

## Fat Taste – A New Sensation

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Research conducted by Dr. Dave Pittman, associate professor of psychology at Wofford College, seeks to define the taste of dietary fat as a new category of taste sensations. Dr. Pittman believes that fat taste plays a major role in the over-consumption of high-fat foods thus contributing to the ongoing obesity epidemic in America.

### *Background information related to the research of Dr. Dave Pittman*

- Current estimates using Body Mass Index (BMI) are that 2 out of 3 Americans are overweight and nearly 1 out of 3 Americans are obese.
- The Center of Disease Control (CDC) estimates that 1 out of 3 children will develop type 2 diabetes.
- The two main contributors to being overweight are physical inactivity and over eating high-calorie, fatty foods.
- Ask anyone on the street why they choose to eat high-fat foods and they will say it is because the food tastes good.
- However; sweet, sour, salty, bitter and umami (MSG) are the only five characterized tastes.
- Until the last couple of years, there was no scientific proof that dietary fat produced taste sensations.

### *Goal of the research conducted by Dr. Dave Pittman*

- **Develop a research model in which we can fully examine and understand the role of taste in our consumption of fatty foods.**

### *Summary of research findings from the laboratory of Dr. Dave Pittman*

1. Using taste, rats are able to detect small amounts of the specific chemicals found in dietary fat.
2. Adding small quantities of the chemicals found in dietary fat to sweet, sour, salty, or bitter solutions increases the intensity of the taste.

### *Implications of the research findings from the laboratory of Dr. Dave Pittman*

1. Even though we know that eating food with high fat contributes to obesity, we continue to eat fatty foods because the food tastes good. Understanding the mechanisms that underlie why fatty foods taste good may allow us to develop artificial fat replacements that retain the palatability of fatty foods without the caloric density in a manner similar to sugar replacements like saccharin or Splenda.
2. We believe that individual differences in our taste sensitivity to fatty foods may contribute to the development of obesity. Understanding the role of fat taste may help explain why some people are more prone to become overweight than others.

The latest information about Dr. Pittman's research can be found at: **FatTaste.com**