

# Creating trends

How can we leverage health science  
to increase consumption

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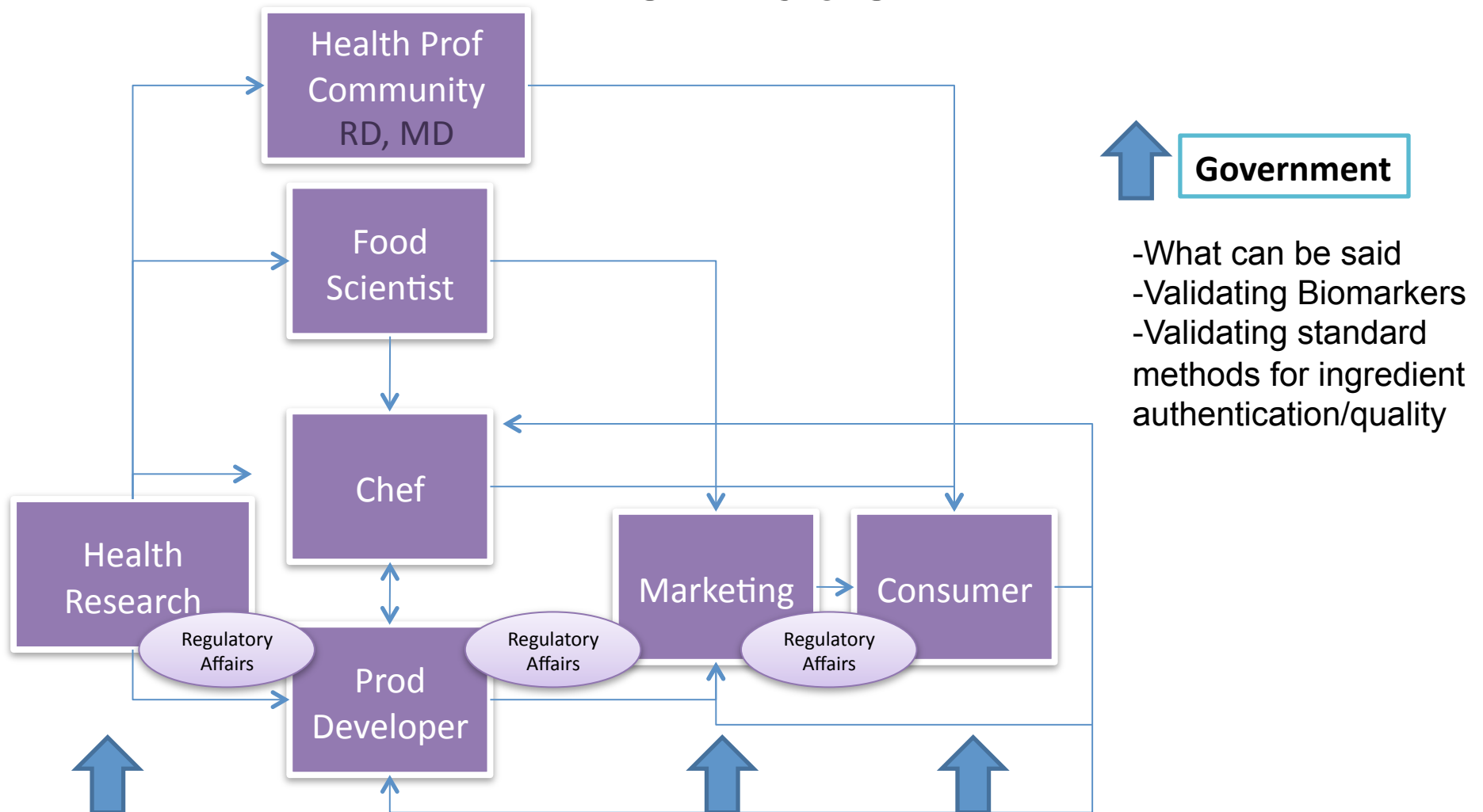
# Panel Discussion Talking Points

Is there a better model to leverage health research?

- Understand how health science information moves from researcher to consumer
  - Who is involved, who interacts and at what stage
- What drives product development decisions for what fruit to use?
- What attributes of berries do we need to focus on maximizing?
- What should the industry be considering to increase demand for berries?



# Health Science Research flow of Information





# Standard methods

## *'seal of approval'*

### Examples

- Anthocyanin content and composition
  - Required dose to achieve benefit –min/max
  - Compositional – ingredient must contain
  - Matrix and Processing effects
- Antioxidant value
  - ORAC, other
    - Reliable Value to compare foods / beverages
    - Value linked to health benefit



# What should the industry be considering to increase demand for berries?

- Dietary Guidelines for Americans
  - Is there enough evidence currently or what evidence would be required to ‘call-out’ a berry sub-category within recommendations for fruit consumption
- Health Claim
  - Is there enough evidence across berry research to support a health claim?
    - Health claims require Validated disease risk marker: Nothing at present for oxidative stress or inflammation.
      - Oxidized LDL ??
      - Inflammatory profile ??



## Consider language supporting consumers choice of berries

*USDGA 2010 - Eat a variety of vegetables, especially dark-green  
and red and orange vegetables and beans and peas.*

Future USDGA- Eat a variety of fruits, especially dark-blue, purple  
and red fruits.



## Consider language supporting consumers choice of berries

*USDGA 2010 - Choose foods that provide more potassium, dietary fiber, calcium, and vitamin D, which are nutrients of concern in American diets. These foods include vegetables, fruits, whole grains, and milk and milk products.*

*Future USDGA- Choose foods low in calories that provide flavonoids, particularly anthocyanins and proanthocyanindins. These foods include berry fruits and juices/beverages derived from these fruits, tea and .....*



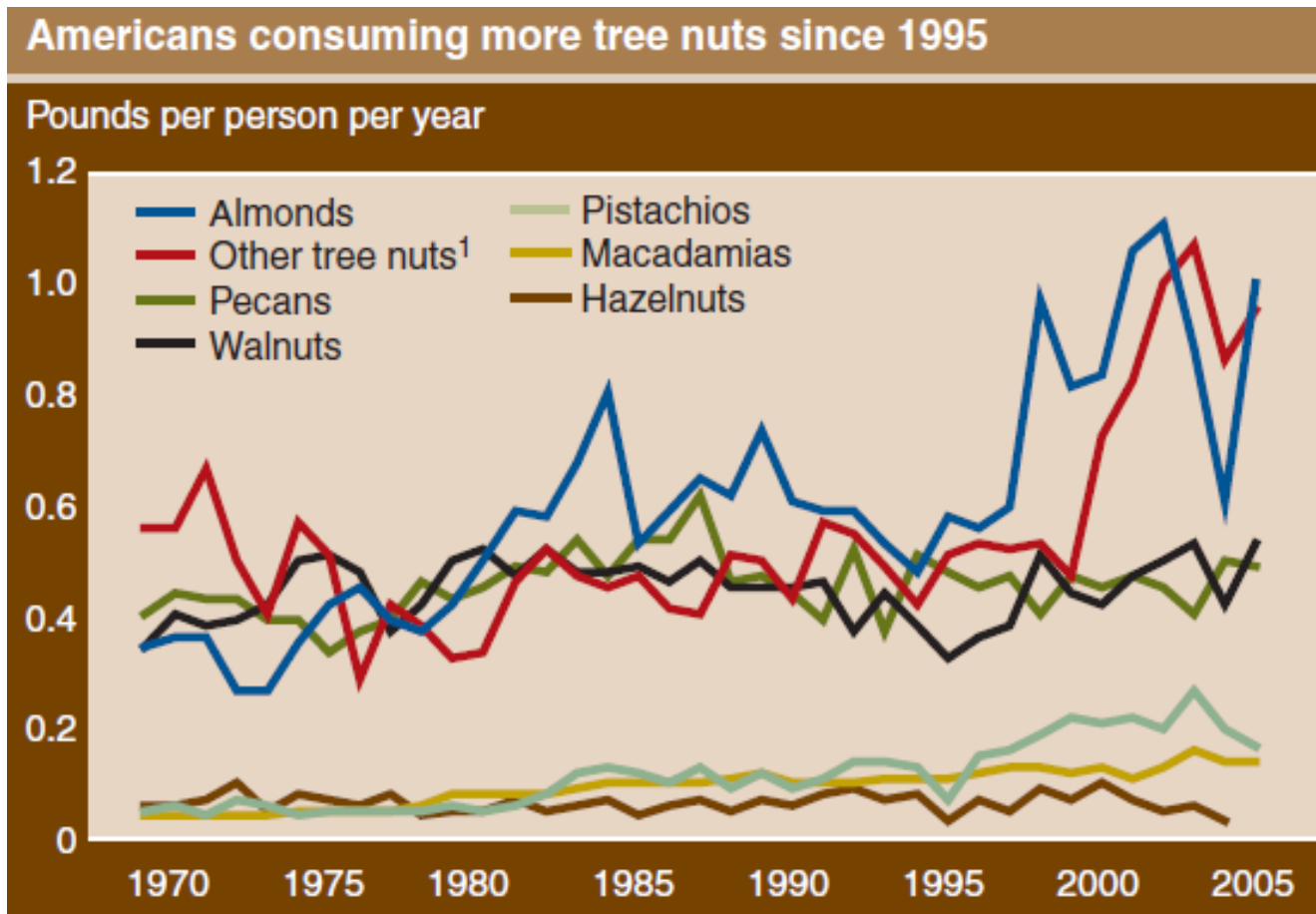
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# Qualified Health Claim in 2003



ERS\_USDA data



# Science of Berries

- Consumption related to:
  - Decreased Risk for CVD, including risk factors for diabetes
  - Memory improvements
  - Decreased Risk for esophageal cancer

Common mechanisms:    Decreased oxidative stress  
                                      Decreased inflammation  
                                      Improvements in insulin resistance

**What attributes of berries do we need to  
focus on maximizing?**



## What attributes of berries do we need to focus on maximizing?

- Nutrient content (essentials and fiber)
- Phytonutrients composition
  - What is unique?
    - Anthocyanins, Proanthocyanidins, others
  - Are they bio-available
  - What do they do / bioactivity?



# Perfect Storm



↑ Hyperlipidemia  
↑ Hyperglycemia

↓ Satiety

↓  
**Viscious  
Cycle**

**Berry Intake**

**Oxidative  
stress**

Insulin  
Resistance

Leptin  
Resistance

**Inflammation**

Metabolic Syndrome

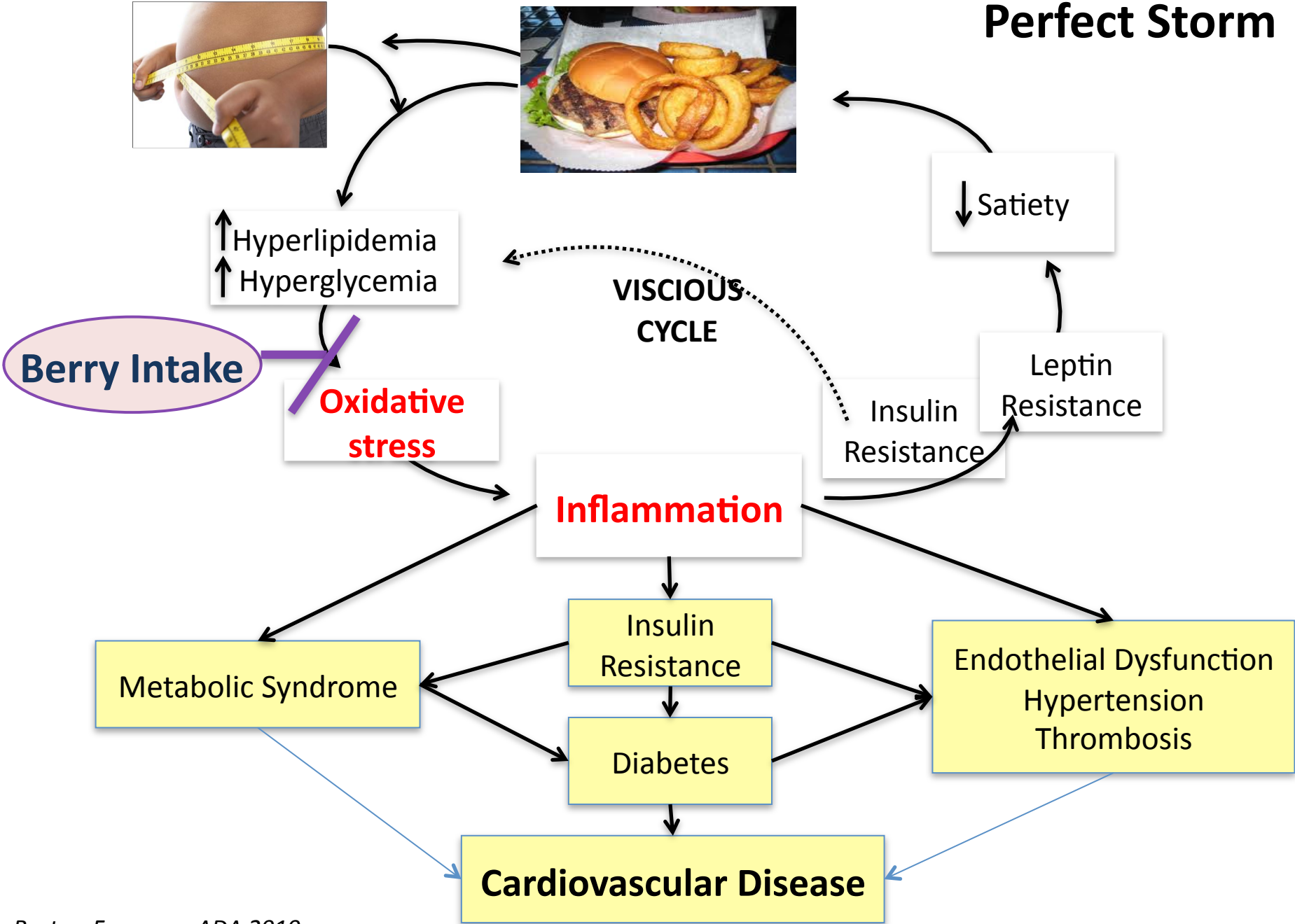
Insulin  
Resistance

Endothelial Dysfunction  
Hypertension  
Thrombosis

Diabetes

**Cardiovascular Disease**

Burton-Freeman, ADA 2010





# Application

Considerations based on delivering health benefit

- Source
- Processing
- Food matrix



# Considerations

- What is the health benefit
  - Use familiar and appealing terms
- What is the strength of the science
- Product Position – Who is target consumer?
- Product profile - What are you going to deliver?
- Delivery form – based on max health benefit, convenient “easy access to health”



# Questions

- What have been the challenges for marketers in communicating health messages?
- What have been the challenges in getting consumers to choose based on health messages?
- What factors influence 'fruit choice' at home
  - Consider barriers (containers, expense, shelf-life)







# Summary

## *Dietary Guidelines for Americans, 2010*

- Evidence-based nutritional guidance
  - Promote health
  - Reduce the risk of chronic diseases
  - Reduce the prevalence of overweight and obesity
- Integrated set of advice for overall eating pattern
- Consumer-friendly advice and tools coming



## Table 2 1. Key consumer Behaviors and Potential Strategies for Professionals, DGA 2010

- **“Use fruit as snacks, salads or desserts”**
  - No mention of eating with meals
    - What do we know about eating fruit as snack vs meal
    - Bioavailability of certain nutrients related to CVD, cognitive function, etc... via ox stress and inflammation pathways

in contrast to vegetables: Include vegetables in meals and in snacks.