

Innovations for fortified wholegrain foods for resource efficiency and business competitiveness.

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FORTIFIED
WHOLE GRAIN
ALLIANCE

PRESENTATION OUTLINE

01

ADVERSE EFFECT OF REFINED GRAINS ON EFFICIENT UTILISATION OF RESOURCES

- Importance of grains to African diets.
- Refining and its impact in numbers.
- Fortified wholegrain foods for the efficient utilization of resources.



03

INNOVATION IN THE PROCESSING OF WHOLEGRAIN FOODS

- Drying, toasting, roasting.
- Extrusion.
- Fermentation.
- Blending.

02

THE HISTORY OF REFINING OF GRAINS

- Industrial revolution and urban migration.
- Perfection of refining processes and equipment.
- Evolution of the African diets and behaviors.
 - Sensory appeal.
 - Status symbols.
 - Convenience.

04

STIMULATING DEMAND FOR WHOLEGRAIN FOODS

- Sensory appeal and nutrition.
- Consumer research and analysis of trends.
- Commercialization of traditional foods concepts.
- Concluding remarks.

1. ADVERSE EFFECT OF REFINED GRAINS ON EFFICIENT UTILISATION OF RESOURCES

- 45% of caloric intake in Africa is grains.
- 3 main grains- maize, wheat, rice, mostly consumed refined.
- 10-30% losses due to refining processes.
- 50% of arable land is used to grow grains. Competition for arable land increasing. Refining exuberates the situation.
- Refining contributing to carbohydrate-rich, nutrient poor dietary patterns.
- 30% of world's undernourished are in Africa.
- 7% increase per year in obesity in Africa since 2000.
- Africa needs to change how it processes and consumes grains and now!

2. THE HISTORY OF REFINING OF GRAINS

- Industrial revolution and urban migration.
- Large infrastructural investments, Perfection of refining processes and equipment.
- Evolution of the African diets and behaviors.
 - Sensory appeal.
 - Status symbols.
 - Convenience.

3. INNOVATION IN THE PROCESSING OF WHOLEGRAIN FOODS

- Drying, toasting, roasting.
- Extrusion.
- Fermentation.
- Blending.
- Another industrial revolution is required to create appropriate technologies for large-scale processing of wholegrain foods.



4. STIMULATING DEMAND FOR WHOLEGRAIN FOODS

- Sensory appeal and nutrition.
- Consumer research and analysis of trends.
- Commercialization of traditional foods concepts.



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Thank you!



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