#### **Comfort Foods and Mood**



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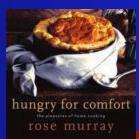
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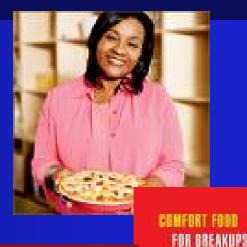
### Overview

**Diabetes** 

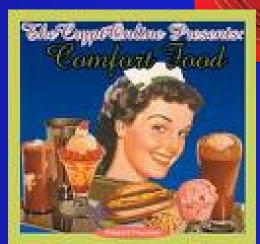
Comfort Food

- Stress & eating
- Does food improve mood?
- Emotional eating
- Comfort Foods
- Consequences
- Solutions









## Reporting from Iraq: Comfort food for troops can pack on the pounds

By Scott Hadly (Ventura County Star) Tuesday, July 8, 2008

CAMP RAMADI, Iraq There are many threats for the troops deployed here, but few as insidious as the bacon cheeseburger, French fries and soda.Reflecting what's happening across the United States, the military is fighting fat.

QuickTime<sup>™</sup> and a decompressor are needed to see this picture.

Beebe said his favorite meal is the weekly surf and turf - steak and crab legs. There's also an ice cream bar and a fast-food burger option at every meal. Five years into the war in Iraq, Forward Operating Bases such as this one and others much larger - have developed into mini-American towns. On some bases, troops fresh off of a patrol can stroll in for a sandwich at a makeshift Subway, grab a pie at Pizza Hut or get a Whopper from Burger King.

Even in the chow hall, where the meals are prepared by contractors, there are plenty of fast-food options - the kind many young troops typically reach for first. Such amenities are meant to provide some comfort for troops wrestling with dangerous situations and long deployments, but they've also made it difficult for some to keep off the pounds.

### King's Delight Ad

Our men and women serving in the United States Armed Forces deserve nothing but the finest. Kings Delight has a tradition of providing the great tasting chicken and deli meats served in troop feeding as well as in military commissaries.

We are proud that our portfolio of products and brands might bring a little comfort food to our soldiers, sailors, marines, airmen, and coast guardsmen



#### What are comfort foods?

 comfort food - food that evokes psychologically comfortable or pleasant state (Wansink, Cheney, & Char, 2003)

 Preferences that develop over a Lifetime

 Can get us in trouble was regularly

QuickTime<sup>TM</sup> and a decompressor are needed to see this picture





### Stress & Eating

- Comfort foods may be turned to in times of stress
- Stress An aversive state, marked by increased sympathetic nervous system arousal, in response to a threatening/demanding situation.
  - <u>Perceived</u> stress predicts health outcomes
- Eating after stress can improve mood (Dube, LeBell, & Lu, 2005; Osborn, Sbrocco, Carter, & Hood, 2008).
- However, eating does not always improve mood (Macht et al, 2003)
- Eating can actually worsen mood (Macht, Gerer, & Eligring, 2003; Polivy & Herman, 1999)

### Does food improve mood?

The Impact of Eating
Depends on . . .

## The Impact of Eating on Mood Depends on . . .

- The antecedents to eating
  - Stress or other negative emotions
  - Positive emotions (e.g., social situations)
  - Hunger
- Who is eating?
  - Specific groups may have a learned association between mood and eating:
    - Overweight/Obese or Weight status
    - Emotional Eaters
    - Dieting Status/Restrained Eaters
    - Gender may differ
    - Binge Eaters

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## The Impact of Eating on Mood Depends on . . .

- Type of food consumed Comfort Foods
  - Nutrients in foods
    - Tot fat, sat fat, % fat increase (McCann et al., 1990; Crowther et al., 2001),
  - Psychological aspects of foods "forbidden foods", healthy vs. unhealthy
  - Food availability
  - Personal preferences
    - Sweet & salty high fat foods among binge eaters (Marcus, Wing, & Hopkins, 1988); Michaud et al, 1990).
    - Foods typically avoided may be consumed
- Amount of food consumed total kcal increase (McCann et al., 1990; Crowther et al., 2001; Zellner et al, 2006)

## Eating Improves Mood in Response to Stress

- By moving a person along a continuum towards a positive mood state -- literally mood improvement.
- Or, eating can buffer the stress response so that an individual person does not ever reach the lowest mood point (vs. negative level reached without the buffer)



#### **Who? Emotional Eaters**

- Emotional Eating a tendency to eat in response to stress or negative mood.
  - Inapt response to stress (van Strien & Ouwens, 2006)
  - Higher among dieters
  - Decreases during positive mood states
- Overweight (vs. normal wt/underwt) increase amt eaten under stress conditions(Lowe & Fisher, 1983; Pinaquay et al, 2003, Gliebeter & Aversa, 2003)
- Underweight often eat less under stress

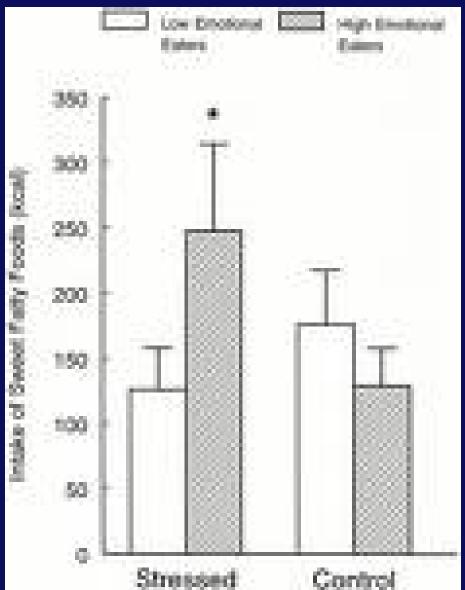


Fig. 1. Effect of emotional eating status and stress manipulation on intake (kcal) of sweet fatty foods. Data are mean + SE. \*t(32) = 1.85, p < .05, one-tailed test, for greater intake by high emotional eaters in the stressed group vs. the control group

### Who? Dieters

- Dieting Status Restrained eaters chronically limit food intake for weight control.
- More susceptible to increasing food intake under stress conditions (e.g., Cools, Schotte, & McNally, 1992; Zeliner et al., 2006).

# Consequences of Comfort Food Consumption Can Include:

- Short term powerful
  - Improved mood
  - Improved morale
- Long term
  - Weight gain
    - 79% obese vs. 9% normal weight report stress-related weight gains of 10lb or more (Rand, 1982)
    - 67% report 25lb more
  - Health consequences
  - Negative mood (dieters)

### Solutions . . .



### **Solutions**

- Identify who is negatively impacted (e.g., overweight, emotional eaters) & target them.
- Environmental Changes & Food Availability
- Alter stressful/neg emotional antecedents (e.g., boredom)
- What are the eating patterns?
  - Snacking & grazing
  - Regular meals
  - Night/evening eating
  - Mindless eating
- Modify the comfort foods
  - Healthier versions
  - Alter frequency/portion size



### Solutions

- Promote alternative behaviors to manage stress
  - Recreation, social, entertainment
  - Much match the ease & frequency of food

