GENE IE
juice bar
Discover the Magic of DNA!

View the GENE-IE Juice Bar & other resources at
ucbiotech.org
To reserve the juice bar, or for more information, please contact Barbara Alonso
email: balonso@berkeley.edu
or phone: 510-642-1589

DNA EXTRACTION METHOD

1. Select fruit, 3 small kiwis, 6 strawberries, 2 smaller tomatoes – softer fruits work better.

2. Remove leaves, stems, skin (from kiwi) and chop coarsely.

3. Put in blender to blend, add water, if necessary, to achieve "pumpkin soup-like" consistency. Don't overblend; it might still be chunky.

4. Add blended fruit to 8 oz. plastic cup - ~1/3 of cup's volume.

5. Add 1 teaspoon baking soda – it will fizz, especially with acidic fruits.

6. Stir several minutes until fizzing stops.

7. Add equal volume extraction mixture; stir for several minutes.
   Extraction mixture:
   In 1-quart container add:
   - 4 tablespoons dishwashing liquid (Palmolive)
   - 3 teaspoons iodized salt
   - Add water to 1 quart

8. Put single layer coffee filter in strainer and filter mixture into fountain glass. Discard pulp in strainer.

9. Add 1/2 teaspoon (2 milliliters) of this mixture into small tube, using graduated "eye dropper".

10. Gently layer 1 teaspoon (4 milliliters) of 95% ethanol down side of tube to form layer on top of mixture using graduated "eye dropper". Try not to mix layers.

11. DNA will appear at interface between ethanol and DNA mixture.

12. Carefully twirl unfolded paperclip (leaving one end bent in a "U") at interface of two layers to capture the DNA. It will appear as a "snotty glob" when removed from liquid.