Peanut products from around the world

Hot Topics on Peanuts
2004 Georgia Peanut Tour August 31, Tifton, GA

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Production and Significance

World wide 34 m MT

- India, 5.4
- Nigeria, 2.7
- USA, 1.5
- Others, 9.5
- China, 15
World wide - 50% peanuts end up in human food

- In the US -
  - Crush, 18%
  - Export, 18%
  - Loss, 10%
  - Food use, 54%
George Washington Carver

- Developed Peanut & Soybean products that revolutionized southern agricultural economy
- His research developed
  - 300 products from peanut &
  - 105 ways of preparing peanuts for human consumption

An Educator, Farmer
Agricultural/Food Scientist
Use peanuts in 105 ways in
- Soups, puree, bread, candy, cheeses, coffee, cookie
- Desserts – Cakes, pudding, ice-cream, frappe
- Main courses – Patties, sausage, macaroni, stuffing, etc.
- Snacks – Wafers, bars, donuts, salted peanuts, etc.
Book by J. G. Woodroof
List of Products

- Peanut Butter
  American Phenomenon
- Roasted nuts
  In-shell, shelled
- Peanut Confections
  Candies
  Desserts
  Bakery Sweets
List of Products

Diversified Uses

- Variety Breads including - White and whole peanut bread
- Cookies, Cakes and Brownies
- Doughnuts and Sweet Yeast Products
- Pies & Frozen Desserts
- Peanut Milk, yogurt and Cheese -type products
- Non-milk Beverages, soups, and gruels
- Peanuts with meats
- Boiled Peanuts
- Breakfast Cereals
- Peanut noodles
- Peanut Paste/fermented peanut pastes
- Chinese type noodles
Products in Japan

- Peanut snacks
  Roasted, salted, & coated nuts
- Peanut butter
Products in Korea

- Peanut snacks
  - Roasted, salted, & coated nuts
- Peanut confections
Products in Thailand

- Peanut snacks
  - Roasted, salted, & coated nuts
- Peanut candies
- Peanut confections
Products in Bulgaria

- Peanut snacks
  - Roasted, salted, & coated nuts
- Peanut candies
Products in Bulgaria

Peanut candies and confections
Products in Philippines

- Peanut snacks
  - Roasted & salted
  - Flavored/ coated
Products from Philippines
Modified through Peanut CRSP (Collaborative Research Support Program)
UGA Griffin campus

Java sauce using sorted peanuts
Peanut sauce mix using sorted peanuts

Regular (L) and Vitamin A fortified peanut butter (R)
A European market leader in nuts food sector

Three major segments in nut and nut-based products

- Consumer brands
- Private label products
- Ingredients

Ingredients division based at Imko Ingredients (Netherlands and Poland)
Tailor-made and ready to use ingredients for Confectionery, savory snacks, bakery, breakfast cereal, dairy products, ice-cream, meat sauces, and various meat components

Coated and salted peanuts
Popular consumer brands

- Æltje
  - Netherlands
- Jack Klijn
  - Germany and Austria
- Jack Benoit
  - France and Italy
- Felix
  - Poland
- Pittjes
  - Western Europe
Products in other countries

- India: Coated peanuts
- Ghana: Peanut candy
- China: Coated peanuts
- Indonesia: Coated peanuts
Commercializing - Peanut Products in the US

- Cracker-coated nuts
- Baked snack chips
- Peanut butter tarts
- Extruded snack puffs

UGA research
Variety of beverages in the US market

Why not a peanut beverage?

Soymilks and drinks

Flavored milks

Almond, oat, rice, grain, and hazelnut milks
Current Approaches

- Chinnan’s Lab - Work supported by Peanut CRSP and the SE Peanut Research Initiative

Development of efficient processes for nutritionally enhanced beverage formulations from peanut and soy
Development of peanut beverages

Two approaches were employed

Defatted peanut flour, soy and chocolate
A graduate student, Rashmi Deshpande, at UGA worked on this product.

Peanut Punch, a peanut-butter based product
Dr. Dida Iserliyska, a visiting scholar from the Institute of Cryobiology and Canned Foods, Bulgaria, worked on this product.
Low-fat nutritional drink from peanut, soy & chocolate

1 Soy flour
2 Peanut flour
3 Soy protein isolate
4 Ingredients for chocolate syrup

Various formulations were developed incorporating soy and using mixture design
Determination of influence of particle size on product mouthfeel

Viscosity

Visual Stability index

100% Peanut beverage

Chocolate-flavored, peanut-soy beverage
Sensory evaluation of peanut beverages

Consumer acceptability was studied using 9-point hedonic scale. Sensory attributes such as flavor, consistency, mouthfeel, aftertaste, etc. were evaluated.
Peanut Punch

Peanut Punch made from skim milk, peanut butter, sugar and other ingredients. It can be flavored with chocolate, vanilla, strawberry and other flavors.
Product Evaluation

Viscosity

Visual Stability index

Sensory Evaluation

FOOD Product Innovation and Commercialization
Dept. of Food Science & Technology, Griffin
Summary

- Historical perspective of peanut products
- Products developed at UGA
- Products available in the US
- Products available in other parts of the world
- Some new products on the horizon
THANK YOU

FOOD Product Innovation and Commercialization

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