The Manifesto

This is the first year of my manifesto, which was launched on 22nd July 2011. My aim is to use my manifesto to lobby the Government and ask them to stand up to polluting chemical producers and put our health and environment first.

The reason I ask this is because whilst undertaking research into ethical fashion I discovered that since the beginning of the chemicals revolution, we have all been unwitting participants in a vast, uncontrolled, worldwide chemistry experiment involving the rivers, oceans, air, soils, plants, animals, and human beings. The chemicals revolution has impacted greatly on human well-being and although it cannot be argued that chemicals have raised farming yields by killing crop pests and have made an endless array of useful products possible, but to what detriment has this occurred?

Once released into the world some chemicals can cause toxic reactions, and some have been found to persist in the environment for years. Chemicals can have different effects in people or on wildlife, depending on the amount, timing, duration, and pattern of exposure as well as the properties of the specific chemical. Chemicals can have toxic effects through a variety of mechanisms. For example, sometimes a chemical attacks and damages or kills cells or tissues in the body. Some chemicals attack the genetic material in the nucleus of a cell, causing damage directly to the DNA, which may create an inheritable defect that is passed on to the next generation. This can lead to gene mutations, which can set in motion a sequence of events leading to cancer, birth defects, developmental or reproductive disorders. Chemicals that cause cancer are called carcinogens. Chemicals that cause birth defects are called teratogens. Chemicals that damage the normal development of the fetus, infant, or child, or damage our reproductive tissues are called developmental/reproductive toxicants. Some chemicals can cause damage through their ability to interfere with normal hormone function. These chemicals are called endocrine disrupters.

Through these various mechanisms, toxic chemicals can cause a long list of health problems. They include, for example, direct damage to the lungs, liver, kidney, bones, blood, brain and other nerves, and the reproductive systems. There are hundreds of adverse health effects that can arise from exposures to chemicals or metals. These potential effects include cancer; high blood pressure; asthma; attention-deficit hyperactivity disorder (ADHD); deficit in memory, learning, and IQ; parkinson's-like diseases; infertility; shortened lactation; endometriosis; genital malformation; peripheral nerve damage; and dysfunctional immune systems. For example, dioxin is a carcinogen and fetal exposures to dioxin interfere with normal development, including the immune system. Fetal exposure to polychlorinated biphenyls (PCBs) is related to behavioral and cognition problems. DDT exposure has been related to women's inability to produce sufficient breast milk. Fetal exposure to mercury causes attention, memory, and learning problems later in life. Brain development is also impaired in fetuses and infants exposed to lead.

The evidence of damage to humans is alarming – and mounting. There is a growing

suspicion that persistent organic pollutants, or POPs, as they are known, contribute to cancer. One form of dioxin – 2,3,7,8 TCCD – is classified as a human carcinogen by the International Agency for Research on Cancer. In addition, the Agency considers PCBs a probable human carcinogen, and chlordane, DDT, heptachlor and taxophen as possible human carcinogens. Meanwhile, studies in the US and in Mexico have found significant problems with learning and physical coordination in children exposed to pesticides, including POPs, as compared to children living in cleaner environments.

Hazardous chemicals, both naturally occurring and man-made can enter the human body in many ways; we may inhale them, swallow them in contaminated food or water, or in some cases, absorb them through the skin; our body's largest organ. Chemicals often coat the surface of dust particles, which we handle or inhale. The ginning process of cotton for example creates invisible dust particles, which is widely known to cause lung disease.

Some of these chemicals are present in house dust, via the degredation of products containing them, where they can be inhaled. Contaminated dust is an especially important route of exposure for children who commonly put their hands into their mouths. Hazardous chemicals are also discharged into the environment during production and at the end of a products life. A 2004 study conducted by researchers at the Technical University of Lódz, in Poland, showed that hazardous pesticides applied during cotton production can also be detected in cotton clothing, and a house dust study undertaken by Greenpeace (2007), revealed that the ongoing use of hazardous chemicals in consumer products is leading to a "ubiquitous and complex contamination of the home environment across the EU".

Some chemicals or their metabolites, which are their break down products, lodge in the human body for only a short while before being excreted, but continuous exposure to such chemicals can create a "persistent" body burden. Arsenic, for example, is generally excreted within 72 hours of exposure, however other chemicals are not readily excreted and can remain for years in blood, adipose (fat) tissue, semen, muscle, bone, brain tissue, or other organs; chlorinated pesticides, such as DDT, can remain in the body for 50 years. Whether chemicals quickly pass through or are stored in the body, body burden testing can reveal an individual's unique chemical load and can highlight the kinds of chemicals that a person is exposed to as they live out each day of their lives.

Today analytical techniques have improved and as a result many other chemicals have been detected in human and wildlife tissues. For decades, tests for some substances that make up the total chemical body burden have been conducted by government agencies around the world. These hundreds of studies include analyses of adipose (fat) tissue, breast milk, semen, blood, or urine for chemical content, documenting the amount and kinds of chemicals found. For more information visit: http://www.chemicalbodyburden.org/whatisbb.htm

It is undeniable that we have and continue to be exposed to hundreds of chemicals through the everyday products we use and although we can't undo the harm that has

been done, I believe that we have the right to know what chemicals are in the products we buy, so that we can begin to take control of our personal chemical exposure.

Current regulations were developed well in advance of the new science that shows that small exposures to chemicals, once considered harmless, are indeed capable of subtle cellular changes and the regulations now in place are also not designed to look at exposures in the context of the full burden of chemicals we carry. No one is looking at the health effects of the cumulative total. Despite the introduction of the new REACH legislation, which aims to ensure chemicals of very high concern are phased out and replaced with suitable, safer alternatives, REACH legislation will be unable to meet its aims unless Parliament insists on improvements because REACH contains an enormous loophole that means that even if a safer alternative is available at a comparable price, production of a chemical of very high concern can continue. The producer simply has to demonstrate "adequate control". This issue goes right to the heart of chemicals policy, and wider as research has shown that substances that are persistent and bioaccumulative cannot be controlled and therefore "adequate control" is henceforth based on an acceptable level of risk. Clearly even a minute quantity of a toxic chemical poses an accumulative risk and is therefore unacceptable.

For more information visit: REACH Legislation/CHEMICAL FACTS: THE CHEMICALS IN OUR CLOTHING

The aim of my manifesto is therefore to:

- stand up and be counted, as I feel I have a duty to protect the environment, campaign for a safe and healthy world, where our clothing does not contribute to killing us
- campaign and petition to make politicians take action to stop companies using hazardous chemicals and substitute them with safer alternatives whenever and wherever possible
- educate people about the potential dangers of chemicals used in the textile and clothing industries, as “information itself has value; knowledge translates into market power”, (Goleman, 2010:73).
- campaign for the use of a label that alerts people to the chemicals in their clothing.

The ultimate goal of my manifesto is a healthy balanced life which facilitates productivity, contentment, wisdom and long term health. I have taken inspiration from 'Instructions for Life' by The Dalai Llama, who’s manifesto includes the following guidance:

- Follow the three R's: Respect for self, respect for others and responsibility for all your actions.
- Share your knowledge. It's a way to achieve immortality.
- Be gentle with the earth. Source: http://s.rvxn.org/2010/05/26/simple-

instructions-for-life-by-the-dalai-lama/

I will therefore lobby EU Governments and parliamentarians and tell them to:

- Make substitution of all hazardous chemicals mandatory where safer alternatives are available.
- Ensure that industry is obliged to provide sufficient information about the properties and hazards of chemicals they produce, including the ones in imported products.

Please use the manifesto to raise awareness with your MP, local health service and help me campaign for change.