Challenges Facing Food Product Development with Sorghum

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Overview

- General challenges of the food product development process
- Special challenges in developing foods from sorghum
- Conclusions. Questions and Answers

The Challenge

- Today's consumer has shortened product life-cycles by expecting more of the foods she/he buys

- Fresh, natural, healthy, nutritious, friendly to the environment, good-value and convenient.

- Generally no compromise with taste

Risky Endeavor

- Yet unavoidable to stay competitive !
- The average time spent on developing new food products is about 2 years
- About 12,000-15,000 new food products are introduced into the market each year
- 90% -95% failure rate (product not on shelves after 5 years)

Common Challenges

- Creativity
  - Screening:
    - internal sources: salespersons, Consumer inquiries
    - external sources: shows, conferences, competition
  - Market analysis

Common Challenges

- Changing consumer trends and preferences

- Going down:
  - Low carb, 100 calorie, low fat

- Moving on up:
  - Gluten-free, organic, No HFCS

Current Food Trends

- Functional foods & beverages – offering health and disease prevention benefits
- Gourmet – more exotic spices and ingredients
- Baby boom – targeting younger children with healthier products
- Joint ventures – two brands creating one exceptional product

Current Food Trends

- Healthcare – increase demand for food and beverages offering specific health benefits
- Packaging – capture consumer attention
- Ethical Products – appeal to moral and socially expectable principles such as: recyclable, re-usable materials, and equal treatment of employees

Common Challenges

- Technological Challenges:
  - Formulation, Ingredients, Processing, Equipment, Packaging, Shelf life.
  - Facilities, Distribution.
- Regulatory Challenges:
  - GMOs, Organic, labeling
- Financial Challenges:
  - Fixed costs and variable costs

Common Challenges

- Competition from other raw material:
  - Rice
  - Potato
  - Tapioca
  - Other Ancient Grains: Amaranth, Teff, Spelt, Quinoa, Chia, Millet, Buckwheat

Sorghum Challenges

- Functionality Issues:
  - Dough formation
    - ---------> Gums, other proteins

Sorghum Challenges

- Sensory
  - Color
    - ---------> Baking time/temperatures, inclusions
  - Taste
    - --------> Added ingredients

Sorghum Challenges

- Products
  - Other than gluten-free?
  - Functional ingredients

Sorghum Challenges

- Innovative concepts
  - Fermented products
  - Drinks
  - Neutraceuticals

Sorghum Challenges

- commercialization
  - Missing link
  - Marketing!!!

CONCLUSIONS

- We have come a long way
- A lot more to be done

THANK YOU

ANY QUESTIONS ????