



# A report from planet dairy

As the Mars rover Curiosity explores the terrain and seeks signs of water on the Red Planet, another explorer on another planet finds a wonderful, life-sustaining fluid.

**T**o much fanfare and well-deserved media attention, NASA landed its Curiosity rover on Gale Crater on Mars on the evening of Aug. 5. The engineers at mission control celebrated their expertise at deploying, landing and operating the explorer remotely from the Jet Propulsion Laboratory in Pasadena, Calif.

Now the rover begins its search for evidence that the planet ever supported microbial life. Curiosity will roam the planet, seeking water, analyzing rocks and performing other tests. On a planet that has inspired so much science fiction, here's hoping that Curiosity's mission will deliver reams of scientific facts about the universe.

You probably do not know that NASA deployed another robot to another planet in our solar system. I won't go as far as calling it a cover-up, but the mainstream media did not report this little-known mission to a planet code-named "Y-R-iad." *Dairy Foods* caught wind of this program and did a little investigation. Through our various sources and resources, we obtained a confidential report. Here are some excerpts:

"Almost immediately upon being deployed, the rover discovered a water-based substance that in its liquid form is full of nutrients that could support and nourish life on the planet. We manipulated the rover arm and pumped a sample of the substance . . . Our analysis found that 0.23 liters contains 8 grams of protein, 322 milligrams potassium, 490 IU vitamin A, 276 milligrams calcium, 205 milligrams phosphorous, 0.41 milligrams riboflavin and other vitamins and elements. When we subjected the substance to heat, we found that high temperatures imparted a preservative effect on the liquid."

"The rover's next test was excavation. As the rover's arm dug into the planet's

crust, it again encountered the substance, this time in a solid form, in various colors. For the purpose of our report, we will refer to the solids as 'bricks.' . . . Our analysis found that a 28.3 gram sample contains the equivalent of 8 grams of protein and 224 milligrams of calcium. The rover's on-board chemical laboratory assayed the sample and detected potassium, iron, magnesium and phosphorous, in varying concentrations."

"As the rover moved to the polar regions of the planet, it encountered this substance for a third time. We took a sample of the liquid in a frozen state and concluded that sub-zero temperatures have no deleterious effects. . . . One sample found particulates mixed with the frozen liquid. We would compare these unidentified particles to bits of fruits or nuts."

"Our team at Mission Control concludes that this liquid, if harvested and brought back to Earth, could be processed into a nutritious and low-cost source of protein, calcium and minerals for the human diet. Indeed, our back-of-the-envelope calculations estimate that 0.23 liters of the liquid could retail for 25 cents."

As **Rocket J. Squirrel** said to Bullwinkle: "Hokey smoke!" That is some miracle substance. Of course, there was no secret NASA mission to planet Y-R-iad. That watery substance is milk and it is found in abundance on planet Earth.

Readers of this magazine know all too well milk's health and nutrition benefits. But the general public's understanding can be a little shaky. There is plenty of science fiction surrounding dairy foods, especially milk and cheese.

With a new school year underway in September, dairy processors and producers are forced into their annual defense of milk against the efforts of the anti-dairy crowd. The annual cafeteria food fight

begins anew over the merits or evils of serving flavored milk to children. Cheese on pizza is another target, and the dairy industry again expends energy to defend the ingredient. (Here's what I don't get: These children are not being force-fed dairy foods. Parents can choose to make lunches for their children that include dairy, or not. On the other hand, for some children, school breakfasts and lunches are the most nutritious meals they will see all day.)

The dairy industry has the U.S. government on its side, in the form of the Dietary Guidelines for Americans, which recommends increasing intake of low-fat and fat-free milk, especially among children.

**Dairy processors:** Don't let the public think dairy is just for kids. It's true that milk consumption drops off after the teen years, but adults might want to reconsider their beverage and food choices. Greg Miller, president of the Dairy Research Institute (and a *Dairy Foods* columnist), pointed me towards a study in Australia that concluded that at least 43,000 cases of osteoporosis could have been prevented if Australians had increased their dairy intake. While the recommendation is three servings of dairy (milk, yogurt, cheese) a day, the average Australian consumes only 1.7 servings. A news report cited University of Melbourne bone researcher Sandra Iuliano-Burns, who said research showed the combination of a calcium-rich diet and exercise had "a powerful effect" on bone density.

This magazine's readers live on Planet Dairy, a comfortable world and one that can be a nutritious and healthy place to live, work and raise a family. That's not science fiction. ■

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