

WE AGREE WITH THE POPE OF THE FRANCIS. "If the incorporation of technology into production translates into higher rates of exclusion, misery, hunger, ignorance and on the other hand, economic concentration and deterioration of the environment, sad destiny holds humanity." In this industrialized world, where the production processes are degrading to the ecosystem and the human being, it is difficult to maintain the customs, and a way of life, that connects with nature, that respects the ethical values, that groups the people , to promote sustainable development.

HOME GARDENS, ECOVILLAGES AND FIBERSHED are an example to follow. The base starts with the organic farmers, who do not deteriorate the soil with the tillage, use organic fertilizers, and mycorrhizal, for the cultivation of biodynamic plants. Family gardens have been for centuries the refuge of a large part of the agricultural biodiversity and the meeting point of several generations, which has allowed the transmission of knowledge, techniques and practices along with that of genetic resources. The passage from those home gardens, to the new leisure gardens, and urban gardens, also promotes the path of agrarian biodiversity.

The "ecovillage" includes all aspects important to life, respectfully integrating them in the natural environment, supporting healthy forms of development Complete vital functionality: studies, work, leisure, daily necessities, everything is covered within the ecovillage. In short, it is an integration with nature: in the end it is a sustainable life, respecting and caring for the environment, practicing a traditional agricultural activity, using bioclimatic constructions, recycling waste, taking advantage of renewable energies, etc.

AFTER AGRICULTURE, THE TEXTILE INDUSTRY IS THE MAIN POLLUTER OF FRESHWATER RESOURCES ON THE PLANET. The chemical cocktail used to soften, process and dye our clothes, is attributed to a number of human diseases, including chronic diseases and cancer. Fibershed: We develop regional fiber systems that build soil and protect the health of our biosphere. In its website, we define: We are a network of farmers, livestock, land managers, designers, ecologists, sewers, weavers, felters and natural dyers, spinners and mill operators who have defined a strategic geography to work and create within. http://www.fibershed.com/

They themselves declare that the machinery necessary to produce clothing was nowhere to be found. Most of the manufactures had disappeared as a result of the free trade agreements. The group relied on the honored skills that craftsmen, over time, to make fabric: spinning wheels, weaving needles, and floor looms. THE ETHNIC AND PERSIAN CARPETS, of wonderful tones and composition of colors, realized with natural dyes, following an ancestral art, a wisdom that demands to know in depth the environment,. It is a merit of a culture, a story passed from parents to children and enriched with the passage of the years.

The leaf of the cinnamon, peach or mint, tea leaf blossom, beard (similar to moss), radal bark, purple onion peel, relbun root, blueberries in fruit, the branch and leaf of the Chilco are the raw material to give color to the wool of sheep in the carpets of the Andes. In Persian carpets the blue comes from the indigo, a plant of the family of the peas. The red of the root of the blonde, coscoja and the cochineal. Saffron yellow, reseda, vine leaf or pomegranate. Green from indigo + vine leaf, pomegranate or simply blending blue and yellow. Orange of the henna + the root of blonde, etc. LET US SUPPORT WITH ALL OUR POSSIBILITIES, THESE INITIATIVES, THAT DEFEND A SUSTAINABLE DEVELOPMENT, PROTECTING THE PEOPLE AND THE ECOSYSTEM.

# iamblessediam

Hi Prof. G. -- EXCELLENT summation(s) - especially those links you provided in the "alic021" comment - a lot of "time" spent on your part! The "fast clothing industry" has been DESTROYING the two most precious resources ALL natural life forms need to survive - WATER and AIR. The good news is there's a "shift" occurring within the clothing industry - true it's small segment - but some are getting "awake" and doing something about their polluting ways: [www.youtube.com/watch] and: [www.youtube.com/watch] and this one from Christina Dean REALLY takes the subject of "fast fashion" to task: [www.youtube.com/watch].

I'm glad Dr. Mercola published this article - here's why - it relates to both endocrine disruptors and glutathione production and the health of the Earth - Mother Gaia. I applaud not only Fibershed's vision but those "regional" producers - the local farmers [folks like Krofter] - that take on true "stewardship" work to protect those "two" components every natural life form needs - water and air. Every individual can support the emerging "shift" posited in this article by supporting regional producers of natural fiber-based clothing - many can be found through local co-ops - take the time to do the research. Be well everyone! Love, blessings and peace!

## nao3425

Jade – Heaven's Stone More than 2,500 years ago, Gautama Buddha recognized that much of life involves pain and suffering. Consequently, few of us here on Earth have been provided with a glimpse of heaven. Instead, we mostly dwell in hell. But for the Chinese, there is a terrestrial bridge between heaven and hell – jade.

I knew it was the Buddhists fault, They also said man is basically Good and trusting... So, they provided the Parasites with the information of our weakness. What did the Bible say, "Your children come to you begging for food and you feed them stone." No wonder the Politicians want to beg us for "CONTIBUTIONS" FOR NATURAL DISASTERS(which never finds it's way to helping anyone) What the hell we paying FEMA for, oh yes, I forgot, to invoke Marshall law and buy body bags to clean up the mess? AND they want us to pay to protect everyone with a "NANNY STATE" which they have dumped about a 35% TAX on your after tax take home pay by incorporating that cost into the price of EVERYTHING called "Compliance fees".... anyone feeling "STUPID" yet.

Posted On 10/01/2017

# Almond

Perhaps it is not the passing of the family garden so much as the passing of the home and the family.

Researcher IAM. A replica, worthy of a great communicator. Greenpeace, has produced a study of hazardous chemicals, in the production of clothing, for large chains in the sector. Following the success of the Detox campaign, which began in 2011, in which water contamination by textile industries was denounced, research has expanded to 20 fashion brands, among them Armani, Levi's and Zara, and a larger number of substances analyzed

The garments included jeans, t-shirts, dresses, pants and fiber underwear. 31 of the samples contained ethoxylated phthalates and nonylphenols (NPs). Chemicals found included high levels of phthalates, 2 toxic chemicals in four of the garments, and 3 carcinogenic azo chemical compounds. NP was found in 89 articles. NPs are intrinsically dangerous substances.

Alquiphenols are used in the textile industry for washing and dyeing processes. Nonylphenols (NPs) and octylphenols and their ethoxylates, especially ethoxylated nonylphenols, are included. They are toxic to aquatic life, persistent in the environment, and bio-accumulative in body tissues. They are similar to estrogen, acting hormonal disruptions

Around the world a growing movement of people are using their creativity, design skills and purchasing power to demand fashion without pollution. united by a shared belief that the clothes we wear should carry a story we can be proud of, activists, bloggers, designers, scientists and models have been able to convince big brands including zara, mango, valentino, uniqlo and h&m to commit to toxic-free fashion. there is still a long way to go, but our successes so far prove that when we work together, big brands are forced to stand up and deliver. https://youtu.be/uzucclsukau

The "Fashion Detox" has started in 20 countries since 27.11.12 https://youtu.be/ex4zsp6mzba

Greenpeace activists in over 20 countries took to the streets, joined by over 175,000 people online, to demand Levi's make fashion without pollution. https://youtu.be/x173k1crsze

# doubly.blessed

Taking Textiles to Task thoughts from CA. Francis of Assisi has been a teacher of mine hence some cut & paste from earthhealing. St. Francis, Patron of Environmentalists Francis of Assisi, (1181-1226) is the patron of ecologists & embodies what good ecological practice is all about. Francis is not an academic but a person who loves creation as God's gifts, sees creatures with a sense of kinship, & initiates a process of preserving and repairing the damage done by neglect to the environment near where he lives. He prefers deed to word.

Francis is the son of a rich cloth merchant, a typical medieval newly rich person, who regards dress & the latest styles & colors as a mark of a chosen station in life. Francis is expected to follow that routine; he rebels early on & does just the opposite. Like Christ he gives away all his worldly possessions. His opposition to family affluence is celebrated by a new 2017 shrine in memory of his "Divestiture" in the Assisi church of St. Mary Major. It recalls where in the presence of Bishop & his father he stripped naked & put on sack cloth & sandals. He breaks with the tradition of the budding bourgeoisie or social class of freemen of medieval times, which is emerging with all the smugness, conventionality, & materialistic practices of the dawning age of capitalism. to be contd

Posted On 10/01/2017

# doubly.blessed

Like Francis, we need to start where we are. We need not go to Hong Kong landfills to get our epiphany that we are responsible in wounding Earth. We have purchase power and that is our beginning demonstration, and something all of us can do. We control what we put on our back, put into our closet, discard... By this simple beginning others take notice and hopefully join in through their cooperative efforts of healing the wounded Earth. Gandhi gets the last word: "Be the change that you wish to see in the world." | Mahatma Gandhi Shalom from CA

Let's be positive NAO. As you know, jade "imperial jewel" is a symbol of purity and wisdom. In the East, they carve jade figures for the home, because they believe that they will bring prosperity, good behavior, justice, modesty, charity, courage, longevity, good friendships, kindness and wisdom to the family. The ancient Mayas wore jade to protect themselves against kidney disease and vesicular problems, and also the Egyptians used jade elixir for cures in ancient times.

Jade is related to the fourth chakra, the heart chakra. It is used to relax the mind and to enter into meditative states, favors love, serene spirit and add to meditate. It is assumed that the Marshall Plan showed that government planning can achieve great results in the economic sphere. US foreign aid gave the countries of Western Europe, efficiently mobilized their human resources, took measures of monetary stabilization, increased their cooperation and stimulated their industrial and agricultural production. Of course, this progress has not contemplated the safeguarding of the ecosystem, in addition to causing inequalities and corruption We hope that solidarity to people who suffer disasters, have a better destiny. There is constant news that certain solidarity aid from non-profit-making associations is diverted for profit from certain corrupt managers,

Posted On 10/01/2017

# **Krofter**

Guillermo - The article and your insightful comments remind me of an earlier time in the '70's when my partner at that time - a surfer girl and a classic earth muffin - collected wild mustard, cochineal (a bug that sucks juices from nopal cactus plants - makes a very bright red dye), beets from our garden, avocado pits from our trees and other locally available plant dyes to use in coloring her textile crafts including skeins she had spun on a spinning wheel I made for her. Wish I had gotten into alpacas back then, I'd be rich today. In case anyone is interested, alpacas have more natural colors than any other fleece bearing animal. They also have the finest fleece and consume far less resources than sheep or goats per pound of fleece. Organic cotton can't even come close to being as sustainable as any of those animals because to grow cotton an entire ecosystem needs to be plowed under. Those animals can make fiber from intact native ecosystems.

yam - Thanks for the nice comment.

DOUBLY. Thank you very much, very nice writing. I'll hook you up. St. Francis of Assisi, patron of vets and textiles. Indeed, Francis was the son of a merchant, initiated very early in the commerce and with great endowments for the businesses, Francisco dominated the human relations. Fascinated his companions. The ideal of courtly love, born in the courts of the lords of southern France, had spread throughout Europe through the songs of troubadours and romances of cavalry. This new art of love, impregnated with veneration, delicacy and nobility, found in the heart and in the spirit of Francis a profound echo that would inspire his life of relationship.

Under this sociable and even polite character, however, there was a background of violence and aggression. Francisco belonged to the then-booming class of merchants, eager for profit and eager for power. These wealthy bourgeois were now moving away from the humble people, in which they had supported themselves to supplant the lords, and, approaching more and more to the nobles, dreamed of possessing also titles of nobility.

The appearance of the poor, messenger of God, in the life of Francis, when he was totally absorbed in his luxury fabric business, began his reconversion. It is the irruption of the poor, as in the Bible the irruption of the messengers of God, in the life of the prophets, to transmit a divine announcement. Francis, moved by grace, undertakes, never to deny anything, to anyone who asks him in the name of God. Then he calls the poor man and gives him a large alms. What is important in the story is not the poor as poor, but as the messenger of God. The first and most important, is the internal attitude of respect and honor to God, based on courtesy, courteous urbanity, is a consequence of the inner attitude. What is emphasized, rather than the surrender of alms, is the quality of the relationship with the poor, made of respect and honor.

Hi KROFTER. You have noticed, in the reference of the carpets of the Andes. Effectively alpacas fiber are of excellent quality and if food is economical. Of the various species of camelids, the alpaca and vicuna are the most valuable fibrous animals, the alpaca for the quality and quantity of its fiber, and the vicuña for the softness, fineness and quality of its coat NOW, YOU CAN CONSIDER YOURSELF A RICH MAN, YOUR DEDICATION TO ORGANIC FARMING AND HIS MORAL TALENTS, YOU CREDIT HIM WITH A PERSON OF GREAT WEALTH. As you know, alpacas graze on the heights of the southern Andes of Peru, western Bolivia, Ecuador, and northern Chile, at an altitude of 4,500 m above sea level. Alpacas are considerably smaller than llamas , and were bred specifically for their fiber Polar alpaca is a silky and lustrous natural fiber. Although it is similar to sheep wool, it is warmer, non-thorny, and has no lanolin, which makes it hypoallergenic. It is also soft and luxurious. In the physical structure, the alpaca fiber is somewhat similar to the hair, being very bright. Alpaca fiber is also flame resistant and meets the standards of the United States Consumer Product Safety Commission.

Alpaca fiber is used to make knitted and woven items, similar to wool. These items include blankets, sweaters, hats, gloves, scarves, a wide variety of textiles and ponchos in South America, and sweaters, socks, coats and bedding in other parts of the world. Fiber comes in more than 52 natural colors classified in Peru, 12 classified in Australia and 16 classified in the United States. YOU, METICULOUS AND METICULOUS, WOULD HAVE BEEN A GREAT TEACHER, IN THE TINTING OF THE ALPACA. Alpacas require much less food than most animals of their size. They usually eat hay or herbs, but can eat some other plants. Outdoor alpacas can obtain the necessary vitamins in their native grazing fields.

Posted On 10/01/2017

# Guillermou

ALMOND. Your proposal is a big step

## iamblessediam

Hi Prof. G. -- About - "The garments included jeans, t-shirts, dresses, pants and fiber underwear. 31 of the samples contained ethoxylated phthalates and nonylphenols (NPs). Chemicals found included high levels of phthalates, 2 toxic chemicals in four of the garments, and 3 carcinogenic azo chemical compounds. NP was found in 89 articles. NPs are intrinsically dangerous substances." -- recall the Dr. Dale Bredensen interview Dr. Mercola did recently about Alzheimer's - phthalates play a BIG role in the brain's production of beta-amyloid's as a "glue" to bind up those toxins. No wonder to me why there's so many metabolic-related disease processes WHICH weren't manifesting on the "scale" seen today when GREED Science wasn't driving profit overloading the human body's capacity to get rid of their CRAAP! My motto about food - "love the food that love's you back" - also applies to clothing.

The other "aspect" about the garment industry also goes beyond the "chemical" connection - there's a human labor cost connection as well. If and when I purchase anything I look for the "Fair Trade" symbol along with being conformed organic - that also applies to clothing. I work to source my garments being produced as locally as possible. Anyone can support "Fair Trade" when purchasing new garments - just look for the symbol! By doing so you can be sure those "people" that made that garment where well paid doing work in an "environment" that less impactful on their health! Be well my friend! LBP!

Posted On 10/01/2017

# Guillermou

IAM. You do not rest from investigating. Also this article: The WECF (Women in Europe for a Common Future) organization has found the presence of the following toxic substances in clothing, summarizing the results of a total of 18 studies. View report:

www.wecf.eu/.../ResizedReportWECFTextiles.pdf

#### nao3425

Jade was/is the Burial stone of all the great societies, Egyptian Mayan and others around the world... A jade pebble under the tough, a Jade suit for an Emperor All of which, I believe came out of tibetian Monks pursuit of going into near death trances, and this is the fruit of their investigations.

Posted On 10/01/2017

#### doubly.blessed

lamIsaid, You: My motto about food - "love the food that love's you back" - also applies to clothing. I look for the "Fair Trade" symbol along with being conformed organic - that also applies to clothing. Me: Great symbiotic relationship in your motto. You: there's a human labor cost connection as well. Me: That's been on my agenda: slave labor aspect of underpaying, long hours, no rest, unsafe conditions (buildings burning causing deaths) & the list goes on.Your bliss in sharing your research in health and just about anything you write about is contagious and a gift to us merc readers . What's great, to me, is that you are tenacious about your bliss giving the merc community potential for action. Shalom from CA am not afraid of the pen, or the scaffold, or the sword. I will tell the truth wherever I please. -Mother Jones

Posted On 10/01/2017

#### stanleybecker

Gui - no mention of hair dye - this is a fashion concept - do "Gentlemen Prefer Blondes?" - here is a link - www.psychologytoday.com/blog/homo-consumericus/201202/do-gentlemen-pre.. - and here are 5 chemicals you should avoid when dying your hair - www.naturigin.com/five-chemicals-avoidcolouring-hair - in my opinion [humble as it is] - the dying of hair is osmotically responsible for organ failure - www.liversupport.com/hair-color-for-the-liver-conscious - avoid hair dyes - they are poisonous

## stanleybecker

blessed X 2 - the modern descendant of Assisi must be the "Birdman of Alcatraz" - the bird itself has the most evidence of dinosauric genetics - here is the flying reptile in action - www.dinocreta.com/wp-content/uploads/2014/06/pteranodon-dinosaur-4d-3d..

Posted On 10/01/2017

#### Guillermou

Good references Stan. 1 in 2 people born today in Spain will have cancer. If we think the reasons why: certain substances are prohibited in certain countries and in others not, or why, it is only the independent professionals, who dare to report the harmful effects. People have to stop believing TV ads, and perform a minimal research and reading, from a few independent professionals. Then they will admit that 95% of those products that we use usually produce cancer, and all kinds of degenerative diseases. Nail polishes carry a large amount of toxic synthetic substances. The labels have written the components, in very small print, since everything that can provide information to the consumer, often appears quite hidden and illegible. This link lists toxic ingredients. The worst are phthalates, toluene and formaldehyde. 7 Toxic Chemical Ingredients to Avoid in Nail Polish www.activebeat.com/your-health/women/7-toxic-chemical-ingredients-to-a..

Posted On 10/01/2017

#### stanleybecker

some historical info on toxic makeup - news.nationalgeographic.com/2016/09/ingredients-lipstickmakeup-cosmet.. - and here is a more recent history - www.ucl.ac.uk/.../111 - and here is a link concerning those that choose to suffer for beauty -

www.nbcnews.com/id/22546056/ns/health/t/suffering-beauty-has-ancient-r.. - and here is a modern link about lead in lipstick - www.alternet.org/.../why-toxic-lead-lipstick

## iamblessediam

WHOA...doubly.blessed...YOU humble me with your kind words - THANK YOU, INDEED! It took awhile many years and literally "dying" of sorts - for me to learn the MANY values of living in and with heart intelligence - understand that one's heart holds the "keys" to a happy "authentic" life. I now try to view life through the lens of compassion - most times I'm successful - other times not so - my heart reminds me when those "other times not so" happen. I've learned to listen - that's still a work in progress! I hope you enjoy breaking bread with your friend this day! Be well! Love, blessings and peace - namaskar!

Posted On 10/01/2017

# doubly.blessed

lamIsaid, You're welcome. You: It took awhile Me: Life's kind alike French cooking, you can't hurry it! You: I've learned to listen - that's still a work in progress! Me: The process is what gives Life it's beauty and us our wisdom. Will be breaking bread with Indu at 6pm CA time. Fyi: I wasn't familiar with 'Namarkar' so looked it up. Another hello/goodbye. Namaste I knew. Will impress Indu with my new word du jour! Shalom/Aloha/Namarkar from CA

Posted On 10/01/2017

# **Krofter**

Having ranted here on numerous occasions about how much more sustainable animal fibers are than organic cotton, and having also linked Fibersehd several times in some of those rants, it was nice to see Rebecca's face this morning, featured in the video above. As a founder of one of Fibersheds regional chapters I believe that the concepts presented by Rebeca and FIbershed represent the direction we need to go regarding textile production.

erdakroft.com/Erdakroftfarm/Blogs/Entries/2017/3/2\_why\_textiles\_matter..

Thank you Krofter. I admire his published articles in his blog. Your link makes mention of "The Warp and Weft of the Kroft", "Alpacas In The Kroft" and "Cotton vs Alpaca Fiber". Very good compilation of articles by Dr. Mercola. I have also seen your link of the alpacas, that you acquired. Some pictures of the alpacas very touching.

Posted On 10/01/2017

#### mar6915

That was my goal, to raise alpacas. Where I live mostly people raise cattle, a few bison. Goats became the next popular. I have seen people with kangaroo pets, that got lost. Heard of a camel. And of course Llamas. Emus can be a bit tricky to raise. I saw where one person made buffalo (bison) wool & yarn to sell. I read about alpacas and their wool and how they are a better animal to have than a llama . never got to far with my goal..need fencing and hired hands. Discovered how hard it is to find good work willing people to hire. Also when you get just one lousy neighbor, that lousy neighbor can pop a dream bubble fast.

Posted On 10/01/2017

# Krofter

Guillermo - Yes, the young alpacas are very cute. Theyr'e fleece is also VERY soft - it becomes slightly more coarse with each passing year. Sweeping my hand across their exquisite fleece is a sensation I never tire of.

mar - Thanks for the kind words.

## Islander

When I need clothing (which is rare), I look first at the thrift shops: Salvation Army\*, Goodwill\* and the many local mom & pop stores. I figure anything that's been worn and washed multiple times has all the poison rinsed right out of it. And incidentally, don't assume a garment from a resale shop has been laundered prior to donation. In fact, when buying anything new, ALWAYS launder it before wearing — preferably hand-washed in sink or basin, because frequently a lot of the dye washes out and would tint the rest of your clothes if thrown in the washing machine.

\* Please, let's not get into the ethics of these two major outlets. True, neither is perfect, but both provide a needed service for many whose budget doesn't allow for branded new clothing... and their selection is usually huge. Central Maine is a low-income area and I see many moms bringing their school-age kids, even teens, to these outlets for their back-to-school needs.

Posted On 10/01/2017

# Almond

You are so right about used clothing stores. If you live in a large town, you may even find an "outlet" store. Clothing is sold by the pound, so things like cotton shirts are quite cheap. This is where thrift stores send their unsold clothing after about 6 weeks. Some stuff does not sell simply because it is over-priced, but nice. Recently, I got a very old (looks like never worn) cotton Western shirt with pearl snaps for a quarter. I do have to iron it--unlike newer synthetic blends--but is it worthwhile as it is so comfortable. I have also found many old Field&Stream heavy flannel shirts. I watch for vintage wool suits for a young professional friend. Some styles are classic and timeless, such as A-line skirts, basic straight slacks, fisherman's knit or boiled wool sweaters. You don't see a lot of this stuff anymore, but it always looks good on a person and well-put-together. The one thing I never seem to find enough of is old-fashioned heavy wool work sox, the really thick hand-knit kind, especially, that cushion your feet. They are worth paying a bit extra for if they are in like new condition.

# **Krofter**

I guess I'm a typical guy in that I generally hate to shop... except when it comes to going to he White Elephant, a huge thrift store in a retirement town near me. When many of the old folks in that town die some of their possessions end up at the W.E. Its a volume business so the prices are always really low - most stuff is \$2. Much of my wardrobe (mostly shorts and T-shirts) is from there. Because the selection is so vast I'm able to buy high quality clothing made from silk, wool, camel hair and other natural fibers.

Posted On 10/01/2017

# **RobertSniadach**

"Certain clothes can get your hormones in an uproar..." Yeah, exactly: www.spartareport.com/wpcontent/uploads/2017/04/antifa-smash-barrier1...

truthfeed.com/wp-content/uploads/2017/02/soros-antifa-berkeley-009-01...

Posted On 10/01/2017

# Randyfast

Robert: Those idiots are also creating/building the CHAOS (this is their "elite's" agenda) in Canada. They have "demonstrations" planned throughout N/A. We're at the tipping point!

vancouversun.com/news/local-news/noisy-immigration-protesters-counter-..

# Almond

Good one, Robert! I find the news very confusing. When I hear that BLM is protesting, my first thought is always that the letters stand for Bureau of :Land Management, the bane of many of us landowners.

Posted On 10/01/2017

# Guillermou

Yes, Robert, Randy and almond. The fashion has gone from producing 4 seasons a year to the incredible number of 52, according to Andrew Morgan's documentary "The True Cost." It is called Fast Fashion, which is favored by globalization, makes us see clothes as something to wear and throw, and that in two decades we have increased by 400% the consumption of clothes worldwide.

It is estimated that 4 kg of chemicals are needed to produce 1 kg of T-shirts. Many of these chemicals are hormonal contaminants (EDCs), which affect the functioning of our hormonal system. The WECF (Women in Europe for a Common Future) organization has found the presence of the following toxic substances in clothing, summarizing the results of a total of 18 studies. View report: www.wecf.eu/.../ResizedReportWECFTextiles.pdf

Among the hormonal contaminants we have: Nonylphenol ethoxylates (NPEs) and its derivative Nonylphenol (NP). Brominated and chlorinated hormone contaminants that are used as flame retardants for clothing. Antibacterial chemicals such as Triclosan, suspected of causing damage to the endocrine system, and increase bacterial resistance.

Phthalates: endocrine disruptors. Also heavy metals: Lead, a hormone alterer suspected of damaging the quality of human semen. Formaldehyde has been classified as a carcinogen. In the process of dyeing the clothes it is usual to use azo dyes, which can generate carcinogenic amines. Hormonal contaminants are suspected of causing reproductive damage, birth defects and development, asthma, allergies, disorders of the immune system, increased incidence of obesity, heart disease, and cancer in hormone-related organs such as thyroid, testis, or mom. It is no coincidence that the increase in the consumption of products containing EDC is related to the increase of these problems in the last 50 years

#### stanleybecker

Roberto - I have worn black all my life - it seemed about 54 years ago to be the solution to the "Fashion War" or as some call it "the Fashion Bore" - ironically black needs the most dye - I have never worn synthetics - I have always believed that I have an allergy to synthetics - I have no proof for this

Posted On 10/01/2017

#### mar6915

A feel good article. some spectrum of colors from commonly available plants in the wild or in your garden. Coreopsis; Sophora; Goldenrod; Lily of the Valley; Privet; Queen Anne's lace; Rhododendron; Logwood; Onion skin; Smartweed; Marigold; Pokeberry; Maddar; Butterfly weed; Tea; Cochineal; Coffee; Tobacco; Acorn; The first step to making your own dyes is to gather the dyestuffs. Also collect them at the right times. Flowers right after full bloom, Roots, barks and branches from mature plants, not new branches. For example acorns are best right after they have fallen, berries when fully ripe and black walnuts when they have been on the ground and have become spotted. Have fun.

Posted On 10/01/2017

#### Almond

When I was younger, I got a skein of unbleached natural "white" wool yarn. I gathered substances from the fields and forests using tufts of yarn to create a color wheel. Weeds/herbs, berries, mushrooms. It was quite amazing what could be done with natural substances for dyes, mordants to determine the color and fixatives to hold the color. For the latter, I used many common substances that could be found in a kitchen such as vinegar. With a bit of online research, you can learn a lot. The main thing for using wool or cloth is to dye everything you will need at once. You will never get an exact color match again if you run out. I also did some neat things spinning different natural colors of wool from the colors that came off the sheep, from whites to dark brown to make patterns.. I never did get any blacks. I found a drop spindle much easier to use than a spinning wheel. It is fairly cheap and some women learn to use it while walking for multi-tasking.

## mar6915

Onion skin - to make 4 gal of dyebath,= enough for dyeing 1 lb. of wool =collect 2 lb dry outer skins, (the dyebath) = try wrapping in cheesecloth & put in enough water to cover, remove after simmering and add enough water to make 4 gal of dyebath -if that is amt you wish to use. then simmer 20 min. don't overcook . finally if dying a pound of wool, wet the wool with water, add to your dyebath, heat the bath Slowly, and simmer for onion skin 20 min., let it cool, then rinse till rinse water runs clear then dry your wool. For marigold you need 2 bushels of fully bloomed flower heads simmer 1 hr then dyeing simmer 1/2 hr.

Acorns 7 lbs that have fallen to the ground Soak overnight, for your dyebath, then boil 21/2 hrs to dye simmer 1 hr. Be careful with mordants. Mordants is the stuff (chemicals) that help keep dyes from changing color, fading. For beginners do NOT use mordant pots to cook food, handle with care in a well ventilated area. Ok if you are just wanting to dye those organic white undies, you won't need as much, have fun trying.

Posted On 10/01/2017

# **Krofter**

mar - Great information. Any favorite mordants?

#### mar6915

The most common mordants are Alum (aluminum potassium sulfate) that causes the least change in color, then Blue vitriol (copper sulfate) copper is toxic, it sometimes colors fibers green, Copperas (iron sulfate) grays colors, then Chrome (potassium dichromate) it is used to strengthen colors Highly poisonous don't use !

Tin (stannous chloride) highly toxic brightens colors like reds and yellows but it can damage fibers. So chemicals chemicals chemicals. I'd want to answer by saying Tannic acid as it tends to turn fibers brown. It might be a good color when dyeing our white undies. (trying to make people laugh) you use 1 1/4 tablespoons of tannic acid per gallon of water and simmer one hour for animal fibers, then for plant fibers you are to use 2 1/2 tablespoons per gallon and it says to boil them for one or 2 hours.

Not all plant dyes need mordants to achieve good color. Some plants dyes already contain qualities that will bind color to fiber without any additives. Not using a mordant allows you more direct contact with the natural dye colors, which can be a simple, fascinating process, and can eliminate an extra step in the dyeing process, saving time, water, and energy. The key to successful results when you skip the use of a mordant relates to the plant materials you choose to make dye from, the fiber you want to dye, and the length of time it takes for the dye to set on the fiber.

www.motherearthnews.com/diy/home/using-mordants-natural-plant-dyes-ze0..

Posted On 10/01/2017

## Darzoum

The trend in artists' pigments (where I often see the word "AZO") has been toward greater and greater saturation of color. I'm told these pigments were originally developed for industry, such as automobile pigments, and that they are "safer"...but when you're comparing to lead, cadmium and such, it's not a very high bar to clear. But just a general "artistic" observation: beauty, in color as in other things in life, is all about balance. Loud, garish colors are like junk food: the needed corrections are in eye or palate, which ultimately means we need to bring mindfulness to our experience. When I work with any of these colors, I find that I have to work harder to remove all the supposed "advantages" that the technology provides, which is mostly extreme colors garishly saturated beyond the requirements of natural or artistic balance. Just like with food, hone your taste and the need for the junk (and its purveyors) goes away.

## **Tompkins**

Almond -- regarding wool socks. I have been purchasing Wigwam El Pine rag wool socks for years. They are pricey at around \$12 a pair, but last for years. The El Pine are natural, undyed and very thick. My husband has injured feet and legs (poor circulation) and had to be on his feet at work. He said they cushioned his feet and he still wears them all year long. The fibers of wool are a covering and protection more than we know and the feet are especially important. Wish I could knit socks. Sigh . . .

Posted On 10/01/2017

## **Tompkins**

I looked up the El Pine socks on Amazon and some reviews say the newer socks aren't like they used to be. That figures. But, they are the best I can find.

Posted On 10/01/2017

# Carefulman

www.worldcat.org/title/dress-for-health-the-new-clothes-consciousness/..

check out the classic book on this subject....bucky fuller, gary null, ralph nadir all acclaimed it. In many libraries after all these year...many universities.....maybe one near you.

## stanleybecker

Fashion Victims - www.worldcat.org/title/fashion-victims-the-dangers-of-dress-past-and-p.. - " "From insidious murder weapons to blaze-igniting crinolines, clothing has been the cause of death, disease and madness throughout history, by accident and design. Clothing is designed to protect, shield and comfort us, yet lurking amongst seemingly innocuous garments we find hats laced with mercury, frocks laden with arsenic and literally 'drop-dead gorgeous' gowns. Fabulously gory and gruesome, 'Fashion victims' takes the reader on a fascinating journey through the lethal history of women's, men's and children's dress, in myth and reality. Drawing upon surviving fashion objects and numerous visual and textual sources, encompassing louse-ridden military uniforms, accounts of the fiery deaths of Oscar Wilde's half-sisters and dancer Isadora Duncan's accidental strangulation by entangled scarf, the book explores how garments have tormented those who made and wore them and harmed animals and the environment in the process. Vividly chronicling evidence from Greek mythology to the present day, Matthews David puts everyday apparel under the microscope and unpicks the dark side of fashion. 'Fashion victims' is lavishly illustrated with over 125 images and is a remarkable resource for everyone from scholars and students to fashion enthusiasts." -- Publisher's website."

Posted On 10/01/2017

## grulla

"..dress for health..." I wonder if Morman underware/garments qualifies???: www.ebaumsworld.com/.../556321

Posted On 10/01/2017

## ellaswan

was it oscar wilde who said ' only the most superficial don't judge others by what they are wearing' ?

# Carefulman

stan.....looks packed of good info.

grulla.....underwear looks comfy....if made of cotton, sounds healthy.

Oscar wilde had a 'rational dress socieity' he said bad clothing is more dangerous than (I forget rest) but good stuff.

Posted On 10/02/2017

#### nao3425

Don't forget to go buy some commercial laundry soap, so you can wash those NEW DUDS. LMAO Oh well you have your retirement right??? "This Is A Crisis Greater Than Any Government Can Handle": The \$400 Trillion Global Retirement Gap www.mauldineconomics.com/frontlinethoughts/? utm\_source=newsletter&..

Of course, we can all go "Quietly into the night" which I think is the plan here.....

Posted On 10/01/2017

# interestedone

MEC Mountain Equipment Co op in Canada sells fairtrade organic white cotton tshirts, long tshirts (they do ship international) (but hopefully to protect environment eco friendlier companies are in your country too) Rawganique sells hemp fibre apparel (includes shoes), PACT sells organics too

## taddie

another great book is Killer Clothes - very eye opening..expensive to start ditching your clothes - start by not buying anything new for a month - then extend it out - and when you do buy first make it a natural fiber - organic if possible..none of us in western society needs more clothes - we just amuse ourselves with shopping..because as Dr Mercola says the discarding of excess clothes is an issue too..... BTW - red onion skins make a great tea to drink before bed to help you sleep - ver tasty

Posted On 10/01/2017

## Guillermou

Yes taddie. The fashion has gone from producing 4 seasons a year to the incredible number of 52, according to Andrew Morgan's documentary "The True Cost." It is called Fast Fashion, which is favored by globalization, makes us see clothing as something to wear and throw, and that in two decades, we have increased by 400% the consumption of clothes around the world.

This huge amount of garments made, sold and discarded, is what multiplies the human, and environmental costs of clothing, in each phase of its life cycle. The amount and percentages of chemicals found in clothing may seem small, if you add the whole process, from the manufacture to its use and finally disposal, the issue will become apparent that the problem. is really worrying.

"Disposability" is key in this large volume of business. The poor quality of many products. coupled with low prices. motivates the need to change clothes routinely. and therefore, life cycles are becoming shorter. In the US, the 13 million tons of textile products, generated in 2012. The fashion Fast Fashion, is generating a great pollution in the rivers due to the synthetic dyes, and in general a degradation of the ecosystem.

# ZooGal

Other then GOTS there is also OEKO-TEX® Standard 100 www.nandinagreen.com/blog/nandina/organic-certifications-gots-vs-oeko-..

and if you happen to be dying things yourself for a blue option you can grow your own woad! Woad is super interesting as synthetic blue has been linked to causing cancer where as woad has been linked to curing cancer (more studies are currently on their way with this) for more info on woad here are some links to start your curiosity engine

www.newscientist.com/article/dn9735-from-woad-warriors-to-cancer-buste..

www.wearingwoad.com/part-eleven-woad-in-herbal-medicine

herbs-treatandtaste.blogspot.ca/2011/10/woad-not-only-for-dying-health..

Posted On 10/01/2017

## 19beets

I'm thrilled to see this movement highlighted and honored. I have stopped buying anything from China... The fabric odor alone is enough to knock you out, high levels of formaldehyde and who knows what else. I would love to be able to walk into a store and buy clothes dyed naturally.

Posted On 10/01/2017

## Darzoum

I've recently learned about the butterfly pea--clitoria (yep, that's right) leguminosae--a tropical plant with a blue flower that makes a VERY intense blue tea... off hand I forget its health benefits, but they're there. I've started growing a few in pots (Southern California). Anyways, hard to imagine there aren't fabric dye applications (unless they already know about it). It's worth making the tea just to see the unusual blue bursting in your cup!

# LaurieLou

Oh Hibiscus flowers would be beautiful pink!

Posted On 10/03/2017

## Darzoum

Yep LL, and Hibiscus + ButterflyPea = Purple... I know because I already tried it. If you have a Hibiscus plant, pick and dry the flowers for tea... remove stamens first... at least that's what I do.

Posted On 10/04/2017

# healthfreedomfighter

This article is an excellent example of something that shaped my life and my family's life: The air you breath is the MOST important thing when it comes to your health. You breath it 365/24/7, so you have more potential toxic exposure from air compared to water, food, etc. That is why I long ago moved my family to area with pristine air. Rationalize it anyway you want. Come up with as many excuses as you want. You cannot deny this, and ask yourself if you have the guts to make the change.

# LaurieLou

Great interview Dr. Mercola! I have been looking into this for a while as wearing yoga pants and other syntheic clothing affects my nervous system and I use to go to the Chiropractor and then put my yoga pants on in minutes my back was bothering me! I have looked for an organic bra! Hard to find unless you are breast feeding and I bought one of those just to have one of my sisters fall out when bending over! SO I have been looking at healthy hemp clothing however then have to be aware of the dyes that are being used.

I have actually helped a class at Courage Center - people with brain injuries make tie dye t shirts!

I have actually sheered a lama.

So glad you are helping push this industry out into the main stream so much to teach.

Am a Certified Health Coach and Natural Chef. IF you are looking for more team members please let me know as I am wanting to be mobile and would love to help!

Posted On 10/03/2017

# boogirl712

I am so glad that you had this conversation on your platform. I am in sustainable fashion and this is so important. It touches our lives everyday. We have a GOTS certified plant based dye global company. Our dyes are specifically formulated for large scale production in the textile and fashion industries. The best way to change the toxic natural of the fashion industry is through true collaboration on all levels. Starting with the decision makers in the boardroom all the way down to the sales people in the stores education the consumer. As well as informative brand websites. Please visit our site for more information www,delaterrecolours.com

Such an important conversation, Thank you Dr. Mercola and Rebecca Burgess

## myg1385

In specific reference to the tie-dye or fiber-reactive dyes mentioned "We had to wear gloves. I had to wear a mask. People had to wear aprons. We couldn't let the powder get in the air. We were so careful once we opened these jars of powder to not get it in our lungs or on our skin. The ingredients list wasn't very clear.

These powders are very fine and become airborne. The reason for masks is so you don't inhale them, just as you would not want to inhale ANY powder.

The reason for aprons and gloves - is so you don't dye your skin.

These dyes handled properly are pretty safe - they are mixed with Urea as a reacting agent, (yes, that's related to URINE) and once the reaction happens on the cloth, the dye is stabilized. They are one of the safest dyes to use. They bind with the organic fiber, and that's the end of it. You slam these dyes as mysteriously toxic when they really are not at all.

I am speaking of the fiber reactive dyes commonly found in t-shirt tie dye kits, and also called Procion etc. Please get a handle on your dye info - this is mis-information at best.

The coal-tar and other chemical dyes used in industry are entirely different and could well be toxic on their own. Look at Dharma company for some info please.

Posted On 10/01/2017

#### cwunder

Wow! My Dad who was born in 1910, and died just before turning 90 from Parkinson's complications, was injured in WWII and spent over a year in hospitals where he did a lot of reading. He was on to this, because he ALWAYS wore white socks, would never wear any other color socks, and of course men's underwear came only in white. He was WAY ahead of his time!

# LaurieLou

Except they were probably bleached? Everyone use to bleach everything!

There are around 8,000 synthetic chemicals used in the manufacturing process of the clothing industry, from material procurement to the finished product. Since we cannot cover all chemicals and their function, this article will focus on the most common and harmful substances. These include, but are not limited to, flame retardants, polyfluorinated substances (PFAS)\*, lead and chromium, phthalates, chlorine bleach, AZO dyes, and volatile organic chemicals (VOCs)+ such as formaldehyde. Toxic substances are used during the cultivation of a plant, during the production of a yarn, but also during dyeing or printing graphics.

Each manufacturing process uses dozens of toxic substances that persist in the fabric, are absorbed by our body and released into the water during washing, throughout the useful life of a garment. Regulations for clothing are different in each country. What you buy in China may not be prohibited in that country where the GB/T 18401 regulation is in force, but it may be illegal in Europe under the REACH regulation, or in California where the Proposition 65 regulation is present. Choosing products made in Europe is equivalent to buying products that comply with the REACH law, which excludes more than 1,000 toxic substances dangerous for the environment and human health.

It must also be said that this legislation, although not the best, improves year after year, increasing the number of prohibited substances and reducing the margins of the toxic ones still allowed. Alternatively, we have the classic environmental certifications, such as OEKO-TEX, GOTS and Bluesign. It is not easy to find these labels on clothing displayed in large retail chains, nor is it easy to find them in stores in our cities.

Posted On 04/07/2024

99% of textiles/clothing continue to be dyed with synthetic products and therefore with chemical compounds that, although they fall within the notorious lists of certification bodies, are toxic. We are talking about waste that contains various chemicals, including cadmium, mercury, chromium, etc. All of these substances end up in wastewater, rivers, seas, oceans and aquifers. There is evidence of the presence of natural dyes dating back to the Neolithic. In China, dyeing with plants, bark and insects dates back more than 5,000 years. Throughout history, people have dyed fabrics using locally available materials, but those dyes that have produced bright, permanent colors, such as marine invertebrate dyes, such as Tyrian violet extracted from a sea snail, or kerme Crimson extracted from an insect called kermes, they quickly became highly prized luxury items in the ancient world.

The environmental impact of synthetic dyes is overwhelming. What can be hypothesized is that, in the production phase of textile dyes, there is a waste of 1-2% and, during their use in dyeing threads or fabrics, the waste is between 1 and 10%.

So what can you do to avoid toxic chemicals in your clothes? Look for certifications such as OEKOTEX or GOTS or 1) Prioritize organic clothing whenever possible 2) Check product descriptions and information provided by a brand 3) Always wash new clothes before wearing them At Project Cece, you can find sustainable clothing from hundreds of fair trade brands and filter them by certifications among other factors. Easy! www.earthday.org/toxic-textiles-the-chemicals-in-our-clothing .----- sonderlier.com/.../shop-clean-dress-nontoxic .-----

Posted On 04/07/2024

# juststeve

To add to the positives Gui would be to purchase fabrics, clothing of quality, durability in mind. High quality clothing, fabrics repairable, long lasting and still look presentable for years with proper care. These add to reducing the massive amount of throw away junk we can find ourselves constantly buying. The whole of throw away culture feeds the toxic pollution found in nearly all the products on our shelves today.

Posted On 04/07/2024

Yes just, that is a great hope. Personality is at odds with the constant fashion changes imposed by large fashion clothing companies. Refusing to follow trends gives a sign indicative of a way of thinking, which wants to be free and unconventional. Brands and top designers have always understood that tailoring collections to demonstrate a lifestyle and income level. Whether it's a logo, a type of fabric or a particular design, the garment is worn, the brand is shown and the style statement is made. Finding pieces that reflect your personality, with understated dressing, means you can show your identity, and your outfit can become an expressive extension of yourself.

Personality is shown by knowing oneself, communicating with words and gestures, knowing how to reach people. If we are also respectful of nature and the people who work in making the clothes, we are demonstrating a great personality. Fashion Psychology: What clothes say about you www.psychologistworld.com/body-language/psychology-of-clothing-dating-..

Posted On 04/07/2024

# plastictekkie

When I first got into formulating printing inks and house paints back in the 1960s, I was concerned about the azo pigments, but, over time, lost that concern. This article makes so much sense, and the concern is back. At one point in my life I owned a log house built in 1746. Yes that's not a typo: 1746. The interior doors and some trim were painted with milkpaint colored with blueberries, or milkpaint colored with clover. I was amazed at how durable it was! My red barn, over 100 years old at the time, had been painted red; the pigment was cow's blood, but I never found out the true binder for the pigment. Yes, it had faded, but the red tint was there 100 years later. What color will your house be in 100 years? Lots of food for thought here; so, once again, thank you Dr. M.

Posted On 04/08/2024

# juststeve

What color will the house be in 100 years? Probably dirt colored. The way houses are knocked together these days many or major repairs come in about the time the payments leave. Most likely a lot filled with plastic residue. More throw away, consumerism, just a larger scale than tee shirts.

Posted On 04/08/2024

# cricket1956

oh well, we can't escape everything. I'm not going to only buy organic clothing-it's too expensive and besides, it's hard to find them anywhere. I go healthy with everything else: organic food, all non food products: toothpaste, mouthwash, laundry detergent, dish soap, hand soap, liquid soap, makeup, shampoo, conditioner, etc.

Posted On 04/11/2024

# dale95

Methlene blue seems like it would be a safe dye.

Posted On 04/08/2024

#### sue2613

Gui, you mentioned chlorine bleach. Does the harm apply when using it as a cleaning product?

Posted On 04/07/2024

# steelyd

I bought 6 pair of diabetic black socks because they were soft and not constricting. I quickly noticed that they made my feet and toes hurt worse when at the desk in the office working on the computer with the printer on. They were conducting from the EMFs. I threw them away and went back to old cotton socks that I had kept around from several years ago and my feet immediately felt much better. Plus I now unplug the printer when not in use. I am not crazy either.

Posted On 04/07/2024