

# Consumption and Obesity in China

-A consumer Segmentation Study based on the Food Perspective

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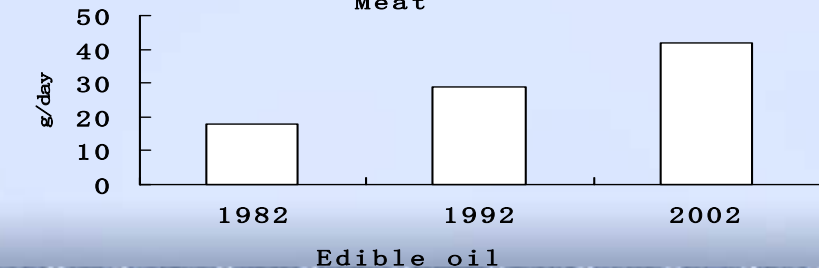
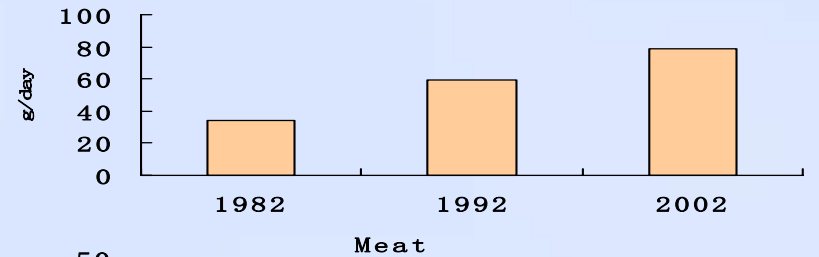
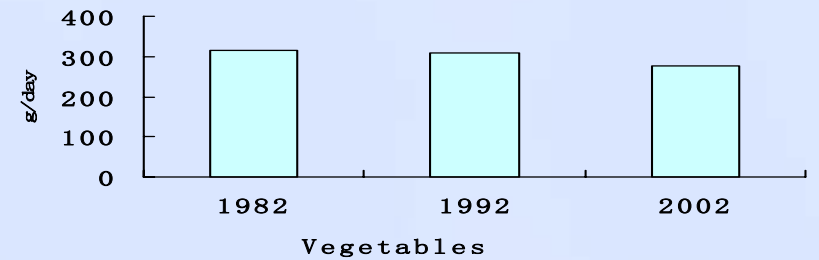
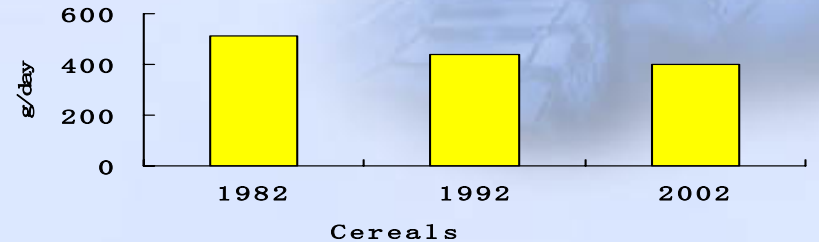
Hans Dagevos

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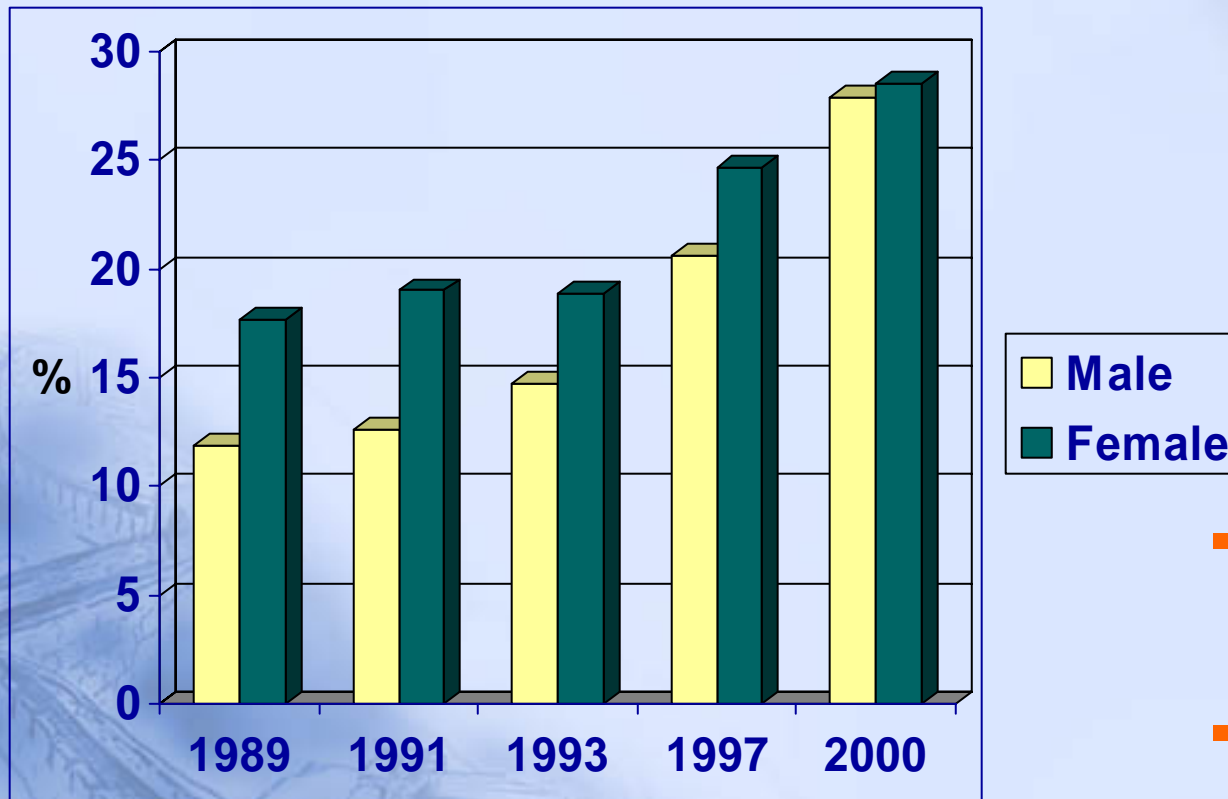
(Marketing and Consumer Behavior group)

# Changes in China: Consumer Society & Food consumption

- Fastest-growing consumer society in the world
- The World of Food is also changing
- Dietary patterns



# Changes in China: Overweight and obesity

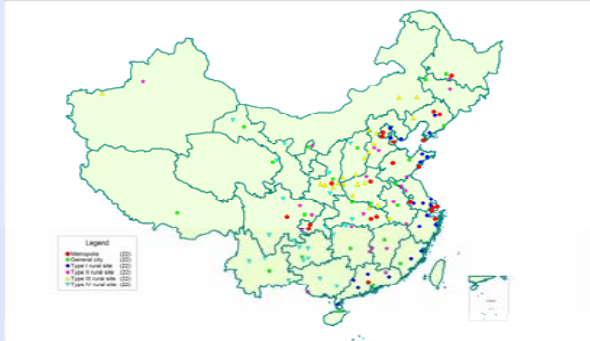


Prevalence of overweight in China for age group 18-45y



- Overweight: 18.9%  
(171 million adults)
- Obesity: 2.9%  
(26 million adults)

# Data and Method



**2002 China Nutrition and Health Survey**

- 132 counties
- 56,442 consumers above 18 years old
- 28 food categories expressed in grams per capita per day, assigned into 4 quarters

Factor Analysis

Factor Scores

Hierarchical Cluster Analysis (1% total sample)

Number of clusters and Initial Cluster Centers

K-means Cluster Analysis

# Consumers segmentation and food pattern

Consumer Clusters	High consumption product categories
1. Yellow Earth	Wheat product, other cereals, other tubers
2. Green Water	Rice, vegetables, seafood, pork, poultry
3. Newly Affluent	Beef/Lamb, fruit, eggs, poultry, seafood, tofu and milk
4. Western adopters	Cake, fruit juice, beverages, nuts

# Consumers segmentation and their characteristics

Clusters	Overweight /obesity	Regions	Educational Level	Income Category	Age
<b>Yellow Earth</b>	27%	3 <sup>rd</sup> class rural areas	Secondary & primary school	Low	Average
<b>Green Water</b>	18%	1 <sup>st</sup> , 2 <sup>nd</sup> & 4 <sup>th</sup> class rural areas	Secondary & primary school	Medium	Average
<b>Newly Affluent</b>	39%	Large cities & Medium/s mall cities	Secondary & higher school	Higher	Older
<b>Western Adopter</b>	30%	Large cities & Medium/s mall cities	Secondary & higher school	Highest	Younger

# Conclusion and Final Remarks

- Successfully and consistently identified four Chinese consumer clusters with very different BMIs!
- Most Vulnerable Group 'Yellow Earth' deserves special attention
- Traditional dietary pattern 'Green Water' most desirable – from a health perspective
- Most worrisome 'Newly Affluent' and 'Western Adopters', do not represent the majority (yet...)
- Implication to Firms: CSR, honest information and guidelines to consumers