



The NGSMIPS Herald

The Official news letter of the Nitte Gulabi Shetty Memorial
Institute of Pharmaceutical Sciences, Mangalore

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Are Cosmetics Safe?

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VISION

To build a humane society through excellence in education and health care.

MISSION

To develop Nitte University as a centre of excellence, imparting quality education, generating competent, skilled manpower to face the scientific and social challenges with a high degree of credibility, integrity, ethical standards and social concern.

'For Private Circulation Only'

From the Editor's desk



Friends,

There has been much debate among the academic scholars, research scientists, animal activists and general public about the moral, ethical and scientific justification of experiments on animals in research laboratories, educational institutions and pharmaceutical companies. Each of these agencies put their concerns and views passionately with varying degree of scientific evidence and conviction. The Ministry of Environment and Forests (MoEF) also intervened in the matter and directed the UGC to take a stand in the matter. Accordingly UGC sent guidelines to educational institutions conducting animal experiments in colleges without totally banning the experiments on animals.

Perhaps experiments on animals in under graduate level may not be justified and necessary. But it will be very difficult to do away with in research involving development of drugs and formulations. Saving grace is that the government is allowing use of animals in "molecular research" which is not again clearly defined.

No doubt, reduction, refinement and replacement of animal experiments are most ideal. The big question is; can we stop using animals in the production of antibiotics, toxicity testing etc.? Several software based solutions, cell culture based studies and even micro dosing on human volunteers are being tried to replace toxicity testing with varied success.

The suggested penalties for conducting animal experiments are fine or imprisonment for five years or both! This extraordinary proposal has a potential to take medical research many steps backwards. The way out is balancing - permitting the experiments with stringent conditions. A blanket ban will be only at the cost of serious research in the area of medical sciences and drug development.

Thousands of research projects funded by the government agencies, universities and pharma companies involving animal experimentation are in different stages of completion. The law making, regulating authorities and scientific community should take a close look into the issues and arrive at a decision without taking the research backward.

C.S. Shastry, Editor in-Chief

Gold Medal Winners 2010-2011



Ms. Shakila

K. Sriharsha Memorial Gold Medal for the best out going B.Pharm student



Ms. Uchil Deepika Vijaykumar

Sri. G. Venkatanarasamma Memorial gold medal for the best outgoing M.Pharm student

Guest Lectures



Dr. V. B. Gupta speaks at the In-Campus Workshop for UG & PG Students



Mr. Himanshu Joshi, Lecturer, NGSM IPS delivers his lecture at the Goa Collage of Pharmacy

CAMPUS BUZZ

NGSM IPS celebrates Annual Day

The Institution celebrated Annual Day on April 19, 2012 at the K.S. Hedge Auditorium. Derelakatte. The Chief Guest was Dr. B.R Jagashetty, Drugs Controller, Karnataka State and Guest of Honour, Dr. M. S. Moodithaya, Director-Global Initiatives, Nitte University. Also present at the occasion was Sri. Raghuram Bhandary, Additional Drugs Controller, Karnataka and Sri Ramakant Kunte, In-Charge Additional Drugs Controller of Mangalore. Dr. B.R. Jagashetty has to his credit 29 years of experience in the administration and enforcement of various acts and rules and is a recipient of several awards for his services and commitment to his responsibilities in the Drugs Control Department. In his



Dr. B.R. Jagashetty lights the inaugural lamp in the presence of Dr. M. S. Moodithaya, Dr. C.S. Shastry, Principal, Dr. D. Satyanarayana, Director of PG Studies and Mr. Praveen, Student President



Ms. Uchil Deepika receives her Gold Medal from Dr. B.R. Jagashetty



Ms. Shakila receives her Gold Medal from Dr. B.R. Jagashetty

address, Dr. Jagashetty shared his experiences and assured the students that the Drugs Control Department is an important area where pharmacy graduates can aspire to start their careers.

During the formal function, students for academic excellence were recognized and duly awarded. The K. Sriharsha Memorial Gold Medal for the best out going M.Pharm student went to Ms. Uchil Deepika Vijaykumar and the Sri. G. Venkatanarasamma Memorial gold medal for the best outgoing B.Pharm student was awarded to Ms. Shakila for the academic year 2010-2011. Prizes were also distributed to winners of various competitive events in Sports, Literary and the Cultural Arts held during the academic year. Later in the day, the students put up a two hour long entertainment of song and dance complete with fashion shows that enthralled everyone.

Guest Lectures

A one day in-campus workshop for the final year B. Pharm and M Pharm students was organised by the institution on April 2, 2012. The resource person was Dr. V. B. Gupta from Inventi-novo Trial Consortium, Bhopal who spoke on the topic, "Ideating-Inventing-Patenting". This workshop was sponsored by the Nitte University, Mangalore.

Mr. Himanshu Joshi, Lecturer Department of Pharmacology, NGSMIPS delivered a guest lecture on, "Intellectual Property Rights" for P.G students at the Goa Collage of Pharmacy, Goa on 23 and 24th April 2012

Ph.D Awarded

Mr. Himanshu Joshi, Lecturer, Department of Pharmacology, NGSM Institute of Pharmaceutical Sciences, Mangalore, Karnataka, has been awarded Doctor of Philosophy (Ph. D) in Pharmaceutical Sciences for his thesis entitled "Phytochemical and Pharmacological Investigation of the Plant, memecylon umbellatum (Burm.)(Syn: Memecylon Edule Roxb.)" by the Rajiv Gandhi University of Health Sciences, Bangalore, under the guidance of Dr. D. Satyanarayana, Director of P.G. Studies and Research, NGSMIPS.



Best Paper Award

Mr. Chandrashekar D., Librarian, received Best Paper Award at the 4th Annual Conference of Karnataka Health Sciences Library Association held on 27th & 28th January 2012 at Kidwai Institute of Oncology, Bangalore for his paper entitled "The role of Knowledge Professionals from Information System to Knowledge based system"

Appointments

Mr. Javed Shareef has been appointed as Senior Lecturer in the Department of Pharmacy Practice with effect from April 9, 2012

DEPARTMENT ACTIVITIES

DEPARTMENT OF PHARMACEUTICAL CHEMISTRY

Research Publications

DR. K.ISHWAR BHAT, Professor

1. Synthesis and antibacterial activity of new 2,5-disubstituted 1,3,4- thiadiazole derivatives. International Journal of Pharmaceutical Research and Development, 2012; 3(12): 144-151.
2. Analgesic and anti inflammatory activity of Desmodium Oojeinense (Roxb.) H. American Journal of Pharmtech Research, 2012; 2(1): 557-563.
3. Microwave mediated Aminobenylation reactions. International Journal of Pharmascholars, 2012; 1(1): 34-39.
4. Anti inflammatory, analgesic and phytochemical studies of clitoria ternatea linn flower extract, International Research Journal of Pharmacy, 2012; 3(3): 208-210.

MS. JAINEY P. JAMES, Lecturer

Antitumor, Analgesic, and Anti-inflammatory activities of synthesized pyroazolins. Journal of Young Pharmacist, 2012; 4(2): 82-87.

DEPARTMENT OF PHARMACEUTICS

Research Publications

DR. R. NARAYANA CHARYULU, Professor

1. Influence of bioenhancers on the release pattern of niosomes containing methotrexate. Nitte University Journal of Health Science, Vol. 2, June 2012.
2. An investigation of effect of various hydrophilic polymers on matrix tablets of desvenlafaxine succinate Int. J. Pharm. Sci. Rev. Res., 2012; 14(1)
3. Formulation and evaluation of bilayer floating tablets of Diltiazem hydrochloride for bimodal release. International Journal of Research in Pharmaceutical Sciences, 2012; 3(2): 301-306

4. Design and evaluation of three layer matrix tablet of Losartan Potassium capped with Eudragit and HPMC Combination. International Journal of Research in Pharmaceutical Sciences. 2012; 3 (2), 319-325

DR. MARINA KOLAND, Professor

Buoyant oil entrapped calcium pectinate gel beads of famotidine. International Research Journal of Pharmacy, 2012; 3(4): 247-250

MRS. NISHA GIRISH SHETTY, Senior Lecturer

1. Phase transition ocular drug delivery system for Antazoline Phosphate. Int J Drug Formulation and Research, 2012; 3 (2): 27-39.
2. Formulation and Development of nasal in situ gels of tryptans for migraine activity. Int. J Res. Pharm and Biomedical Sci. 2012; 3(2): 861-868.

MR. D. SRINIVASA SASTRY, Lecturer

Formulation and in vitro comparative evaluation of orodispersible tablets of granisetron hydrochloride, .IJRPS 2012; 3(2): 195-199

DEPARTMENT OF PHARMACOLOGY

Workshops/Seminars Attended

Mr. Himanshu Joshi, Lecturer, Mr Gururaja M.P, Lecturer and Mrs. Nimmy Chacko, Senior Lecturer, participated in a workshop on, "Computer Assisted Learning (CAL) in Pharmacology" organized by the Department of Pharmacology, KMC, Mangalore in association with 'Elsevier' on 8th June 2012.

NON TEACHING FACULTY

Mr. Chandrashekar. D, Librarian, presented a paper entitled, "Impact of Web on the Process of Print Resources to Electronic Resources" at the 4th Annual Conference of Karnataka Health Science Library Association on the 27th and 28th January 2012 held at Kidwai Institute of Oncology, Bangalore.



LAUGHTER



"You are completely free to carry out whatever research you want, so long as you come to these conclusions."

STUDENT FORUM

Everyone knows that Pharmacy is one of the most important health care professions in the world and can be considered on par with the medical profession. But does our student community think so too? We, on the editorial team decided to find out by presenting a few questions, to feel the pulse of the student so to speak. These are some of the interesting answers that Vivek Ghate, Student Editor received to two such questions from the students.

Question 1:

What have you read recently related to pharmacy?

('Student Life'- A time to enjoy, educate and develop oneself for a better future. So I decided to focus on the reading habits of NGSM IPS fellow mates and hence the above question.)

'A Course in pharmacy is on the top of the list of medical and related courses'

Mr. Praveen (III B.Pharm)

Ideas keep growing! Even in the case of Diabetes- the most common life style disease today!

'Lifestyle changes - Is a must for diabetic patients'

Mr. Christian Manan (IV B.Pharm)

'Newer dosage forms for administration of insulin for diabetes'

Mr. Shanon (III B.Pharm)

'The new trend in the diabetic level checking which does not utilize the finger pricking electronic devices, but uses one's own tears!'

Ms. Annett (IV B. Pharm)

The vision of the future - Grand entry into the Industry!

'The major industries, their turnovers, infrastructures and the opportunities for the growing generation'

Ms. Ashwini Pai (IV B.Pharm)

'The profits of the MNC's like Pfizer and their tactics for profitable business'

Ms. Melissa (IV B.Pharm)

Also the talk about India and the MNC's

'SEZ in Himachal Pradesh for setting Industries and employment of Indians'

Mr. Meet (IV B.Pharm)

'The various drug related products being cheaper in India compared to the US and they looking into Indian market'

Mr. Jeevan (IV B.Pharm)

Question 2:

What will be the impact of Pharmacy on your future career?

'Future Career' - is like the bitter medicine. You know you will get well taking it but cannot easily take it. This question did seem a bit tougher than the previous and the majority of replies are from the 3rd and the 4th years, while the other two classes are still indecisive about their future.

'As every woman is concerned of beauty, I want to join the Cosmetic Industry and also learning Pharmaceutics for 4 years will be a strong foundation for me in the future'

Ms. Melanie (III B.Pharm)

'I am interested in the animal and human mechanisms of the drug and hope my future career will be related to this'

Mr. Meet (IV B.Pharm)

'The knowledge of the drug laws, materials, and layout would strongly support me in joining an industry and perhaps in building one too!'

Mr. Christian Manan (IV B. Pharm)
& Mr. Lenson (III B.Pharm)

Apart from these, there were a few novel thoughts about the future.

'I want to continue my career in the Analytical field and this interest grew when I was introduced with the Pharm. Inorganic Chemistry subject'

Ms. Stephanie (III B. Pharm)

'The knowledge gained here with respect to the usage of drugs would help me in educating the people with the dos & don'ts with respect to medication which is a matter of concern in the growing population'

Mr. Shanon (III B. Pharm)

'I am comfortable to be under the cover of an industry but have a strong liking for the hospital setting too, which involves interaction with variety of patients and monitoring. I also suggest that the course should involve visits to hospitals.'

Ms. Melissa (IV B.Pharm)

'I wanted to take up MBA later on and my primary goal would be setting up of my own business. For this Pharma MBA will have greater impact on my career than B.Pharm alone'

Mr. Praveen (III B.Pharm)

'I am keen in joining the R & D in the pharmaceutical setup and am confident to pursue the same due to the familiarization with the working and instrumentation of the industrial equipments'

Mr. Anish (IV B.Pharm)

While the whole section above gave cent percent positive view about the impact, it's not always so!

'It may not always have a positive impact because the techniques and the instruments we learn to handle in the course may not really match with the ones used in the industry and we may have to face some hurdles later.'

Mr. Aditya (IV B.Pharm)

The only solution to this would be perhaps to include some of these techniques or completely revise the educational systems for the better future.

COSMETICS: THE TWO FACES OF A COIN!

Compiled by: **Manan Christian**
Final Year B.Pharm



Cosmetics are substances used to enhance the appearance or odour of the human body. They are generally mixtures of chemical compounds, some being derived from

natural sources, many being synthetic. But are these Cosmetics really safe? No. Thanks to the latest additions to the melting pot of chemicals and pollutants in skin care, above and beyond the usual parabens. They include synthetic coloring ingredients, emulsifiers, leads, copolymer, triclosan, and urea. Also contributing to the chemical compounds are phthalates, formaldehyde and petroleum.

Have you ever counted how many cosmetics or personal care products you use in a day? Chances are it's nearly 10. And chances are good that they include shampoo, toothpaste, soap, deodorant, hair conditioner, lip balm, sunscreen, body lotion, and shaving products if you're a man and cosmetics if you are a woman. Phthalates aren't just found in cosmetics-they're also in shampoos, shower curtains, and time-release medications, among other things. Make-up contains phthalates, which have been linked to reproductive problems in boys and heightened risk of breast cancer in women. Pregnant women who are exposed to phthalates are more likely to give birth to boys with reproductive problems.

The Safe Cosmetic Act of 2010 uses terminology like aggregate exposure, vulnerable populations, and people with compromised immune systems, but it seems as though everybody fits into at least two categories. Are you still willing to take the same chances?

- Synthetic colors are listed as D&C or FD&C, but even though these are regulated by the industry, they are still mostly derived from coal tar, which, when injected in lab mice, causes cancer. Many previously approved colors are now banned across the world because of known carcinogenic properties.
- Dibutyl phthalate (DBP) is a commonly used plasticizer. Banned in Europe, this dangerous toxin can pose a threat to the nervous system, even by simply inhaling the fumes. Women who sit and relax at salons and boutiques for hours

on end might even feel intoxicated when they exit. Pregnant women especially beware. The long term effects include impaired fetal development and deformed male reproductive organs.

- Triclosan is an antibacterial and antifungal agent. It is a polychloro phenoxy phenol. Is being used in many consumer products, including toothpaste. It can cause allergies, endocrine disruption and also cancer.
- Even the use of the most difficult to pronounce chemicals Diethanolamine and Triethanolamine are generally included in many formulations that are of emulsifier type have proved to be really carcinogenic in the lab rats.
- Many synthetic nail colors, lipsticks, sunscreens and whitening toothpastes now contain lead and other metals. Titanium dioxide is found in concealers and even diaper ointments.
- Some metals are used for color, and certain kinds of lip glosses even contain aluminum compounds. The infamous D&C Red 6 may contain mercury and arsenic in addition to the lead. Also, zinc is used in moisturizers, which clogs pores, preventing them from breathing properly.
- Petrolatum commonly known as the petroleum jelly is also used in the preparation of moisturizers. It forms an oily layer on the skin which blocks moisture evaporation. Just as aluminum in antiperspirants dangerously blocks and traps sweat, petroleum has adverse effects on skin; however, since it's so cheap for makeup manufacturers, it's even found in baby creams and wax depilatories.

However, it's not possible to just shop our way out of this problem. Without new laws, hazardous chemicals will remain in the majority of personal care products - and the problem will remain hidden from consumers. Many of the toxic chemicals described here are not even listed on product labels due to loopholes that allow companies to keep secret the chemicals in fragrances (such as DEP) and the hazardous impurities (such as formaldehyde and 1,4-dioxane) that are commonly found in products. Some companies are already making safer products that don't contain harmful chemicals such as phthalates and formaldehyde. One can browse the list of companies that make products and have signed the Compact for Safe Cosmetics.

The Safe Cosmetics Act of 2010 will fix these problems by requiring companies to list all product ingredients on labels, and by setting up a system to ensure that all personal care products are assessed for safety and free of the most harmful

chemicals. This legislation will protect the health of everyone who uses personal care products, and will also ensure the long-term health of the cosmetics industry by shifting the industry away from toxic chemicals and spurring the innovation of safer products that consumers around the world are demanding.

Fortunately, there are natural, non-toxic preservatives that are both safe and effective. Nevertheless the use of chemicals cannot be wiped of completely neither can the use of cosmetics to brighten and clean the skin be stopped.

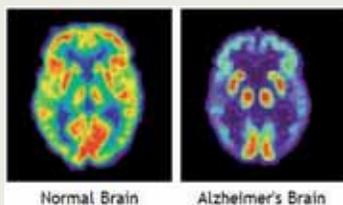
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- <http://www.naturalnews.com>
- <http://www.naturalskincaresecrets.com/cosmetic-ingredients-avoid.html>
- <http://safecosmetics.org/article>
- <http://www.mystagesofbeauty.com>

ALUMINIUM AND ALZHEIMER'S DISEASE

Compiled by: **Dr. Marina Koland**

There are a number of environmental factors that could be possible contributory causes of Alzheimer's disease in some people. Among these is aluminium. During the 1960s and 1970s, aluminum emerged as a possible suspect in Alzheimer's. This suspicion led to concern about exposure to aluminum



through everyday sources such as pots and pans, beverage cans, antacids and antiperspirants. Many of the symptoms of aluminum toxicity can be compared to Alzheimer's disease, which can make it difficult for

physicians and patients alike to distinguish the differences. Although aluminum toxicity is a serious disease by itself, it can also lead to the contraction of other serious disorders such as rickets, gastrointestinal disorders, anemia, nervousness, memory loss, softening bones and colic.

There are some natural alternatives and supplements that can help reduce the intake of aluminum and/or have this intake

safely digested without harming the kidneys. Apple Pectin is a natural supplement that binds itself with metals in the body and then helps expel these metals from the body naturally. Calcium and magnesium are also important supplements which work this way. Since the idea that the metal might be a risk factor for Alzheimer's disease was first proposed there have been numerous conferences on aluminium and health. The medical research community, international and government regulatory agencies and the aluminium industry all review the evidence at frequent intervals. The overwhelming medical and scientific opinion is that the findings outlined above have shown that there is no concrete link between the use of aluminium and alzheimer's disease Though there is no doubt that aluminium is neurotoxic and excessive intake should be avoided,

References:

1. <http://alzheimers.org.uk/site/scripts/document>
2. <http://www.alzscot.org/pages/info/aluminium.htm>
3. Frank Mangano. Avoiding aluminium toxicity in your life. <http://www.naturahealthonthe web.com>

BEST PAPER AWARD



Mr. Chandrashekar D., Librarian, receives Best Paper Award at the 4th Annual Conference of Karnataka Health Sciences Library Association held on 27th & 28th January 2012 at Kidwai Institute of Oncology, Bangalore

Annual Day Celebration

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