



**CALIFORNIA STATE SCIENCE FAIR  
2005 PROJECT SUMMARY**

<b>Name(s)</b> <b>Brisk Kannel; Max Simmons</b>	<b>Project Number</b> <b>J0211</b>
<b>Project Title</b> <b>Dog-E-Diner</b>	
<b>Abstract</b> <b>Objectives/Goals</b> Some pet owners choose to feed their pets outdoors rather than inside. This exposes a pet's food to dirt and most importantly to other animals such as raccoons or pets owned by neighbors who get into the food and eat it before the pet has a chance to eat it. The purpose of the Dog-E-Diner is to keep a dog's food safe and clean while he isn't actually eating it. The Dog-E-Diner can also keep wild animals and other dogs out of a dog's food. <b>Methods/Materials</b> We took on the challenge of inventing a way to allow only an authorized animal access to the food in its bowl. We researched other pet feeders, drew preliminary sketches and spent several hours discussing what features would make our Dog-E-Diner functional. We selected components that would provide the functionality we designed. We began to layout all of the components to determine how big our enclosure would have to be to allow the internal components to work and move within the enclosure. We then drew the full scale version of the enclosure with the exact dimensions that house all of parts needed. We built the enclosure, and using a proximity device and many other off the shelf mechanical and electrical devices, we built the feeder. <b>Results</b> We invented and built a functional feeder that keeps pet food safe, clean and makes the food available only to a specific pet. <b>Conclusions/Discussion</b> The Dog-E-Diner is a great idea that we came up with really easily, but it took a lot more work than we ever imagined. We had a lot of fun inventing and building this project, and hope someday we can patent it make it available to other pet owners.	
<b>Summary Statement</b> We invented a feeder that keeps pet food safe, clean and makes the food available only to a specific pet.	
<b>Help Received</b> Stepmom helped type report; Dad helped with sizing of the actuator; Although we already knew a lot about wiring, a family friend taught us about power supplies.	