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The Importance of Corn in Medical Developments

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Important Evolutionary Changes in Corn, Importance of Corn in Medical Advancements, and Genetically Modified Sweet Corn
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Evolutionary and Nutritional Changes:
- Ancient Ancestor
  - Teosinte to Modern Corn
    - Zea mays ssp. Parvigumis
    - Teosinte Glume Architecture I (tgaI) and Teosinte Branched I (tbl)
    - Structural changes
  - Nutritional Changes
    - Teosinte
      - Insoluble fiber
      - Lower caloric value
    - Corn
      - Amino Acids – Lysine and tryptophan
      - Vitamin B

Medical Uses of Corn Through History
- Ancient Uses:
  - Headaches
  - Diuretic
  - Paste for bruises
- 1900s:
  - Corn Steep Liquor
  - Arno Behr
  - Penicillin Production
- 2000s:
  - Corn Silk
    - Diuretic
    - Antioxidant
    - Antiproliferative
    - Many more still under research

Genetically Modified Sweet Corn:
- History:
  - 1972-1973: GMO’s created
  - 1988: First GM food
  - Present: Almost 50% of sweet corn is GM
- Current Genetic Modifications:
  - Herbicide resistant
  - Produce own insecticide
  - High quality product
- Future GM’s:
  - Nutrition
    - Vitamins and minerals
    - Protein
    - Fat and carbohydrates

Our Focus