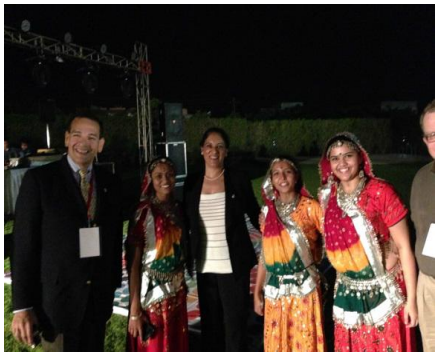
L'INSTITUT INDO-CANADIEN SHASTRI INDO-CANADIAN INSTITUTE

Sukhinder Cheema
Department of Biochemistry, Memorial University, Canada

"I am grateful to Shastri Indo-Canadian Institute for providing financial support to initiate a number of collaborations in India to target malnourishment and nutrition education."

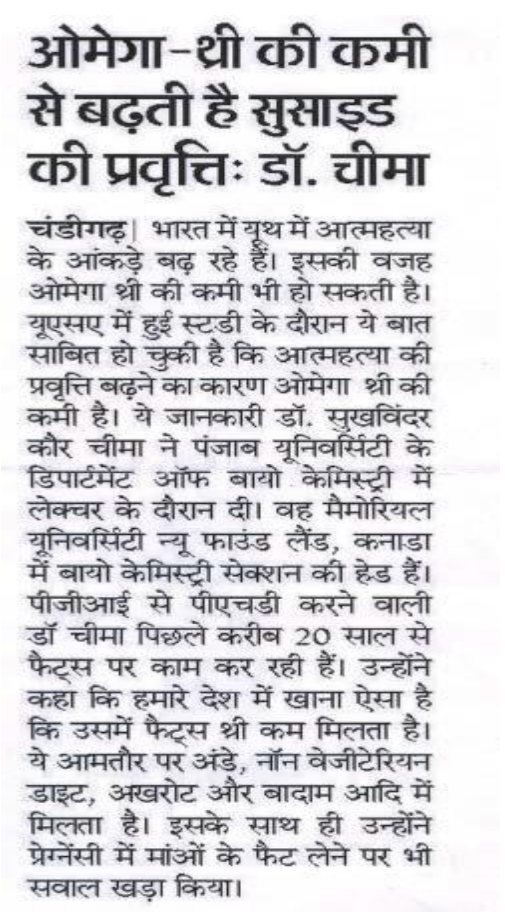
Project: "Targeting malnutrition to improve the health of the next generation."



Dr. Sukhinder Cheema is a Professor in Department of Biochemistry and Faculty of Medicine (cross appointed) at Memorial University of Newfoundland, Canada. She has established collaborations in various States such as Punjab, Gujarat and Madras. Recent support from the Shastri Institute was helpful to her towards initiating collaborations with Dr. Rajat Sandhir, Department of Biochemistry, Punjab University, Chandigarh. Their meetings during her visit to Chandigarh in May 2015 resulted in exchange of scientific ideas that led them to apply for a research grant to study the importance of mother's omega-3 fatty acid status on brain health of the offspring. She has been promoting healthy eating during pregnancy and early childhood to protect the future generation from various metabolic disorders, with a focus on omega-3 fatty acids. The Indian population lacks knowledge on the importance of essential fats, and are generally deficient in healthy fats, while they consume excess of bad fats, which is likely the cause for increased incidence of obesity and other metabolic disorders. Through support from Shastri Institute, she was able to hold a conference on the importance of omega-3 fatty acids in health; the idea of bringing together academics, scientists, producers and growers of flax and companies interested in flax products was an excellent platform to learn about the challenges that every sector faces to improve the health of the Indian population. This led her to have discussions with Mr. Gurbans Sobti (Trade Commissioner, Canadian High Commission, and Chandigarh) during her recent trip to India in May 2015, to establish a Centre of Excellence in Nutrition in Punjab. Thus, these are exciting times for both India and Canada to enter into this new partnership. She has developed several other collaborations in India as a result of financial support from the Shastri Institute, which wouldn't have been possible otherwise.

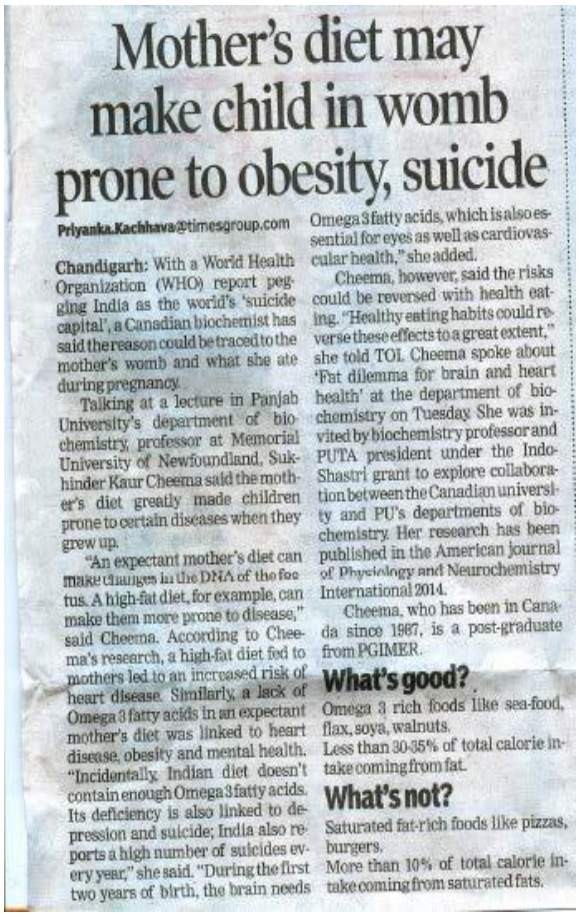
She has delivered several talks to varied audience such as undergraduate and graduate students, nurses, dieticians and faculty members; these were very well received.
She wrote a proposal to establish a Center of Excellence in Nutrition in Punjab and submitted the same to Mr. Sobti, Trade Commissioner, Canadian High Commission, Chandigarh to bring forward to the Chief Minister, Punjab. This proposal has been given an OK by the Chief Minister to move forward.

She has established an MOU between Memorial University and Lovely Professional University, Punjab, India. Memorial University was awarded a grant under the Queen Elizabeth II Jubilee Scholarship program to bring 2 Master's students from Lovely University to Biochemistry Department at Memorial University.



ओमेगा-थ्री की कमी से बढ़ती है सुसाइड की प्रवृत्तिः डॉ. चीमा

चंडीगढ़| भारत में यूथ में आत्महत्या के आंकड़े बढ़ रहे हैं। इसकी वजह ओमेगा थ्री की कमी भी हो सकती है। यूएसए में हुई स्टडी के दौरान ये बात साबित हो चुकी है कि आत्महत्या की प्रवृत्ति बढ़ने का कारण ओमेगा थ्री की कमी है। ये जानकारी डॉ. सुखविंदर कौर चीमा ने पंजाब यूनिवर्सिटी के डिपार्टमेंट ऑफ बायो केमिस्ट्री में लेक्चर के दौरान दी। वह मैमोरियल यूनिवर्सिटी न्यू फाउंड लैंड, कनाडा में बायो केमिस्ट्री सेक्शन की हेड हैं। पीजीआई से पीएचडी करने वाली डॉ चीमा पिछले करीब 20 साल से फैट्स पर काम कर रही हैं। उन्होंने कहा कि हमारे देश में खाना ऐसा है कि उसमें फैट्स थ्री कम मिलता है। ये आमतौर पर अंडे, नॉन वेजीटेरियन डाइट, अखरोट और बादाम आदि में मिलता है। इसके साथ ही उन्होंने प्रेग्नेंसी में मांओं के फैट लेने पर भी सवाल खड़ा किया।



Mother's diet may make child in womb prone to obesity, suicide

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Chandigarh: With a World Health Organization (WHO) report pegging India as the world's 'suicide capital', a Canadian biochemist has said the reason could be traced to the mother's womb and what she ate during pregnancy.

Talking at a lecture in Panjab University's department of biochemistry, professor at Memorial University of Newfoundland, Sukhinder Kaur Cheema said the mother's diet greatly made children prone to certain diseases when they grew up.

"An expectant mother's diet can make changes in the DNA of the foetus. A high-fat diet, for example, can make them more prone to disease," said Cheema. According to Cheema's research, a high-fat diet fed to mothers led to an increased risk of heart disease. Similarly, a lack of Omega 3 fatty acids in an expectant mother's diet was linked to heart disease, obesity and mental health. "Incidentally, Indian diet doesn't contain enough Omega 3 fatty acids. Its deficiency is also linked to depression and suicide; India also reports a high number of suicides every year," she said. "During the first two years of birth, the brain needs Omega 3 fatty acids, which is also essential for eyes as well as cardiovascular health," she added.

Cheema, however, said the risks could be reversed with health eating. "Healthy eating habits could reverse these effects to a great extent," she told TOI. Cheema spoke about 'Fat dilemma for brain and heart health' at the department of biochemistry on Tuesday. She was invited by biochemistry professor and PUTA president under the Indo-Shastri grant to explore collaboration between the Canadian university and PU's departments of biochemistry. Her research has been published in the American journal of Physiology and Neurochemistry International 2014.

Cheema, who has been in Canada since 1967, is a post-graduate from PGIMER.

What's good?

Omega 3 rich foods like sea-food, flax, soya, walnuts.
Less than 30-35% of total calorie intake coming from fat.

What's not?

Saturated fat-rich foods like pizzas, burgers.
More than 10% of total calorie intake coming from saturated fats.

For more information on the project, please contact Dr. Sukhinder Cheema at: skaur@mun.ca