

Appendix #7

Pronominal Referencing

Cats finicky for Researchers find dysfunctional gene that prevents sweet tooth

By Paul Elias

The Associated Press

1. San Francisco- Cats are notoriously finicky eaters, as millions of pet owners can attest.

2. Now, there's a scientific theory explaining, at least in part, why cats have such snobby eating habits: genetics.

3. **Researchers** at the Monell Chemical Senses Center in Philadelphia and **their** collaborators said Sunday **they** found a dysfunctional *feline gene* **that** probably prevents cats from tasting sweets, a sensation nearly every other mammal on the planet experiences to varying degrees.

4. Researchers took saliva and blood samples from **six cats** including a tiger and a cheetah and found **each** had a useless *gene* **that** other mammals use to create a "sweet receptor" on their tongues. **The gene** in question does not produce one of the two vital proteins needed to form receptors.

5. "Because **cats** can't taste sweets, **they**'re cranky," joked Joseph Brand, Monell's associate director and an author of the paper published Sunday in the Public Library of Science's journal Genetics.

6. Brand said the "pseudogene" is probably a big reason why **they** are carnivores **that** get by on a high-protein "Atkin's-like" diet.

7. "**Its** sense of taste has driven **it** to become a meat-eater," Brand said. "Losing **their** sweet receptor has probably changed **their** dietary habits."

8. **Brand** said the paper is a culmination of a lingering **question that** nagged at **him** since **he** visited the Philadelphia Zoo with a colleague 25 years ago to watch the feeding habits of big cats.

9. **All mammals** have **receptor cells** on **their** tongues **that** send taste signals to the brain to process. **The receptor cells** are clustered together as taste buds. Each human taste bud is comprised of 50-100

receptor cells representing the five major taste sensations: salty, sour, sweet, bitter and umami, the taste of the food additive MSG and fermented soy products, among other foods.

10. Most mammals' sweet receptors are created by **two proteins, one of which** cats are missing.

11. The study was paid for, in part, by the research arm of the pet food giant **Mars Inc, which** is looking to make better-tasting cat food. The company has the rights of first refusal to commercialize the discovery published Sunday, Brand said.

12. Brand said the discovery could help veterinarians treat ill cats.

13. "Everyone knows **that** cats are finicky," said Brand, who owns two cats. "And one big issue is how to make food palatable enough for a sick cat to eat."

Tuesday, July 26, 2005
The Chronicle Herald
Halifax, Nova Scotia, Canada