

**Making safe, affordable & abundant food a global reality**

The Three Rights: Food, Choice, Sustainability

**Safe, affordable, abundant food**

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**A critical time and ours to act on**

- The time is now:
  - Record oil prices
  - Commodity price spikes
  - Food security fears
  - Trade restrictions
  - Global recession

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**The wave of global hunger**

In the year **2050**, world population will require **100%** more food,<sup>1,2</sup> and **70%** of this food must come from efficiency-improving technology<sup>3</sup>

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**Technology..** The vital ingredient to making safe, affordable and abundant food a reality

Technology- practices, products, genetics

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**Technology enables three rights**

A Time for Action  
Access to safe, proven, efficiency-enhancing technologies ensures:

**THE THREE RIGHTS**

1 **FOOD**  
a basic human right

2 **CHOICE**  
a consumer right

3 **SUSTAINABILITY**  
environmentally right

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**Food, a basic human right**

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**The wave of global hunger**

Hunger is the No. 1 health problem in developing world

- Lack of food kills more than war, AIDS, malaria and tuberculosis combined<sup>2</sup>
- 25,000 deaths per day worldwide from hunger

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**The wave of global hunger**

- Equivalent to 60 jumbo jets falling out of the sky **every day**

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**Hidden hunger**

“Hidden hunger” in industrialized nations affects

**1 in 5**

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**Developing countries want protein...period**

*“I have a dream to provide every Chinese, especially children, sufficient milk each day.”*  
**Wen Jiabao, Chinese Premier, 2007**

Country/Category	Grams
China (Previous)	100
China (New)	300
United States (Current RDI)	706

100g → 300g = 36M cows (with current production levels)<sup>3</sup>

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**Choice, a consumer right**

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**Choice, a consumer right**




- Do consumers want technology?

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**Choice, a consumer right**


- International Consumer Attitudes Study (ICAS) review of consumer attitudes & behaviors
- Key criteria:
  - Unaided questions
  - Spending data



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**Choice, a consumer right**

**The International Consumer Attitudes Study (ICAS)**

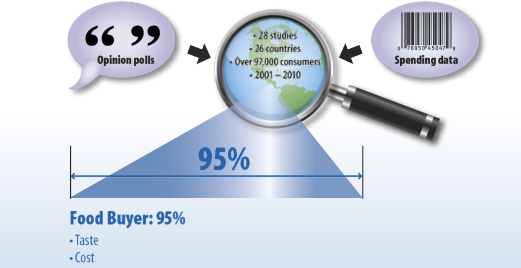


- 28 studies
- 26 countries
- Over 97,000 consumers
- 2001 – 2010

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**ICAS: Food buyer**

**The International Consumer Attitudes Study (ICAS)**



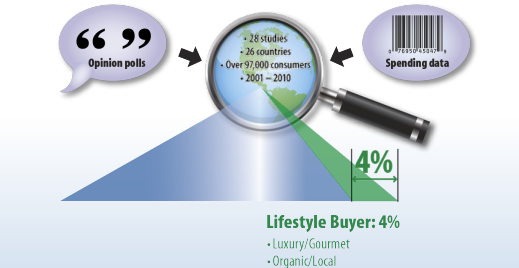
**Food Buyer: 95%**

- Taste
- Cost
- Nutrition

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**ICAS: Lifestyle buyer**

**The International Consumer Attitudes Study (ICAS)**



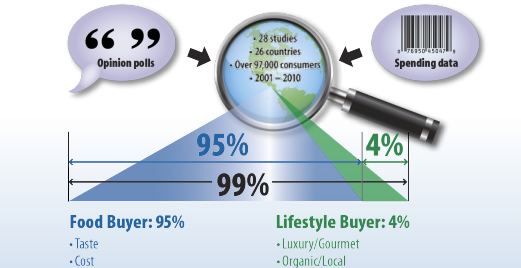
**Lifestyle Buyer: 4%**

- Luxury/Gourmet
- Organic/Local
- Gardens

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**ICAS: Lifestyle buyer**

**The International Consumer Attitudes Study (ICAS)**



**Food Buyer: 95%**

- Taste
- Cost
- Nutrition

**Lifestyle Buyer: 4%**

- Luxury/Gourmet
- Organic/Local
- Gardens

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### ICAS: Fringe

**The International Consumer Attitudes Study (ICAS)**

- Opinion polls
- Spending data
- 26 studies
- 26 countries
- Over 97,000 consumers
- 2001 – 2010

**Fringe**

- Food bans
- Restrictions
- Propositions

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### ICAS: Food buyer

**Factors Influencing U.S. Food Purchase Decisions (2010) U.S.**

- Over 26,000 households surveyed in October, 2010
- 98% buy based on:
  - Taste
  - Cost
  - Nutrition<sup>1</sup>

According to a 2010 Nielsen survey of U.S. households, the most important factors in food purchasing decisions are taste, cost and nutrition.<sup>1</sup>

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### Global food sales

- Global sales of food produced without technology<sup>1</sup>
- An important niche, but very small

Year	U.S.	Global	Europe
2009 (actual)	3%	1.4%	2%
2014 (projected)	4%	1.6%	2.5%

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### Case study: Brazil

- Former food importer
- Now one of largest exporters

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### Case study: Brazil

- 365%** Total crop production (1996-2006)<sup>1</sup>
- 10X** Beef exports (tenfold increase)<sup>1</sup>
- World's Largest Exporter** Beef, poultry & sugar cane<sup>1</sup>

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### Case study: Brazil

- Brazil's key ingredients
  - Climate
  - Entrepreneurial leadership
  - Embracing technology
  - Pro-agriculture policies

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**A change of heart for the EU?**

“Farmers in the EU must be allowed to choose the tools they need to thrive, and our citizens must be free to select from the widest variety of food choices made possible by our modern food production enterprises.”<sup>1</sup>

– Paolo De Castro,  
Chairman of the European Parliament Committee on Agriculture and Rural Development



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**Sustainability, environmentally right**



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**Thought leader on sustainability**

“To feed 9 billion people and maintain the planet, **we must freeze the footprint of food.**”<sup>1</sup>

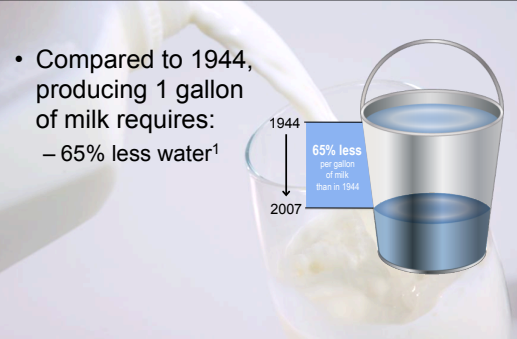
– Dr. Jason Clay,  
World Wildlife Fund



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**Milk production & efficiency**

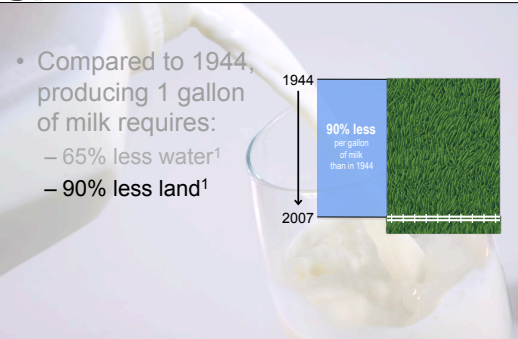
- Compared to 1944, producing 1 gallon of milk requires:
  - 65% less water<sup>1</sup>



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**Milk production & efficiency**

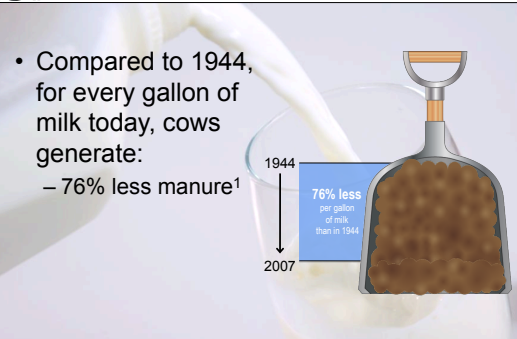
- Compared to 1944, producing 1 gallon of milk requires:
  - 65% less water<sup>1</sup>
  - 90% less land<sup>1</sup>



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**Milk production & efficiency**

- Compared to 1944, for every gallon of milk today, cows generate:
  - 76% less manure<sup>1</sup>



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### Milk production & efficiency

- Compared to 1944, for every gallon of milk today cows generate:
  - 76% less manure<sup>1</sup>
  - 63% smaller carbon footprint<sup>1</sup>

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### Beef production & efficiency

- Each pound of beef produced in the U.S. today requires
  - 14% less water<sup>1</sup>

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### Beef production & efficiency

- Each pound of beef produced in the U.S. today requires
  - 14% less water<sup>1</sup>
  - 34% less land<sup>1</sup>

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### Beef production & efficiency

- Compared to 1977, beef production:
  - Generates 20% less manure<sup>1</sup>

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### Beef production & efficiency

- Compared to 1977, beef production:
  - Generates 20% less manure<sup>1</sup>
  - 18% smaller carbon footprint<sup>1</sup>

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### Technology enables three rights

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### Conclusions

**The need to boldly move forward is urgent**

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### 7 reasons to be hopeful

1. **09-'10 Recession (Food Security)** → **Window of Opportunity** ← **'11-'12 Input Costs (Food Costs)**
2. **50-100-70** is playing out
3. **99%** of consumers **WANT**: taste, affordability, nutrition & choice
4. **500 individuals** influence the global food chain
5. In all **5 major decision-making areas**, the data aligns:
  - **Science, Economics, Social, Environmental & Consumer**
6. A shift in positive **retailer decisions** on technology in the last 18 months
7. **Regulatory consistency**, record innovation and alignment on antibiotics

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### A time for action

#### What is Elanco doing?

Technology + choice	Engaging 500 key influencers	Industry coalitions	Making it personal	Innovation
Communications	Access decisions	One voice for safe, affordable & abundant food	Partnering with Heifer International®	Quantity
Social media	Optimizing regulations		Bringing 100,000 families out of hunger	Quality
White papers & editorials	Trade standards		Ending childhood hunger in Indianapolis, IN	Speed

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### A time for action

- 1) Personalize the issue
- 2) Engage the food chain
- 3) Support the 99%

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### A time for action

Visit [PlentyToThinkAbout.org](http://PlentyToThinkAbout.org) and join the conversation

- Download a copy of the white paper
- View a short video on making safe, affordable and abundant food a global reality

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### Join the conversation

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GM0032 (04/11)

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