

THE OPEN

QUARTERLY

i/iv - 2020



32nd General Convocation of OUSL

WITH THE CONTENT



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New Frontiers
for Learners

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THE OPEN QUARTERLY

i/iv - 2020

THE OPEN UNIVERSITY OF SRI LANKA

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Due to the constraints that were born with the current Corona crisis, we took a conscious decision to make the OPEN Quarterly digital. As temporary as this decision might be, it allowed us to respond to the newest happenings of OUSL swiftly. Our main story in this first digital issue is the Convocation. From a student's perspective, here is a milestone in life, the moment when all the efforts undertaken on behalf of intellectual curiosity and satisfaction become an objective reality. For university staff, this is a deep reflection of their efforts to facilitate, moderate and nurture intellectual growth of a given group of students. A mirror of the process of teaching and learning, one could assume. Thus, beyond the glamor glory and joy, the convocation holds deeper meanings for us, and we assume that our coverage of the event will encourage contemplation and deliberation among our readers.

Stay healthy.

Lal M.

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Opening New Frontiers for Learners

32nd General Convocation of The Open University of Sri Lanka

The 32nd General Convocation of OUSL conferred 3,688 degrees to our postgraduate and undergraduate students. Two doctoral students from the disciplines of Humanities and Social Sciences and Education graduated along with a student from the Faculty of Natural Sciences who obtained a Master of Philosophy.

The General Convocation was held as two events. The foremost event saw Master's and undergraduate degrees being conferred from the faculties: Humanities and Social Sciences (Laws in Criminal Justice Administration, English & English Language Teaching, Development Studies & Public Policy), Education (Special Needs, Drama & Theater and Education in the Natural Sciences), Faculty of Engineering Technology (Engineering Technology & Software Engineering), Faculty of Natural Science (Science), and the Faculty of Management (Human Resources, Business Administration and Public Administration). One of the highlights of this event was the awarding of sixteen gold medals and six prizes to the brightest of our students.

Event two of this ceremony will be held later for the students of the Postgraduate Institute of English and the Faculty of Health Sciences.

"The graduate teachers who are untrained have to secure training and the Open University does a valuable service by offering the Post Graduate Diploma in Education to the untrained graduate teachers."



The first phase of the convocation was ceremoniously presided over by the Chancellor, OUSL Deshamanya Vidyajoti Prof. Colvin Goonaratna. The event was led by the Vice Chancellor Prof. S. A. Ariadurai, the Registrar Mrs. Vindya Jayasena, the Directors, Deans and the academic staff of the Faculties. The distinguished Guests of Honour at the two-day event were eminent Professor Sarath Kotagama - Emeritus Professor Environmental Science, University of Colombo and Professor Sarath Abayakoon, Former Vice-Chancellor of the University of Peradeniya and Dr. Upali M Sedere, Rector & CEO of Sri Lanka International Buddhist Campus.

Quality Education for a Knowledgeable Society

Addressing the convocation at the session in which engineering degrees were awarded, Professor Sarath Abayakoon reflected on the theme "Quality Education for a Knowledgeable Society." The main focus of his speech was the quality of the university output. The need is to create students who could meet the challenges of the local and global contexts. This would demand the university to pay extra attention to the notion of KSA, or Knowledge, Skills and Attitude of the undergraduates. The KSA model should be a one of the defining criteria of curriculum designing of the universities, he emphasized.

Teacher as a Professional

Dr. Upali M Sedere, addressed the convocation at the session held for the awarding of Postgraduate Diploma and Master's in Education and he emphasized on the criterion needed to become a teaching professional. "Those who graduate today with Masters Degrees have to realize the importance of educational research to overcome some of the limitations that the act of dissemination face. Many of the educational research done in Sri Lanka are rather conventional. It is rarely one would see even a PhD dissertation of high standard. Many studies are simply descriptive studies that follow explicit knowledge. The world is looking for implicit and tacit knowledge. "Tacility" is a new word that we need to

encourage in learning. Of course, the traditional examination has no way of assessing tacitly and implicit learning outcomes. These are the challenges that every one of you should experiment with and explore,” he suggested.

He further stated that “the graduate teachers who are untrained have to secure training and the Open University does a valuable service by offering the Post Graduate Diploma in Education to the untrained graduate teachers. The blended mode that the Open University uses has its strengths. Many nations today, provide continuous professional training to teachers on-line and the Open University has the high potential to expand its service to all teachers in schools to up-grade their knowledge and skills through on-line learning systems. I do not see these happening in other state universities. All teachers today have to have the e-competence to meet the challenges of the world”.

Dedication and Conviction

Prof. Sarath Kottagama emphasised that the secret behind his academic success was “dedication, conviction in science and its approach, in the philosophy of giving and serving with no strings attached. I know this is difficult, but yes it has

rewards that require commitment and some times at difficult times. The effort is purely to be “Human”.” He paid tribute Nalini Ratnasiri and J N O Fernando, who encouraged him to join the Open University system in 1984, and provided all the support to make the best use of this system for the maximum level, breaking away from many conventional approaches. He was able to make the real purpose of university education methodology by decentralizing the notion of reading for a degree from the comforts of a student’s home.

Prof. S.A. Ariadurai, Vice Chancellor in his address stated that education was a lifelong pursuit and the Open University offered the opportunity to learn at any given point in life. He emphasised on the Open and Distance Learning and online learning which are the future mode of teaching and learning. He congratulated all the graduates whom the university has empowered with a valuable degree and encouraged them to contribute to the strengthening and the building of the nation.

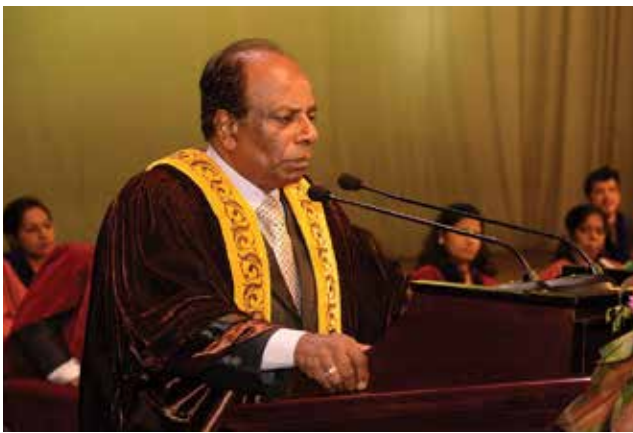
*Dr. Indika Bulankulame
Director Public Relations*

	PG Degrees / Postgraduate Diplomas / Degrees	In Person	In Absentia
1	Degree of Doctor of Philosophy	03	--
2	Degree of Master of Philosophy	01	--
3	Degree of Master of Laws in Criminal Justice Administration	23	03
4	Degree of Master of Technology	05	--
5	Degree of MBA in Human Resource Management	30	01
6	Degree of Master of Education	212	08
7	Commonwealth Executive Master of Business Administration/Public Administration	52	01
8	Degree of Master of Arts in Development Studies & Public Policy	07	01
9	Post Graduate Diploma in Education	1863	564
10	Post Graduate Diploma in Technology	14	03
11	Post Graduate Diploma in Development Studies & Public Policy	03	--
12	Post Graduate Diploma in Human Resource Management	20	01
13	Degree of Bachelor of Technology Honours in Engineering	177	01
14	Degree of Bachelor of Industrial Honours	59	01
15	Degree of Bachelor of Software Engineering Honours	17	--
16	Degree of Bachelor of Science	480	07
17	Degree of Bachelor of Science Honours	07	--
18	Degree of Bachelor of Arts Honours in English & English Language Teaching	21	01
19	Degree of Bachelor of Arts in English & English Language Teaching	20	--
20	Degree of Bachelor of Education (Natural Sciences)	08	--
21	Degree of Bachelor of Education (Drama & Theatre Education)	16	--
22	Degree of Bachelor of Education Honours in Special Needs Education	52	01
23	Degree of Bachelor of Education in Special Needs Education	04	01
	TOTAL	3094	594

32nd General Convocation of OUSL



32nd General Convocation of OUSL



32nd General Convocation of OUSL



A New Department at the Faculty of Humanities & Social Sciences

Inauguration of the Department of English Language Teaching (DELT)



The inauguration ceremony of the newly established Department of English Language Teaching (DELT) was held on 20th February, 2020 at the Faculty of Humanities and Social Sciences. The ceremony was attended by the Guest of Honour, Senior Professor Marie E. S. Perera, Department of Humanities Education, University of Colombo and Director - NEREC, Vice Chancellor, OUSL, Prof. S.A. Ariadurai,



The establishment of the DELT is a major initiative to enhance the English language skills of both undergraduate and postgraduate students of the OUSL

Dean of the Faculty of Humanities and Social Sciences, Dr. S.N. Morais, the founding head of the DELT, Dr. Anoma Satharasinghe, Registrar, Mrs. Vindya Jayasena, Head, Department of Language Studies, Dr. Niroscha Abeyasekera, and other distinguished invitees.

The keynote address was delivered by the Guest of Honour, Senior Professor Marie E. S. Perera.

The establishment of the DELT is a major initiative to enhance the English language skills of both undergraduate and postgraduate students of the OUSL. It will also cater to the English language requirements of a wider population in the country. OUSL achieves a milestone this year as Sri Lanka's premier Open and Distance Learning university celebrates its 40th year.



A New Department at the Faculty of Education

Department of Educational Leadership and Management



As OUSL celebrates its 40th anniversary this year, the Faculty of Education, which was established as OUSL's fourth faculty in 2003, declared open its fourth department, the Department of Educational Leadership and Management. This is the first department that will teach Educational Leadership and Management in the Sri Lankan University system. In addition, it will be conducted in the Open and Distance learning mode which is a landmark in the history of education in Sri Lanka.



The Department of Educational Leadership and Management was established through the government gazette notification of 7th January 2020 and was ceremonially declared open on the 30th of January 2020. The three departments that

The main objective of the new department will be to strengthen the structure of educational management in Sri Lanka through the development of the management skills of Principals, Directors of Education, and educationalists at various levels in the colleges of Teacher Training and in the National Colleges of Education.



comprised the Faculty of Education prior to the inauguration were the Departments of : Secondary and Tertiary Education, Early Childhood and Primary Education, and Special Needs Education.

The Department of Leadership and Management was ceremonially declared open in the presence of the Vice Chancellor of OUSL, Professor S. A. Ariadurai, Dean of the Faculty of Education, Prof.



Shironica Karunanyake, Head of the Department, Mrs. Chitrangani Hewapathirana and Mr. W.M.S. Weerakoon, Senior Lecturer, Dept. of Leadership and Management, Deans of the other faculties and other senior staff of the university.

Professor Prasad Setunge of the Faculty of Education, University of Peradeniya, delivered the Key Note address.



The main objective of the new department will be to strengthen the structure of educational management in Sri Lanka through the development of the management skills of Principals, Directors of Education, and educationalists at various levels in

the colleges of Teacher Training and in the National Colleges of Education. The Department of Leadership and Management will offer the Post Graduate Diploma in Educational Management,



Bachelor's Degree in Educational Management and school-based management programs conducted in the Open and Distance Learning method of education.



Inauguration of the EUSL Energy Project 2020 - 2023



The inaugural meeting of the Europe Sri Lanka Capacity Building in Energy Circular Economy which was coordinated by OUSL was held on 11th of February 2020. The aim of the project is to facilitate digital education, with the high-level input of renowned EU universities, to create a new Master's program on Energy Technology that is primarily focused on the energy-related challenges in Sri Lanka. The project is a partnership with five universities from the European Union and four universities from Sri Lanka.



The event was presided by the Chief Guest Senior. Professor Sampath Amaratunge, Chairman, University Grants Commission of Sri Lanka, Professor S. A. Ariadurai, Vice Chancellor, OUSL/ the

"The project aims to create a new Master's degree program on Energy Technology in an environmental and financially sustainable manner and offer skills and competences on how to develop, and run, common online, digital degree programs between universities in developed and emerging-economy countries"

EUSL-Energy Project Coordinator, Professor K.K.C.K. Perera, Vice Chancellor University of Moratuwa and Mrs. Tanja Gonggrijp, the Ambassador of Netherlands to Sri Lanka. Mr. Ruchira Abeyweera, EUSL-Energy Project Manager, faculty members of OUSL along with other faculty members from the partnering universities, University of Peradeniya,



University of Moratuwa, University of Ruhuna and the University of Twente Netherland, University Royal Institute of Technology (KTH)- Sweden, University Centrale Supélec- France, University Learnify Sweden and Futurelearn - UK participated in this inaugural meeting.

The project aims to create a new Master's degree program on Energy Technology in an environmental and financially sustainable manner and offer skills and competences on how to develop, and run, common online, digital degree programs between universities in developed and emerging-economic nations. It also aims to develop perspectives in entrepreneurial education using technical curricula to create a new type of university-industry collaboration through "challenge-based real-life cases" using the implementation of student-centered education with the teachers becoming coaches and mentors, instead of sole providers of knowledge.



Immediate beneficiaries of this programme will be teachers who will further enhance their international profile and have access to educational material. Students will get access to a much broader, varied and diversified view of the energy sector. University faculty, administrators, leadership and legislators in

Sri Lanka will have the opportunity to identify possibilities for other joint programs. Professionals in the renewable energy sector, public utilities officials and politicians in Sri Lanka will have access to a greater knowledge in energy management.



At policy level it hopes to improve energy efficiency and conservation, enhance self-reliance and care for environment through dissemination of knowledge and create awareness among the general public by trained personnel in this sector, Further, it will



enhance the share of Renewable Energy by creating a concern among policy makers about the impact of non-renewable energy sources and strengthening the governance in the energy sector, thus providing opportunities for innovation and entrepreneurship.



Launch of the Master of Science in Structural Engineering Programme



Master of Science in Structural Engineering, offered by the Department of Civil Engineering of OUSL was ceremonially inaugurated on 28th February 2020 in the presence of the chief guest Vice-Chancellor, OUSL, Prof. Ariadurai and several distinguished guests of honour, Deans of the faculties, members of the departments of the faculty, and prospective students of the programme.

The event was graced by the three distinguished keynote speakers, Senior Professor Priyan Dias, Department of Civil Engineering, University of Moratuwa, Senior Professor Ranjith Dissanayake, Secretary to the State Ministry of Urban



This is a unique postgraduate programme which will enable students to link up with the academics and practicing experts to bridge the gap of real applications in structural engineering.

Development, from University of Peradeniya, and Professor Priyan Mendis, Director Australian Research Centre for Advanced Manufacturing of Prefabricated Modular Housing Australia, from University of Melbourne.



enhance the students' knowledge of application in sustainable modern practices. A total of 36 students were selected from various government and private organizations from over 100 applications received through a newspaper advertisement.



This is a unique postgraduate programme which will enable students to link up with the academics and practicing experts to bridge the gap of real applications in structural engineering. This programme consists of 62 SLQF credits (2 academic years) placed in SLQF levels 9 and 10, including the research dissertation. Further, each course will be delivered by three resource persons—from OUSL, another state university and an industrial expert—to



Awards Ceremony of the Faculty of Natural Sciences



Faculty of Natural Sciences held their awards ceremony on 23rd January 2020 at the Main Conference Hall. This is a collaborative event organized by the Dean's office and the four societies: BotSoc (Department of Botany), Buckyball (Dept. of Chemistry), Spectrum (Dept. of Physics) and ZooNet (Dept. of Zoology). The chief organizer of the event, this year is Buckyball Society, the oldest society of the faculty. A total of 90 students were recognized at this event for their outstanding performance in the main disciplines during the academic year 2017/18.



***Professor G M K B
Gunaherath award
for Organic
Chemistry, Professor
J N Oleap Fernando
Scholarship, three
C-60 (Buckyball)
Scholarships,
Buckyball Science
award for best Level
3 student and 16
subject excellence in
chemistry awards.***

The following awards were presented:

- Dean's List awards - 30
- Faculty awards: Nalini Rathnasiri Scholarship and Kandiah Memorial Scholarship for Botany.
- BotSoc Awards for excellence in Botany – 4



- Buckyball awards:

Professor G M K B Gunaherath award for Organic Chemistry, Professor J N Oleap Fernando Scholarship, three C-60 (Buckyball) Scholarships, Buckyball Science award for best Level 3 student and 16 subject excellence in chemistry awards.



- Spectrum Awards for excellence in physics – 21
- ZooNet awards for excellence in Zoology – 12

The Acting Vice Chancellor of the University of Sri Jayawardenapura, Prof. Sudantha Liyanage and the Vice Chancellor of OUSL, Professor S. A. Ariadurai graced the occasion as the Chief Guest and the Guest of Honor.



The Opening Ceremony of iTeam, Department of Computer Science

In collaboration of the Department of Computer Science, under the guidance of the former head of the department Mr. Duminda De Silva, the department's society was launched on January 29, 2020 as iTeam for students. The Chief Guest at the occasion was Senior Professor J.C.N. Rajendra, Dean of the Faculty of Natural Sciences, and several distinguished guests including the Deans of the faculties, Heads of Departments and Senior Lecturers.

Following the ceremonial rituals, the welcome speech was delivered by the head of the department, Mr. Duminda De Silva. Subsequently there was the speech of the distinguished guest, Professor Rajendra followed by the speeches of Professors and Senior Lecturers. The vote of thanks was delivered by Ms. Suresha Perera, the newest member of the Computer Science Department.

A large number of undergraduates who were interested in the computer industry took part in the event and all of them were excited to work with iTeam.





The program was conducted by Ms. Bhagya Rupasinghe, a renowned student of OUSL who is currently working as an Academic Coordinator in the Department of Computer Science. A short talk on the success as a student of OUSL by Mr. Saliya Wickramasinghe who is currently working as a Demonstrator in the Department of Computer Science, was also an attractive feature of this event.



A large number of undergraduates who were interested in the computer industry took part in the event and all of them were excited to work with iTeam. All the guests who participated on the day congratulated the future of iTeam. With all the commendations, the function of the IGM was concluded. Subsequently, the new office bearers were elected with the participation of the students.



Change Your Plate

Change Your Fate

Ayurvedic Diet



Ayurveda is defined as the science of living a long and healthy life. According to Ayurvedic literature, Lord Brahma's is considered as the central depository of all knowledge on Ayurveda and those traditions were written down by Sushruta Maharishi in 6000 BCE. Ayurveda not only combines herbs, but also astronomy, mantra, physiognomy and etc. Though Siddha Ayurveda is the popular mode of practice in Asian countries, it is now gaining ground in Europe. Yunani Ayurveda is popular in the Middle-East.

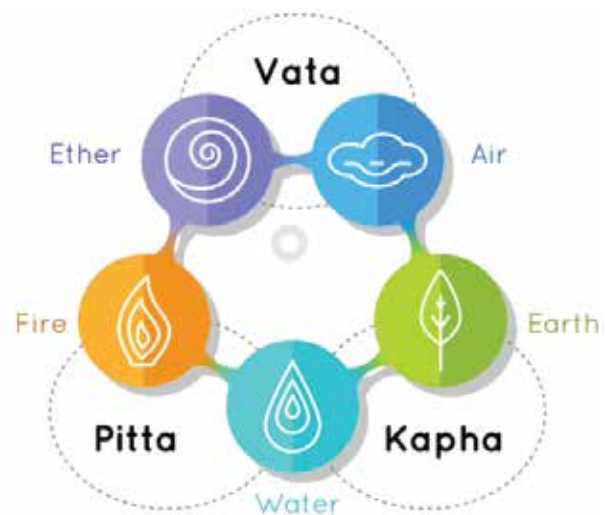
Ayurveda is unique because it:

- offers remedies - not to the disease but to the root of disease
- caters to individuals -- treatments vary from person to person depending on their prakruthi, life style, mentality, behavior, diet and etc.
- uses natural substances to cure diseases
- shares strong spiritual relationship with Hinduism and Buddhism

According to Ayurveda, diet is one of the foremost factors which decide your lifespan because the diet that we consume varies from one persons to another.

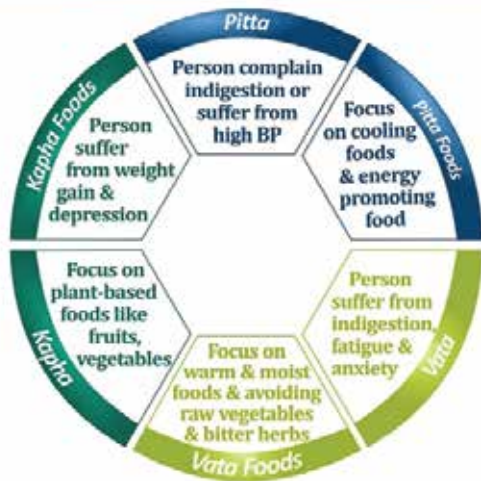
Basic concepts in Ayurveda:

1. **Five great elements (pancha mahabhutus) :** Constitution of the entire universe - **Akash** (ether-space), **Vayu** (air-gases), **Thejo/Agni** (fire-energy), **Aapo/Jal** (water-liquids), **Prithvi/Bhumi** (earth-solids)



2. **Three Dosha :** Abundances of the constitutions - **Pitta** (Thejo + Aapo), **Kapha** (Prithvi + Aapo), **Vatta** (Akash + Vayu).

- **Prakruthi** is known as the natural dosha of our body. Generally, everybody has at least two doshas as prakruthi.
- Three doshas change with time of the day, experience of food, season of the year, and our age respectively, and are given below.



- ◆ Pitta - 10-2 a.m. and p.m. - while eating - summer - young age
- ◆ Kapha - 6-10 a.m. and p.m. - before eating - spring - childhood
- ◆ Vata - 2-6 a.m. and p.m. - after eating - winter/autumn - adulthood

3. Three Gunas : Natural energies stored in the body - **Sattva** - (Kapha prominent, calm, quiet, focused, wise, honest), **Rajas** - (Pitta prominent, restless, hyperactive, agitated, passionate, emotional), **Tamus** - (Vatta prominent, sleepy, lazy, destructive, ignorant, weak, unclean)

4. Six Rasas : Essence/tastes - Sweet (aapo + prithvi), Salty (aapo + thejo), Sour (prithvi + thejo) , Pungent (vayu + thejo), Bitter (akash + vayu), Astringent (vayu + prithvi)

- ◆ Pitta - consume sweet, bitter, astringent foods - avoid sour, salty and pungent foods
- ◆ Kapha - consume pungent, bitter and astringent foods - avoid sweet, sour and salty foods
- ◆ Vatta - consume sweet, sour and salty foods - avoid bitter, pungent and astringent foods



Ayurvedic aspects of foods:

1. Prakruthi - Nature of food - The nature of food can change with the other factors.

- **Sweet :** bananas, dates, mangoes, beets, cooked carrots, cucumber, olives, corn, rice, wheat, tofu, almonds, cashews, coconut, gee, milk, eggs, beef, pork, salmon, all sweets, mint, vanilla, fennel
- **Salty :** celery, seaweed, tuna, cottage cheese, table salt, soy sauce, tamari
- **Sour :** grapefruit, lemon, lime, pickles, tomatoes, butter, cheese, yoghurt, alcohol, vinegar, garlic, most fermented foods, dough breads
- **Pungent :** chilies, garlic, leeks, onions, raw spinach, most spices, mustard seeds
- **Bitter:** bitter melon, bitter gourd, leafy greens, egg plants, sesame seeds, coffee, cocoa, cumin
- **Astringent :** apples, avocado, broccoli, cabbage, green beans, most raw vegetables, pasta, popcorn, chicken, coriander, rosemary, nutmeg

2. Karma - Processing of food - The way of preparing food affects the change in prakruthi of the food. For example, gee has sweet taste while yoghurt and cheese consist of sour taste. Furthermore, old rice is lighter and easy to digest than new rice. It is good to eat raw fruits than processed fruity nectars as we can get their original nutritional value.

3. Samyoga - Combination of foods - This is a very considerable fact as incompatible, opposite food combination which is known as viruddha samyoga causes many poisonous diseases such as blindness, fainting, intoxication, stiffness in neck, varieties of anemia, indigestions, various skin diseases, diseases of intestines, swelling, gastritis, fever and infertility. Higher toxicity may cause death.

e.g.: viruddha samyoga - fish + milk, heated honey, honey + cow's gee in equal proportions, hot water after taking honey, pungent substances in summer and cold substances in winter, taking sweet taste end of the meal and bitter and pungent at the starting of meals, consuming cold water immediately after having hot tea or coffee, green or black tea with milk, milk + yoghurt

4. Rashi - Quantity of food - Heavy foods should be taken in lesser amounts for proper digestion though eating lighter foods in higher quantity is somewhat harmless. For true satisfaction, you may fill 2/4 of your stomach with solid and 1/4 with liquid. The other 1/4 should be kept empty to move vatta, pitta and kapha. You may drink water while having meal which acts as nectar, however, for proper digestion leave the stomach 3/4 full. Drinking water immediately after eating may create digestion problems.

5. Desha - Influence of region on food - In colder countries, one can consume heavy foods which are difficult to digest but better to avoid spicy food. In general, fruits, vegetables and nuts are produced seasonally. Therefore, it is better to stay in synergy with nature rather than eating incompatible foods.

6. Kala - Influence of time of eating - Heavier meal is not suitable at night as we are resting physically and mentally.

7. Upayoga samstha - Rules of diets - People should eat only when they are hungry. Eating when you are not hungry or eating without a specific schedule may cause digestion problems. In ancient times, having meal considered as ritualistic process as contacting God. Eating without a conscious mind can be harmful to you. Breakfast should be taken before 8 a.m., lunch before 1 p.m. and dinner before 7 p.m. for proper digestion. Every day you should drink 3-4 L of water.

In Ayurveda, nutrients quantity of once's diet measures according to a cooking cup (patha). One cooking cup consists of 8 ounces or 240 ml. Here is a balanced diet:

- ◆ Carbohydrates - 1-2 cups - 400 kcal - rice, potatoes, wheat foods
- ◆ Protein - 1/2 cups - (75 - 150) kcal - soy, fish, dhal, meat (cooked with milk or oil)
- ◆ Vegetables - 1 cup - 130 kcal - cooked with milk or oil
- ◆ Green leaves - 1 cup - 25 kcal - salad
- ◆ Fruits - 1/2 cup - 25 kcal - fresh

8. Upayuktha - Person who consumes food -

Influence of a specific food varies from person to person. His/her prakruthi, dosha, habitual behavior, desire for food and many more things influences him or her. Curd is a heavy food and not suitable to eat in the night. But in some regions in India, people eat a small amount of curd before they go to bed. It is not harmful to them as they are used to do it for a long time. Likewise, some people cannot consume spicy food without tearing up whilst some can eat a lot of sweets.

Food is the source of energy for every living being. If you misuse the power of energy, it makes you suffer. Hence, your plate of food decides your fate.

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මද්‍යකාරීය පාන ශරීරයට හිතකර ද?



පිපාසය සංසිඳවීම, හැවුම් බවක් ලබා දීම, උත්තේජනය කිරීම සහ පෝෂණය ලබා දීම සඳහා භාවිත කරනු ලබන සියලු බීම වර්ග පාන (beverages) ලෙස හඳුන්වනු ලබයි. තේ, කෝපි ආදිය උණුසුම් පානයන් (hot drinks) ලෙසත්, ගැන්ටා, ස්ප්‍රයිට් වැනි පැණි බීම හා පළතුරු බීම ආදිය සිසිල් පානයන් (soft drinks) ලෙසත්, කිරිකෝපි, රස ගැන්වූ කිරි හා යෝගට් බීම ආදිය ක්ෂීරමය පානයන් (milky drinks) ලෙසත්, බියර්, වයින, අරකකු, රා ආදිය මද්‍යකාරී (alcoholic) පාන ලෙසත් වර්ගීකරණය කළ හැකිය. මද්‍යකාරී පෙරීම, මානව ශිෂ්ටාචාරයේ පැවති පැරණිතම කර්මාන්තවලින් එකකි. සෑම රටකටම අනන්‍ය වූ සාම්ප්‍රදායික මත්පැන් වර්ගයක් ඇති අතර, උදාහරණ ලෙස ජපානයේ “සකේ”, රුසියාවේ “වොඩ්කා”, ස්කොට්ලන්තයේ “ස්කොෂ් විස්කි” හා ඇයර්ලන්තයේ “ගිනස්” දැක්විය හැකිය. යුරෝපීය ආක්‍රමණවලට පෙර, ශ්‍රී ලාංකිකයන් භාවිත කළ එකම මද්‍යකාරී පානය වූයේ පොල් හෝ කිතුල්වලින් සාදන ලද “රා” ය. නමුත් අද වන විට “අරකකු” මෙරට වෙළෙඳ සත්කාරය බවට පත් වී ඇත.

මද්‍යකාරී පාන සුළු ප්‍රමාණවලින් ඖෂධීය වැදගත්කමින් යුතු කටයුතුවල දී භාවිත කරන්නේ ඒවායේ ඇති ප්‍රතිඔක්සිකාරක, නිරවින්දක, ප්‍රතිජීවක සහ රුධිරය කැටි නොගැසීම වැනි ගුණාංග හේතු කොට ගෙන ය. නමුත් හානි වෛද්‍ය මතය වන්නේ මද්‍යකාරී සුළු වශයෙන් හෝ භාවිත නොකළ යුතු බවය. මෙයට හේතුව ලෙස ඔවුන් පෙන්වා දෙන්නේ මෙම පානයන් පිළිකා ඇතුළු රෝග රැසකට හේතු කාරක විය හැකි බැවිනි.



මද්‍යකාරී පාන හිෂ්පාදනය

එතනෝල් ප්‍රතිශතය අනුව මද්‍යකාරී පාන කොටස් තුනකට වර්ග කළ හැකිය. බියර්වල එතනෝල් ප්‍රතිශතය 5% පමණ වන අතර වයිනවල ඇත්තේ 10% ආසන්න ප්‍රතිශතයකි. පීන්, වොඩ්කා, විස්කි, රම්, බ්‍රැන්ඩි වැනි ස්ප්‍රිතු වල එතනෝල් ප්‍රතිශතය 40% පමණ වේ. රසය, පැහැය, එතනෝල් ප්‍රතිශතය සහ ප්‍රමිතිය වෙළඳ නාමයෙන් නාමයට වෙනස් වේ. නමුත් සියලුම මද්‍යකාරී පාන හිෂ්පාදනය කරන මූලික පියවර සමාන වේ.

අමුද්‍රව්‍ය → නලප සෑදීම → පැසීම → ආසවනය → පලවීමට තැබීම (maturation) → ඇසුරුම් කිරීම

කෙසේ වුවත් මද්‍යකාරී පානවල තත්ත්වය රඳා පවතින්නේ අමුද්‍රව්‍යවල සීනි ප්‍රමාණය, පැසීමට තැබූ කාලය, අපද්‍රව්‍ය ප්‍රමාණය සහ ආකලන (additives) ප්‍රමාණය ආදිය මතය.

මද්‍යකාරී පාන භාවිත කිරීම සෞඛ්‍යයට කෙතරම් හිතකරද?

මද්‍යකාරී පාන භාවිත කිරීම සෞඛ්‍යයට හිතකර නොවේ. මද්‍යකාරී පාන භාවිත කිරීම සීමා කිරීම සඳහා බ්‍රිතාන්‍ය රජය විසින් සෞඛ්‍ය ආරක්ෂිත සීමාවක් පනවනු ලැබ ඇති අතර, එය සතියකට එකක 14 වේ. අප භාවිතයට ගන්නා විදුරු වර්ගය අනුව එම එකක ගණන වෙනස් වේ. දළ වශයෙන් සප්‍රිතු මිලි ලීටර් 25ක් එකක 1කි, වයින මිලි ලීටර් 175ක් එකක 2කි, බියර් මිලි ලීටර් 500ක් එකක 2.5කි. සප්‍රිතු අවුත්ස 1ක් මිලි ලීටර් 30 කි. ෂෝට් (shot) 1ක් අවුත්ස 1.5 වේ.

මද්‍යකාරී පාන හේතු කොට ගෙන සිරුරට විය හැකි හානි

මද්‍යකාරී අධික ශක්ති (කැලරි) ප්‍රමාණයකින් සමන්විත වේ. මෙම ශක්ති (කැලරි) ප්‍රමාණය සිරුරට දරා ගත නොහැකි බැවින් සියලු පද්ධතීන් උඩු යටිකුරු වේ. එසේ හෙයින්, පළමුව සමතුලිතව ගිලිහී යන අතර අපේ සහ දෑත් අතර සම්බන්ධතාව ව්‍යාකූල වේ. ඉන් පසු බහු කාර්යය හැකියාව සහ දරා ගැනීමේ හැකියාව අඩු වේ. කෙසේ වෙතත්, සිරුරේ පරිමාව හෙවත් සිරුරේ මාංශ හා මේදය ඇති ප්‍රමාණය අනුව මද්‍යකාරී දරා ගැනීමේ හැකියාව වෙනස් වේ. අධික දේහ බරින් යුතු පුද්ගලයන්ට මද්‍යකාරී වැඩි ප්‍රමාණයක් දරා ගැනීමේ හැකියාවක් ඇත. එනම්, සිරුර අඩු ජල ප්‍රමාණයකින් යුක්ත වේ නම් එම පුද්ගලයා අන් අයට සාපේක්ෂව අධික වේගයකින් මද්‍යකාරී පානය කළ හැකි වන්නේ මද්‍යකාරී සිරුර විපලනය කරන බැවිනි. තව ද, වැඩි ආහාර ප්‍රමාණයක් ගත නොවන මද්‍යකාරීවල බලපෑම වඩා හොඳින් දරා ගත හැකි බව පර්යේෂකයන් විසින් අනාවරණය කරනු ලැබ ඇත. නමුත් ඔබ ආහාර ගැනීමට පෙර මද්‍යකාරී පානය කළහොත් එය ආහාර රුචිය වැඩි කිරීමට හේතු විය හැකිය.

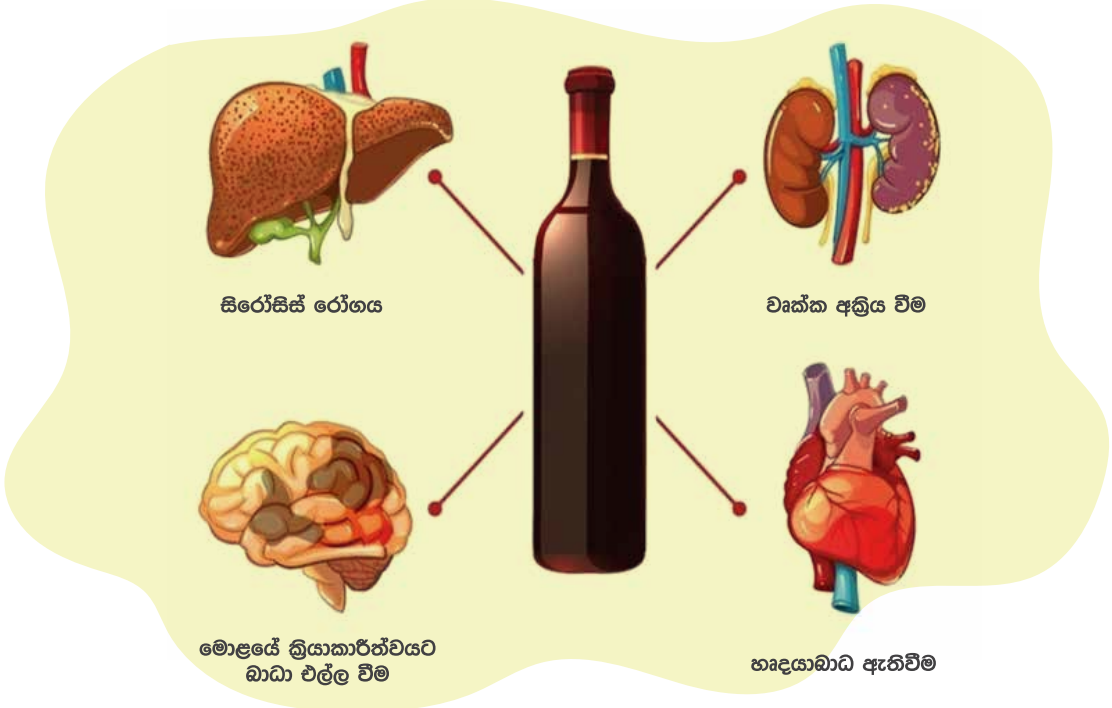
රතු වයිනවල අධික පොලිෆීනෝල ප්‍රමාණයක් අන්තර්ගත වේ. එහෙයින් එය අඳුරු පැහැති වේ. මෙම රසායනික සංයෝගය රුධිර නාලිකාවල විෂකම්භය වැඩි කරමින් රුධිර පීඩනය අවම කරන නමුත්, එය පානය කිරීමට තරම් සාධාරණ හේතුවක් නොවන්නේ වෙනත් ආහාර මගින් එය ලබා ගත හැකි බැවිනි.

පොලිෆිනෝල සහ රතු වයින් අතර ඇති සම්බන්ධතාව පොලිෆිනෝල යනු මිදිවල පොත්තෙහි පවතින වයින් සඳහා පැහැයක හා රසයක ලබා දෙන ස්වභාවික සංයෝගයක් වේ. රතු වයින්වල අධික පොලිෆිනෝල ප්‍රමාණයක් අන්තර්ගත වේ. එහෙයින් එය අදුරු පැහැති වේ. මෙම රසායනික සංයෝගය රුධිර නාලිකාවල විෂකම්භය වැඩි කරමින් රුධිර පීඩනය අවම කරන නමුත්, එය පානය කිරීමට තරම් සාධාරණ හේතුවක් නොවන්නේ වෙනත් ආහාර මගින් එය ලබා ගත හැකි බැවිනි. උදාහරණ ලෙස මලි ලීටර 175 වන සමමත වයින් විදුරුවක ඇති පොලිෆිනෝල ප්‍රමාණයම චොලනට් (Walnut) ග්‍රෑම් 24 හෝ තේ මලි ලීටර 360 හෝ ආමන්ඩ් (Almond) හෙවත් රට කොට්ටන් ග්‍රෑම් 158 ප්‍රමාණයකින් ලබා ගත හැකි වේ. තව ද අදුරු පැහැති මද්‍යසාරීය පාන නිසරදය ආදී ලක්ෂණ වැඩි කිරීමට හේතු වන්නේ එහි අධික සංජානනීය ද්‍රව්‍ය (congener) ප්‍රමාණයක් අඩංගු බැවිනි.

දෛවිකීයන්ගේ මත්පැන් භාවිතය නිසා (ගැබ් ගැනීමට ප්‍රථමව හෝ / සහ මව්කිරි දෙන අවධියේ දී) දරුවන් තුළ රුධිරය ආශ්‍රිත පිළිකා වර්ධනය විය හැකිය.

ස්ත්‍රී දූෂණ, මිනී මරුම් සහ සොරකම් වැනි බොහෝ සමාජ විෂමාවාරවලට මූලික ම හේතුවක් වන්නේ මද්‍යසාරයි. මීට අමතරව මාර්ග අනතුරුවලට ද ප්‍රධානතම හේතුවක් වන්නේ මද්‍යසාර පානය කර රිය ධාවනය කිරීමයි. මේතට ලොල් වූ ජීවිතයකට බොහෝ විට හිමි වන්නේ බේදනීය අවසානයකම පමණි.

මහාචාර්ය කේ. සරත් ඩී. පෙරේරා සහ ඒ. ඩී.නීෂ්‍යා දුල්මිණී
රසායන විද්‍යා දෙපාර්තමේන්තුව
ස්වභාවික විද්‍යා පීඨය



ජීවිත ගිල ගන්නා මිනිසා

ශ්‍රී ලංකාවේ පමණක් නොව තුර්කිය, කොස්ටරිකාව, ඊශ්‍රායලය, ඉන්දියාව, පකිස්තානය, බොම්බිකන් රාජ්‍යය වැනි රටවලින් ද හීනි විරෝධී හා ව්‍යාජ මද්‍යසාරීය පාන පරිභෝජනය කිරීම නිසා අන්ධතාවයට හා ආබාධිත තත්වයට පත්වීම් මෙන්ම බේදජනක මරණයන් ද වාර්තා වී ඇත. බොහෝ හීනි විරෝධී හා ව්‍යාජ එතනෝල් නිෂ්පාදන මෙතනෝල් සමග මිශ්‍ර කරමින් ප්‍රමිතිය අවම කර ඇත්තේ එහි මිල අවම වීමක, ගන්ධයක් හා රසයක් නොමැති වීම යන හේතු නිසාය. අසම්පූර්ණ භාගික ආසවනය නිසා මෙතනෝල් අපද්‍රව්‍යයක් ලෙස ජනනය විය හැකිය. මෙතනෝල් සිරුර තුළ දී ගෝමික අම්ලය බවට බිඳ හෙළීමෙන් විෂ වීම ඇරඹෙන අතර, මේ සඳහා අවම වශයෙන් පැය 6-12 ක් පමණ ගත වේ. ඉන් පසු ගෝමික අම්ලය රුධිරය හරහා සිරුර පුරා සංසරණය වේ. මෙම විෂ මොළයට සහ ඇස්වලට අතිතකර බලපෑම් එල්ල කරන අතර මරණය සඳහා ද හේතු විය හැකිය. ඔබ මත්පැන් පානයකර පැය 12ක් ගත වූ පසුත් වමනය, සිරුරේ අනුභවිකත්වය සහ නිසරදය යන රෝග ලක්ෂණ වලින් පෙළේ නම් වනාම වෛද්‍යවරයෙකු ගේ සහය පැතිය යුතුය. මද්‍යසාරීය පානවලට ඇබ්බැහි වීම මද්‍යසාර භාවිතයේ අදුරුවම පැතිකඩ වේ. මේ නිසා කෙටි කාලීන රෝග (උදා : ව්‍යාකූලත්වය, දෘෂ්ටික ස්නායු ක්‍රියාකාරීත්වය දුර්වල වීම, මනෝභාවය වෙනස් වීම, මතකය අඩු වීම) මෙන්ම දිගු කාලීන රෝග (උදා: හෘදයාබාධ, අධි රුධිර පීඩනය, රුධිර කැටි ඇති වීම, විවිධ වර්ගයේ පිළිකා) හට ගනී. එසේම

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