



## From the Founder:

Greetings to the Ayurveda world!! We are back after a relaxing and rejuvenating summer break. Hope you all have been able to reboot as well.

We are gearing up for the year and will be looking at possibilities of exploiting some research opportunities which have been presented to us. Reaching out to practitioners and students, becoming a membership based organization, offering research webinars are some of the things on our agenda.

Take a minute, go over our website and the resources we have listed therein, and share your feedback, comments and suggestions. Let us know how else we can help you with documentation and writing up case studies. Together we can ensure that Ayurveda increasingly becomes part of the healthcare conversation.

We would love to hear from you as always. You can reach us at [ayurvedaresearchusa@gmail.com](mailto:ayurvedaresearchusa@gmail.com). You can stay connected by visiting our [website](#), following us on Twitter (@PratibhaAyurved), joining our [Facebook group](#) and/or liking our [Facebook page](#)!!



*Pratibha Shah*

(Pratibha Shah, Masters In Ayurveda, MPH)

## Research Abstract



### Anti-microbial Activity of Tulsi {Ocimum Sanctum (Linn.)}

#### Extract on a Periodontal Pathogen in Human Dental Plaque: An Invitro Study

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**Introduction :** Periodontal disease is a chronic infectious disease of the oral cavity and one of the principal causes of tooth loss in humans. This chronic inflammatory disease that affects the supportive tissues of the teeth has a complex etiology [1]. One of the major etiological factors for periodontal disease is the dental plaque biofilm on the teeth surfaces [2]. The noxious products produced by the bacteria in dental plaque trigger the inflammatory process in the periodontal tissues. Actinobacillus actinomycetemcomitans, in human dental plaque is one of the most commonly implicated micro-organisms in the causation of periodontal disease [3]. Hence, reducing their levels in the oral cavity is one of the rationales for the prevention and control of periodontal disease.

Tulsi is a popular healing herb in Ayurvedic medicine. It is widely used in the treatment of several systemic diseases because of its anti-microbial property. However, studies documenting the effect of Tulsi on oral disease causing organisms are rare. Hence, an attempt was made to determine the effect of Tulsi on a periodontal microorganism in human dental plaque.

**Aim:** To determine if Ocimum sanctum (Linn.) has an anti-microbial activity (Minimum Inhibitory Concentration and zone of inhibition) against Actinobacillus actinomycetemcomitans in human dental plaque and to compare the antimicrobial activity of Ocimum sanctum(Linn.) extract with 0.2% chlorhexidine as the positive control and dimethyl sulfoxide as the negative control.

**Results:** At the 6% w/v concentration of Ocimum sanctum (Linn.) extract, a zone of inhibition of 22 mm was obtained. This was the widest zone of inhibition observed among all the 10 different concentrations tested. The zone of inhibition for positive control was 25mm and no zone of inhibition was observed around the negative control.

**Conclusion:** Ocimum sanctum (Linn.) extract demonstrated an antimicrobial activity against Actinobacillus actinomycetemcomitans. The maximum antimicrobial potential was observed at the 6% concentration level. Undesirable effects due to prolonged use of currently used antibacterial agents and financial considerations there is a need for alternate preventive and treatment strategies that are safe, effective and economical when compared to existing treatment methods. In this direction, natural phytochemicals isolated from traditional medicinal plants like Tulsi serve as a good alternative.

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This article is freely available to the public

## News and Upcoming events

### INTERNATIONAL EVENTS

- The 24<sup>th</sup> Global Ayurveda conference “ Ayurveda for Health & Wellness ” organized by European ayurveda academy is scheduled to be held from 11 to 12 November 2017 In London ,UK  
[http://www.europeayurvedaacademy.org/?page\\_id=652](http://www.europeayurvedaacademy.org/?page_id=652)
- 4<sup>th</sup> International Conference on Ayurveda, Unani, Siddha and Traditional Medicine, ICAUST 2016 to be held from 08<sup>th</sup> -10<sup>th</sup> December 2016 on “Indigenous Knowledge for Health Challenges” at Institute of Indigenous Medicine, University of Colombo Rajagiriya, Sri Lanka.  
<http://iim.cmb.ac.lk/icaust2016>

### INDIAN EVENTS

- 7th World Ayurveda Congress And Arogya Expo, is scheduled to be organized at Science City, Kolkata , India from 1st to 4th Dec 2016. The Focal Theme of this edition of World Ayurveda Congress is Strengthening the Ayurveda Ecosystem.  
<http://www.ayurworld.org/wp-content/uploads/2016/06/7th-WAC-Brochure-New.pdf>
- Government of India has decided to Celebrate National Ayurveda Day every year on Dhanvantri Jayanti (Dhanteras). This year it will be celebrated on 28<sup>th</sup> oct.2016. The theme decided for this year is “Ayurveda for Prevention and Control of Diabetes”. The main function of the National Ayurveda Day will be organized on 28<sup>th</sup> Oct.2016 in New Delhi



### “ Quote of the month “

A person in order to protect his health and to increase the life span should cultivate the habit of getting up early in the morning I.e at Brahma muhurths (any time between 3.00AM to 6.00AM).

(A.S.Sutrasthana 3 / 2)

### “ Kitchen Spice Tip “



Intake of 1/4 th tea spoon of dried ginger powder with hot water helps in curing diarrhea.

### Zinc supplementation in the management of diarrhea; Biological, behavioral and contextual rationale

A continuing lack of safe water and adequate sanitation in many parts of the world means, that diarrhea remains the leading cause of death among infants and young children in low- and middle-income countries. Every year more than a million children under five years of age succumb to the fluid loss and dehydration associated with the majority of diarrhea related deaths. It is estimated that 13% of all years lost due to ill health, disability, or early death (so-called “disability-adjusted life years”) are caused by diarrhea. Good guidelines on the clinical management of diarrhea among the world’s most vulnerable children therefore remain critical. There are two simple and effective treatments for the clinical management of acute diarrhea - use of low concentration oral rehydration salts (ORS); routine use of zinc supplementation, at a dosage of 20 milligrams per day for children older than six months or 10 mg per day in those younger than six months, for 10–14 days. Oral rehydration is a well-known and relatively simple treatment approach. Zinc supplementation has been found to reduce the duration and severity of diarrheal episodes and likelihood of subsequent infections for 2–3 months. Zinc supplements are generally accepted by both children and caregivers and are effective regardless of the type of common zinc salt used (zinc sulphate, zinc acetate or zinc gluconate). Supplementary zinc benefits children with diarrhea because it is a vital micronutrient essential for protein synthesis, cell growth and differentiation, immune function, and intestinal transport of water and electrolytes. Zinc is also important for normal growth and development of children both with and without diarrhea. Zinc deficiency is associated with an increased risk of gastrointestinal infections, adverse effects on the structure and function of the gastrointestinal tract, and impaired immune function. Dietary deficiency of zinc is especially common in low-income countries because of a low dietary intake of zinc-rich foods (mainly foods of animal origin) or inadequate absorption caused by its binding to dietary fiber and phytates often found in cereals, nuts and legumes. Although the benefits of zinc supplementation in the management of diarrhea have been established, there remain a number of barriers to the widespread implementation of this treatment strategy. Currently, zinc is not used to treat most cases of diarrhea because the known benefits of zinc supplementation are still not widely appreciated by physicians and health-care workers in developing countries. There is a need to establish the optimal dosage and to investigate whether the same benefits of zinc supplementation are also applicable to children in middle- or high-income nations. There is also concern that high zinc intakes may compete for absorption with other micronutrients such as iron and calcium. This, in turn, can have unintended negative consequences for children’s health and development. Studies are needed to help identify subpopulations that would benefit most in resource-limited settings and to ensure access to zinc supplementation, especially for those families whose children are most at risk of diarrhea but may not be able to afford treatments that include zinc supplements. However, zinc deficiency remains difficult to diagnose because measuring serum zinc levels is not necessarily accurate for this purpose. Currently, only a very small proportion of children in need have access to zinc supplementation.

Edited article- Originally written by Satyendra Narayan Ojha B.A.M.S; Masters In Ayurveda PhD

## Case Study

### Ayurvedic Clinical Management Of Irritable Bowel Syndrome



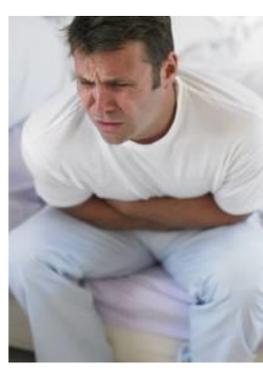
**Background** - Irritable bowel syndrome (IBS) also referred to spastic colon or mucus colitis is one of the most frequent disorders of the gastro-intestinal tract. It affects the females more than the males in the ratio of 2:1. Pellet like or ribbon like stools with or without mucus is seen in IBS. In Ayurveda IBS can be compared to ‘GRAHANI’ because of the similarity in the bowel pattern. In this the patient passes loose stools or constipated stools frequently. The present case report deals with a case of IBS who came for Ayurvedic treatment.

**Clinical features** – A 60 year old female patient visited us with complaints of abdominal pain followed by mucus stools with altered bowel pattern more of diarrhoea type for the past six months. The abdominal pain was relieved by defaecation but there was a sense of incomplete emptying of rectum. Abdominal distension was present with audible intestinal sounds and dyspepsia. She was on regular medicines for the past one year and did not find any relief. The patient was diagnosed depending on the clinical history. Laboratory investigations were done to exclude any other organic pathology

**Intervention and treatment** – The patient was put on samana chikitsa and was monitored for every 20 days. Initially the patient was put on Kutaja Ghana vati, 500mg BD with water. Then the patient was put on Panchamrita Parpati 250mg BD and Sutasekhar Ras 250 mg BD. Finally the patient was given Swarna Malini Vasanta Ras 150 mg in dose of two tablets BD with Mustarista, 20ml BD. The treatment was altered according to the condition of the patient and was monitored regularly.

**Conclusion** - There was a gradual relief to the patient and the patient was completely relieved within three months after starting the treatment. As IBS is a highly distressed condition, Ayurveda provides an effective treatment in the management of IBS.

S. GnanaPrasuna, Masters in Ayurveda & B. HarinathaChary, Masters in Ayurveda, MA(Sanskrit)



### Importance of Agni

What makes a living body different from a dead body? It is the presence of life!! And that life is nothing but the *Agni* (fire) present in the human body.

This *Agni* has a vast range of functions, responsible for all kinds of activities, starting from the tasting of food through its digestion, absorption and evacuation, and other metabolic activities at cellular level. *Agni* is present in everything a human body comprises of, the 3 *dosha* governing the human body - *Vata*, *Pitta* and *Kapha*, the 7 *dhatu* - *Rasa*, *Rakta*, *Mamsa*, *Medas*, *Asthi*, *Majja*, *Shukra*, the 3 mala - *Mutra*, *Purisha*, *Sweda* and foremost is the *Jatharagni* (digestive fire). The source of energy in humans is mainly got through the nutrition from the food that he eats and this digestion is a continuous process taken care of by the digestive fire, which in turn nourishes the other fires in the body. In the previous issue you have read that *Ahara* (food) is one of the 3 pillars of life as per Ayurveda.

Ayurveda also believes that every disease at some point of time started with impairment in one’s *Agni*. And hence it is of prime importance to maintain this *Agni* at its optimum for those who urge to maintain a good health. Therefore assessment of one’s *Agni* is foremost for any Ayurveda *Vaidya* before starting the treatment for any disease. Treatment principle of almost all diseases in Ayurvedic literatures prompts at treating the *Agni* first and then other treatment plans. Only if *Agni* is maintained the body’s capacity to heal naturally is accentuated, and also for any medicine or food to help the body rejuvenate it has to undergo digestion and be absorbed by the body and this is the key function of the *Agni*.

What plays a role in maintenance of *Agni*? Majorly it is the food that we eat! Eating the balanced and right kind of food as per one’s *Prakriti* (body constitution), *Vikrati* (disease state), *Desha* (the place where one belongs), *Kaala* (time – seasonal and day to day), *Satmya* (natural acceptance of the body), and in right amounts is of utmost importance. Any indulgence in wrong eating directly affects the *Agni* and such continuous insults to *Agni* results in disease. Keep your fire kindling for a blissful living!

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