



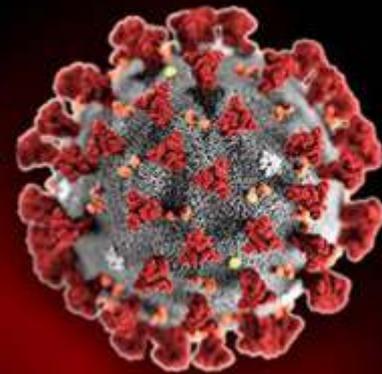
KARNATAKA REGISTERED PHARMACISTS ASSOCIATION®

CH 51, 6th Main, 5th Cross, 1st Floor, Above Sri Krishna Bakery, Saraswathipuram, Mysuru-570009.

Ph: 9738366942 Web : www.krpaindia.com Email : krpaindia@gmail.com

EDITORIAL TEAM

Mrs. Shilpa Palaksha
Dr. Chandni Saha
Dr. Sri Harsha Chalsani
Mr. Balaji S
Dr. Jehath M Syed,
Ms. Priya J Aradhya
Dr. Ravina Ravi
Ms. Shifa Taj
Mr. Santhosh Raj R K



COVID 19

Lets Fight Against Corona



DRUG CONTROL DEPARTMENT, KARNATAKA RISES TO THE SITUATION: 24 hours COVID-19 WAR-ROOM ESTABLISHED

The Drug Control Department, Govt. of Karnataka has once again shown its mettle, rising to the challenge posed by the worsening COVID-19 pandemic situation in Karnataka state.

It is admirable to state that the Drug Control Department, Govt. of Karnataka is perhaps the only state in the country that has a 24 hour dedicated war-room for managing the supply of medical oxygen and Remdesivir injection.

Medical Oxygen is a special pure oxygen form, different from industrial oxygen. Medical oxygen is used for medical purposes only and has been developed to deliver oxygen for use in the human body. Medical grade oxygen contains a minimum of 90% oxygen, 5% nitrogen and 5% argon.

Remdesivir is a broad-spectrum nucleotide analog prodrug, an antiviral injectable IV formulation used for the management of SARS-CoV-2 infection in patients above 12 years and weighs at least 40 kg. It is the first drug approved by the US FDA for the management of COVID-19 viral infection, moderate to severe patients. Remdesivir speeds up the recovery process of such COVID-19 patients, in a five-day regimen. Remdesivir stops viral replication. It was invented first for action against the Ebola virus and repurposed against COVID-19.

When this news of the Drug Control Department, GoK COVID-19 war room went viral on social media and published prominently in the mainstream press, it was a moment of great pride and happiness that our pharmacist colleagues in the drug control department have once again raised to the occasion to serve our profession, Karnataka state and our country.

The Karnataka Drug Control Department war room has a dedicated number 8951755722 with several lines to answer all queries related to the supply and availability of medical oxygen and Inj. Remdesivir. Any stakeholder (patient, doctor, hospital administrator, pharmacy administrator) can contact this number and get help.

All the Drugs Control Dept. (DCD) officers/staffs are working 24*7 in three shifts:

6 am to 2 pm, | 2 pm to 10 pm | 10 pm to 6 am.

The pharmacists and staff of the Drug Control Department, GoK are rendering yeoman service to society and keeping the pharmacist flag flying high.

THREE CHEERS TO THE PHARMACISTS AND DRUG CONTROL DEPARTMENT personnel.

Speaking about the Covid-19 war room concept of Drug Control Department, GoK, renowned pharmacist Dr. B R Jagshetty M Pharm PhD, Retd. Drugs Controller of Karnataka said: 'Hearty congrats to all officers & staff of Karnataka Drugs Control dept for their yeoman service of 24 x 7 in this pandemic critical situation and wish them all the best.'



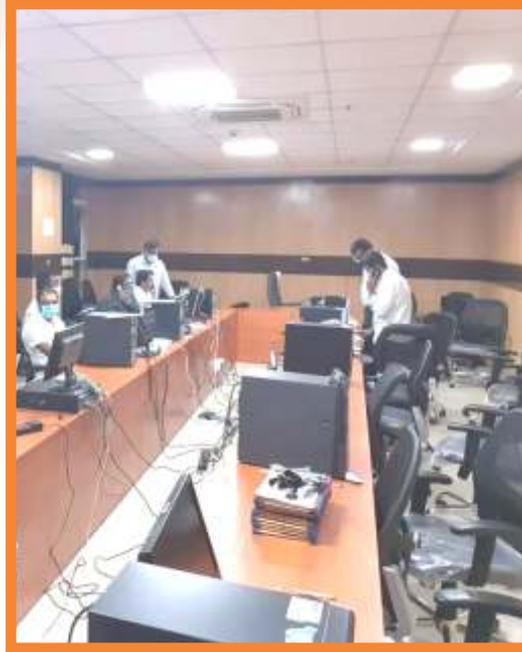
Dr. Kaushik Devaraju
President,
Karnataka Registered Pharmacists Association

Mr. Sunil S Chiplunkar
M Pharm (Pharmacology)
MBA (Marketing) PGDHRM (PhD)
VP – Business Development,
Group Pharmaceuticals, Bangalore,
Email: 1969sunilchiplunkar@gmail.com



FAQs related to Drug Control Department Covid-19 war room:

- Objectives of Drug Control Department Covid-19 war - room
To ensure a timely & sufficient supply of Medical Oxygen and Remdesivir, a 24x7 war room has been established from 20.4.2021, with the staff working round the clock in 3 shifts.
- How many calls have you handled?
Nearly 1500 calls (as of 25.4.2021).
- How many people are there in the war room?
Each shift: - 15 members, total three shifts in a day.
- Is the war room only in Bangalore?
Yes, but coordinating with all the officers across the state.
- Anyone memorable incident of the war room service?
Every phone call is a memorable one and all the staff is promptly ensuring a timely supply of Remdesivir and oxygen.



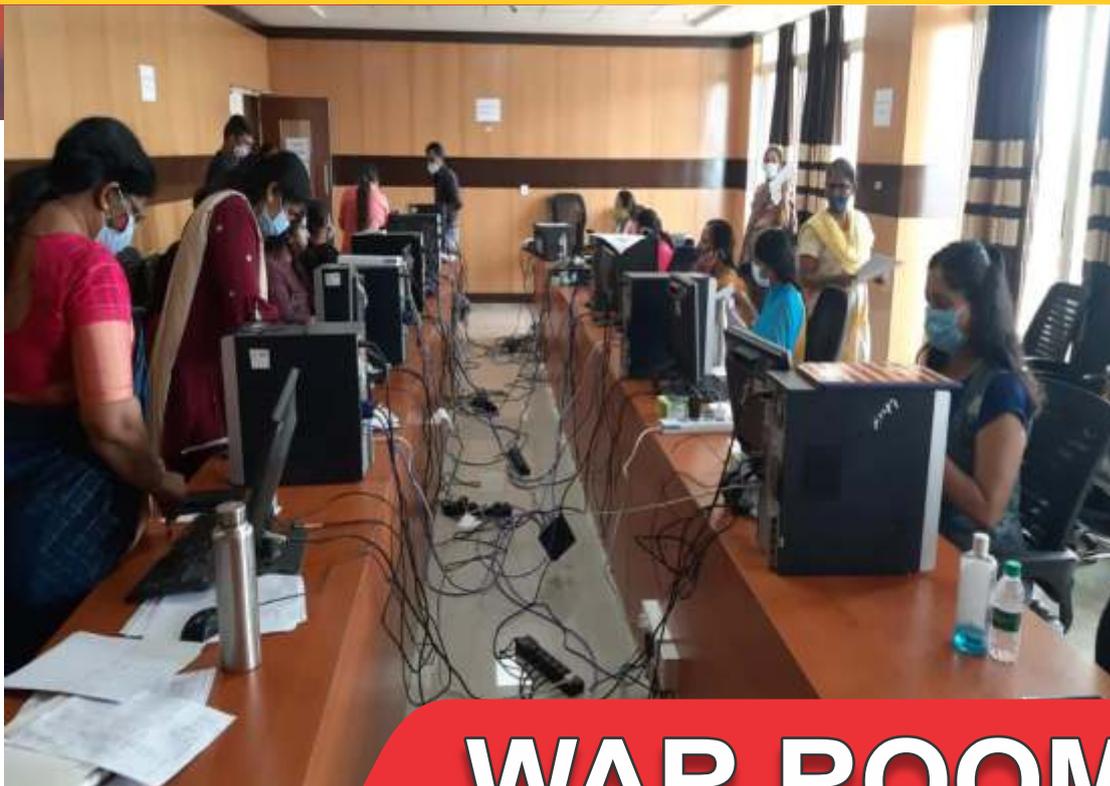
KUDOS TO THE FOLLOWING LEADERSHIP TEAM OF COVID-19 WAR ROOM OF DRUG CONTROL DEPARTMENT, GOVT. OF KARNATAKA:

Dr. K. Sudhakar
Health minister

Sri Bhagoji T Khanapure
Drugs Controller

Sri Amaresh Tumbagi
Additional Drugs Controller

KRPA, Mysuru congratulates Drug Control Department, GoK for its very smart move of providing a 24/COVID-19 war room to streamline supply of medical oxygen and remdesivir.



WAR ROOM



“ Hand hygiene is
the best way
to **BREAK THE CHAIN** of
infection ”

KILLS
99.9% GERMS

Contact: ipsugandhi@grouppharma.in
or WhatsApp to: 77609 12222.
Visit us: www.grouppharma.com



THE NOVEL CORONAVIRUS DISEASE:

THE STRAINS

With the second wave of the pandemic gripping the country, recorded single-day new cases of 2,61,500 makes virus mutation a concern. Multiple variants of COVID-19 have been identified globally. The National Institute of Virology (NIV) has recently detected a “double mutation” of the COVID strain in samples from Maharashtra. This double mutant strain is termed B.1.617.

The B.1.617 variant is a combination of two separate virus variants- E484Q and L452R, the L452R variant was first identified in the United States and E484Q variant is identified as indigenous. This mutant strain is highly infective with high transmission rates, making B.1.617 more infectious and lethal.

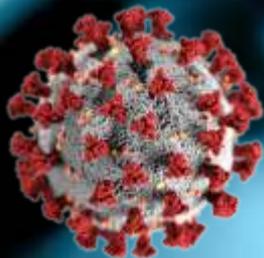
The Centers for Disease Control and Prevention (CDC) has established three classifications for the SARS-CoV-2 variants namely, Variant of Interest (VOI), Variant of Concern (VOC) and Variant of High Consequence (VOHC).

Variant of Interest (VOI):

A variant with specific genetic markers that have been associated with changes to receptor binding, reducing neutralization by antibodies generated against previous infection or vaccination, reduced efficacy of treatments, potential diagnostic impact, or predicted increase in transmissibility or disease severity.

Examples:

Name	First Identified	Potential Attributes
B.1.526	New York	<ul style="list-style-type: none">• Potential reduction in neutralization by monoclonal antibody treatments• Potential reduction in neutralization by convalescent and post-vaccination sera
B.1.525	New York	<ul style="list-style-type: none">• Potential reduction in neutralization by monoclonal antibody treatments• Potential reduction in neutralization by convalescent and post-vaccination sera
P.2	Brazil	<ul style="list-style-type: none">• Potential reduction in neutralization by monoclonal antibody treatments• Potential reduction in neutralization by convalescent and post-vaccination sera



Variant of Concern (VOC):

A variant for which there is evidence of an increase in transmissibility, more severe disease (increased hospitalizations or deaths), a significant reduction in neutralization by antibodies generated during previous infection or vaccination, reduced effectiveness of treatments or vaccines, or diagnostic detection failures.

Name	First Identified	Potential Attributes
B.1.1.7*	United Kingdom	<ul style="list-style-type: none">• 50% increased transmission• Likely increased severity based on hospitalizations and case fatality rates• Minimal impact on neutralization by emergency use authorization (EUA) monoclonal antibody therapeutics• Minimal impact on neutralization by convalescent and post-vaccination sera
P.1*	Japan/ Brazil	<ul style="list-style-type: none">• Moderate impact on neutralization by EUA monoclonal antibody therapeutics• Reduced neutralization by convalescent and post-vaccination sera
B.1.351*	South Africa	<ul style="list-style-type: none">• 50% increased transmission• Moderate impact on neutralization by EUA monoclonal antibody therapeutics• Moderate reduction on neutralization by convalescent and post-vaccination sera
B.1.427 B.1.429	US- California	<ul style="list-style-type: none">• 20% increased transmissibility• Significant impact on neutralization by some, but not all, EUA therapeutics• Moderate reduction in neutralization using convalescent and post-vaccination sera

* Strain identified in India.

Variant of High Consequence (VOHC):

A variant of high consequence has clear evidence that prevention measures or medical countermeasures (MCMs) have significantly reduced effectiveness relative to previously circulating variants. Currently, there are no SARS-CoV-2 variants of the high consequence.



Sri Harsha Chalasani
Department of Pharmacy Practice,
JSS College of Pharmacy,
JSS AHER, Mysuru.

PANDEMIC BUYING

The word pandemic has devastating implications on the economy and public health. It implies a large body of suffering patients, who overwhelm the medical systems to obtain care. The recent deficit of inj. remdesivir and medical oxygen is a witness to the havoc pandemics can wreak on society. The daily wage earner, the person who runs a small business and depends on his daily turnover and the contract labourers are all biggest sufferers of this pandemic. Private medical and dental practitioners have had to switch to the online mode of consulting and e-prescribing to gain their daily practice fees. Teledentistry too has taken off since patients need orofacial pain relief and dentists are providing palliative medicines till the circumstances are amenable for chair site practice. Dentists are also masters of oral care practice, their counsel is sought to prevent or tackle COVID-19 infection since the chief route of entry of SARS-CoV-2 viral particles is through the nose and mouth. ACE2 receptors in oral, pharyngeal and nasal tissue are the substrates with which the virus bonds to enter the human cell, and then uses the cellular machinery to create several copies of the viral genetic material which goes onto infect other cells. The net result is increased viral load that causes lung damage, and increased inflammation, which is mediated by signaling molecules called cytokines, this inflammation causes even further damage and intravascular blood clotting. The net result is a thrombotic, generalized inflammatory condition with pneumonia. Several other COVID-19 manifestations are there including diarrhea, red eyes, skin rashes, COVID toes, anosmia and ageusia. And finally, the patient who recovers from COVID-19 still has to deal with along with fatigue, depression, irritability and at times musculoskeletal, cardiometabolic and nervous system related problems. So, a pandemic time has its own buyer patterns in pharmacies.

- a) **Immunonutrition:** The obvious range of buying is for immune nutrition products that support good health to ward off the viral threat. This mainly includes Vit. C. However, Vit. D3 and Vit. A are also immune nutrients. The pharmacist needs to counsel on the right amounts of Vit. D3 and Vit. A to be taken by the patient, based on his profile, since these are stored fat-soluble vitamins. Nevertheless, it must be noted that a very large amount of these vitamins is required for hypervitaminosis. Zinc is immune support nutrition. In fact, zinc is recommended routinely in diarrhea cases as immunonutrition. Thus, vitamins and minerals are in-demand formulations at community, retail and hospital pharmacies.
- b) **Herbal based formulations (with or without vitamins and minerals):** Polyphenols including curcumin and EGCG (epigallo catechin gallate), and carotenoids like carotene and lycopene are known to have antiviral, antibacterial, antimicrobial and immune support properties. Along with these nutraceutical type formulations, various immune support ayurvedic formulations such as tulsi drops have gained traction this pandemic. Thus, the pharmacist should familiarize with the composition, principal action of each ingredient and USP (or unique selling proposition) of each such formulation, and based on the patient type and patient psychology, the pharmacist should push such products over-the-counter to make more revenues and offer improved health service to patients for patient well-being.
- c) **Protein supplements:** have seen an uptick in sales because antibodies are proteinaceous in character and that proteins are required for bodybuilding and immune support. Repair processes in the body, involve essential amino acids, ensure that you detail the right type of protein supplement and encourage repeat buying from your pharmacy.
- d) **Antianemia formulations:** are on a roll because anemia exacerbates COVID-19 and recovery is tardy in anemic COVID-19 patients. Hence, to manage masked anemia and nutritional anemia, and commonly occurring iron deficiency anemia, a pharmacist can counsel patients. One interesting point here is that pallor or pale skin including near nails and yellowishness in eyes indicate anemia and one can use these pointers for patient counselling across the counter.
- e) **Oral care products:** hugely in-demand particularly since throat gargling is protective. Thus, promote the concept of gargling and not just rinsing. Further as pharmacists, it is better to detail the fact that periodontitis or gum infections or inflamed gums cause severe COVID-19. Diabetics have a proclivity for oral and gum problems. Thus, patients can produce better patient outcomes by detailing the oral care products apt for the patient profile. The prescription that a patient brings gives hints on the patient's profile. For instance, a regular anti-diabetes medication purchaser can be detailed on the importance of oral health, gum health and gargling. Appropriate oral care formulations can be promoted to such patients.
- f) **Accessory products:** beauty products that can be used at the home, gloves, sanitizers and various types of masks, and face shield are seeing good business prospects. One needs to understand product profile and patient or purchaser requirements and then recommend appropriate products to them. An upper middle class lady will have more attraction towards a natural herbal based hand sanitizer while a routine young guy will settle for an on-the-go handy pack sanitizer with a good brand name. Such, personalized recommendations based on product strengths and purchaser profile will help in improved pharmacy revenues.



Mr. Sunil S Chiplunkar

M Pharm (Pharmacology)
MBA (Marketing) PGDHRM (PhD)
VP – Business Development,
Group Pharmaceuticals, Bangalore,
Email: 1969sunilchiplunkar@gmail.com

Overall, the pandemic has provided a window of opportunity for pharmacists to do front-end sales across the counter for the purchaser or patient benefit. It is the adaptations that helps the pharmacist counsel patients and detail the product benefits better. Look up various sites to understand the process of front-end selling, particularly in the pandemic times.

Empowering Immunity

Future of Immune Nutrition

Rx **Mulmina**TM 200 ml
Tetra Pak Pack

••• Say hello to health... •••

Natural Immune Booster with Powerful Antioxidants

ORAC
ANTIOXIDANT
VALUE
3736/PACK



Immune booster

Potent Antioxidant

Provides 12 added
essential nutrients

Tasty nutritious way
for good health

Dose: 1 to 2 packs per day, for 15 days



JUGGAT PHARMA

(Pharma Division of Jagdale Industries Pvt.Ltd.)
No.782, 15th Cross, 1st Phase, JP Nagar,
Bengaluru-560 078

Tel: 1800 425 6939
Fax : 080-26636231
e-mail: mulmina@jagdale.com
Website www.jagdale.com

FLAVOUR

A NEW DANGER



Flavouring agents, also known as additives, are used to elevate the taste and aroma of the food. Most food products such as soft drinks, cereals, cake and yoghurt contain enormous amounts of flavouring agents. Natural flavouring agents are those which add natural flavours such as nuts, fruits, spice-blends, wine and also vegetable derivatives to the food. Research shows that additives in the food we consume causes nausea, weakness, headaches, difficulty in breathing and also contributes to dementia, bone disease, microcytic anaemia, and human nerve cell damage. In addition to flavouring agents, food products like meat, cereals and bread are also added with preservatives. Exposure to toxic food is inevitable in today's lifestyle, and it is close to impossible to completely eradicate them, but alternative options like organic, local and farm foods with fewer toxins could be chosen.

In the recent decade, with the development of globalization and technology, humans have gradually changed their eating habits. In today's everyday lifestyle, it is impossible to avoid foods containing chemical additives like micro-ingredients that add artificial flavour, processed food with a great smell, and taste keeps bringing people back to it. These additives also comprise chemical compounds with a great range, such as colourants, diluents, preservatives, which are classified into natural and artificial flavouring agents.

Protein-rich foods, soups that are used to elevate the perspective of other tastes like particularly meat and oriental foods, are flavoured by a famous controversial food additive produced by naturally fermenting starch and sugar termed as Monosodium L-glutamate (MSG). Despite anecdotal reports of MSG triggering headaches or exacerbating asthma, the World Health Organization, the European Community's Scientific Committee for Food, The Joint Expert Committee on Food Additives of the United Nations Food and Agriculture Organization, the American Medical Association, and the National Academy of Sciences have all affirmed the safety of MSG at normal consumption levels.

Research by Dr Ben Feingold in the 1960s revealed groundbreaking information that food additives can cause toxic effects to vulnerable individuals and children. Results from recent studies also show that food additives used by the food industry may have adverse effects on health, such as allergic skin reactions, upper respiratory system symptoms, asthma, conjunctivitis, gastrointestinal disorders, migraine etc. Not all additives used in food are harmful to health, yet only a few people know their sensitivities, and the majority of people don't know which one is safe and which is not. Considering this, one must try to avoid taking food additives in general. This can be said at ease yet done as they're widely used worldwide. The 'ingredients label', which is from current law, which consists of a list of ingredients added by the final producer, can be a drawback about what you can learn.

The most widely used preservatives known to cause urticaria on the lips and oral mucosae are Potassium nitrate and Sodium benzoate. The other name for Sodium benzoate is benzoate of sodium which is a crystalline white or granular salt of benzoic acid. It is moderately dissolved in alcohol and highly soluble in water. Canned soda accounts for about 50 per cent of the production of benzoate usage. Antimicrobial preservatives consisting of benzoates may cause adverse effects such as allergies, skin rashes and asthma. One of the effective preservatives used in sausages and cooked meat to retain the flavour and colour is Potassium nitrate, a colour fixative with microbial properties. In 1992, it was found that nitrates, when reacted with amines in the human body or food, may result in nitrosamine formation, given by Jones. In addition to this, curing agents of meat such as Nitrates and Nitrites are found to cause nitrous acid when intaking and leads to stomach cancer. Most of the food products like instant noodles, bakery items and carbonated beverages are flavoured extensively using a needle-like crystalline white flavouring agent with the odour of vanilla called Vanillin. One must be encouraged to eat fresh fruits and vegetables to boost immunity rather than foods containing these additives, which can also have an impact on the immune system.

Tartrazine, after consumption, is metabolized to nitrous derivatives, sulfanilic acid in the body via the gut microflora-azoreductase in the hepatic or intestinal wall. The nitrous derivative is identified to cause allergies such as urticaria and asthma. However, tartrazine has no possibility to induce malignant or benign neoplasias. It was also found that tartrazine did not establish any harmful neurobehavioral and reproductive markers at a dose of 1225 and 773 mg/kg BW/day for females and males.

1-methylcyclopropene	Smart fresh gas is the common name which is pumped in to apple crates that prevents ethylene release, the one responsible for fruit ripening. Thus, helps preserve apples for about a year and a month in case of bananas. Grapes are similarly preserved using Sulphur dioxide.
Astaxanthin	About 90% of salmons in supermarket are from farms which doesn't include crustaceans. It is a natural astaxanthin used to make a wild salmon look like having pink flesh. Thus, artificial astaxanthin is used by producers which is made from coal tar, to give that fresh from water look.
Benzoic acid/sodium benzoate	It causes digestive enzymes inhibition and results in headache, asthma, hyperactivity in children and stomach upset. Commonly used in drinks, meat products and milk as preservative.
Bha (butylated hydroxyanisole) and bht (butylated hydroxytoluene)	Often used in oil-containing foods such as crackers, cereals, sausages, dried meats. These antioxidants can delay rancidity and are similar yet non – identical chemicals derived from petroleum. Butylated hydroxyanisole might be human carcinogen as stated by World Health Organization's International Agency for Research on Cancer.
Canthaxanthin	This pigment is used by producers to make Golden yellow yolks which are more palatable. Though fewer quantities are used, canthaxanthin when used in greater amounts may lead to retinal damage.
Potassium bromate	It is an agent used to increase the volume of breads, rolls and wheat flour. Potassium bromate is a carcinogen which requires a warning sign on products containing it, mostly in California.
Sodium Nitrate and Sodium Nitrite	These were closely related chemicals used as preservatives of meat for decades. Nitrates are safe but when nitrosamines which occur as result of chemical reaction by frying the meat, is a powerful cancer – exacerbating chemical.



Dr. A Pramod Kumar
Associate Professor
Chebrolu Hanumaiah
Institute of
Pharmaceutical Sciences



Artificial vanilla named Ethyl vanillin is stronger than vanilla by about 3.5 times. It has a wide range of application in ice cream, chocolate, food and beverages. Mint – related flavouring agent, named Menthol in chewing gum, provides a strong-quality flavour, long-lasting and high-intensity.

Other commonly used flavouring agents as follows:

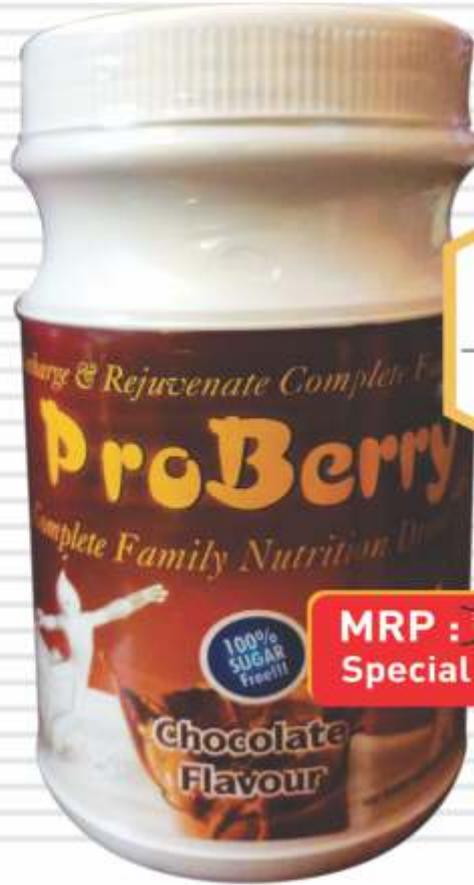
- Amyl acetate used as a banana flavouring
- Benzaldehyde used to create cherry or almond flavour
- Ethyl butyrate for pineapple
- Methyl anthranilate for grape
- Methyl salicylate for wintergreen flavour
- Fumaric acid, which adds tartness and acidity to dry foods.

The human body's tolerance to chemicals is dependent on the rate and extent of absorption and excretion. The chemical substance entering the human body reaches the liver through the bloodstream. The liver attempts to detoxify harmful chemical substances to a less toxic compound that could be utilized by the body. Our body is designed in such a way that harmful substances present in the blood are naturally filtered by the kidneys and excreted through urine, faeces, sweat and exhalation. However, complete removal may not be possible. Therefore, adverse effects of health increase with the increase in amount, type, length of exposure to harmful food substances.

nutrition drink

Muscle	High-Quality Protein
Heart	Heart-friendly fat blend (Low in Saturated fats)
Bone	Vitamin D and calcium
Digestion	Prebiotic fibre
Immunity	Antioxidants

Balanced Nutrition for Diabetes



100%
SUGAR FREE
Immunity
Booster

MRP : ~~₹285/-~~
Special Rate : ₹140/-

Best Replacement For Sugar



Diabetic Friendly!

- 100% NATURAL
- 100% VEGAN
- LOW CARB
- HEALTHIER
- NO ADDITIVES

MRP : ~~₹285/-~~
Special Rate : ₹120/-



ಹೊಮ್ ಡೆಲಿವರಿಗಾಗಿ ಸಂಪರ್ಕಿಸಿ : **8105177773**
FOR HOME DELIVERY CONTACT :

RULES

1. Correct answers will be rewarded 1 point each (10 marks)
 2. Answer of the quiz will be evaluated by panel of judges and their decision is final.
 3. Those who get the highest marks, their photo will be published in our next bulletin and also a cash prize of Rs.500/- will be rewarded to them
 4. The answer must be sent within 20th May 2021 to this E Mail ID- krpaindia@gmail.com
- A confirmation mail will be sent to you on receiving your e-mail.

Quiz

Match the following

1	Iodine is stored as	A	Thyroid gland
2	Isoelectric pH of Alanine is	B	von Ebner's glands
3	Lingual lipase is secreted by	C	Vancomycin
4	Red-Man Syndrome is caused by	D	Nicolas Mauris Arthus
5	Arthus Reaction was discovered by	E	Quinine
6	At high doses which drug can cause loss of equilibrium	F	6.1

7. Which of the following is the necessary step for cultivating the microorganisms?

- a. Preparing a culture medium for the growth of microorganisms
- b. Sterilizing in order to eliminate all living microorganisms in vessel
- c. Inoculating the microorganisms in the prepared medium
- d. All of the above

8. The oldest eukaryotic organisms are considered to be

- a. diplomonads like Giardia
- b. Archaea
- c. Fungi
- d. Animals

9. Which of the following properties are the characteristics of tetanospasmin? D

- a. It is a heat-labile protein
- b. It is a neurotoxin
- c. It can be toxoided
- d. All of these

10. Which of the following species can cause bitterness, acidity and curdling in canned milk, cream and evaporated milk?

- a. *Bacillus*
- b. *Clostridium*
- c. both (a) and (b)
- d. *Saccharomyces*



Prize Money is Sponsored by
Group Pharmaceuticals Ltd
healthy smiles matt



Congratulations

to the winner of 12th Edition
KRPA Quiz Competition

Naveen K L
M Pharma (Pharmacology)

DISCLAIMER

The Newsletter intends to provide updated and reliable information on medicines and other related issues in an attempt to equip healthcare professionals to take informed decision in recommending medicines to the patients. However, they are encouraged to validate the contents. Neither the people associated with the publication of the Newsletter nor the organization shall be liable for any damage incurred as a result of use of the contents of this publication. The brand names of medicines, if mentioned, are for illustration only and the newsletter does not endorse them.

Send your Articles, Suggestions, or Comments to
krpaindia@gmail.com
for the overall improvement of
KRPA Monthly Bulletin

For Business Advertisements
Contact

Kaushik Devaraju
+ 91 97383 66942

Sanjeev Kumar B N
+91 87478 44080

Are you a pharmacist yearning to EXPAND your network and explore the world of pharmacy? It's just one click away.

Scan QR Code to become a member of KRPA and enjoy the benefits.

