

Plants for Human Health

Dr Prakash Kondekar*

Indian Institute of Naturopathy, India.

*Corresponding author: Dr Prakash Kondekar, Indian Institute of Naturopathy, India, E-mail: kondekar.prakash@gmail.com

Received date: October 16, 2020; Accepted date: August 21, 2021; Published date: August 31, 2021

Citation: Dr Prakash Kondekar (2021), Plants for Human Health. Insights Aquac Cult Biotechnol Vol.5 No.2.

Abstract

Human body contents Plasma which carries substances like hormones, vitamins, amino acid & antibodies & also contains proteins called clotting factors that help the blood to coagulate. Balance of Saliva, Mucus & cerebrospinal fluids, is important for overall health of sports person. Nature plays a major role in Human Health through various plants. Stress has been shown to increase clinical viral respiratory illness in humans. Immunity changes are associated with distress can contribute to the etiology and course of immunologically resisted diseases, such as infections, autoimmune diseases or cancer. So we will see how plants are associated with our health.

Introduction

The earliest land plants date back to around 3.70 Billion years before. Estimates on the number of Earth's current species range from 10 million to 14 million. They have major impact on Mankind. The impact of the Moon and its rotation around the Earth has many effects on life on the Earth and Mankind. Earth Science taught the Mankind, how to take care of the Nature and obtain the benefits of the atmosphere through plants so as to have a smooth life and healthy longevity.

The burning of fossil fuels by humans is the largest source of emissions of carbon dioxide which is one of the greenhouse gases that allows radio active forcing and contributes to global warming. For that reason humans should use plant based foods for their overall health instead of animal based foods and plants as a medicines instead of Chemical Drugs.

During the Nutrition month of September 2020, Government of India has taken a Plantation drive for Promotion of Kitchen Garden under "POSHAN KE LIYE PAUDHE "(in Hindi language)

Plants give us various types of seeds and dry fruits which in term give us Vitamin E. This Vitamin E plays important role in human personality as well as in immune system as an antioxidant, preventing important molecules and structures in the cell from reacting to oxygen. When the delicate components of living protoplasm are attacked by oxygen they are often injured. If one wants to live longer, he/she has to be very friendly with vitamin E. It has now been found out that it has good role to play in many types of pains, not as a pain killer but a pain reliever. Vitamin E may help ease muscle aches after a

tough workout, a new study suggests. Researchers believe that the antioxidant mops up the damaging by products created by a strenuous workout.

In one study participants took a relatively high dose of vitamin E, the average person could probably get the same benefits from lower doses of between 200 to 400 IU per day.

Thus the vitamin E which is a water soluble vitamin can be a good pain reliever as also immunity enhancer, if taken in proper proportion as also in proper Natural form.

Our day-to-day eating habits provide many opportunities for us to support our immune system's power to protect us. All these are from plant foods like....

Black resins, dates & apple, provide us with Iron (Fe), Watermelon seeds give us Zn. Cereal sprouts give us Amino Acids. Gooseberry (Amla), Cranberry, Lime juice Sweet lime provide us vitamin C, Sunflower seeds give us Selenium. All these vitamins are plant sourced and are good for enhancing immunity but doses differs from person to person since unique physiological characteristics .Also it is important to know, how the nutrients are prepared & processed & what other substances accompany them into body. This is a Pharmacology of Nutrition. Further it considers alteration in food due to food processing, adulteration & contaminations. Hence food should be healthy & ideally suited to a particular person.

How can our diet affect immune health?

Our body produces highly reactive molecules called free radicals as part of normal metabolic processes & in response to exposures like pollution & tobacco smoke. Immune cells produce them as a way to fight infections. High levels of free radicals trigger inflammation. Antioxidant nutrients consumed in excess may actually interfere with the body's antioxidant defenses. One has to be very careful while using any nutrient, including plant that high doses of one nutrient can create deficiencies of other nutrients, including those needed by the immune system.

High-fibre diets can nurture gut microbes that provide anti-inflammatory protection. These microbes protect cells within the colon & seem likely to help protect against inflammation throughout the body. Now we are looking for plant based proteins and try avoid animal based proteins, so more of plant utilisation for our health.

Make nutrient-dense foods the majority of our plate to provide the wide range of nutrients needed for immune

system cells & function. This includes – but is not limited to – minerals like Zn, Se, Fe & Cu, omega-3 fats & protein.

A few more examples where plants can be of more beneficial are like...

Lemon grass-Cloudy lemonade is served hot as a remedy for chest congestion. Ginger plant Juice-Contains gingerol, is very good muscle pain reliever. It is useful in cough and cold. Watermelon-Cucumber-Mint Juice This drink if taken during summer, it will have a soothing effect on hyperthermic body of a person. Cloves' Powder and Honey. Cloves contain a natural compound eugenol which helps to stabilize blood sugar & has positive effect on artery clogging cholesterol. Carrot juice along with lemon juice works in case of Diabetic persons. Coriander, Basil, Pudina, Aloe vera, Moringa, Turmeric, Garlic and such other plants are good for Human health.

The European Society of Clinical Nutrition and Metabolism guidelines on nutrition emphasize that their nutritional needs should be met through a balanced diet, adjusted as needed to meet each individual's condition. But in general, the guidelines say that use of single high-dose micronutrients should be avoided.

Conclusion

In short, More is not always better.

Free radicals are normal. They are important signals within cells & "turn on" body antioxidant defenses but excessive levels of free radicals can damage cells & promote inflammation. Likewise, short-term inflammation is part of how the body clears an infection. If inflammation is out of control however, it can create cell & tissue damage that is difficult to reverse. Most of us may be tempted to assume, "if some is good, more is better," to fight these diseases. But that's not what evidence shows.

Thus depending upon requirements of a person, various plants can be useful to maintain an overall health of a person so as to maintain his or her Healthy Longevity.

Reference

1. Southgate, EM, Davey, MR, Power, JB, Merchant, R Factors affecting the genetic engineering of plants by microprojectile bombardment *Biotechnol Adv*19951363157
2. Sticklen, M Plant genetic engineering to improve biomass characteristics for biofuels *Curr Opin Biotechnol*2005173159
Ma, JKC, Drake, PMW, Christou, P The production of recombinant pharmaceutical proteins in plants *Nature*20034794805
Conrad, U Polymers from plants to develop biodegradable plastics *Trends Plant Sci*2005105112
Executive summary of Global Status of Commercialised Biotech/GM crops: 2007 *ISAAA Briefs No. 372007*Ithaca, NY *ISAAA*
3. Brandt, P Overview of the current status of genetically modified plants in Europe as compared to the USA *J Plant Physiol*200316073540
Gay, PB, Gillespie, SH Antibiotic resistance markers in genetically modified plants; a risk to human health *Lancet Infect Dis*2005563746
Bennett, PM, Livesey, CT, Nathwani, D, Reeves, DS, Saunders, JR, Wise, R An assessment of the risks associated with the use of antibiotic resistance genes in genetically modified plants: report of the Working Party of the British Society for Antimicrobial Chemotherapy *J Antimicrob Chemother*20045341831
4. Goldstein, DA, Tinland, B, Gilbertson, LA Human safety and genetically modified plants: a review of antibiotic resistance markers and future transformation selection technologies *J Appl Microbiol*200599723
5. Hare, PD, Chua, NH Excision of selectable marker genes from GM plants *Nat Biotech*20022057580
6. Wu, HX, Sparks, CA, Jones, HD Characterisation of T-DNA loci and vector backbone sequences in GM wheat produced by *Agrobacterium*-mediated transformation *Mol Breed*200618195208
7. Fu, XD, Duc, LT, Fontana, S Linear transgene constructs lacking vector backbone sequences generate low-copy-number GM plants with simple integration patterns *Transgenic Res*20009119