

CALIFORNIA STATE SCIENCE FAIR 2017 PROJECT SUMMARY

Name(s) **Project Number Orion S.S. Walter J1132 Project Title Environmentally Happier Meal: Nature's Lovin' It!** Abstract **Objectives/Goals** With 1.2 to 1.3 billion McDonald's Happy Meals being sold worldwide, a Happy Meal produces a lot of material waste. My objective is to reduce at least one-third of the material waste from the Happy Meal in order to make it more environmentally sustainable. **Methods/Materials** I used various measuring devices to determine dimensions as well as used cutting devices, various papers, cardboard, paint, plastic, and adhesives to generate my prototypes. **Results** By re-engineering the McDonald's Happy Meal, I exceeded my objective which was to reduce one-third of its material waste, and by doing so I generated a more environmentally sustainable Happy Meal. **Conclusions/Discussion** By engineering new versions of the McDonald's Happy Meal, I have reduced over one-third of it's original material waste, and by doing so reduced its pollution, its plastic production, as well as made this product more environmentally sustainable. **Summary Statement** I successfully created several, significantly more environmentally sustainable versions of a McDonald's Happy Meal. **Help Received** I investigated, designed and then developed my prototypes on my own. My parents assisted in editing, cutting, printing, and gather supplies. I did listen to feed back from former science fair judges.