Keeping Kids Healthy
The Harmful Effects of Food Additives
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Great Problem Seminar: Feed the World

Problem
- Many of the soft drinks and snacks that children consume contain food additives that could affect their health
- Certain additives have been proven to cause health problems.
  - **Tartrazine** - (yellow 5 or E102) causes hyperactivity, airway constriction disorders and is found in products such as soda, instant puddings, and drink mixes
  - **Benzoates** - (E210- E219) preservatives found in pickled items and carbonated drinks, causes damaged mitochondria, ADHD, and certain types of cancer
  - **Aspartame** - (NutraSweet, E951) a sweetener used in soda and syrup, causes hyperactive and aggressive behavior
- The symptoms of ADHD are worsened by food additives for children who have already been diagnosed

Solution
- Children should reduce the amount of additive intake in order to avoid the negative effects
- Diets should contain more natural foods

Mechanisms
- More research to fully understand the workings of food additives
  - Reexamine amount of chemicals considered dangerous
- Provide more awards and government funding on research for substitutes of these additives
- Less advertising of products with these harmful ingredients
  - Propose changes by the Food and Drug Administration on advertising
  - Prevent children from easily accessing such products
- More publicity centered on effects of additives
  - Parents will be more aware of the harmful consequences and will change their child’s diet

Assessment
- Examine sales of foods with additives from major grocery chains each week
- Compare income of companies that produce these products
- Observe children’s hyperactivity levels and the occurrences of other diseases as compared to earlier years

Promotional Materials
- **Billboard** - targets children and adults, placed in busy area
- **Digital Story** - targets adults and teens, used as an infomercial
- **Magazine Article** - targets young adults and teens, published in popular magazines

Based on the global hyperactivity aggregate, this graph shows the effects of additives from children consuming drinks (Mix A), which contained 7.5 mg of tartrazine and 45 mg of sodium benzoates, the equivalent of about 100 grams of sweets.