

## The Reasons I would not use chemical shampoo

1. The surfactant in shampoo, the main ingredient supposed to clear the oil from skin and hair, is not suitable for human skin at all.

- because it's emulsification and solubilization property it over wash the skin oil, solve the sebaceous glands cell and cell membrane. The natural skin sebum balance is lost; the barrier the skin provides to us is ruined. this is why we often see the people first find the their hair is oily no matter how many times they use "shampoo" to wash their hair, simply the shampoo over wash the skin sebum away.
- because it's penetration property, it can go through the top skin- epiderm, in this way the harmful substance can get in to inside skin as well, for example the synthetic colour made from tar which often found in the shampoo.
- because it's stable molecule property, after it entering to the body, it stays and accumulates to the skin cell, like hair follicle and pore, there is no chance to degrade it by body, unless our body can provide more than 500 °C high temperature and 100 time high atmosphere pressure like the refine oil factory. Under this circumstance, it block the blood supply to the hair root and solve the skin gland cells, as the result, the hair is losing, thinning and greying.

2. The preservatives (like the parabens and other) in every shampoo may be carcinogens by many researches results. the parabens also is Endocrine Disruption Substance. It mimics and confuses our hormone system; destroy our reproduction function and others.

3. Most of ingredient of Shampoo are derived from side product of refine oil process; they are based on petroleum industry and not sustainable.

4. The whole process of making shampoo is not environment friendly. The process releases a lot of Dixon and other harmful substance to the environment.

5. Chemical surfactants are not easy to degrade in environment. Due to their stable modular structures (think it can only be crack down at over 1000 °C ), it will take many decades to degrade or even not degrade at all. They can enter to our soil, even in low quantity; it will make soil 's physical and chemical property change tremendously. The soil surface tension decreased and cause the soil over sandy, it cannot hold the water well; the microorganism in soil suffers and decay. The result is the soil turn to sterile and poor.

6. Chemical surfactant is one main pollution source for our river and lake. In Unite State, over 70% lake and rivers have been polluted by surfactant and other chemical substance, For example NP Nonylphenol (this surfactant is estrogenic mimic substance and is widely used for textile, leather and home detergent industry) is spread to many water source in the world. It is one main reason that causes the fish and bird sex abnormal or hermaphrodite. NP is banned by European Union from 2005; unfortunately it is not the case in Australia.

We believe that in less than 10 years, human being will realize how dangerous of the chemicals in personal care products and stop using them, as same as peoples found the smoking is very harmful too after 20 years researches. Our wish is let the public are fully aware the dangers as soon as possible, and we can prevent from the permeant disasters happened to the earth and human beings.