Name:

# ADHD and artificial food coloring: short paper assignment

To be used with the review:

Artificial food dyes and attention deficit hyperactivity disorder. Kanarek RB. Nutrition Reviews. 2011. v.69(7) 385-391.

As mentioned in class, in 1975, B. Feingold published a study that suggested a link between ADHD (attention-deficit and hyperactivity disorder) and artificial food coloring. In Europe, partly in response to Feingold's study, artificial food coloring was banned from candy in 1994. In the U.S., where such bans don't exist, it is still possible to find alternatives that use only natural food coloring.

Here, you are given a review paper written in 2011, that seeks to summarize current understanding of the relationship between artificial food dyes and ADHD.

#### Note:

**Primary papers** or **reports** present new findings in a scientific field, and contains novel experimental results and discussion about the result presented.

In comparison, **Review Papers** provide a summary of the current understanding of a topic. It includes a summary of the important results in different primary papers, along with discussion and critiques of these papers, and how they fit into the current understanding of the topic. Review Papers oftentimes discuss possible future direction in the field, and the work which should be done to advance the field.

Unlike a primary paper, when reading secondary papers, you can read only the portion that is directly pertinent to your interest. Here, we are interested in research on dyes and ADHD. Read section entitled "Early work on food additives/dyes and ADHD, and Recent Research on Synthetic food dyes and ADHD"

# Write a 500-800 word summary that contains:

- 1. Findings of Dr. Benjamin Feingold's 1975 paper.
- 2. Three or more subsequent studies investigating association between synthetic food dyes and ADHD.

  Report them in chronological order. Focus on the experimental details. How was the new experiment deisgned, and how did it address critiques of the experiments that had been previously reported? Did the new results support or weaken the association between synthetic food dyes and ADHD? Did the change make you more or less confident of the results obtained, compared to the previous experiment?

Remember to include references (follow the format in the paper. References do not count towards word total).

3. Are you convinced by the current state of the field? What do you believe: is there an association between synthetic food dyes and ADHD? What experiment would you like to see performed in order to convince you if there is a link between synthetic food dyes and ADHD? Why do you think that experiment has not been performed?

## On plagiarism.

It is important to not plagiarize what is in the review. To do that, as you read, make notes, using your own words to summarize the results. If you are confused about what constitutes plagiarism, and what does not, and refer to the acceptable example below.

### Original:

"Initial Clinical trials, in which children simply consumed the Feingold diet, supported Feingold's original findings. However, in these clinical trials, parents, teachers and researchers were aware of the change in children's diet. Thus, expectations could have contributed to positive outcomes. "

#### New:

"One criticism of Feingold's study, and other studies in the 1970s-80s that supported Feingold's findings, is that the parent or teacher were not blinded. Therefore, their reports on changes in children's behavior might have been biased."