## Dr Peter Dingle

Dr Peter Dingle has a Bachelor of Education in Science, a Bachelor of Environmental Science with first class honours and a PhD. He conducts ongoing research into diet and nutrition, lifestyle and environmental impacts on health, well being and productivity. To find out more got to www.drdingle.com

## Paint

Paints are essentially a liquid plastic coating derived from petroleum. Even when the paint has apparently dried it continues to offgas volatile chemicals into the air. Offgassing of paints may last days or under some conditions even months, which means the occupants of the building are chronically exposed. Even the so-called 'water based' paints are nothing more than plastic resins (such as acrylic) dissolved with low odour solvents (such as glycol ethers) to make them'water thinnable'.

The synthetic paint industry has over 1,000 substances to choose from to make its products. Some of the dangerous ingredients found in synthetic paints and varnishes are cadmium, styrene, benzene, formaldehyde, toluene, xylene, ethylene glycol, isocyanates (the chemicals responsible for the world's worst industrial accident - Bhopal) chromates, mineral turpentine and pentachlorophenol.

Toxic effects

The Painter's Hazards Handbook put out by the Operative Painters and Decorators Union, lists five main health hazards associated with the ingredients in synthetic paints. These are occupational cancer, 'Painters'Syndrome' (i.e. brain and central nervous system damage), skin diseases, lung diseases and reproductive hazards.

Consumers exposed to paints, lacquers and varnishes have reported headaches, memory problems, nausea and long term health problems. A recent study also found increased respiratory problems in children associated with freshly painted homes. Some years ago we investigated a retail paint store where the manager complained of frequent headaches, concentration and memory problems and tremors. His tremors were worse later in the day and towards the end of the week. All the symptoms disappeared whenever he was absent from work. Even if he had a busy work schedule he was symptom free if he was away from the shop. His symptoms were caused by continual exposure to the VOC's emitted from paints.

Another common problem we have come across is when expecting parents paint the baby's room. Not only is it toxic to the newly born baby but also to the pregnant mother and the developing foetus. Many of these chemicals cross the placenta into the unborn child.

## Alternatives

Alternatives to these petroleum products include plant-based paints which are made from a selection of approximately 150 raw materials of plant and mineral origin. While it is not intended to suggest in any way that plant based products are totally safe, it is interesting to note that a great number of them are either used as food or authorised for use as food additives. For example, linseed oil (the oldest known food oil), soya bean lecithin, casein (made from cows milk), beeswax, orange peel oil, shellac, carnuba wax, chalk, lemon oil, bergamot oil and iron oxides. It is also interesting to note that one brand of paints, Livos Plant Chemistry, are deemed so safe they are exempt from Material Safety Data sheets in all countries where they are sold.

http://drpeterdingle.blogspot.com.au/2012/08/paint.html