



**CALIFORNIA STATE SCIENCE FAIR
2012 PROJECT SUMMARY**

Name(s) Emma C. Spaeth	Project Number J0422
Project Title Supersized: Can Teenagers Measure Serving Sizes?	
Abstract Objectives/Goals My project was to determine whether teenagers can accurately measure one USDA recommended serving size of milk and cereal. Methods/Materials Collected Informed Consent Forms from 31 participants with ages ranging from 12 to 18, of which 19 were girls and 12 were boys. Each participant completed a survey testing their knowledge of serving sizes and their nutritional habits. Each participant was then directed to pour one USDA serving size of cereal into Bowl 1 (12 oz) and then again into Bowl 2 (24 oz). Each participant was then directed to pour one USDA serving size of milk into Cup 1 (9 oz) and then again into Cup 2 (18 oz). I measured and recorded the contents of each container. I compared the data collected to the amount recommended by the USDA as one serving size. Results From the survey, participants were pretty good at estimating the number of calories in a serving size of cereal and milk. They overestimated number of cups of milk and cereal in a USDA recommended serving size. Participants, on average, poured one USDA recommended serving size of cereal correctly into Bowl 1 (the smaller bowl) and, on average, overestimated one serving size by 25% with Bowl 2 (the larger bowl). Participants, on average, underestimated a serving size by 23% with Cup 1 (the smaller cup) and underestimated one serving size of milk by 8% with Cup 2 (the larger cup). Generally, males were likely to pour more than females. Conclusions/Discussion Teenagers are confused when it comes to understanding serving sizes. First, they overestimate by a lot when asked what a serving size is. Second, they don't pour what they estimate a serving size to be. Third, the amount they pour seems to be influenced by the size of the container they are pouring into.	
Summary Statement My project was to determine whether teenagers can accurately measure one USDA recommended serving size of milk and cereal.	
Help Received I received help from my older brother. He helped me to consider different types of graphs and charts to help analyze my data. My mom and dad helped me organize my board.	