

In the Media

HAVE YOU HUGGED A VENDING MACHINE TODAY?

“A brand that’s high up on a billboard wants to dominate me, but a brand that can be hugged wants to be my friend. Brands expropriate human gestures in order to make us look at them, not as immaterial entities, but as friends...who can do something for us...they become indispensable.”

– Schulich School of Business Marketing Professor Marcus Giesler, speaking about Coke’s touchy-feely campaign to hug a vending machine for a free can, *Toronto Star*, April 17.

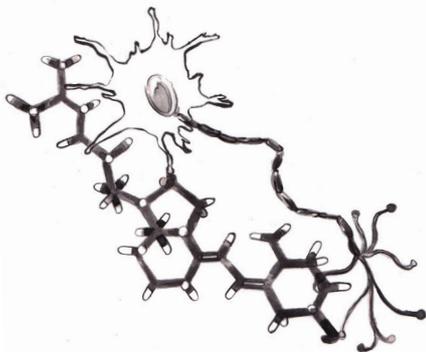
RESOURCEFUL THINKING

“What I say to them is that corporations that are doing wrong things are also doing very good things. And those good things are emanating from people like them, inside of the system, trying to change the system. You don’t have to sell your soul. [Besides] if you’re not going to go inside these corporations and try to change them, how the hell are they going to change?”

– Advice York Environmental Studies professor José Etcheverry says he gives to his graduating students considering jobs in the resources industry, *Maclean’s*, September 13, 2012.

A **MYOTROPHIC LATERAL SCLEROSIS** (ALS), often referred to as “Lou Gehrig’s disease”, is a progressive neurodegenerative disease affecting nerve cells in the brain and the spinal cord that control muscle. Gehrig was a famous New York Yankees player whose struggle with ALS eventually gave the disease its moniker.

In a normally functioning person, motor neurons reach from the brain to the spinal cord, and from the spinal cord to the muscles throughout the body. ALS causes those neurons to progressively degenerate and eventually leads to their death. When neurons die, the ability of the brain to initiate and control muscle movement is lost. With voluntary muscle action progressively affected, patients in the later stages of the disease may become totally paralyzed.



York Researchers Go to Bat for ALS Sufferers

How vitamin D could help those with Lou Gehrig’s disease

There have been various therapies that have surfaced in the last decade to treat or at least ameliorate ALS’s symptoms. A recent study by York Kinesiology and Health Science Professor Mazen Hamadeh of York’s Muscle Health Research Centre in the Faculty of Health has found that high doses of vitamin D may affect ALS symptoms and improve the quality of life for some patients.

“Vitamin D is unique, since its actions are diverse,” says Hamadeh. “It influences the immune system, increases antioxi-

dant defence and increases neuronal survival under insults.”

Hamadeh and two Kinesiology & Health Science master’s degree students, Jesse Solomon and Alexandro Gianforaro, found motor performance and muscle endurance of mice with ALS improved with higher-than-normal doses of vitamin D. “The idea of using vitamin D in terms of my ALS research was indeed a ‘eureka’ moment,” says Hamadeh. “I remember I was visiting with my friends in the US, and after everyone had retired I started reading up on recent nutrition research. When I stumbled upon the latest vitamin D study, I realized it was the ideal nutritional component for research!”

The team first gave ALS-affected mice 10 times the adequate intake of vitamin D (equivalent to 8,000 IU/day in humans). Results showed improvement in motor performance and paw grip endurance, but not disease outcomes. In a follow-up study, the amount of vitamin D was 50 times the adequate intake (equalling 40,000 IU/day in humans). Again, functional capacity improved, but not disease outcomes.

The researchers wondered if vitamin D levels were set too high and there was an overabundance. So, in a third study, only a fortieth of the recommended adequate intake was used on the mice. This induced a vitamin D deficiency. Interestingly, while disease severity was reduced before disease onset, soon after onset, disease severity caught up with the mice and their paw grip endurance was worse. Hamadeh says there is clearly something happening in the mice’s muscle and CNS cells causing them to be less severely sick – despite very low vitamin D levels – for a short time, but only until disease onset. After that, the ALS progresses regularly. Why, remains a mystery. ■