

# Suvarnaprashan: An Ayurvedic Immune Booster

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#### Abstract

The word 'Suvarnaprashan', a logical offshoot of Ayurveda, is made with combination of two words 'Suvarna' and 'Prashan'. The term Suvarna is a common word which refers to the Gold noble metal. Prashan refers to Pra+Ashan which means specially the act of eating or drinking or in taking. Suvarnaprashan has been practiced since a long back to make Vyadhikshamatva i.e. Immunity stronger to prevent infectious diseases as well as maintenance of good physical and mental growth and development of a child. According to WHO, Health is a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity. In the wider context, health is a state of total absence of illnesses, diseases, syndromes, infections, abnormal behavior, accidents etc. Vyadhikshamatva i.e. immunity or resistance is the power that protects the body from diseases. It depends on Ojas, Bala, Prakrita Kapha and Balavardhaka Bhava. There has been a significant deterioration in the quality of human health status from generation to generation resulting in decline of immunity. Samskara, Lehana and Rasayana medicines, Suvarnaprashan etc. are recommended in Ayurveda for children for the promotion of health and longevity of life span. According to ancient Ayurved Acharyas like Acharya Kashyap, Sushrut and Vagbhat, Suvarnaprashan strengthens immunity and simultaneously improves digestive functions, intellectual capabilities, activeness and vital power of the body, hence keeps a child healthy. Suvarnaprashan contributes in proper achievement of milestones significantly during growth and development process also.

Keywords: Ayurveda; Vyadhikshamatva; Suvarnaprashan; Lehana

#### Introduction

Ayurveda is not only a system of medicine but a science of life which has been in use for more than 7,000 years ago. The word 'Ayu' means life and 'Veda' means knowledge. It is the oldest and continuously living medical system in the world. The core objective of Ayurveda is the promotion of health and prevention of diseases. Suvarnaprashan is an age-old Vedic immunization technique which was prevalent since the ancient days. Suvarnaprashan involves the administration of gold to children aged between 0 -16 on a specific day on the Pushya star of every month. So, by administrating gold on this day it is said to improve the overall health, physical well being, mental well being, complexion, intellect, immunity of the child. The gold which is used in Suvarnaprashan is subjected to purification as mentioned in the Ayurvedic classics to remove its toxicity and enhance its medicinal properties. Thus it becomes very safe for use with children. Honey, the second component has antioxident, antibacteral and antifungal proparties. Ghee pacifies Pitta and Vata doshas, Ghee nourishes all sapta dhatus equally and thereby enhances ojas, pacifies the feeling of burning, makes body delecate and strengthens the speech and complexion. Ghee has fatty acids of omega 6 and omega 3 that are essential for neurological health and brain development. Now Suvarnaprashan is a special tool for improving children's immunity and intellectual strength. Today's most difficult issues for parents and government is how to maintain and improve children's physical and mental wellbeing, as children are indulging in disrupted lifestyle, unhealthy behavior and eating habits. Suvarnaprashan is a Rasayana Chikitsa and one of Prashana or Lehana, for preventive and promotive child health, and in a curative sense for unhealthy babies. In Ayurveda immunity is corelated with Vyadhikshamatwa, Bala, Ojas, Prakrit Kapha. Vaccine produces immunity to particular disease, where as Suvarnaprashan activats nonspecific immune cell and protects the body from various disease. Several places in India Suvarnaprashan samskara is named Suvarna Amrita Prashana, Suvarna Bindu Prashana [1].

#### **Materials & Methods**

#### Source of Data

Many databases including Ayurvedic text book, Modern text books Pub med, Research Gate, Review of previous articles and API will be reviewed with the key words like Suvarnaprashan Samskar, Samskar, intellectual performance, immunity immunization.

#### Suvarnaprashan in Ayurved

Acharya Kashyap has described the Process of Suvarnaprashana in detail. In Suvarnaprashan Suvarna is rubbed with honey, and water on a washed stone and then, licked while holding the baby's face in the direction of East. In lehadhyaya the method and properties of Suvarnaprashan are described as follows

- Medha-agni-bala-vardhanam (improves intelligency, digestive power, and strength of body),
- Ayushya (improves life span)
- Mangalya (auspicious)
- Punya (sacred)
- Vrishya (aphrodisiac)
- Grahapaham (relieves all bad effects of grahas.)

If Suvarnaprashan administer to child for one month, child becomes Parammedhavi means Genius and if administering for six month child become Shrutadhara he can remember all things whatever he listen [2].

According to Acharya Vagbhatta Suvarnaprashan is paste of Aindri, Brahmi, Shankhpushpi and Vacha, Harenu in equal quantity, mixed with honey and ghee, sanctified by touching the tip of kusa grass with sacred hymns and kept in a plate resembling asvattha leaf, made of gold, should be given to the child to lick in order to encourage knowledge, long life and strength [3].

#### In Sushrut Samhita

Acharya Sushrut explain four formulations of Suvarna which enhances intellectual power and overall growth of baby. These are

- Kustha, Vacha, Brahmi, honey and Ghrita
- Paste of Bhrami and Sankhapushpi
- Arkapushpa, Vacha with Ghrita and honey.
- Kaidarya and Shwet Durva with Ghrita [4].

**Dosage:** The accurate dose of Suvarnaprashan is not defined in the literature by any acharyas but we can measure the total dose of Suvarnaprashan by calculating the dose of Suvarna bhasm. References from the separate text which

- 1/8<sup>th</sup>-1/4<sup>th</sup> Ratti (15-30 mg) Suvarna Bhasma [5].
- 2 Gunja (250 mg) [6].
- 1 Gunja (125 mg)/as per age [7].
- 1 Harenu [8].
- 1/32 Ratti (3.9 mg) [9].
- 15.5-62.5 mg of Suvarna Bhasma [10].

- Rasa: Kashaya, Tikta, Madhura
- Guna: Guru, Snigdha
- Veerya: Sheeta (cold), Picchila
- Vipaka: Madhura

Suvarna bhasma is sweet in taste, strengthens the body, beneficial for heart and good for eyes, it also improve intellectual power, due to its property to pacify all doshas it acts as a rasayan, and it remove all toxic substance from the body and good for skin. It is also helpful to cure many diseases as anemia, tuberculosis, diarrhea, colitis, heart disease, murcha etc.

#### Pharmacological Property of Gold

Suvarna (gold) bhasma has been used in traditional Indian ayurvedic medicine for many clinical disorders, including bronchial asthma, rheumatoid arthritis, diabetes mellitus and diseases of the nervous system [12-15]. Multiple studies on gold nanoparticles showed that to influence the activation of T cells, it conjugates with antigen. As a drug carrier, gold nano particles serve as a major demonstration of the multifunctional capacity for drug delivery. Suvarna bhasma, combined with honey, ghee or milk, should usually be administered orally. Several pharmaco-clinical studies indicate that gold has antioxidants and restorative properties [16]. Gold nano particles have adjuvant properties as well. It functions as an antigen carrier and stimulates macrophage phagocytic activity and affects lymphocyte function. It is therefore responsible for its immunomodulating effect. Gold stimulates the respiratory activity of reticuloendothelial cells and also demonstrates antistress activity by conjugating with low and high molecular weight antigen [17]. A pharmacoclinical research performed on rat at different point of time in restraint induced stress. Prior to this stress induction, rats were treated with Swarna Bhasm. The dosage of Suvarna Bhasm was 25 mg / kg orally for 10 days. To evaluate brain catecholamine, serotonin and plasma corticosterone levels, the HPLC technique was used. Catecholamine levels in the brain (norepinephrine, epinephrine and dopamine). 5 HT and plasma corticosterone were near to be normal [18].

#### **Toxicity Study on Gold**

A toxicity analysis was conducted for 15 days on mice with a nanoparticle of 500 nm. Long-term and non-toxicity survival was observed in histological specimens of mice tissue (lung, kidney, liver and spleen) [19]. Pharmacological property of honey- Honey has hydrogen peroxide and gluconic acid which are antibacterial in action [20]. These two factors stem from the dissolution of sugar by honey glucose oxidase [21-23]. Honey also develops resistance to allergens that remain unaffected. Due to its high sugar content it has high osmotic pressure un-favourable to bacterial growth and proliferation. Its aromatic and phenolic compounds can contribute to the total activity of antimicrobials [24].

Pharmacological property of Ghee-Ghee pacifies Pitta and Vata, ghee is beneficial for Rasa, Sukra and Ojas, pacifies the feeling of burning, softens the body and strengthens the speech and complexion. Ghee has fatty acids of omega 6 and omega 3 that are essential for neurological health and brain development [25]. Benefits of Pushya Nakshtra-In this auspicious Nakshtra, all ayurvedic medicines are administered due to the nourishing effect of Pushya Nakshtra [26]. The action of the drug on this day is very fruitful. On this day the body is better able to absorb the drugs for their optimum benefits and the drugs. In Ayurved this day is considered as appropriate for drug collection [27].

#### Suvarnaprashan Samskar as Immunomodulator

A research on the combination of Madhu-Ghrita-Suvarna-Vacha in infants was performed, the study shows strong immune system response by an increase in total protein and serum IgG levels [28]. Another pharmacological clinical research was performed on gold nano particles, which showed that when faced with an inflammatory threat, gold nano particles modulate the immunological response. The therapeutic application of nanoparticles in diseases involving inflammatory problems is demonstrated by these findings [29]. Several gold nano particle studies show it conjugates with antigen to affect T cell activation.

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#### **Discussion**

Brain development is continued up to 2 years and Suvarnaprashan Samsakara can accelerate brain growth at this point. According to Kashyapa Samhita, administering Suvarna to a child for one month makes him Param Medhavi (super intelligent) and becomes Shruta Dhara (can remember everything she /he hears) by administering for up to six months. According to literary study gold strengthens the body, beneficial to the heart (hridya), nice to the eyes (chakshusava), boosts intellectual capacity, rejuvenation (rasayan), even helpful in curing many diseases such as anaemia, tuberculosis, diarrhoea, colitis, heart disease, etc [30]. Madhu in Suvarnaprashan mitigate the increased Kapha Dosha in URTI. It also minimizes the irritability of child which is produced due to URTI [31]. Many pharmacological studies show that gold nano particles aid in T cell activation, serve as a carrier of certain drugs also and having antioxidant and restorative properties. Suvarnaprashan Samskar can minimize recurrent infection attacks in malnourished children, and help to improve digestive and metabolic capacity. So, we may infer from the above discussion that gold (Suvarna) has several physical and mental characteristics that are helpful for both rising children and adults. By integrating the physical (Shareerik) and mental (mansik) roles of the human body.

#### Conclusion

Suvarnaprashan Samskar offers multidimensional Protection of child. It can increases child's immunity and intellectual strength. Gold has anti-aging property (Rasayana) and site-specific drug targeting (yogavahi) potential. Further clinical trials are required to evaluate Suvarnaprashan's efficacy and safety profile in healthy and diseased children.

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