```
FILENAME REFFILE '/folders/myfolders/beta_carotene_univar.csv';

PROC IMPORT DATAFILE=REFFILE
    DBMS=CSV
    OUT=beta;
    GETNAMES=YES;
RUN;

PROC MIXED DATA=beta METHOD=ML;
title 'Model 0: Categorical Time';
class id group time;
model y = group time group*time / solution;
repeated / type=UN subject=id;
run;


PROC MIXED DATA=beta METHOD=ML;
title 'Model 1: Linear Time';
class id group;
model y = group time group*time / solution;
repeated / type=UN subject=id;
run;

PROC MIXED DATA=beta METHOD=ML;
title 'Model 2: Quadratic Time';
class id group;
model y=group time time*time group*time group*time*time / solution;
repeated / type=UN subject=id;
run;

PROC MIXED DATA=beta METHOD=ML;
title 'Model 3: Cubic Time';
class id group;
model y=group time time*time time*time*time group*time group*time*time group*time*time*time / solution;
repeated / type=UN subject=id;
estimate 'BASF (30mg capsules) 12 weeks'
intercept 1 group 0 0 1 0 time 12 time*time 144 time*time*time 1728
group*time 0 0 12 0  group*time*time 0 0 144 0 group*time*time*time 0 0 1728 0;
contrast 'BASF 30mg 60mg Curve Comparison'
group 0 0 1 -1 group*time 0 0 1 -1  group*time*time 0 0 1 -1 group*time*time*time 0 0 1 -1;
run;

PROC MIXED DATA=beta METHOD=ML;
title 'Model 4: Quartic Time';
class id group;
model y=group time time*time time*time*time time*time*time*time
        group*time group*time*time group*time*time*time group*time*time*time*time / solution;
repeated / type=UN subject=id;
run;
```