JANUARY
01 New Year 2009
12 Faculty Graduate Studies Committee Meeting
13 FIST Building Task Force Meeting
14 Research on FAME from microalgae with RMC and UMT
24 UMP's Third Convocation (Session 2)
25-26 Chinese New Year

FEBRUARY
02 Vice-Chancellors 2009 Mandate
03 Faculty Executive Meeting
08 Thaipusam
09 Faculty Graduate Studies Committee Meeting
11 Central Labs Committee formed
20-22 Expert Panel Meeting—Industrial Mathematics Program
22 National Symposium in Organic Synthesis Working Committee Meeting
24 State Biotechnology Committee Meeting
28 Deputy Prime Minister's visit to UMP

MARCH
03 MOSTI's Research & Innovation Unit Visit
09 Mauludirrasul
16 Submit Infrastructure Requirement for RM10
18 New Academic Programs Meeting
26 RD&C on FAME from microalgae Meeting with Research & Innovation and Almal Sdn Bhd

ARSENIC DETECTION
FOCUS ON:

USING THE RIGHT RECIPE FOR COOKING RICE REDUCES TOXIC INORGANIC ARSENIC CONTENT

The content of toxic arsenic in rice not only depends on where you get the rice but also how you serve it; that is the result of a new study performed by a UK research group.

Rice is the only staple crop grown under flooded soil conditions. Under anaerobic conditions, arsenic in soil is converted readily to arsenite which is mobile, leading to arsenic in rice grain being around 10-fold higher than for other crops. Arsenic contamination of rice is further exacerbated when the soil or the irrigation water is polluted with arsenic. Toxic inorganic arsenic, classified a non-threshold carcinogen, can constitute up to 90 % of the total arsenic present in rice.

The new study investigated the question whether the cooking technique has an influence on the final content of toxic arsenic in the prepared rice meal. Three different cooking procedures were investigated. Total arsenic concentrations were determined by ICP-MS using collision-cell technology.

The results indicated that rinse washing was effective at removing circa. 10% of the total and inorganic arsenic from basmati rice, but was less effective for other rice types. While steaming reduced total and inorganic arsenic rice content, it did not do so consistently across all rice types investigated. High volume water: rice cooking did effectively remove both total and inorganic arsenic for the long-grain and basmati rice, by 35% and 45% for total and inorganic arsenic content, respectively, compared to uncooked (raw) rice.

References:

PASSAGES
Latest additions to the FIST family

Professor Liew Kong Yong (VK7)
Inorganic Chemist
5 January 2009

Assoc. Prof. Tahir Abdul Rohman (DS54)
Polymer Chemist
26 February 2009

Dr. Roziah Hj. Kambol (DS51)
Molecular Taxonomist
2 February 2009