

The Food Industry Center
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Why We Can't Stop Eating

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Undernourishment

In 2001-2003

- 854 million undernourished people worldwide
- 820 million in the developing countries
- 25 million in the transition countries
- 9 million in the industrialized countries



The World Food Summit in 1996 established the target of halving the number of undernourished people by no later than 2015.

State of the Food Insecurity in the World 2006

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Facts About Overweight & Obesity


The World Health Organization (WHO) Sept 2006

Globally in 2005

- Approximately 1.6 billion adults (age 15+) were overweight
- At least 400 million adults were obese
- At least 20 million children under the age of 5 years were overweight

By 2015

- Approximately 2.3 billion adults will be overweight
- More than 700 million will be obese

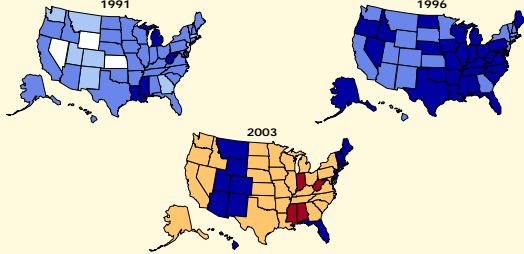


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Obesity Trends* Among U.S. Adults

BRFSS, 1991, 1996, 2003

(*BMI ≥30, or about 30 lbs overweight for 5'4" person)



No Data	<10%	10%–14%	15%–19%	20%–24%	≥25%
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Overnourishment

For developed countries and low-mortality developing countries

•overweight was listed as the fifth most serious risk factor

•Levels of overweight and obese women in Eastern Europe and Latin America are similar to those in the USA.



•In Brazil and Mexico, obesity is ceasing to be associated with high socioeconomic status



Chopra, Galbraith & Hill 2002

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“Why do you eat?”

- Hunger
- Stress
- Time of Day
- Social Gathering
- Boredom
- Compulsivity
- Free Food
- Fun
- Keep one Awake
- Tastes Good

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BRAIN INJURY

C.M. FISHER, NEUROLOGY (1994)

- ü BOY WITH INTRACEREBRAL HEMORRHAGE OF RIGHT ANTERIOR TEMPORAL LOBE (2 EPISODES)
- ü EXCLAMATION OF INTENSE HUNGER

HENSON ET AL, BRAIN INJURY (1993)

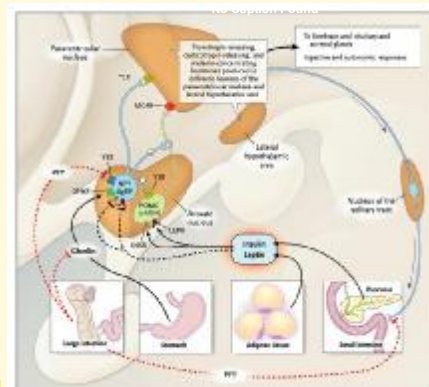
- ü TRAUMATIC BRAIN INJURED SUBJECTS VS CONTROLS
- ü TBI ATE LARGER MEALS AND MORE KCAL
- ü PRESENCE OF OTHER PEOPLE HAD NO EFFECT IN TBI SUBJECTS

REGARD AND LANDIS, NEUROLOGY (1997)

- ü GOURMAND SYNDROME
- ü LESIONS OF RIGHT ANTERIOR CEREBRAL HEMISPHERE
 - PREOCCUPATION WITH FINE FOODS

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Korner, J. et al.
N Engl J Med
2003;
349:926-928

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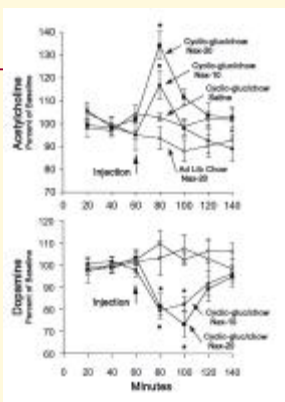
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What Causes Obesity?

Energy imbalance between calories consumed vs. calories expended

- A global shift in diet towards increased intake of energy – dense foods- high fat & sugar, low vitamins

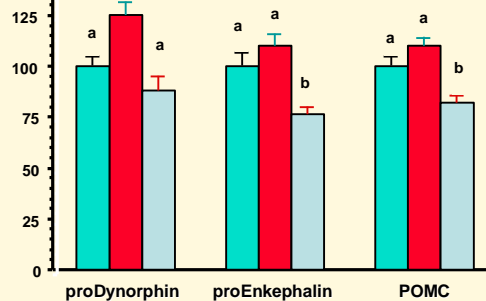
- A trend toward decreased physical activity – changing modes of transportation and increasing urbanization



Opioid mRNA Levels in Arcuate Nucleus

OD value (% CHO)

■ CHO Diet ad libitum
■ Fat/Sucrose Diet ad libitum
■ Fat/Sucrose Diet Pair-Fed



Obesity and Hunger: Elinder's View

- Current dietary energy supply is more than sufficient to alleviate starvation worldwide and is forecasted to grow for 25+ years.
- Agriculture subsidies distort balance between supply & demand, leading to over consumption and obesity.
- Overproduction of food in rich countries using trade distorting measures undermine the ag sectors in developing countries, hindering the eradication of hunger & poverty.
- Phasing out of ag producer support in developed countries is the first step in the fight against obesity and hunger.

Elinder BMJ 2005

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Food Advertising



Snack food
advertisers spent

\$2.6 million per 30
second commercial

during the 2007 Super
Bowl Game

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Food Advertising

2006 \$456 million was allocated to
education & outreach activities

compared to

2001 \$450 million spent by 2 major soda
companies on advertising



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eMarketing

revenue
BY PERFORMANCE MARKETING

Food companies are increasing online advertising

•Approximately 38.2 million Web users visited food sites in
September - up 15 percent from 2005. Media Matrix

•Comparing July 2005 with July 2006, Food Network.com had
a traffic increase of 21 percent; AllRecipes.com is up 51
percent; and About Food increased by 44 percent.

•introduction of *Food University* - high-end cooking events
with an accompanying website - is targeted at boomers.

•The Food Network reaches 90 million homes in the United
States and the core audience is 25 to 54, more female than
male.

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Children, Advertising and Obesity

Fast food restaurants spend \$3 billion dollars in ads targeted to children (Schosser, 2002).

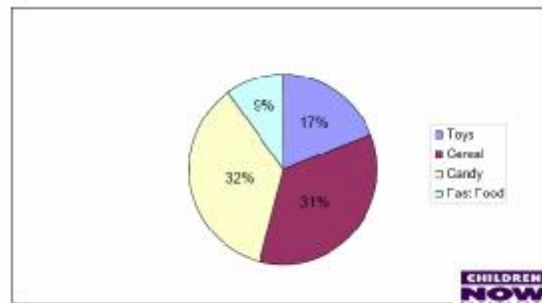
- 70% of all ads during children's television shows are for candy, cereal and fast food (Kunkel, 2001).

- There are about 11 food commercials per hour during children's Saturday morning TV; the average child may be exposed to one food commercial every 5 minutes. (Kotz and Story, 1994)

- Studies suggest that children who watch more television eat more fast food and tend to consume more soft drinks than other children, possibly related to food advertising.



Children's Television Advertisements by Type of Product



Potential Solutions

Individual/Community Action

- Educate parents about television co-viewing/media literacy
- Train child care providers/preschool teachers about TV co-viewing/media literacy
- Incorporate media literacy into preschool curricula

Voluntary Industry Action

- Promote public education campaigns and PSAs
- Promote positive messages about nutrition and eating in children's television shows
- Use children's favorite TV characters to sell healthy products

Regulatory Action

- Restrict advertising of unhealthy products to children under the age of 8
- Restrict interactive advertising
- Restore FTC authority to regulate marketing to children

