



## COUNCIL FOR AYURVEDA RESEARCH / Vol 02 /

Issue 02 (Apr-Jun)

## From the Founder:

Spring is here and so is our Spring issue! We always have interesting news to share with you. So here you go.

CAR developed a Case Study template which debuted at the 12<sup>th</sup> National Ayurveda Medical Association National conference at Warwick, Rhode Island, USA on April 15<sup>th</sup>. The CAR Executive Committee also presented a 3.5 hr Practicum at this event where attendees were trained in writing a simple case study. The Practicum had 31 paid registrations and was very well received.

I am also excited to share with you that my case study titled, 'Resolution of primary Chronic Otitis Media with Effusion, with Ayurveda' was published in the Ayurveda Journal of Health. You can read that and other interesting case studies and articles in the journal.

Lastly we would like to congratulate our youngest Executive Committee member Dr. Anupama Kizhakkeveettil on receiving the Clinical Research Award, at the Association of Chiropractic Colleges and Research Agenda Conference, in Orlando, FL, for her research paper.

We always like to hear from you. Email us at <u>ayurvedaresearchusa@gmail.com</u>. Let us know how we are doing and what more you would like to see happening at CAR. Stay connected by visiting our website, joining our Facebook group and/or liking our Facebook page!!



Pratibha Shah

(Pratibha Shah, Masters In Ayurveda, MPH)

# **Research Abstract** Ayurnutrigenomics: Ayurveda-inspired personalized nutrition from

inception to evidence

Banerjee S, Debnath P, Debnath PK

Ayurveda proclaims food and drugs are intersecting concepts that are vital for human survival and for the prevention and mitigation of diseases. Food interferes with the molecular mechanisms of an organism's "physiome". It is consumed in large amounts compared to any drug. Hence, research on its effect and interaction with genome is highly relevant toward understanding diseases and their therapies. Ayurgenomics presents a personalized approach in the predictive, preventive, and curative aspects of stratified medicine with molecular variability, which embodies the study of interindividual variability due to genetic variability in humans for assessing susceptibility, and establishing diagnosis and prognosis, mainly on the basis of the constitution type of a person's Prakriti. Ayurnutrigenomics is an emerging field of interest pervading Ayurveda systems biology, where the selection of a suitable dietary, therapeutic, and lifestyle regime is made on the basis of clinical assessment of an individual maintaining one's Prakriti. This Ayurveda-inspired concept of personalized nutrition is a novel concept of nutrigenomic research for developing personalized functional foods and nutraceuticals suitable for one's genetic makeup with the help of Ayurveda. Here, we propose and present this novel concept of Ayurnutrigenomics and its emerging areas of research, which may unfold future possibilities toward

Ayurveda takes a holistic approach toward medicine that integrates mind, body, and soul, and toward several other stratifications. Interestingly, we find that Ayurveda merges foods (Pathya orAhara) and drugs (Ausadha) inside the concept of therapeutics, to maintain harmonization of the Doshas or physiological factors according to individualistic variability or *Prakriti* and other environmental factors.

This Ayurveda-inspired concept of personalized nutrition is a novel concept in the realm of nutrigenomic research for developing personalized functional foods and nutraceuticals suitable to one's genetic makeup. The concept is that food and drugs intersect, considering their effects according to the genetic constitution (Prakriti) of a person at the systems biology level. It is evident that the reviewed techniques can be of immense importance in the way forward for Ayurnutrigenomic research. Technological platforms based on the different omics (genomics, epigenomics, transcriptomics, proteomics, and metabolomics) may help in this regard to develop a better understanding toward Ayurvedic principles on nutrition and Ayurgenomics. This review introduces and presents this novel concept of Ayurnutrigenomics as an emerging area of research, which may unfold future possibilities toward smart yet safe therapeutics.

This article is freely available to the public

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# **News and Upcoming events**

### INTERNATIONAL EVENTS

- 17th International Conference "Ayurveda: Food & Nutrition" to be held from May 13 – 15, 2016, Pittsburgh, PA, USA. . The conference is-organized by Global Ayurveda Conferences, LLC, USA. http://globalayurvedaconferences.com/
- 3<sup>RD</sup> International Congress on Ayurveda is scheduled to be held from 16 to 19 September 2016 at Milan, Italy. This conference is being organized by INDRA and Ayurvedic point, Italy www.ayurvedicpointcongress.com

### **INDIAN EVENTS**

7th World Ayurveda Congress And Arogya Expo, is scheduled to be organized at Science City, Kolkata from 1<sup>st</sup> to 4<sup>th</sup> Dec 2016. This edition of WAC is lead by two eminent personalities, The Secretary, Ministry of AYUSH and Director general of Indian Council of Medical Research



Quote of the month

Habit of charity, compassion, truthfulness, celibacy, gratitude, using rejuvenators, friendship with all and benevolent activities enhance the life span.

( A.Hr.sharirasthana-III/119-120)

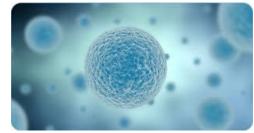
# **Kitchen Spice Tip**

2tsp of cumin seeds boiled in 2 glass of water and reduced to 1/4<sup>th</sup>, taken along with little jaggery cures indigestion.



## **Domain Expert Corner**

## Concept of Aama and bio markers



One of the basics that need to be considered in the analysis of the patients through Ayurvedic approach is the concept of aama. Aama can be understood as a result of autoimmune phenomena.

Certain biomarkers like immune complexes can be considered as *aama* and they are measurable. Autoantibodies are the best examples of circulating *aama*.

Acharya Charaka in the context of ajeerna (indigestion) [Cha. Chi. 15th chapter], very clearly demonstrates aama and most of the gut related issues start with this accumulation of aama.

CRP is an acute phase reactant; can be considered as rasa/rakta gata aama marker.

There is autoantibody to islet cells of Langerhans causing type 1 DM, this can be understood as aama in samaana (one of the 5 types of vata) sthaana manifesting as madhumeha.

In chronic complications of DM triglycerides are a major culprit and responsible for athero-genesis, it is taken as a biomarker for saama meda/kapha. Oxidized LDL - cholesterol also can be correlated with saama meda.

For the treatment of such aama, drugs used should be katu and tikta taste dominant, which are enriched in vayu, agni and akasha mahabhuta and hence help in countering the saamata. One of the ideal drugs is *Musta* (Cyperus rotundus/Nut grass). It has an immune-modulatory effect in clinical/experimental trials. *Musta* (Nut grass) can grow at any place in any given condition, thus shows its strongest behavior to survive. Through the knowledge of loka-purusha saamyata we can understand that even in the difficult situation posed by the saamata, drugs like Musta (Nut grass) have an effect.

Ghora anna visha (diet components), environmental factors, are triggering factors in genetically predisposed persons to induce autoimmunity.

The identification of *aama* in the body, cross-reaction due to molecular mimicry and self to non-self reaction is very crucial for an autoimmune activity. Identification of aama by vaayu, molecular mimicry by kapha and self to non-self reaction by pitta and eventually initiation of autoimmune induced disease

process is concerned with tridosha.

[Dr. Satyendra Ojha]

# **Case Study**

## **AYURVEDA - A GREAT REMEDY FOR TENNIS ELBOW**



Background: Tennis Elbow, a common term for a condition caused by overuse of arm, forearm & hand muscle that causes pain in the elbow & arm. The term came into use because it can be the significant problem for some tennis players; also called as Writer's Cramp/Washer Women's Elbow. Despite its name, you don't have to play tennis to get Tennis Elbow, instead any repetitive gripping activities/arm movements; people with jobs/hobbies like carpentry, typing, painting, knitting, playing Tennis, Squash, fencing, weightlifting, other laborers who swing hammer/other tools with forearm contribute to Tennis Elbow.

Clinical Features: A Male patient aged 42yrs, Mason by profession, presented with pain and swelling associated with tenderness in the bony knob on the outside elbow & difficulty in movements of right upper limb, severe since 6 months.

Intervention & Treatment: The patient was treated with a combination of Kaishora Guggulu, Ekanga Veera Rasa, Maha Vata Vidwamsa Rasa along with Jata Mayadi Lepa for external application for 1 month with advise of minimal activity to the affected elbow joint. After 15 days of treatment patient had great relief from the symptoms, 50% reduction in pain and swelling with minimal tenderness, by the end of 1 month the patient was able to work comfortably without pain.

Conclusion: This case presented above clearly shows the effect of Ayurvedic medications. There are several such cases available, proving the efficacy & demonstrates that Ayurvedic line of treatment is best in management of Tennis Elbow. Higher qualitative studies may be conducted to know the effectiveness of the same.



## **Utility Of Vajeekarna In Today's Era**

A lot has changed in the last few decades especially in terms of Vajeekarna and people's perception of it. During Ancient period Vajeeekarna was mainly used for Procreation, while today people give a lot of emphasis on recreation. Vajeekarna is a much broader science and mainly helps in four main areas

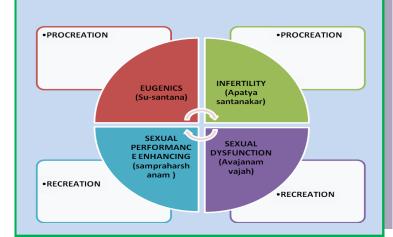
- Eugenics
- Infertility
- **Sexual Dysfunction**
- Sexual Performance Enhancing

Eugenics is the science which advocates the use of practices aimed at improving the genetic composition of a population; usually a human population and this can be achieved by using Vajeekarna herbs. Vajeekarna herbs can be used for various causes of Infertility like impaired production or function of sperm, low sperm concentration

Different herbs also help in the management of hypoactive sexual desire disorders, male erectile disorders, female sexual arousal disorders, male orgasmic disorders like premature ejaculation, retrograde ejaculation and ejaculatory dyspareunia

Hence to sum it up, Vajeekarna is used for both procreation & recreation and can be taken by both healthy & disabled, men & women alike.

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## **COUNCIL FOR AYURVEDA RESEARCH**

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