

# National Conference on Recent advances in understanding the role of phytochemicals in human health (RAURPHH) 25-26 July, 2018



DEPARTMENT OF  
FOOD SCIENCE & TECHNOLOGY  
UNIVERSITY OF KASHMIR

## Background of RAURPHH

Phytochemicals, also known as phytonutrients, are nonnutritive plant chemicals that have protective or disease preventive properties. These complex molecules are found in most foods, especially in fruits and vegetables. Numerous epidemiological studies have shown that there is a considerable association between fruit and vegetable consumption and low risk of many diseases. It was once assumed that vitamins and minerals played a significant role in disease prevention; however, recent studies indicate that phytochemicals can make a much greater contribution than vitamins or other nutrients. Phytochemicals are associated with the prevention of certain chronic diseases, including cardiovascular diseases (CVDs), cancer, diabetes, osteoporosis and vision diseases, which are also called as diseases of development. These diseases are mainly attributed to a high-fat and high-sugar diet, lack of exercise, smoking and other unhealthy lifestyles. Fruit and vegetable consumption is inversely associated with the incidence of many types of cancer, including stomach, colon, breast, lung and prostate cancers. Phytochemicals in fruits and vegetables are mostly responsible for a protective effect against these diseases. It appears that there are many possible ways to affect cancer development. Most cancers result from the interaction of carcinogens or oxidants with DNA. The strong antioxidant ability of phytochemicals appears to reduce this damage. Furthermore, phytochemicals inhibit phase I enzymes, which initiate carcinogenesis, thus reducing the risk of carcinogenesis, and they also induce phase II enzymes, which detoxify and excrete carcinogens, resulting in less DNA damage and preventing carcinogenesis initiation. Also, phytochemicals can reduce the rate of cancer spread by slowing the proliferation of cancer cells. The benefits of phytochemicals in terms of CVDs such as coronary heart disease and stroke have been identified by many studies. Thousands of phytochemicals have been identified in fruits and vegetables, and they are grouped into several classes according to their chemical structure and biological activity. The classification, however, is still quite controversial. Although the importance of the individual phytochemical classes will be discussed in the following section, the benefits of phytochemicals to human health are the result of synergistic effects. Numerous studies have identified a significant inverse association between fruit and vegetable consumption and the incidence of many diseases, including cardiovascular diseases, cancer, diabetes, osteoporosis and vision diseases. Phytochemicals contained in plant foods play important roles in disease prevention. Every year, numerous scientific publications, science books and even articles and advertisements for the general public appear on the positive effects of a specific phytochemical or combination of phytochemicals. There is still a significant need for further investigation into their potential benefits and mechanisms of action, as well as for development of the best techniques for improvement in content and bioavailability of phytochemicals.

## Objectives

The conference aims to bring together leading academic scientists, researchers and research scholars to exchange and share their experiences and research results on all aspects of phytochemicals. It also provides a premier interdisciplinary platform for researchers and educators to present and discuss the more recent innovations, trends and concerns as well as practical challenges encountered and solutions in this emerging field of knowledge.

## Research tracks

- ❖ Phytochemical rich foods of India
- ❖ Factors influencing the level of phytochemicals in food products.
- ❖ Extraction of phytochemicals for food and pharmaceutical use.
- ❖ Stability of phytochemicals during food processing and storage.
- ❖ Role of novel food processing techniques in increasing phytochemical stability.
- ❖ Bio-availability of phytochemicals and methods for enhancing bioavailability.
- ❖ Role of phytochemicals in human health.
- ❖ Mode of action of phytochemicals in disease prevention.

### Who can participate

Professionals engaged in aforesaid aspects of food processing, scientists from R & D institutions, research scholars, students and industry professionals.

### Call for abstracts

Abstracts of the papers from participants are invited to reach the organizers before 25<sup>th</sup> June, 2018. The acceptance of the abstracts for oral/poster presentation will be communicated to the concerned participants within 15 days of the receipt of abstracts. Full length papers should be submitted only after receipt of acceptance of abstract. However, the same can be prepared after submission of abstracts. The abstracts should be typed in MS word, Times New Roman and must not exceed 300 words. The title should be 12 fonts and bold, name of authors and institutions also in 12 fonts, small capitals and placed as centered. Text should be 12 fonts as normal and single spaced. Abstracts and full length papers can be submitted by email at: phytocon.2018@gmail.com.

### University Campus

The university was founded as the University of Jammu and Kashmir in 1948 and named as University of Kashmir in 1969. The University is teaching and an affiliating institution. Main campus of the University is situated on a sprawling 247 acres of land in a picturesque setting, with the majestic world famous Dal Lake on one side and other side interspersed with hillocks, plain spaces and other water bodies. The campus is also very near to the world famous Mughal gardens and this unique topological feature is in sync with nature. The University is committed to provide an intellectually stimulating environment for productive learning to enhance the educational, economic, scientific, business and cultural environment of the region. The University offers programmes in all the major faculties; Arts, Business & Management Studies, Education, Law, Applied Sciences & Technology, Biological Sciences, Physical & Material Sciences, Social Sciences, Medicine, Dentistry, Engineering, Oriental Learning and Music & Fine Arts. It has been constantly introducing innovative/new programmes to cater to the needs and demands of the students and the society. Over the years, the University has marched towards excellence in its programmes and activities. It has been re-accredited as Grade-A University by the National Assessment & Accreditation Council (NAAC) of India in the year 2011. This is recognition and reflection of the high standard of quality in teaching and research at the University of

### Department of Food Science & technology

The Department of Food Science & Technology was established in the year 2008 with financial assistance from Department of Biotechnology, Govt. of India. Annually 20 students are admitted for masters programmed. The department started Ph. D. programme in the year 2012 and presently 2 scholars were awarded Ph. D. degree and 14 scholars are pursuing their Ph. D. programme. There are 7 extramurally funded projects being run by the department and problems pertaining to the local food industry are being investigated through these projects. Nutraceutical enhancements of foods, biopreservation, stability of phytochemicals, health promoting polysaccharides of cereals are some of the thrust areas in research. The department has a well established Pilot Plant for processing of foods to test the technology developed in the labs and to train students, scholars and entrepreneurs.

### Registration

Interested persons are required to send their duly filled registration form in prescribed format at email: phytocon.2018@gmail.com on or before 5<sup>th</sup> July, 2018. Registration forms without transaction details of fee will not be accepted.

The registration fee should reach the organizing committee before 5<sup>th</sup> July, 2018. Abstracts of only registered participants will be considered for their presentation in the symposium. Registration fee can be paid in the form of bank draft in favour of Prof. F. A. Masoodi, Convener of symposium payable at Hazratbal, Srinagar or directly transferred to the symposium account. The details of fee are as under:

#### A. Registration Fee Details:

#### B. Accommodation Charges

Category	Amount (Rs)	Category	Amount (Rs)
Academicians, Scientists, Researchers	1000	Guest House (Single room)	650/day
Students/Scholars	500	Guest House (Shared room)	500/day
Industry & Corporate	1200		

### Bank Details:

Bank	J & K Bank
Branch	Hazratbal branch
Account No	0007040500000308
IFSC code	JAKA 0 NASEEM
MICR code	190051042

No registration form without transaction details of fee will be accepted.

#### Transaction Details Required:

UTR No. (If transferred from banks other than J & K Bank)

Scroll & transaction No. (If transferred from J & K Bank)

Transaction No. (If transferred online)

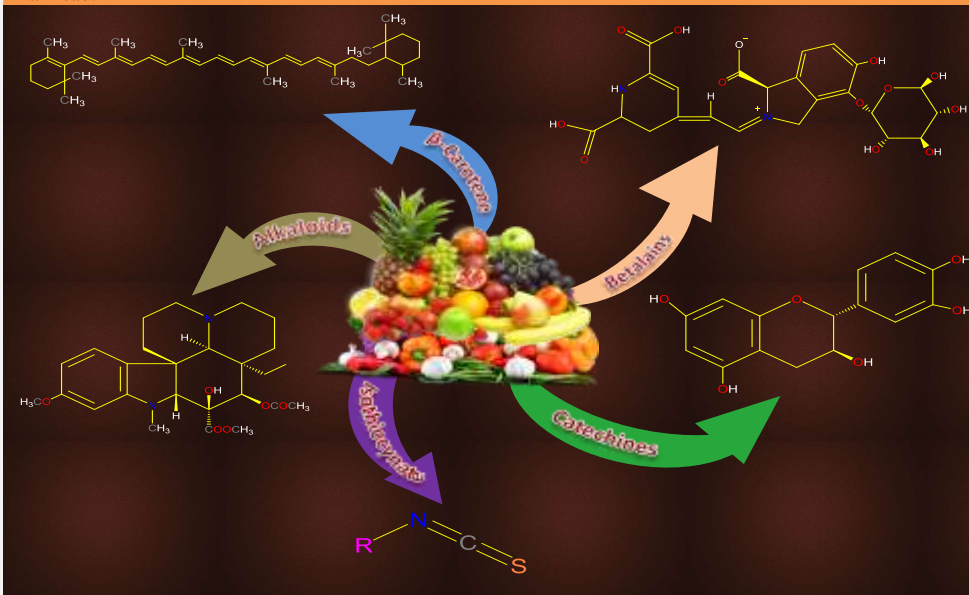
### Advertisement (Sponsorship)

Sponsor logo, contact details and description (<150 words) will be published on symposium proceedings in the form of coloured, black & white, half and full advertising page. Sponsor poster sized 3/ x 5/ (maximum) will be displayed in the conference room. Applications are accepted on a first-come first-served basis upto 1<sup>st</sup> July, 2018.

Advertising Type	Charges (Rs)
Half page	3000
Full page	5000
Poster display	5000

### Location of University

The University campus is located near the most venerated Hazratbal shrine, overlooking the Western side of the famous Dal Lake. The University is accessible by air and also by a picturesque, road connectivity via Jammu-Srinagar National Highway. The University is at a distance of 10 Kms from Tourist Reception Centre (TRC/City Centre), 25 Kms from the Srinagar Airport and about 305 Kilometres from Jammu Tawi railroad.



### Contact Us

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