

**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."