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# **REVIEW ARTICLE**

## **BENEFITS OF COW URINE - A REVIEW**

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#### **ABSTRACT**

The Cow urine has been used from ancient times for curing many ailments of human beings. It is important and essential part of Panchgavya Chikitsa. Difffernt Ayurvedic literature have mentioned its importance and uses for treatment of, Kushtha, Kandu, Udarrog, Colic, Abdominal tumour, Enlargement of the abdomen and Flatulence, for therapies such as decoction purgation, enema etc. Many researches have also be done, which shows its use for treatment of Skin diseases, Stomach diseases, kidney diseases, Heart diseases, Stones, Diabetes, Liver problem, Jaundice, Athletes feet, cyst, Hemorrhoid etc. and show its Immunostimulant, Bioenhencer, Anticonvulsant, Anti cancerous, Wound healing, Antioxidant and Antimicrobial properties. It is also useful in agriculture for preparation of vermicompost and biopesticides. This review article will collect all the qualities and uses of Cow urine from different Ayurvedic and modern literature. The article will also collect the data from all researches done on Cow urine. Cow urine is excellent bioenhencer and recently Cow urine distillate has been granted U.S. patents. Further researches is required to prove its qualities and benefits. Public awareness is required to promote the importance and wide applications of cow urine to improve their health and lifestyle.

# INTRODUCTION

Cow urine has a unique place in Ayurveda and has been described in 'SushrutaSamhita' and 'AstangaSangraha' to be the most effective substance of animal origin with innumerable therapeutic values. In has been recognized as water of life or "Amrita" (beverage of immotality), the nector of the God. In India, drinking of cow urine has been practiced for thousand of years (Dhama, 2005). It is an important content of Panchgavya Chikitsa. Panchgavya is a formulation consisting cow's urine (Gomutra), milk (Godugdha), curd (Godadhi), ghee (Goghrit) and dung (Gomaya). When these five cow products are used for treatment it is known as Panchgavya Chikitsa. It is not only used for human health but also for animal health and plant growth. Different Ayurvedicliterature have mentioned the properties and uses of Cow urine for treatment of various diseases. Lots of researches have been conducted in Cow Urine Treatment and Research Centre, Indore over the past few years and it has been reported that gomutra is capable of curing blood pressure, blockage in arteries, arthritis, diabetes, heart attack, cancer, thyroid, asthma, psoriasis, eczema, prostate, fits, AIDS, piles, migrane, ulcer, acidity, constipation, gynecological problems and several other diseases (Dharma, 2005a).

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The main aim of this review is to collect data related with properties and uses of cow urine and show the importance of Cow Urine in our healthcare system.

#### **Properties of Cow urine**

According to Sushrut Samhita sutra sthan 45/220-221 cow urine is Katu Rasa (pungent), Laghu (easily digestible), Tikshna (penetrating), Ushanavirya (hot in potency), Agnidipaka (kindles digestion), Medhya (improves intellect). Because of Kshar Guna (alkaline property) it does not increase Vata. It increase Pitta, decreases Kapha and Vata (Charak Samhita, 2013). According to Charak Samhita sutra sthan 1/102 cow urine is Madhur rasa (sweet), somewhat alleviates dosas (Sushrta Samhita, 2012). According to Astang Samgraha sutra sthan 6/141-143 Gomutra is Katu rasa and Lavanaanurasa. Rukshaguna, ushnavirya, It increases Pitta. It is best among all other animal urine (Astanga Samgraha, 2011).

# Composition of cow urine

Cow urine contents are water 95%, urea 2.5%, minerals, salt, hormones and enzymes 2.5%. It contain iron, calcium, phosphorus, potassium, urea, uric acid, amino acids, enzymes, cytokine and lactose etc (Bhadauria, 2002).

#### **Uses of Cow Urine**

#### According to Ayurvedic literatures

For treatment of diseases: According to Sushrut Samhita sutra sthan 46/220-221 it is used for treatment of Shoola (colic), Gulma (abdominal tumour), Udararoga (enlargement of the abdomen) and Aanah (flatulence). Cow urine is useful for such Virechana karma as (purgation), Aasthapanvasti (decoction enema) etc. In diseases which are mentioned as curable by urines, there cow's urine only should be used (Charak Samhita, 2013). According to Charak Samhita sutra sthan 1/102 destroys Krimi (worms) and Kustha (leprosy), removes Kandu (itching) and taken internally is beneficial in udararoga (enlargement of the abdomen) caused by tridosha (SushrtaSamhita, 2013). According to Astang Samgraha sutra sthan 6/141-143 it is useful for treatment of Krimiroga (worm), Shopha, Udararoga (enlargement of the abdomen), Aanah (flatulence), Shoola (colic), Panduroga (Anaemia), Kaphavikar, Vat vikar, Gulma (abdominal tumour), Aruchi, Vishvikar, Shvitraroga, Kushtaroga (leprosy) and Arshroga (heamorroid). It is used for Virechana (purgation), Aashthapanavasti (decoction enema), Aalepa, Swedana (Sweating). It is Agnideepak, Paachak and Malabhedak (Astanga Samgraha, 2011).

For formation of different formulation: Gomutra with Haritaki (*Terminaliachebula*) is useful for treatment of Kaphajshoth and Pandu (Sushrta Samhita, 2012).

For shodhan of different dravya: It is also useful for shodhan of various Rasa-aushadhi like Abhrak(Mica), Kansa(Bronze), Jasta(Zinc), Tamra(Copper), Tutiya(Copper sulphate), Naga (Lead), Rajavarta, Roupya (Silver), Kant Lauha, Swarna (Gold) etc. (Ayurveda Sara Samgraha, 2013) and poisonous drugs like Vatsanabh, Dhaturbijaetc (Rasatarangini, 2009).

**Modern view:** Cow urine has many beneficial properties particularly in the area of agriculture and therapeutics. Now a days a lot of emphasis has been given on the medicinal use of Cow urine in India, Recently the cow urine has been granted U. S. Patents (No. 6,896,907 and 6,4,10,059) for its medicinal properties, particularly for its use along with antibiotics for the control of bacterial infection and fight against cancer (Dharma, 2005a).

## Agricultural use

For production of Vermicompost: Distillation waste (Plant herbage after distillation) and cow's urine has been used for production of vermicompost (Dharma, 2005a)

**Biopesticides**: Cow urine after addition of Neem leaves is a wonderful biopesticide. Such biopesticides are safe to use, do not accumulate in the food chain and as such do not have the harmful effects like chemical pesticides (Dharma, 2005).

## Therapeutic uses of cow urine

• **Skin diseases:** It is very helpful in all kind of skin problems, itching, sunburns, eczema, psoriasis, acne etc. (CharakSamhita, 2013).

- Stomach, kidney and heart diseases: Cow dung and urine are best cures for stomach diseases, heart diseases, kidney ailments and tuberculosis (Dharma, 2005a)
- Stones: It can be used for stones. A glass of fresh cow urine should be taken as a first thing in the morning for 21 days, Uric acid in cow urine dissolve these stones to a manageable size (Dharma, 2005a).
- Antidiabetic effect: The antidiaetic effect of Cow urine distillate and a standard drug, glibenclamide, was studied in streptozotocin diabetic rats. The Cow urine Distillate produced a significant reduction of the elevated blood glucose, serum cholesterol and serum triglyseroides levels when compared with the diabetic control (Gururaja, 2011).
- **Liver problem:** Daily doses of 1-2 ounces of warm cow urine are used to treat cirrhosis of liver (Dharma, 2005a)
- **Jaundice:** Antimony sulphide and cow urine taken internally are used to cure malignant jaundice (Dharma, 2005a).
- Athletes feet: It has a cure for athletes feet (Dharma, 2005a).
- Immunostimulant: Cow urine has immunostimulant activity in plants and animal health. Research have been done to evaluale the whole freeze dried Cow Urine and the fraction of Cow Urine for their immunomodulatory potential in rats. As per findings dried cow urine exhibited better effect on immune system compaired to methanol, ethyl acetate, aqueous and acetone fractions of cow-urine.<sup>10</sup>
- Anticovulsant Agent: A herbal preparation popular in Nigeria is based on cow's urine and some herbs known as cow urine concoction (CUC). Its major pharmacological actions are anticonvulsant and hypoglycemic effects (Dharma, 2005a).
- Cysts: For the case of sebaceous cyst incision followed by washing with cow's urine is prescribed (Dharma, 2005a).
- **Bioenhencer:** Bioenhencers are substances, which do not possess drug activity of their own but promote and augment the bioactivity or bioavailability or the uptake of drugs in combination therapy (Joshi, 2002).

Recently Cow urine distillate has been granted U. S. patents for its medicinal properties particularly for its bioenhenceractivites of commonly used antibiotics, anti-fungal and anti-cancer drugs (The Hindu, 2002).

- Anti cancer properties: Cow urine posseses anticancer properties. Research works carried out by Go-VigyanAnusandhan Kendra (Cow science research center) at Nagpur revealed the beneficial properties of cow urine in the treatment of cancer. Further extensive research on Cow urine therapy against fighting carried out by scientists of Central Institute of Medicinal and Aromatic Plants (CIMAP), CSIR center at Lucknow, along with collaboration with Go-Vigyan Anusandhan Kendra, Nagpur confirmed this milestone achievement (Dharma, 2005a).
- Wound healing property: It is observed by researches that cow urine is having antiseptic properties in wound healing and that the healing times is somewhat less in comparison to wound on which antiseptic cream was applied (Maheshwari, 2004).
- Antioxidant and Antimicrobial properties: The cow urine and its distillate tested for antioxidant and antimicrobial activities, it shows that comparatively fresh

- cow urine was found to be better than its distillate (Edwin Jarald, 2008).
- Hemorrhoid: Clinical evaluation of cow urine extract have been done in hemorrhoid patients. Result shows that oral supplemention of cow urine in Hemorrhoids patients has prevented the time consuming, painful and expensive complications of Hemorrhoids (www.ijpsi.org).
- **As Disinfectant**: Cow urine can be used for preparation of Disinfectant (Mandavgane, 2015).
- Antifungal activity of Cow urine: Antifungal activity of cow urine was analyzed (In vitro) against Aspergillusflavus. When the two fungal organism were compared, maximum growth suppression was observed in Aspergillusniger than Aspergillus flavus (Arunkumar Sathasivam, 2010).

#### Conclusion

Because of increasing population people will facing the problem of shortage of fuel, shelter, food, good health, neutrition, these problems can be solved by adopting alternative source of energy. Cow urine is the one of the alternative method which can help to improve our health care system. Though Ayurvedic texts have mentioned the properties and uses of Cow urine in detail, but a systemic work need to be carried out on chemical nature, biological activity, microbiological and pharmaceutical aspects and mechanism of bioactive compounds in Panchgavya along with promotional clinical trials both in preventing and treating diseases of humans as well as their livestocks (Khan Mohd, 2015). Necessary support of scientist as well as researchers and clinicians is desired in order to strengthening the miraculous effect of Cow urine, which will inspire both physician and public to adapt and propagate this wonderful therapy for the beneficial health benefits and help fighting various diseases and disorders of both animals and humans (Mathivanan, 2013). The Panchgavya theory of Ayurveda should gain popularity not only in traditional families but also in highly educated and scientific society. An integrated approach is necessary to promote the highly valuable vitues and wide applications of Cow urine (Dharma, 2005a).

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