



RASAYANA AS ORAC CONNOTATION - AN INTERCESSIONAL HEALTH PROMOTION IN COVID-19

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Undercurrent- World says.....

As we incline towards a smudge where the world has significantly tuned in to a pandemic, humanity is facing an unmatched pandemic of novel corona virus malady (COVID-19) caused by (SARS-CoV- 2). The malady has broadened globally with quite 4.97 million (+113) confirmed cases and 327K (+4322) deaths as of 21st May, 2020. Things have gone worst at in comparison of any epidemic in the history of the humankind. The novel corona virus problem has become extremely contagious with the probability of inflicting severe acute metabolism disease as it has quickly wedged the Government and public health systems. The situation has been responded as a public health emergency of national and international concern, additionally as by adopting extraordinary measures to prevent the contagion and limit the occurrence. Millions of lives have been considerably altered, and has caused widespread concern, fear and stress all of which are natural and normal reactions to the changing and uncertain situation that everyone finds them in regards to the health perspective.^[1]

Ancient Astuteness & Mankind

Since ages person has evolved relying on nature for (Roti- Kapda and Makan). Diet being a fundamental zone of humans plays a crucial role in physiological state. Antioxidants being the branch of Nutraceuticals have a decisive role in health maintenance and promotion. The daily food intake that is made in antioxidants helps to develop and improve the immunity and fights against trouble inflicting factors thereby increase the assembly of free radicals in the body. Ayurved Vijnana has invariably given supreme magnitude to the Swasthya Rakshana (maintenance of health) and Roga prashamana (curing the disease) w.s.r to Vyadhikshamatva kriya.^[1,2]

Antioxidant prospective of Rasayana in Ayurved

A remarkable construct of Rasayana has been given prime importance from health maintenance point of view as they are highly rich in antioxidants. Antioxidant scavenges for complimentary charge radicals and as a result forms a very special cluster of organic process supplements. The free radicals have a robust tendency to impair the correct functioning of the system which ends in infection and a hoard of degenerative diseases. Among the varied antioxidants out there, flavonoids vicinity is a gift synthetic resin compounds in plants. The

Anti-oxidative impact of flavonoids has already recognized as a documented lipide peroxidation inhibitor that helps to scavenge free radicals and active oxygen to chelate iron ions and to inactivate lipoxygenase. Ayurved explains the importance of Rasayana that induce immune stimulation and improves defense mechanisms against free radicals. Rasayana aims at raising the metabolic processes that finish in best possible biotransformation and promotes health. Rasayana is one that nourishes the Rasadi Dhatus, Acharya Chakrapani emphasized on the word Rasadinam as Rasadi Saptadhatu and Shasthanam as Prashasta Dhatu with examples of Rasayana like Guduchi (Tinospora cordifolia Willd), Lashuna (Allium sativum Linn.), Guggulu (Commiphora mukul), Amalaki (Emblica officinalis Gaertn), milk, Ghritha (ghee). Rasayana works at the extent of Rasa (nutrient worth of plasma) by enriching the organic process worth of circulatory plasma, example: Draksha (grapes), Ksheera (milk), Shatavari (Asparagus racemosus Willd). Rasayan helps in the digestion and metabolism leading in turn to improve organic process standing with examples like Pippali (Piper longum Linn.), Haritaki (Terminalia chebula Retz.), Chitraka (Plumbago zeylanica Linn.) Rasayana acts at the extent of Srotas that is the small circulatory channels carrying nutrition to the tissues; these Rasayanas clean

and activate the small circulatory channel that is Sroto shuddi leading to improve microcirculation.^[3,4]

Antioxidant Taxing: ORAC insulation

Active Oxygen is important for defensive form against viruses, microorganism or different foreign bodies. However, once active Oxygen becomes abundant it harms the body, thus it is erased by antioxidants in the exclusion system of the living body in order to preserve the health condition. It has become vital to want food and supplements as well as antioxidants to prevent aerophilous toxicity. The Oxygen radical absorbance capability (ORAC) assay has emerged as a robust analytical methodology to figure out the inhibitor potential of a spread of medicine found in Nutraceutical, pharmaceutical and food merchandise. ORAC depends on a typical fluorescent probe, fluoresceine, to observe inhibitor activity which can be browse on a microplate reader capable of sleuthing light. ORAC is that the direct capability of chain-breaking inhibitor supported the atom transfer mechanism. ORAC assay states the mechanism of atom transfer that mimics to human biology and in vivo inhibitor capability that provides clinical implication. Because of its clinical significance, sensitivity, specificity ORAC is most approved methodology to match additionally as standardize the organic process supplements. It is usually accustomed to measure the inhibitor activities of pharmaceutical merchandise, food merchandise, agricultural merchandise, human and animal blood serum samples. ORAC assay provides the live of the scavenging capability of antioxidants against the peroxy radical that is one amongst the foremost common reactive Oxygen species found in the body.^[5,6]

Future Potential Expectations

In the future our survival will depend on our immunity and therefore ORAC-rich Rasayana may help boost immunity and fight against COVID-19 pandemic. Some of the antioxidant values of Ayurvedic drugs are expressed in ORAC (Oxygen Radical Absorbance Capacity) units mentioned below in descending manner:-

- a) The antioxidant value of triphala powder described in ORAC units is: 706,250 μ mol TE/100g.
- b) The antioxidant value of clove powder described in ORAC units is: 314,446 μ mol TE/100g.
- c) The antioxidant value of cinanamom powder described in ORAC units is: 267,537 μ mol TE/100g.
- d) The antioxidant value of indian gooseberry (amla berries), dried described in ORAC units is: 261,500 μ mol TE/100g.
- e) The antioxidant value of ground Curcumin described in ORAC units is: 150,000 μ mol TE/100g.
- f) The antioxidant value of ground turmeric spice described in ORAC units is: 127,068 μ mol TE/100g.
- g) The antioxidant value of ground Alovera described in ORAC units is: 115,000 μ mol TE/100g.
- h) The antioxidant value of licorice root, dried described in ORAC units is: 102,945 μ mol TE/100g.

- i) The antioxidant value of cumin powder described in ORAC units is: 76,800 μ mol TE/100g
- j) The antioxidant value of tulsi powder described in ORAC units is: 67,553 μ mol TE/100g,
- k) The antioxidant value of chyawanprash described in ORAC units is: 35,700 μ mol TE/100g.
- l) The antioxidant value of black pepper spice described in ORAC units is: 34,053 μ mol TE/100g.
- m) The antioxidant value of ashwagandha root described in ORAC units is: 8,487 μ mol TE/100g.
- n) The antioxidant value of tinospora extract in ORAC units is: 2,614 μ mol TE/100g.
- o) The antioxidant value of asparagus, raw described in ORAC units is: 2,252 μ mol TE/100g.
- p) The antioxidant value of fenugreek seeds, raw described in ORAC units is: 2,090 μ mol TE/100g.
- q) The antioxidant value of asparagus, cooked, boiled, drained described in ORAC units is: 1,644 μ mol TE/100g.
- r) The antioxidant value of tinospora fruit in ORAC units is: 1,107 μ mol TE/100g. The antioxidant value of white asparagus, raw described in ORAC units is: 296 μ mol TE/100g.
- s) The antioxidant value of milk, 2% fat described in ORAC units is: 40 μ mol TE/100g.
- t) The antioxidant value of milk, 1% fat described in ORAC units is: 50 μ mol TE/100g.^[7,8]

Culmination of ORAC and health benefits

Determining the ORAC value gives both qualitative and quantitative measure of free radical scavenging and antioxidant activity of a test drug. Trolox, a water-soluble vitamin E analogue is used as a calibration standard and the ORAC value is expressed as micromoles of Trolox equivalents per grams of the sample (μ mol TE/g). ORAC value is the direct measure of antioxidant capacity of the sample or drug. Synonymously, higher the ORAC value higher will be the antioxidant capacity and vice versa. Health experts have recommended that we should learn to live with COVID-19 for the next coming months. Amidst this, oxygen radical absorbance capacity (ORAC) studies are profoundly attracting eyesight on the social media platforms. Oxygen carrying ability of the blood can be enhanced by eating fruits, vegetables, spices, and herbs that have high ORAC values. They help fight against viruses, allergies, prevent cancer, neurodegenerative disorders, diabetes, and other acute and chronic illnesses and at the same time they also enhance the immunity power. ORAC-rich Rasayanas in the form of supplements may help boost immunity and fight the COVID-19 pandemic as it seems that mankind future survival will depend on our immunity- Diet we have, Lifestyle we live in and Rasayan as supplements (including food-medicines-fruits-spices) with highest ORAC values.^[5, 6, 9]

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