., C-C.Hsu, Y.Guo, T.Lai, S.Chen and J.Luo. Disordered Behavior in the Early-Born Taiwan Yucheng Children. Chemosphere 29(9-11):2413-2422.

[38] Hauser, P, A.Zametkin, P.Martinez, B.Vitello, J.Matochik, A.Mixson, and B.Weintraub. Attention Deficit-Hyperactivity Disorder in People with Generalized Resistance to Thyroid Hormone. New England Journal of Medicine 328(14):997-1001 1993

[39] vom Saal, F, S Nagel, P Palanza, M Boechler, S Parmigiani and W Welshons. 1995. Estrogenic Pesticides: Binding Relative to Estradiol in MCF-7 Cells and Effects of Exposure During Fetal Life on Subsequent Territorial Behavior in Male Mice. Toxicology Letter, in press, 1995.

[39a] Borzelleca J. Paracelsus: herald of modern toxicology. Toxicological Sciences, 2000, 53: 2-4.

[39b] High production volume (HPV) chemicals are those which are manufactured in or imported into the United States in amounts equal to or greater than one million pounds per year.

[39c] Moyers, B., S.Jones. Trade Secrets: A Moyers Report. Television documentary PBS aired on 26mar01 <http://www.pbs.org/tradesecrets/transcript.html>

[39d] Steingraber, S. Having Faith. Cambridge, MA: Persius Publishing, 2001. p.34

[39e] Goettlich, P. PVC: A Health Hazard From Production through Disposal - 25oct01
www.mindfully.org/Plastic/Polyvinylchloride/PVC-Health-HazardPWG25oct01.htm

[39f] US EPA. Exposure and Human Health Reassessment of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. May 2000 Draft Final. www.epa.gov/ncea

[39g] Moyers, B., S.Jones. Trade Secrets: A Moyers Report. Television documentary PBS aired on 26mar01 <http://www.pbs.org/tradesecrets/transcript.html>

[39h] Schecter, A. Personal notes from his presentation at the People's Dioxin Action Summit, UC Berkeley 10aug00

[39i] Schecter, A., et al. Recent Dioxin Contamination From Agent Orange in Residents of a Southern Vietnam City Journal of Occupational Medicine 43:5, pp 435-443 May01 <http://www.mindfully.org/Pesticide/Dioxin-Agent-Orange-S-V.htm>

[39j] Schettler, T., Solomon, G., Valenti, M., and Huddle, A. Generations at Risk. Cambridge; MIT Press, 1999.

[39k] Swan, SH., Elkin, EP., and Fenster, L. The Question of Declining Sperm Density Revisited: An Analysis of 101 Studies Published 1934-1996. (Abstract) Environmental Health Perspectives v.108, n.10, Oct00

Dying From Dioxin: A Citizen's Guide to Reclaiming Our Health and Rebuilding Democracy Lois Gibbs 1995 – Gibbs, one of the original activists from the contaminated neighborhoods at Love Canal, explains what dioxin is and describes how it affects human health, summarizing the September 1994 EPA draft report on dioxin and important reports published since the EPA report. She reviews the politics surrounding the history of dioxin, and offers step-by-step instructions for grass-roots organizing, creating a coalition, identifying sources of contamination in the community, and shutting down an incinerator. Contains appendices on the chemistry of dioxin, conversion charts, sample ordinances, agreements and resolutions, and a declaration of principles of environmental justice.

See “dioxin” article on Wikipedia, and references cited.