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جامعة الشارقة
UNIVERSITY OF SHARJAH

COLLEGE OF MEDICINE

NEWSLETTER

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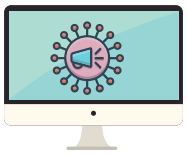
COLLEGE NEWS


VIRAL NEWS


MEDICAL HEROES


STUDENTS' CORNER


STUDENTS' POLLS


DOCTOR'S ORDERS

DEAN'S MESSAGE OF THE MONTH

I would like to congratulate everyone for the New Year and hope that we are writing a new chapter in the development of our college in terms of education, research and clinical training. I am expecting 2021 to be a distinguished year in our achievements.

I would like you all to join me in welcoming the new faculty to our College and wishing them a smooth transition and successful academic year. In addition, the Board of Trustees has approved the 'PhD in Medical Education' program. I have high expectations for the program, and I'm looking forward to its success.

Since COVID-19, the campus has become digital and paperless. The college is currently in the process of implementing a hybrid system. We have brought the students back to campus for Clinical Skills and Practical Sessions, provided they abide by the testing regulations set forth by the college. These changes will bring about exciting opportunities for our College to continue to grow and flourish. An initiative from our college is underway to re-open the University of Sharjah COVID-19 Testing Center. We hope to administer a faster test to cater to the University of Sharjah community; test results would be ready within 6- 10 hours.

December was a busy month of examinations. I was pleased to see we were able to conduct all final examinations on campus. I hope all the hard work paid off and the results reflected all the efforts you've put into the preparation for these exams. I wish the students the best in all their efforts and hope to see them all graduate soon. I would like to thank the faculty and supporting staff for their efforts in preparing and conducting the examinations. There are some excellent events lined up in the next few months and I look forward to seeing participation from students, staff and faculty to ensure we keep our College dynamic and active. Stay safe and stay hard at work.

COLLEGE NEWS

Approval of PhD in Medical Education at UoS

Always at the forefront of continuous and pioneering educational programs, the University of Sharjah has started 2021 by approving the launch of a new program in the College of Medicine – PhD in Medical Education. It is the first of its kind, not only in the country but also in the Gulf Region. The program aims to equip its students with the necessary tools to further develop an innovative curriculum design, as well as research and assessment skills.

Learners will build on existing health professional competencies gained through their professional education. The College of Medicine would like to extend its gratitude to Dr. Mohamed Hassan Taha, Chair of the Medical Education Unit, and Dr. Mohamed Elhassan Abdalla, Former Director of Medical Education Center, and Prof. Esam Agamy – Dean of the Deanship of Quality Assurance, Institutional Effectiveness, and Accreditation - for their significant and committed efforts to kickstart this program and further develop it.

UoS signs MOU with AlJalila Foundation

In December 2020, the University of Sharjah signed a Memorandum of Understanding with the Al Jalila Foundation. It intends to increase the cooperative effort between the two institutions in the areas of medical research and education. This is done in the hopes of fulfilling the joint aim of developing research efforts in the region.

Meeting with Canadian Consul General

Prof. Qutayba Hamid, Dean of the College of Medicine at the University of Sharjah, met with Jean-Philippe Linteau, Consul General of Canada in Dubai and the Northern Emirates, earlier in January 2021.

Webinar - How to do Clinical Research?

The College of Medicine hosted a Webinar programme for 3 CME credits on the topic "How to do clinical research?" on 16th December 2020. The session was moderated by Prof. Mohammed Al-Hajjaj and Dr. Ali Shorbagi.

The list of speakers included Prof. Salah Abusnana, Dr. Maha Saber, Prof. Rifat Hammoudi, Dr. Suhail Al-Amad Prof. Azzam Magazachi, and Prof. Qutayba Hamid. Together, they discussed the importance of clinical research and the steps it involves, from preparing a proposal and obtaining grants to writing the manuscript and publishing it.

UAE Collaborative Research Group Meeting

Held on 16th December 2020, a collaborative research group meeting was organized with the National Institutes of Health (NIH) from the United States to discuss avenues for research in the UAE. The agenda began with an introduction by Dr. Mohamed H. Sayegh, Senior Advisor on MENA Research, and Dr. Gray Handley, Associate Director for International Research Affairs at NIH.
The welcoming ceremony was performed by Prof. Qutayba Hamid and Prof. Alawi Alsheikh-Ali, the Deans of the Colleges of Medicine at University of Sharjah and Mohammed Bin Rashid University, respectively. The team was also joined by Dr. Nawal Ahmed Mohamed Al Kaabi (Sheikh Khalifa Medical City) and Dr. Ahmed Al Hammadi (Tawam Hospital) to discuss the results of the Sinopharm and Sputnik V vaccine trials in the UAE. Direction for future research avenues were positively discussed in a span of two hours.

Pharmacy Competency Framework Project

Prof. Eman Abu-Gharbieh participated in the 'Pharmacy Competency Framework Project' as a member of Pharmacy Leaders in the UAE team. She attended the meeting held at Al Ain University of Abu Dhabi on 30th November 2020. The project was initiated by the Commission for Academic Accreditation.

Faculty Achievements

Grants

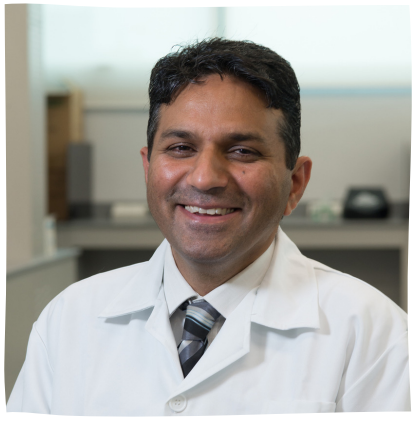
The Sheikh Hamdan Bin Rashed El Maktoum Award for Medical Sciences, a grant amounting to AED 185,000, was presented to Dr. Maha Saber and her co-investigators, Prof. Qutayba Hamid, Prof. Mohamed Al Hajjaj, Prof. Rifat Hamoudi, Prof. Eman Abu-Gharbieh, Dr. Bassam Mahboub, and Dr. Thenmozhi Venkatachalam for a research project titled "Exploring the Relevance of Pharmacogenetics testing in patients with Asthma".

Publications

Dr. Jibran Sualeh Muhammad and his team from the College of Medicine has published research in a high impact Q1 (SJR) medical journal. In this study, he reported a novel link between Estrogen-induced epigenetic modulation of YAP1 in breast cancer cells. Results from this study further enhance our understanding of the carcinogenic effects of estrogen and estrogen receptor-mediated signals in regulating breast cancer.

Muhammad JS, Guimei M, Jayakumar MN, Shafarin J, Janeeh AS, AbuJabal R, Eladl MA, Ranade AV, Ali A, Hamad M. Estrogen-induced hypomethylation and overexpression of YAP1 facilitate breast cancer cell growth and survival. Neoplasia 2021 Jan; 23(1): 68-79., DOI: http://10.1016/j.neo.2020.11.002

Welcome New Faculty



Prof. Naveed Ahmed Khan has recently joined as a Professor of Medical Microbiology in the Department of Clinical Sciences. He has previously held positions at Tufts University School of Medicine, Johns Hopkins University School of Medicine, the University of London, the University of Nottingham, and Aga Khan University, and the American University of Sharjah. He was previously also the Head of Department at Sunway University, Malaysia and the American University of Sharjah.

With research grants of over $3 million, Prof. Khan has produced over 290 peer-reviewed publications, 7 books and 7 chapters, and has mentored over 50 graduate students. In recognition for his research efforts, he has received multiple awards from the UK, the USA, Pakistan, Malaysia, and the UAE.

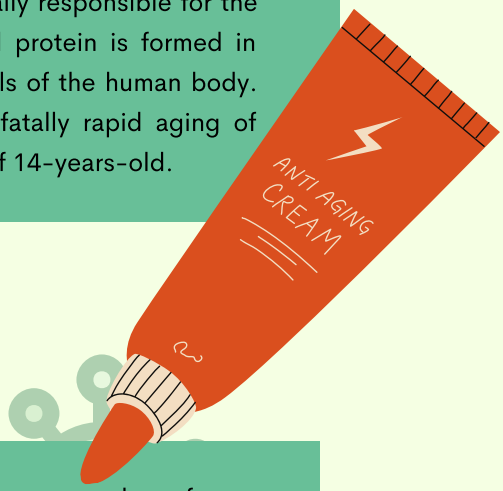
Prof. Khan's work on the search for new antibiotics from animals living in polluted environments has caught worldwide attention; it has been actively discussed in peer-reviewed journals and has even found their way to documentaries. A quick Google search of 'Naveed Khan and Cockroaches' will yield thousands of results.

VIRAL NEWS

An anti-aging solution, but probably not for you

Baldness, stiff joints, wrinkled skin, weak bones, fragile immunity; an elderly patient is likely the first illustration that comes to mind when reading the previous sentence, right? Unfortunately, these words describe the exact features of a 4-year-old child with progeria syndrome, with no real cure or treatment to their devastating condition – at least not yet.

Hutchinson-Gilford progeria syndrome is a rare genetic disorder resulting from a single-base mutation in the lamin A protein, which is normally responsible for the formation of a functional nuclear membrane. An abnormal protein is formed in those patients, known as progerin, and is toxic to most cells of the human body. The changes that occur in affected children lead to the fatally rapid aging of tissues, limiting the patient's life expectancy to an average of 14-years-old.



Though there is no current cure for this crippling disorder, researchers from Harvard and Vanderbilt Universities have obtained shocking results using the novel "base-editing" approach. This technique involves making nicks in a single DNA strand and subsequently swapping out a single base, and has been used previously in a multitude of mice disorders.

The team of researchers have found that base-editing improved between 20% to 60% of most of the affected tissues in mice with progeria syndrome – a result they believe is "far better than they had dared hope for"! This brings about a great amount of hope in the possibility of finally developing a cure for progeria, and freeing affected children from the debilitating effects they suffer due to the disease.

REFERENCES:
Koblan, L.W., Erdos, M.R., Wilson, C. et al. In vivo base editing rescues Hutchinson–Gilford progeria syndrome in mice. Nature (2021). https://doi.org/10.1038/s41586-020-03086-7

MEDICAL HEROES

"You seek what life is in death, now find it air that once was breath."

The very essence of living is tied to the anchor of breath flowing through our lungs. In this month's column, we thank and honor the scientists who confronted crisis in stride – one respiratory epidemic at a time.

Prof. Florence Seibert

In the 1880s, Robert Koch discovered that injecting a mixture detected tuberculosis by causing a skin reaction in patients. However, his test produced inconsistent results, frequent false negatives, and was a scandalous failure. Prof. Seibert, born in 1897, answered this crisis by identifying the active agent in Koch's tuberculin and isolating the purified form – Purified Protein Derivative – around 1937. This groundbreaking discovery is still used to date, in most settings.

Previously, as part of her graduate work, she noted patients would experience fevers after IV injections or treatment. She determined this was due to toxins released by bacterial contamination and was able to eliminate this contamination using a special apparatus and procedure that she created for this purpose. This later became a boon, not only for administering drugs but also for making blood transfusions safer during surgery. Her efforts in making healthcare safer continued until her death in 1991.

Dr. Nanshan Zhong

Born in 1936, Dr. Zhong is China's most trusted pulmonologist. He rose to popularity in 2002 when his workplace received the initial cases of SARS. He employed non-invasive ventilation methods and advocated corticosteroids to reduce morbidity and mortality of the condition. The decision was controversial at that time and was significantly opposed by the international scientific community, who incorrectly recommended antibiotics instead.

When the initial cases of COVID-19 were identified, Dr. Zhong was amongst the first to analyze and announce that the virus was transmissible from person-to-person and recommended quarantine guidelines. He continues to work closely with health officials on the treatment protocols, prevention, and research pertaining to COVID-19. In September 2020, Dr. Nanshan Zhong was awarded the highest state honor in China for his contribution to the fight against COVID-19.

STUDENTS' CORNER

I'm not an artist and I don't have an eye for art whatsoever, but I spent this break painting a clay mug. I guess you can say that my hands didn't fail me thank god.

AMAL ABU HELWA YEAR 1

Where I used to go to recover from the cardiovascular, respiratory, and endocrine units.

ABDULLAH ALDWEIK YEAR 2

Taking time for myself until I'm me again.

HADEEL ALAMELEH YEAR 1

My friends and I had a wonderful visit to Al-Ain during the break. Everyone had a great time, except my sleeping schedule.

AWAB MUSAAD YEAR 2

Keep your friends close and your snacks closer.

MARIAM ELEMAM YEAR 2

Tick Tock it's a clock!

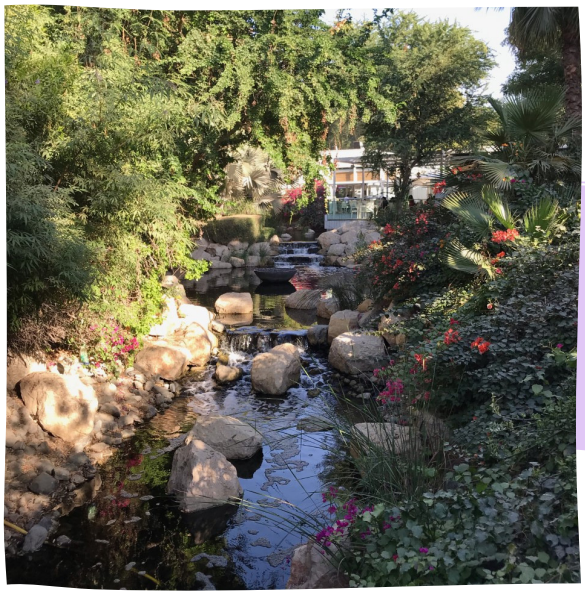
ALAA KALASH YEAR 2

2020 was like a ripple in a lake, distorting the beautiful reflection of the sky.

SHAHAB SHARAFAT YEAR 2

Spending the last dusks of the year with those that I have missed the most.

KHOLOUD HUSSAIN YEAR 2



Winter break was an opportunity to go outdoors and enjoy great weather. This was one of the prettiest places I visited during the break.

HALA MESMAR YEAR 1

DiagKnowsed

Case of the Month

A 22-year-old Indian male patient presents to the clinic complaining of tightness in the chest, breathlessness, and fatigue. The patient is talking in an "irrelevant" manner, with poor response to verbal commands and improper behavior, such as refusal to eat.

History taking shows that the patient is originally residing in Calcutta, at around sea level. He has recently left for pilgrimage to the Amarnath shrine and is currently staying at a base-camp close to the clinic he presented to, at a much higher altitude than Calcutta. The physician is informed that the patient had also experienced an episode of seizure on arrival to the base camp.

The patient's vital signs include a pulse of 108 bpm, blood pressure 130/80, respiratory rate 35/minute, temperature 38.3°C, and oxygen saturation of 80%. Physical examination was unremarkable, except for a Glasgow Coma Scale (GCS) of 10/15. Arterial blood gases showed a pH of 7.4, a PCO2 of 39, a PO2 of 50, and HCO3 levels of 25 mmol/L. An ECG sinus tachycardia and chest X-ray showed diffuse bilateral infiltrates. Base line cell cultures were negative for any organism.

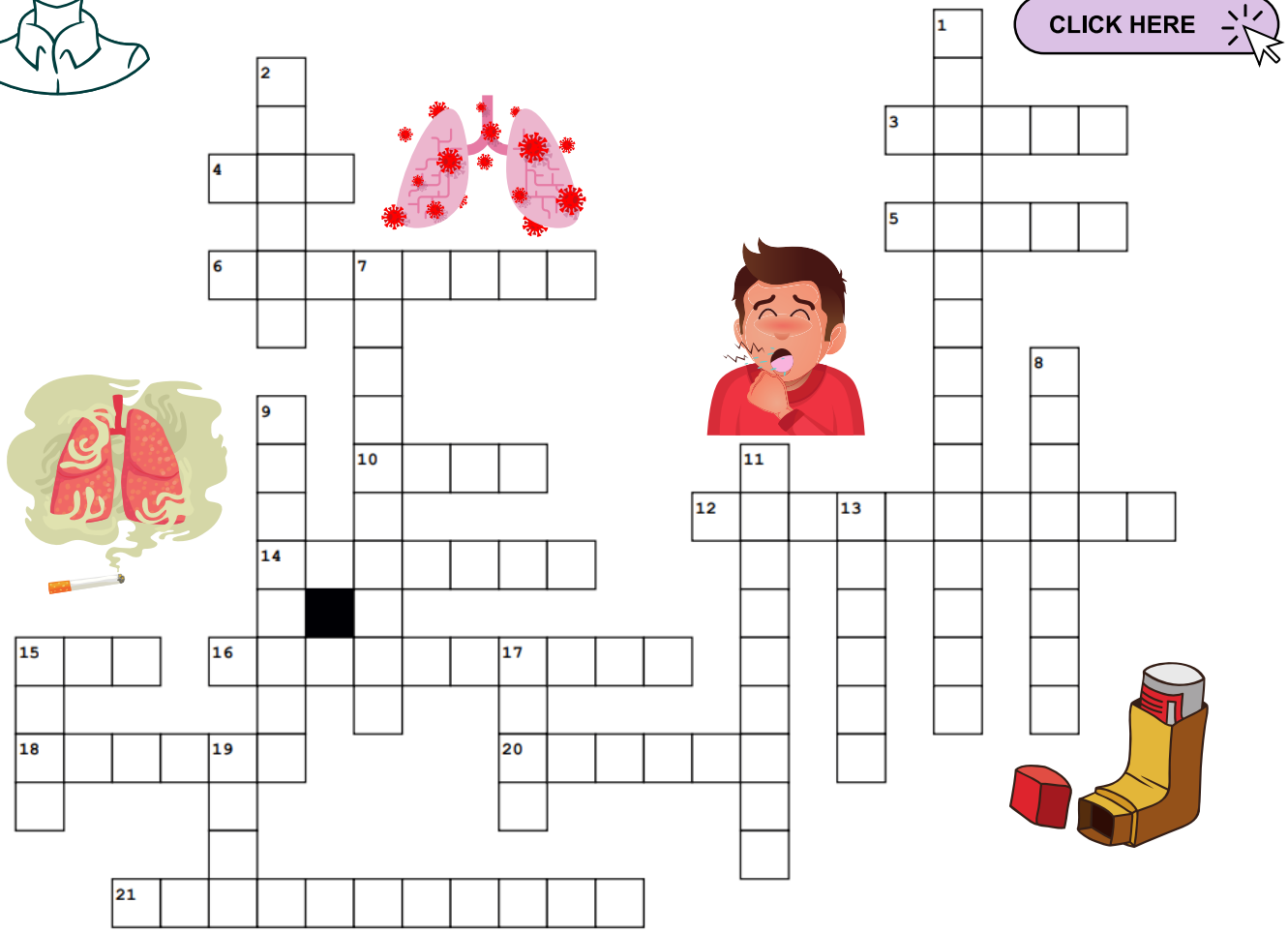
The patient was immediately started on dexamethasone, along with an IV line and arterial line for fluid monitoring. On the second day of admission, however, the patient's GCS had dropped to 6/15, and the patient was in a state of respiratory distress. This led the patient to be admitted to the ICU.

WHAT IS THE MOST LIKELY DIAGNOSIS? WHAT ARE YOUR NEXT STEPS IN THE MANAGEMENT OF THE PATIENT? TELL US AND CHECK IF YOU ARE RIGHT BY FILLING THE FORM HERE!

MEDICAL CROSSWORD

For this month's crossword, the theme is the Respiratory system . **Click on the icon to the right to access an interactive version of the crossword.** You can type in your answers and it will check if they are correct. Good luck!

CLICK HERE



Across

3. Previously treated with heroin
4. Common cause of pneumonia in infants
5. Crackles
6. Total lung capacity minus vital capacity
10. Lung with two lobes
12. Delivered via inhaler
14. Conducting air passage
15. Radiographic film
16. Cell type common in asthma pathogenesis
18. Lung coverings
20. Required for cellular respiration
21. Lung collapse

Down

1. Surgical puncture into the chest cavity
2. Animator who died of lung cancer
7. Discoverer of pulmonary circulation
8. Life-saving procedure
9. Meaning excess
11. Happens in exercise
13. Take my _____ away!
15. Many smokers develop this
17. Drives respiration
19. Invented the stethoscope

SOLUTIONS

DiagKnowsed

Case of the Month

The clinical findings, lab investigations, and ECG of this patient led the attending physician to make a **provisional diagnosis** of a ***non-ST elevation myocardial infarction (NSTEMI)***. Immediate primary care involving aspirin, morphine, and metoprolol was administered, and workup of the patient's case continued.

The demographics of this patient, however, were not the usual case presentation of an MI, considering his young age, athleticism, and low lipid profile. The patient's coronary CT angiogram showed a low-density defect in the proximal portion of the left anterior descending (LAD) artery, and cardiac catheterization showed an intraluminal filling defect by the proximal LAD.

A final **diagnosis** of ***spontaneous coronary artery dissection (SCAD)*** was made, and treatment was initiated using anticoagulant medications, metoprolol, statins, and aspirin. The patient was also referred to the cardiology department for rehabilitation.
SCAD is a disorder where there is the separation of the layers of the coronary vessel walls, leading to the formation of a "false" lumen and hence infarction. Although SCAD is a relatively uncommon cause of the acute coronary syndrome, the disease accounts for almost 25% of infarcts in those aged less than 40 years old. Risk factors include physical stressors, such as strenuous activity as seen in the case here, emotional stressors, pregnancy, and connective-tissue disorders.

If not properly identified, the outcome of SCAD can be deadly, considering the large risk of developing a mural thrombus. SCAD should always be considered as a differential diagnosis for previously healthy, young athletes with a case of an MI. Fortunately, with pharmacological intervention, the coronary dissection should resolve without any further problems.

REFERENCES:
Shenoy, P., Tayeb, T., Covas, P., Temesgen, N., & Tracy, C. (2020). Not Your Common Athletic Heart Problem: Using Coronary CTA to Visualize Spontaneous Coronary Artery Dissection. Case Reports In Cardiology, 2020, 1-5. https://doi.org/10.1155/2020/8882561

MEDICAL CROSSWORD

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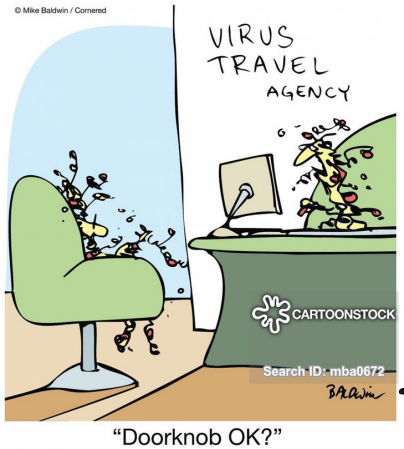
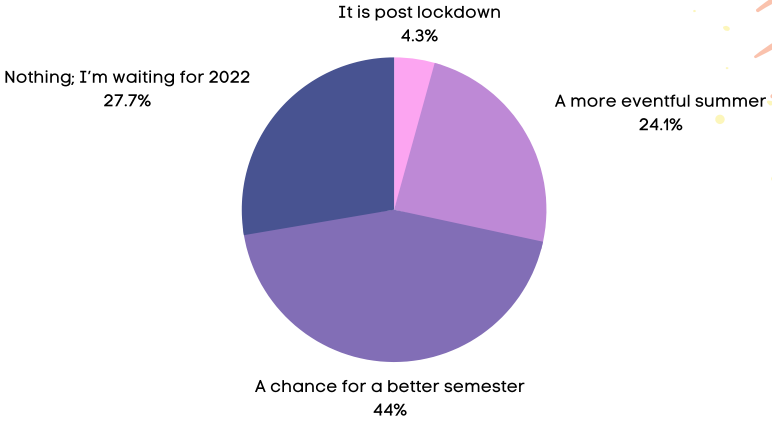


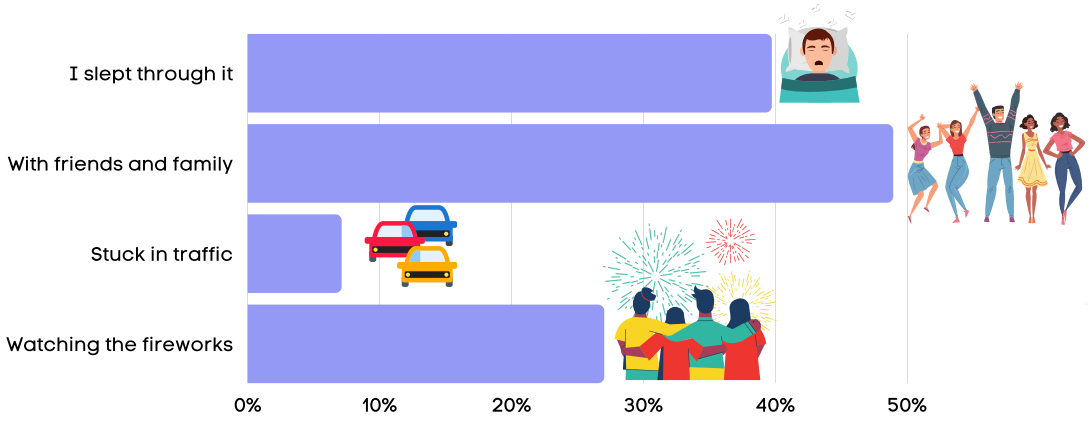
"Doorknob OK?"

STUDENT-SELECTED

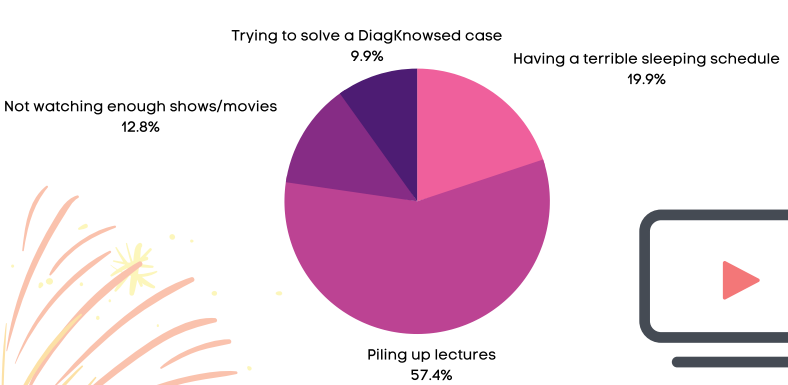
WHAT EXCITES YOU MOST ABOUT 2021?



HOW DID YOU SPEND NEW YEAR'S EVE?



WHAT IS ONE MISTAKE YOU HOPE TO CORRECT FROM LAST SEMESTER?



STUDENT-SELECTED

SOME SAY "NEW SEMESTER; NEW ME".
I DISAGREE. NEW SEMESTER; NEW _____

NEW YEAR'S RESOLUTIONS

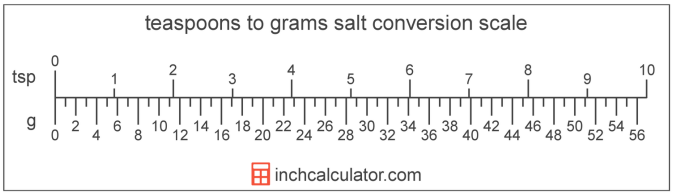
DOCTOR'S ORDERS

DR. SARRA SHORBAGI

MORE FLAVOUR, LESS SALT

Salt intake of less than 5 grams (one teaspoon) per day for adults helps to reduce blood pressure and risk of cardiovascular disease, stroke, and coronary heart attack. 2.5 million deaths could be prevented each year if global salt consumption was reduced to the recommended level.

How to reduce your salt intake?



- Be aware of how much salt you are consuming.
- Don't keep a saltshaker on the table.
- Limit the consumption of salty snacks.
- Choose products with lower sodium content.
- Replace salt with chili, citrus, fresh herbs, garlic, black pepper, and other spices.
- Cut back on sauces such as soy sauce, ketchup, and salad dressings, which can contain lots of hidden salt.
- Use low-sodium alternatives if you need a little more time to adjust to a less salty taste.

Healthy diet

Make healthy dietary choices: greater intake of vegetables, fruits, nuts, whole grains, lean vegetables, animal protein, and fish, while reducing your intake of trans fats, red meat and processed red meats, refined carbohydrates, and sugary drinks.

Click here for large image

Remember

- Food does not need salt to have an appealing flavour. It takes some time for a person's taste buds to adjust, but once they get used to less salt, one is more likely to enjoy food and notice a broader range of flavours.
- Worrying about salt intake should not be restricted to people at an advanced age. Eating too much salt can raise blood pressure at any age.

REFERENCES:
https://sodiumbreakup.heart.org/top_25_foods_that_add_the_most_sodium_to_your_diet
https://www.who.int/news-room/fact-sheets/detail/salt-reduction