

A DAY WITH A POISON: A REVIEW

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ABSTRACT

In day to day life some things are much necessary to carry on our life and some things are necessary to decorate our lives. But while collecting these things we also procure some unwanted things and they become the part of our lives unknowingly; and harm you in a very silent manner. While living and decorating our lives food, cosmetics, etc. are inevitable things. With these things we also welcome poisonous substances embedded in it. Intentionally or unintentionally we get surrounded by such poisons and they become the part of lives. In this article it is highlighted of some daily products which we use several times a day and their poisonous effects on our body. With help of *Agad*, formulations described in *Agadtantra* if we modulate our immune system then effects of such poisons can be minimized.

Keywords: Poison, *Ayurved*, Toothbrush, Food, Cosmetics, *Agad*, *Agadtantra*

INTRODUCTION

Poison is a word by which everyone gets scared or worried. In *Ayurved* also it is described as, ‘any substance which creates sorrows is called as poison’. Poisoning doesn’t always meant for an emergency, anything which deviates from your healthy lifestyle is also termed as poisoning

Nowadays the form of poison has changed; we are living with the poisons only and consuming them either by choice or unknowingly. Without poison neither our day starts nor ends. We have been surrounded by many poisons and we are mostly unaware of it. So, here is some attempt to elaborate how we are surrounded by poisons and how it is costing our life as well.

A Review of Daily poisons:

1. Brushing habit:

In *Ayurved* we have been studying the *Danta – Dhavan vidhi* (Brushing technique) with the help of *Dant Kashtha* (Tooth Brush made up from small branch of tree like *Neem* i.e. *Azadirachta indica*). Now the *Dant kashtha*’s place has been taken by the Tooth brush. It is advised to clean the teeth not to harm your gums. New York State Dental Journal found that 70% of used toothbrushes are contaminated with bacteria¹. Force and time during brushing also plays key role. Unwanted force while brushing damages your gums and lands you in dental disorders.

Toothpastes contain fluorides meant for osteoporosis and dental caries. The permissible limit of Fluoride

should not exceed than 1000 PPM, but there is no provision for children's toothpaste. According to CERS most of children swallow 50 % of toothpaste while brushing. More than half of fluoride intake of a two year old comes from toothpaste.²

Sodium Lauryl Sulphate (SLS) commonly used as foaming agent in many toothpastes. According to National institute for Occupational safety and Health, SLS causes skin and eye irritation, nausea, vomiting and diarrhea, if ingested.³

Many persons have the habit of rubbing salt to their teeth. But the direct application of salt powder acts as abrasive and erodes tooth enamel. Around 5000 years ago *Ayurved* has already told to avoid *Lavan Rasa* (Salty taste) while brushing⁴.

Now established brands are promoting salt containing toothpastes for better dental health. This is very much

contradictory from *Ayurved* and also harmful to human beings.

2. Food:

Food is the crucial part of living. Food is required to sustain the life and get it going⁵. But now a day food is contaminated with various agrochemical products containing organophosphorus compounds. Uncontrolled use of pesticides for more yield resulted in poisoning the food resources.

Pesticides are chemicals used in agriculture to protect crops against insects, fungi, weeds and other pests. In addition to their use in agriculture, pesticides are also used to protect public health in controlling the vectors of tropical diseases, such as mosquitoes. But pesticides are also potentially toxic to humans. They may induce adverse health effects including cancer, effects on reproduction, immune or nervous systems.⁶

Table 1: Top 5 pesticides found in food and Health risks⁷

Sr. No.	Name of Pesticide	Health risk
1.	Dichloro Diphenyl Trichloroethane (D.D.T.)	<ul style="list-style-type: none"> - Probable human carcinogen - Damages liver - Temporarily damages nervous system - Reduces reproductive power
2.	Chlorpyrifos-methyl	<ul style="list-style-type: none"> - Nausea - Dizziness - Confusion - Weight loss - Decreased food consumption - Liver & Renal pathology
3.	Malathion	<ul style="list-style-type: none"> - Difficulty in breathing - Blurred vision - Nausea - Vomiting - Salivation - Sweating - Headache - Dizziness - Loss of consciousness
4.	Endosulfan	<ul style="list-style-type: none"> - Endocrine disruptor
5.	Dieldrin	<ul style="list-style-type: none"> - Headache - Dizziness - Irritability - Vomiting - Involuntary muscle movements

The United Nations Population Division estimates that, by the year 2050, there will be 9.7 billion people on Earth – around 30% more people than in 2017. Nearly all of this population growth will occur in developing countries. The Food and Agriculture Organization of the United Nations (FAO) estimates that, in developing countries, 80% of the necessary increases in food production keep pace with population growth are projected to come from increases in yields and the number of times per year crops can be grown on the same land. Only 20% of new food production is expected to come from expansion of farming land. Pesticides can prevent large crop losses and will therefore continue to play a role in agriculture. However, the effects on humans and the environment of exposure to pesticides are a continuing concern⁸.

Humans expose to organophosphorus compounds not only by ingestion but also by contact. Farmers also succumb to the hazards of pesticides at the time of spraying.

Pesticide poisoning has been a consistent killer with the state reporting as many as 272 deaths in the last four years. As far as last year's incidents are concerned, *Yavatmal* district had reported the maximum number of 21 deaths but the remaining 42 deaths during 2017-18 were reported from 14 other districts in the Maharashtra state of India. Incidentally, the pesticide Monocrotophos, whose unapproved mixture is reportedly blamed for majority of the deaths in *Yavatmal*, continues to figure in the list of 66 pesticides which are being used in India despite of its ban or restricted use elsewhere in the world.⁹

3. Cosmetics:

The 21st century woman uses as many as 515 chemicals every day. Her humble nail varnish contains up to 31 chemicals and her perfume, a whopping 400. Soaps, creams, lotions, gels, mousse, colours, sprays, foams, oils, serums - she uses up to nine on an average day and 15 or more on a vanity affair. But like 73 per cent of her counterparts around the world, she does not know what the ingredients in her make-up are. And like 90 per cent, she doesn't care. Now her everyday beauty kit is under the scanner. Cosmetics are found to contain chemicals they shouldn't.¹⁰

Skin creams intended for skin lightening, anti-aging found to be higher levels of mercury products leading to tremors, irritability, and changes in vision or hearing.

Now a day lipsticks are in various bright shades; reportedly found with the higher amount of lead in them.¹¹

Moisturizers which contains mineral oils and paraffin leads to moisture loss from the skin. High concentrations of detergents and detergent like chemicals damage the skin and lower the skin natural protective mechanism making skin lusterless.

Nail polish contains acetone that is responsible for staining nails yellow and making them weaken and brittle.

Hair colours and hair dyes contains P-Phenylenediamine which make humans prone to cancer, reproductive toxicity, neurotoxicity, allergies, irritation of skin, eyes.¹²

4. Mosquito repellants:

Mosquito mat, coil and liquidator fumes containing particulates, metal fumes and vapors may reach the alveolar region of the lung and in long term exposure may lower the lung capacity. Most common ingredient of mosquito coil or mat is various derivatives of pyrethroid. Acute pyrethroid toxicity leads to breathing disorders and damages the liver in long term.¹³

DISCUSSION

While taking a review we came to know that, every day we come across such poisonous products which harm our body. Right from morning to till night we are covered with many poisons and consuming them knowingly or unknowingly. This review article covers only four products as representatives of our daily poisons. Otherwise there are many such products which are poisonous, like mouth wash, kitchen utensils, our food cooking techniques, food habits, etc. Right from brushing we come in contact with poisons like phthalates, fluorides. Second most important thing in our life is food. Everything a man does is for food purpose only. Unfortunately that food is also poisonous because of the overuse of pesticides; which seeps in the crop through water and gets entered into the human system. Overuse of pesticides has become a toll for fields also; decreasing the soil potency. Now a

day Use of cosmetics is a status symbol. We are decorating our bodies with the poison. To look young and attractive we are burdening our body with various poisons. In *Agadtantra* we have studied the various ways of poisoning; in this era also it continues to be the same but in very sophisticated way.

CONCLUSION

Agadtantra, a branch of *Ayurved*; specifically stated to save the king from such poisonous effects. Presently we cannot deny such products as they have become our part of life; so we have to modulate our immune system to tackle bad effects of such things. Now a day consumer is the king and so with the help of *Agadtantra* and its various *Agadas* (Anti poisonous formulations) explained in it we can overcome this situation. In *Agadtantra* we study the various ways of poisoning; above mentioned are the modern versions with the same concept only. This article attempts to show; how we are surrounded by various poisons. Lastly, 'We have to consume the poison whether knowing or unknowingly to live today'.

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Source of Support: Nil

Conflict Of Interest: None Declared

How to cite this URL: Shreyas S. Joshi: A Day With A Poison: A Review. International Ayurvedic Medical Journal {online} 2019 {cited March, 2019} Available from: http://www.iamj.in/posts/images/upload/419_422.pdf