



GM RICE

and its potential

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# GM RICE

## and its potential

1. Creation of golden rice
2. Why golden rice?
3. Controversial issues
4. Vitamin A deficiency - causes
5. Solution?

# [ Golden rice ]

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- is a variety of rice (*Oryza sativa*)
- is genetically modified
  - provides pro-vitamin A (precursors of beta carotene)

# [ Two Varieties of Golden Rice ]

- Golden Rice (2000)

precursors of beta carotene (pro-vitamin A)

- Golden Rice 2 (2005)

23 times more beta carotene



# Vitamin A Deficiency Map



# Vitamin A deficiency leads to

- blindness



- malnutrition



# Controversy

Commercial  
biotech companies

VS

Environmental  
and anti-globalist  
groups

# [ Causes of vitamin A deficiency ]

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- poverty
- loss of biodiversity in food crops  
+ corporate control of agriculture  
based on GM foods.
- lack of varied diet containing vitamin A



# [ Summary ]

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- Creation of golden rice
- Reasons
- Environmentalists and anti-globalists against GM rice
- Some causes of Vitamin A deficiency

# SOLUTION?

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## Combination of various methods of vitamin A supplementation

- Variety of foods rich in vitamin A
- Vitamin A supplemented
  - by injection
  - orally
- GM rice – available for human consumption