Wake Up and Smell The Research

The aroma soon to waft down the streets of Nashville, Tennessee, will not be coming from yet another new gourmet coffee shop—rather, from the nation's first center devoted to basic research on America's favorite bean. Slated to open later this year at Vanderbilt University, the Institute for Coffee Studies hopes to pluck useful drugs from the brew.

"It's a brand new area," says psychiatrist Peter Martin, who hatched the idea with a Brazilian pharmacologist, Darcy Roberto Lima of the University of Rio de Janeiro. "Not much is known" about what makes coffee tick, says Martin, because "everybody's focused on caffeine."

Coffee is implicated as a depression-fighter in women.

Martin's team is interested in other compounds, namely chlorogenic acids, that he believes are responsible for some of coffee's purported benefits. For example, a meta-analysis last year by Harvard epidemiologist Edward Giovannucci showed that drinking several cups of coffee a day is associated with a 30% reduction in colorectal cancer. Another Harvard study in 1996 discovered an inverse relationship between coffee drinking and suicide among 87,000 female nurses, lending weight to the notion that coffee has antidepressant features.

Coffee "has a lot of bioactive compounds," says Giovannucci. It's "something that should be studied." Martin and Vanderbilt molecular physiologist David Lovinger plan to involve researchers in other parts of the university in screening coffee compounds before eventually testing drug candidates in lab animals and people. He hopes the center will also study other "nutriceuticals"—such as substances from Amazon rainforest plants.

The institute has $6 million in backing from coffee trade groups in Brazil, Colombia, and Central America. A foundation will be set up to handle the money and an independent scientific board will review the science; the coffee dealers get no stake in any patents developed by the institute.

What if the project backfires and coffee chemicals turn out to be bad for you? Martin says he's "pretty confident" that won't happen. "There have been extensive epidemiologic studies over the past 40 years, every one of them trying to show some harmful effect of coffee"—but without success, he notes.

NSF Ices Pier

Building materials are hard to come by in Antarctica, so when the McMurdo research station needs a new pier, it creates one out of ice. Freeze water around steel pipes and cable, sprinkle with dirt, and bingo, you have a 240-meter-long pier (at right in photo). A giant ice cube, however, will eventually crack. So, when the 6-year-old pier began to deteriorate, the National Science Foundation (NSF), which operates McMurdo, wanted to tow it out to sea and ditch it. Technically, that's "ocean dumping," so the NSF sent the Environmental Protection Agency (EPA) a detailed analysis of the ice to prove it does not contain harmful contaminants. Eventually, NSF explained, the pier should melt in the warmer waters, dropping a few kilometers of nontoxic pipes and cable to the ocean floor.

The EPA OK'd the dump, and on Valentine's Day NSF waved goodbye as the *Polar Sea* icebreaker started lugging the 150,000-plus ton pier to oblivion.

Dr. Quinn Counsels the House

Alternative medicine got a sympathetic ear on Capitol Hill last week, during a hearing held by Representative Dan Burton (R–IN) to explore how to integrate homeopathy, herbal treatments, and other therapies into mainstream medicine. Appropriately enough, he called as his star witness an alternative doctor: actress Jane Seymour, who plays Dr. Quinn, Medicine Woman, on TV.

Burton was wooed to the alternative side 5 years ago when his wife got immunity-boosting shots of a cell-surface antigen that, he said, has prevented a recurrence of her breast cancer. The hearing was part of a continuing "inquiry" on how Americans can get better access to therapies off the beaten medical path.

At the hearing, Seymour said she has been a convert since her dying father was taken to a San Diego clinic that invigorated him temporarily with the aid of massive vitamin C injections. She's a special fan of homeopathy, which treats ills with minuscule doses of substances that ordinarily cause the same symptoms. This "hair-of-the-dog" approach has been ridiculed by many scientists, who say the active ingredients are so diluted that they are often nonexistent. But members of the Committee on Government Reform listened raptly as Seymour claimed, among other things, that "homeopathy can cure acne within 4 days."

Only one committee member, Eleanor Holmes Norton of the District of Columbia, raised a contrary voice—after Seymour suggested that women opt for thermography before mammograms, which "are now known to be causing cancer." But most were with Connie Morella (R–MD), who gushed that Seymour is a "role model ... so what you have to say has a tremendous effect on public attitudes."

Crumbling Ivory Tower

Academia "is not the place where most of the life of the mind is being led. ... I do not think it has intellectuals, and it does not have broadly educated people. ... [M]ore and more ... it [has become] an industry, it has a lot of people who are technocrats who just analyze single small problems."

—Psychologist Martin Seligman of the University of Pennsylvania, in the February *American Psychologist*

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