Benefits of Emerging Food Technologies

Richard A. Williams, Ph.D
Author (Ask me about my book)
Senior Affiliated Scholar, Mercatus Center at GMU, Utah State & FDA Retired
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Disclosure

Currently – Paid paper in Progress with Center for Growth and Opportunity at Utah State related to Nutrition Devices.
“Consumers Don’t Want to Eat Technology”
The Desire to Simplify

1854

I went to the woods because I wished to live deliberately, to front only the essential facts of life, and see if I could not learn what it had to teach and not, when I came to die, discover that I had not lived.

Thoreau

1969

LIFE

The Youth Communes: Now Way of Living Confronts the U.S.
“In their largely unprocessed forms, foods from the earth, trees, or animals are healthful by definition.”

Marion Nestle
Nature – Indifferent and Capricious
Control

Humans are increasingly taking control over the food supply.
Food Issues (Sustainability)

- Obesity/Diabetes
- Health
- Hunger
- Environment
- Animal Welfare
- Food Safety
Obesity and Diabetes

3D Printing

Virtual/Augmented Reality
Obesity/Diabetes (2)
Health -1

3D FOOD PRINTER
Health - 2
Genetic Modification/Gene editing
Frankenfood
Hunger 1

The world’s population – 7.3 to 8.5 billion people in 2030

Gene Editing
Hunger 2

Vertical Farming

Underwater gardens
Hunger 3

Precision Agriculture

“Global Agriculture Trends: Are We Actually Using Less Land?” Jon Fisher, 2014

Facts: Land devoted to farming – 25% less than 1930’s
Population since 1930’s – 130% higher

From Jason Lusk
Environment 1

Drones and 3d Food Printers

Nano packages

Fats
Spices
Proteins
Carbs
Environment 2

Cell Based Meat, Poultry and Seafood
Animal Welfare 1

90% of people eat meat, 47% support a ban on slaughterhouses
Millennials and Other Humans

- 70% of world population reducing meat
- Meat consumption down 19% (2005 and 2014)
- 600% increase in self-identified vegans (US)
- 26% millennials vegan or vegetarian
Food Safety 1
Food Safety 2
Food Safety 3

➤ intelligent packaging

Incorporating nano-sensors to monitor and report on the condition of the food.
Solving these challenges will not emerge due to:

• Appeals to Consumers

• Appeals to Corporate Responsibility

They may have effects but more likely..
Adam Smith

“It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own self-interest.”

*An Inquiry into the Nature & Causes of the Wealth of Nations, Vol 1*