



# Marketing Soyfoods with Health & Nutrition



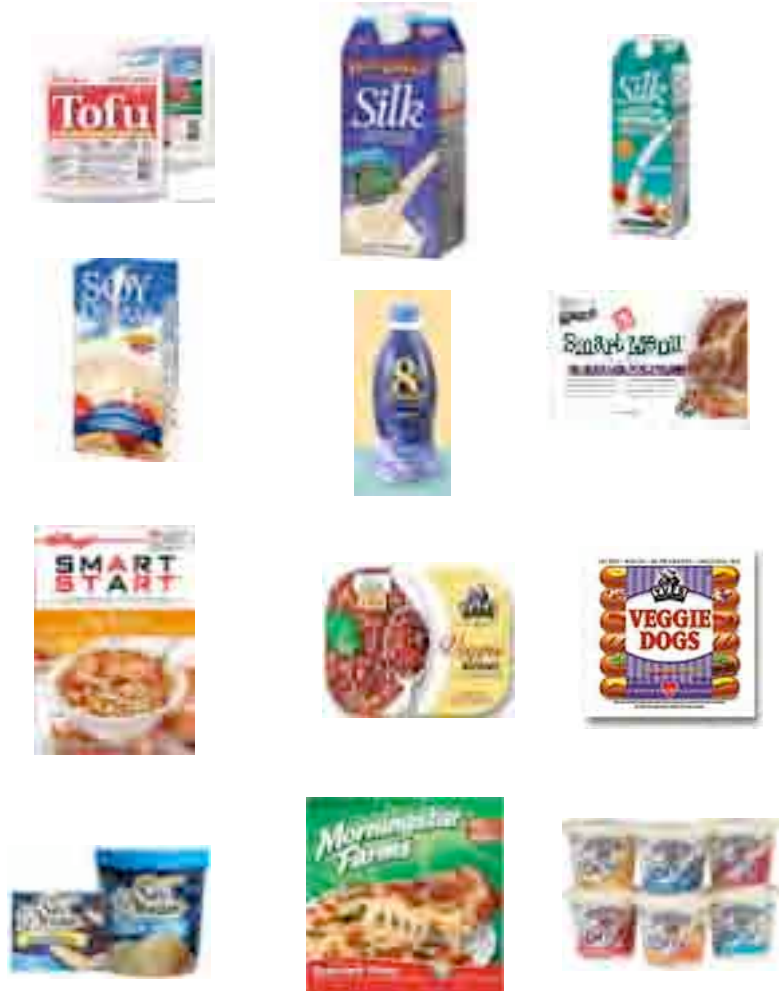
**Joe Jordan**

**Soy Beverage Training Workshop**  
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CSIR - Pretoria, South Africa



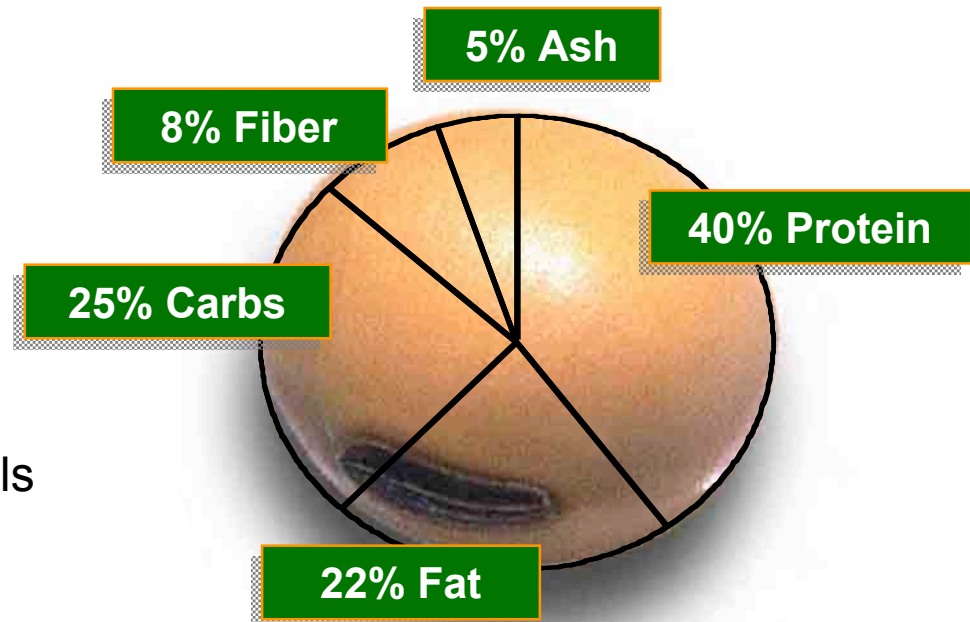
# Today's Focus: How Healthful Properties of Soy Affect Soyfoods Marketing

- Healthful components of the soybean
- Message for consumers
- Resources for soyfoods' marketers



# Soybean's Healthy Composition Makes it the Perfect Food for Health

- On a moisture-free basis, the soybean contains approximately:
  - 40% Protein
  - 22% Fat
  - 25% Carbohydrates
  - 8% Dietary Fiber
  - 5% Ash (minerals)
- And a virtual pharmacy of powerful phytochemicals including:
  - Isoflavones
  - Sterols
  - Saponins
  - Protease inhibitors
  - Anti-oxidants
  - Tocopherols (Vitamin E)
  - Lecithin



# Soy - The Complete Plant Protein

- All 8 essential amino acids needed in a healthful diet
- High quality - PDCAAS\* score between .95 and 1.00 - higher than most meat products
- Very versatile as an ingredient: meat and dairy alternatives, snacks, cereals, bars and baking
- Advances in technology has made possible a variety of protein products
  - Soy flour
  - Isolate soy protein
  - Soy protein concentrate

\* Protein Digestibility Corrected Amino Acid Score



# Soybean Oil: Healthy & Versatile Fat

Soybeans contain 18-22% fat

- Low in saturated fats (unlike tropical oils)
- 8% Alpha-linolenic acid (Omega 3 fatty acid)
- 50% Linoleic acid
- Sterols
- Lecithin
- Vitamin E (tocopherols)
  - antioxidant



# Carbohydrates, Fiber & Phytochemicals

## 25% Carbs - simple and complex sugars

- Sucrose for energy
- Oligosacchrides for intestinal health



## 8% Fiber - dietary fiber

- Hulls, cell walls

## Isoflavones:

- Genistein
- Dadzein
- Glycetein



# Soybeans are Processed into Healthy Foods

In each region of the world, soybeans are processed into foods that fit easily into the traditional eating patterns of infants, children, teenagers and young and old adults



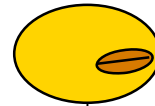


## Processing soybeans into foods

- There are a number of means of classifying foods made from the soybean including the following:
  - Soy-based dairy alternatives (primarily water processed)
    - Processed from whole soybeans or soy proteins
      - » Includes soymilk, tofu and other
  - Soy protein-based foods (primarily from dry ingredients)
    - Processed from whole soybeans or soy proteins
      - » Includes meat alternatives, energy bars, snacks, cereals, baked goods and powders
  - Soybeans as beans (dried and fresh)
    - Processed from whole dry or fresh soybeans
      - » Includes products made from both dried beans and fresh green soybeans

# Soy-based dairy alternatives

(Aqueous Extraction/Wet Processing)



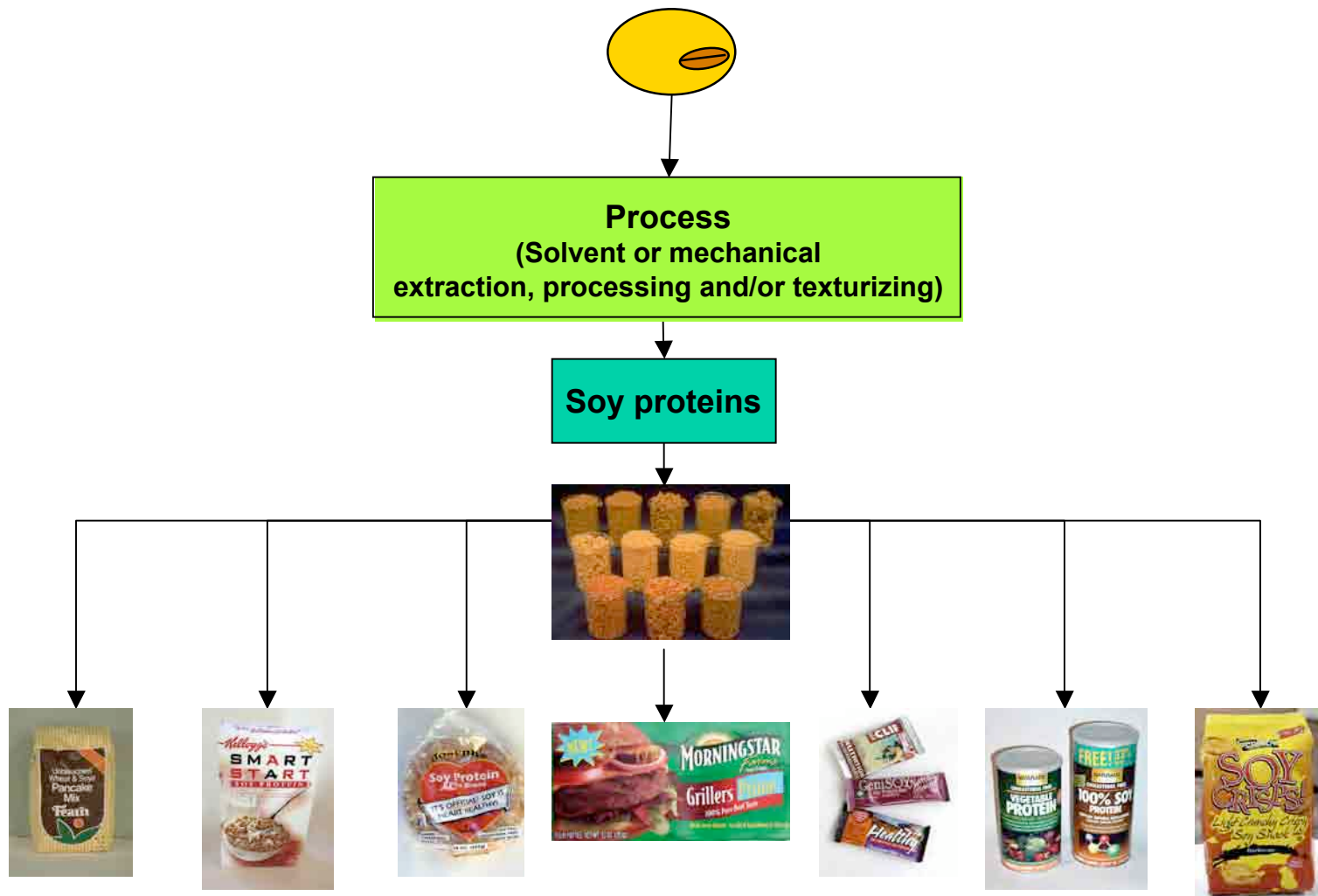
**Process**  
(water extraction or  
reconstituting ingredients)

**Soy-base**  
(soymilk)

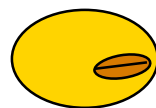


# Soy protein-based foods

(Solvent or Mechanically-Extracted or Ground Dry Ingredients as Food Products)



# Soybeans as beans



**Process**  
Harvest (Dry or Green) & Clean —  
Blanch, Freeze, Roast, Can, etc.



# Consumer Perceptions of Soy as Healthy

A major driver in category growth has been consumer perception of soy as a healthy food source

- Soy & Heart Health
- Cancer Risk Reduction
- Alleviating Menopausal Symptoms
- Bone Health
- Obesity Prevention



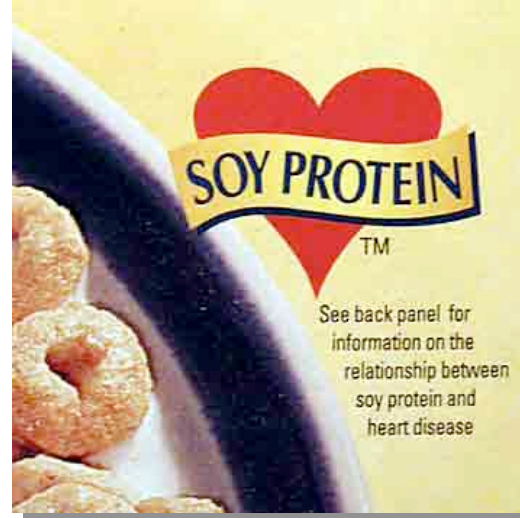
# Soybeans & the Heart

- Soy protein lowers bad cholesterol
  - May raise “good” cholesterol
  - May improve blood vessel elasticity
- Unsaturated fats
  - Sterols help lower cholesterol



## Consumers Seem to be Getting the Message

- U.S. FDA approved a heart health claim for foods containing more than 6.25 grams of soy protein in 1999
- Soyfood marketers are using the health claim to formulate and promote the benefits of soy protein in the human diet
- According to the a consumer survey by the USB conducted in 2005, 78% of U.S. consumers consider soy products to be healthy





# Reducing Risk of Cancer

## Breast & Prostate Cancer

- Isoflavones (phytoestrogens) may be one of the keys, as may be the soy protein itself
- For men, increasing soy protein consumption, even later in life can reduce prostate cancer risk



## Soy & Bone Health

Soy protein had a more pronounced effect on bone formation than milk protein

- In numerous studies it was shown that bone health was improved by consuming soy, especially when fortified with calcium
- Milk protein had the opposite effect due to increased loss of calcium in urine



# Soy & Weight Management

Soy protein based foods are excellent at helping to maintain a healthy body weight

- Reduction of animal fats with lower fat, vegetable oil containing foods
- Increase in protein intakes help “satiety” helping one feel full longer
- Reducing weight reduces many chronic health issues





## How much soy to stay healthy?

It only takes 1 serving a day to make an impact and that can come in a variety of ways:

<b>1/2 cup of firm tofu.....</b>	<b>10 grams of soy protein</b>
<b>1/2 cup of silken tofu.....</b>	<b>9 grams of soy protein</b>
<b>2 soy breakfast links.....</b>	<b>12 grams of soy protein</b>
<b>1 soy-based burger.....</b>	<b>10-12 grams of soy protein</b>
<b>8 ounces of plain soymilk.....</b>	<b>7 grams of soy protein</b>
<b>1 soy protein bar.....</b>	<b>14 grams of soy protein</b>
<b>1/2 cup cooked soybeans.....</b>	<b>14 grams of soy protein</b>
<b>1/2 cup tempeh.....</b>	<b>16 grams of soy protein</b>
<b>1/2 cup roasted soy nuts.....</b>	<b>34 grams of soy protein</b>

# Should marketers use 'soy' or 'health' as the key in inducing consumption?

## The answer is neither!

- While promoting your foods as healthy, vegetable-based, soy-containing, or dairy or meat alternatives, the reality is that people will consume your products again and again for only one reason:

**They taste good!**



## Some Soyfoods are now “so delicious”

Even in the U.S. some soyfood companies are beginning to change labels to promote delicious over nutritious... oh, and yes, by the way, they are dairy free!





## Additional soy resources

Soyfoods Association of North America: [www.soyfoods.org](http://www.soyfoods.org)

Online Nutrient Database: [www.ars.usda.gov/foodsearch](http://www.ars.usda.gov/foodsearch)

QUALISOY™: [www.qualisoy.com](http://www.qualisoy.com)

United Soybean Board: [www.talksoy.com](http://www.talksoy.com)

American Soybean Association: [www.soygrowers.com](http://www.soygrowers.com)

Stratsoy: [www.ag.uiuc.edu/~stratso](http://www.ag.uiuc.edu/~stratso)

Soyatech: [www.soyatech.com](http://www.soyatech.com)

American Dietetic Association: [www.eatright.org/index.html](http://www.eatright.org/index.html)

National Cancer Institute: [www.nci.nih.gov/](http://www.nci.nih.gov/)

National Institutes of Health: [www.nih.gov/](http://www.nih.gov/)

U.S.D.A. Food and Nutrition Information Center: [www.nal.usda.gov/fnic/](http://www.nal.usda.gov/fnic/)



## Additional soy resources

American Cancer Society: [www.cancer.org](http://www.cancer.org)

National Cancer Institute: [www.nci.nih.gov/](http://www.nci.nih.gov/)

American Diabetic Association: <http://www.diabetes.org>

American Heart Association: [www.americanheart.org/](http://www.americanheart.org/)

Food Allergy & Anaphylaxis Network: [www.foodallergy.org](http://www.foodallergy.org)

National Institutes of Health: [www.nih.gov/](http://www.nih.gov/)

New England Journal of Medicine: [www.nejm.org/](http://www.nejm.org/)

North American Menopause Society: [www.menopause.org](http://www.menopause.org)

American Oil Chemists Society: [www.aocs.org/](http://www.aocs.org/)

Food and Drug Administration: [www.fda.gov/](http://www.fda.gov/)

International Food Information Council Foundation: [www.ific.org](http://www.ific.org)

Institute of Oilseed Products: [www.niop.org](http://www.niop.org)