***The SAS System***

***The Mixed Procedure***

**Model Information**

**Data Set**

WORK.MARCNPLANT

**Dependent Variable**

cnratio

**Covariance Structure**

Variance Components

**Estimation Method**

REML

**Residual Variance Method**

Profile

**Fixed Effects SE Method**

Model-Based

**Degrees of Freedom Method**

Containment

**Class Level Information**

**Class**

**Levels**

**Values**

**bk**

3

1 7 15

**ntrt**

3

C NHN NO

**plt**

3

M MN N

**fxnlgrp**

4

F G MV S

**Dimensions**

**Covariance Parameters**

9

**Columns in X**

64

**Columns in Z**

192

**Subjects**

1

**Max Obs Per Subject**

72

**Number of Observations**

**Number of Observations Read**

72

**Number of Observations Used**

72

**Number of Observations Not Used**

0

**Iteration History**

**Iteration**

**Evaluations**

**-2 Res Log Like**

**Criterion**

**0**

1

351.89786771

**1**

3

317.43943379

0.00002424

**2**

3

317.41908161

.

**3**

3

317.35631403

0.00001324

**4**

2

317.34248800

0.00000033

**5**

1

317.34223023

0.00000000

Convergence criteria met but final hessian is not positive definite.

**Covariance Parameter Estimates**

**Cov Parm**

**Estimate**

**bk**

0

**bk\*ntrt**

0

**bk\*fxnlgrp**

34.3370

**bk\*ntrt\*fxnlgrp**

1.8654

**bk\*plt**

2.7373

**bk\*ntrt\*plt**

4.8734

**bk\*plt\*fxnlgrp**

2.91E-34

**bk\*ntrt\*plt\*fxnlgrp**

8.5560

**Residual**

1.7523

**Fit Statistics**

**-2 Res Log Likelihood**

317.3

**AIC (smaller is better)**

329.3

**AICC (smaller is better)**

331.4

**BIC (smaller is better)**

323.9

**Type 3 Tests of Fixed Effects**

**Effect**

**Num DF**

**Den DF**

**F Value**

**Pr > F**

**ntrt**

2

4

6.76

0.0522

**plt**

2

4

3.57

0.1290

**fxnlgrp**

3

4

21.85

0.0061

**ntrt\*fxnlgrp**

6

8

4.33

0.0304

**ntrt\*plt**

4

8

5.95

0.0160

**plt\*fxnlgrp**

2

4

0.16

0.8582

**ntrt\*plt\*fxnlgrp**

4

8

0.59

0.6796

**Least Squares Means**

**Effect**

**ntrt**

**plt**

**fxnlgrp**

**Estimate**

**Standard Error**

**DF**

**t Value**

**Pr > |t|**

**ntrt**

C

Non-est

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**ntrt**

NHN

Non-est

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**ntrt**

NO

Non-est

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**plt**

M

Non-est

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**plt**

MN

28.0401

2.1572

4

13.00

0.0002

**plt**

N

Non-est

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**fxnlgrp**

F

Non-est

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**fxnlgrp**

G

Non-est

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**fxnlgrp**

MV

Non-est

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**fxnlgrp**

S

Non-est

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**ntrt\*fxnlgrp**

C

F

Non-est

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**ntrt\*fxnlgrp**

C

G

Non-est

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**ntrt\*fxnlgrp**

C

MV

Non-est

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**ntrt\*fxnlgrp**

C

S

Non-est

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**ntrt\*fxnlgrp**

NHN

F

Non-est

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**ntrt\*fxnlgrp**

NHN

G

Non-est

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**ntrt\*fxnlgrp**

NHN

MV

Non-est

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**ntrt\*fxnlgrp**

NHN

S

Non-est

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**ntrt\*fxnlgrp**

NO

F

Non-est

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**ntrt\*fxnlgrp**

NO

G

Non-est

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**ntrt\*fxnlgrp**

NO

MV

Non-est

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**ntrt\*fxnlgrp**

NO

S

Non-est

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**ntrt\*plt**

C

M

Non-est

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**ntrt\*plt**

C

MN

32.0793

2.5324

8

12.67

<.0001

**ntrt\*plt**

C

N

Non-est

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**ntrt\*plt**

NHN

M

Non-est

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**ntrt\*plt**

NHN

MN

25.0193

2.5324

8

9.88

<.0001

**ntrt\*plt**

NHN

N

Non-est

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**ntrt\*plt**

NO

M

Non-est

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**ntrt\*plt**

NO

MN

27.0217

2.5324

8

10.67

<.0001

**ntrt\*plt**

NO

N

Non-est

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**plt\*fxnlgrp**

M

MV

47.6205

3.7752

4

12.61

0.0002

**plt\*fxnlgrp**

MN

F

19.3912

3.7752

4

5.14

0.0068

**plt\*fxnlgrp**

MN

G

19.6328

3.7752

4

5.20

0.0065

**plt\*fxnlgrp**

MN

MV

53.1202

3.7752

4

14.07

0.0001

**plt\*fxnlgrp**

MN

S

20.0162

3.7752

4

5.30

0.0061

**plt\*fxnlgrp**

N

F

19.7395

3.7752

4

5.23

0.0064

**plt\*fxnlgrp**

N

G

20.8462

3.7752

4

5.52

0.0053

**plt\*fxnlgrp**

N

S

20.0688

3.7752

4

5.32

0.0060

**ntrt\*plt\*fxnlgrp**

C

M

MV

50.0667

4.2474

8

11.79

<.0001

**ntrt\*plt\*fxnlgrp**

C

MN

F

21.7622

4.2474

8

5.12

0.0009

**ntrt\*plt\*fxnlgrp**

C

MN

G

22.3202

4.2474

8

5.26

0.0008

**ntrt\*plt\*fxnlgrp**

C

MN

MV

62.4004

4.2474

8

14.69

<.0001

**ntrt\*plt\*fxnlgrp**

C

MN

S

21.8345

4.2474

8

5.14

0.0009

**ntrt\*plt\*fxnlgrp**

C

N

F

21.7519

4.2474

8

5.12

0.0009

**ntrt\*plt\*fxnlgrp**

C

N

G

27.1943

4.2474

8

6.40

0.0002

**ntrt\*plt\*fxnlgrp**

C

N

S

21.6406

4.2474

8

5.10

0.0009

**ntrt\*plt\*fxnlgrp**

NHN

M

MV

50.3669

4.2474

8

11.86

<.0001

**ntrt\*plt\*fxnlgrp**

NHN

MN

F

18.4461

4.2474

8

4.34

0.0025

**ntrt\*plt\*fxnlgrp**

NHN

MN

G

18.7362

4.2474

8

4.41

0.0023

**ntrt\*plt\*fxnlgrp**

NHN

MN

MV

43.7091

4.2474

8

10.29

<.0001

**ntrt\*plt\*fxnlgrp**

NHN

MN

S

19.1857

4.2474

8

4.52

0.0020

**ntrt\*plt\*fxnlgrp**

NHN

N

F

19.4382

4.2474

8

4.58

0.0018

**ntrt\*plt\*fxnlgrp**

NHN

N

G

18.5281

4.2474

8

4.36

0.0024

**ntrt\*plt\*fxnlgrp**

NHN

N

S

19.1878

4.2474

8

4.52

0.0020

**ntrt\*plt\*fxnlgrp**

NO

M

MV

42.4277

4.2474

8

9.99

<.0001

**ntrt\*plt\*fxnlgrp**

NO

MN

F

17.9654

4.2474

8

4.23

0.0029

**ntrt\*plt\*fxnlgrp**

NO

MN

G

17.8420

4.2474

8

4.20

0.0030

**ntrt\*plt\*fxnlgrp**

NO

MN

MV

53.2509

4.2474

8

12.54

<.0001

**ntrt\*plt\*fxnlgrp**

NO

MN

S

19.0285

4.2474

8

4.48

0.0021

**ntrt\*plt\*fxnlgrp**

NO

N

F

18.0286

4.2474

8

4.24

0.0028

**ntrt\*plt\*fxnlgrp**

NO

N

G

16.8163

4.2474

8

3.96

0.0042

**ntrt\*plt\*fxnlgrp**

NO

N

S

19.3778

4.2474

8

4.56

0.0018

**Differences of Least Squares Means**

**Effect**

**ntrt**

**plt**

**fxnlgrp**

**ntrt**

**plt**

**fxnlgrp**

**Estimate**

**Standard Error**

**DF**

**t Value**

**Pr > |t|**

**Adjustment**

**Adj P**

**ntrt**

C

NHN

Non-est

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Tukey

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**ntrt**

C

NO

Non-est

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Tukey

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**ntrt**

NHN

NO

Non-est

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Tukey

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**plt**

M

MN

Non-est

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Tukey-Kramer

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**plt**

M

N

Non-est

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Tukey-Kramer

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**plt**

MN

N

Non-est

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Tukey-Kramer

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**fxnlgrp**

F

G

-0.6741

4.9448

4

-0.14

0.8981

Tukey

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**fxnlgrp**

F

MV

Non-est

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Tukey

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**fxnlgrp**

F

S

-0.4771

4.9448

4

-0.10

0.9278

Tukey

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**fxnlgrp**

G

MV

Non-est

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Tukey

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**fxnlgrp**

G

S

0.1970

4.9448

4

0.04

0.9701

Tukey

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**fxnlgrp**

MV

S

Non-est

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Tukey

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**ntrt\*fxnlgrp**

C

F

C

G

-3.0002

5.2508

8

-0.57

0.5834

Tukey

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**ntrt\*fxnlgrp**

C

F

C

MV

Non-est

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Tukey

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**ntrt\*fxnlgrp**

C

F

C

S

0.01950

5.2508

8

0.00

0.9971

Tukey

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**ntrt\*fxnlgrp**

C

F

NHN

F

Non-est

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Tukey

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**ntrt\*fxnlgrp**

C

F

NHN

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Non-est

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Tukey

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**ntrt\*fxnlgrp**

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NHN

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Non-est

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Tukey

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**ntrt\*fxnlgrp**

C

F

NHN

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Non-est

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Tukey

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**ntrt\*fxnlgrp**

C

F

NO

F

Non-est

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Tukey

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**ntrt\*fxnlgrp**

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Non-est

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Tukey

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**ntrt\*fxnlgrp**

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Tukey

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**ntrt\*fxnlgrp**

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Tukey

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**ntrt\*fxnlgrp**

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Non-est

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Tukey

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**ntrt\*fxnlgrp**

C

G

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S

3.0197

5.2508

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0.58

0.5810

Tukey

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**ntrt\*fxnlgrp**

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NHN

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Non-est

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Tukey

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**ntrt\*fxnlgrp**

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**ntrt\*fxnlgrp**

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**ntrt\*fxnlgrp**

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**ntrt\*fxnlgrp**

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**ntrt\*fxnlgrp**

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**ntrt\*fxnlgrp**

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**ntrt\*fxnlgrp**

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Tukey

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**ntrt\*fxnlgrp**

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Tukey

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**ntrt\*fxnlgrp**

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Tukey

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**ntrt\*fxnlgrp**

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Tukey

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**ntrt\*fxnlgrp**

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**ntrt\*fxnlgrp**

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**ntrt\*fxnlgrp**

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**ntrt\*fxnlgrp**

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**ntrt\*fxnlgrp**

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**ntrt\*fxnlgrp**

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**ntrt\*fxnlgrp**

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**ntrt\*fxnlgrp**

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**ntrt\*fxnlgrp**

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Tukey

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**ntrt\*fxnlgrp**

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Tukey

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**ntrt\*fxnlgrp**

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Non-est

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Tukey

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**ntrt\*fxnlgrp**

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NO

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Non-est

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Tukey

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**ntrt\*fxnlgrp**

NHN

F

NHN

G

0.3099

5.2508

8

0.06

0.9544

Tukey

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**ntrt\*fxnlgrp**

NHN

F

NHN

MV

Non-est

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Tukey

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**ntrt\*fxnlgrp**

NHN

F

NHN

S

-0.2446

5.2508

8

-0.05

0.9640

Tukey

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**ntrt\*fxnlgrp**

NHN

F

NO

F

Non-est

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Tukey

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**ntrt\*fxnlgrp**

NHN

F

NO

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Non-est

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Tukey

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**ntrt\*fxnlgrp**

NHN

F

NO

MV

Non-est

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Tukey

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**ntrt\*fxnlgrp**

NHN

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NO

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Non-est

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Tukey

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**ntrt\*fxnlgrp**

NHN

G

NHN

MV

Non-est

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Tukey

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**ntrt\*fxnlgrp**

NHN

G

NHN

S

-0.5546

5.2508

8

-0.11

0.9185

Tukey

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**ntrt\*fxnlgrp**

NHN

G

NO

F

Non-est

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Tukey

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**ntrt\*fxnlgrp**

NHN

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NO

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Non-est

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Tukey

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**ntrt\*fxnlgrp**

NHN

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Non-est

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Tukey

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**ntrt\*fxnlgrp**

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**ntrt\*fxnlgrp**

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**ntrt\*fxnlgrp**

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Tukey

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**ntrt\*fxnlgrp**

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Tukey

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**ntrt\*fxnlgrp**

NHN

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Tukey

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**ntrt\*fxnlgrp**

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Tukey

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**ntrt\*fxnlgrp**

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Tukey

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**ntrt\*fxnlgrp**

NHN

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Tukey

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**ntrt\*fxnlgrp**

NHN

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Tukey

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**ntrt\*fxnlgrp**

NHN

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NO

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Non-est

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Tukey

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**ntrt\*fxnlgrp**

NO

F

NO

G

0.6679

5.2508

8

0.13

0.9019

Tukey

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**ntrt\*fxnlgrp**

NO

F

NO

MV

Non-est

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Tukey

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**ntrt\*fxnlgrp**

NO

F

NO

S

-1.2061

5.2508

8

-0.23

0.8241

Tukey

.

**ntrt\*fxnlgrp**

NO

G

NO

MV

Non-est

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Tukey

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**ntrt\*fxnlgrp**

NO

G

NO

S

-1.8740

5.2508

8

-0.36

0.7304

Tukey

.

**ntrt\*fxnlgrp**

NO

MV

NO

S

Non-est

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Tukey

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**ntrt\*plt**

C

M

C

MN

Non-est

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Tukey-Kramer

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**ntrt\*plt**

C

M

C

N

Non-est

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Tukey-Kramer

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**ntrt\*plt**

C

M

NHN

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Non-est

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Tukey-Kramer

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**ntrt\*plt**

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M

NHN

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Tukey-Kramer

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**ntrt\*plt**

C

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NHN

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Non-est

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Tukey-Kramer

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**ntrt\*plt**

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NO

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Non-est

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Tukey-Kramer

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**ntrt\*plt**

C

M

NO

MN

Non-est

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Tukey-Kramer

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**ntrt\*plt**

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M

NO

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Non-est

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Tukey-Kramer

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**ntrt\*plt**

C

MN

C

N

Non-est

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Tukey-Kramer

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**ntrt\*plt**

C

MN

NHN

M

Non-est

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Tukey-Kramer

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**ntrt\*plt**

C

MN

NHN

MN

7.0601

2.2974

8

3.07

0.0153

Tukey-Kramer

0.0365

**ntrt\*plt**

C

MN

NHN

N

Non-est

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Tukey-Kramer

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**ntrt\*plt**

C

MN

NO

M

Non-est

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Tukey-Kramer

.

**ntrt\*plt**

C

MN

NO

MN

5.0576

2.2974

8

2.20

0.0589

Tukey-Kramer

0.1307

**ntrt\*plt**

C

MN

NO

N

Non-est

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Tukey-Kramer

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**ntrt\*plt**

C

N

NHN

M

Non-est

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Tukey-Kramer

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**ntrt\*plt**

C

N

NHN

MN

Non-est

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Tukey-Kramer

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**ntrt\*plt**

C

N

NHN

N

Non-est

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Tukey-Kramer

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**ntrt\*plt**

C

N

NO

M

Non-est

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Tukey-Kramer

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**ntrt\*plt**

C

N

NO

MN

Non-est

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Tukey-Kramer

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**ntrt\*plt**

C

N

NO

N

Non-est

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Tukey-Kramer

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**ntrt\*plt**

NHN

M

NHN

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Non-est

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Tukey-Kramer

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**ntrt\*plt**

NHN

M

NHN

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Non-est

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Tukey-Kramer

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**ntrt\*plt**

NHN

M

NO

M

Non-est

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Tukey-Kramer

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**ntrt\*plt**

NHN

M

NO

MN

Non-est

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Tukey-Kramer

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**ntrt\*plt**

NHN

M

NO

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Non-est

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Tukey-Kramer

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**ntrt\*plt**

NHN

MN

NHN

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Non-est

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Tukey-Kramer

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**ntrt\*plt**

NHN

MN

NO

M

Non-est

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Tukey-Kramer

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**ntrt\*plt**

NHN

MN

NO

MN

-2.0024

2.2974

8

-0.87

0.4088

Tukey-Kramer

0.6719

**ntrt\*plt**

NHN

MN

NO

N

Non-est

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Tukey-Kramer

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**ntrt\*plt**

NHN

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NO

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Non-est

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Tukey-Kramer

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**ntrt\*plt**

NHN

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NO

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Non-est

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Tukey-Kramer

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**ntrt\*plt**

NHN

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NO

N

Non-est

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Tukey-Kramer

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**ntrt\*plt**

NO

M

NO

MN

Non-est

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Tukey-Kramer

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**ntrt\*plt**

NO

M

NO

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Non-est

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Tukey-Kramer

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**ntrt\*plt**

NO

MN

NO

N

Non-est

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Tukey-Kramer

.

**plt\*fxnlgrp**

M

MV

MN

F

28.2292

5.3390

4

5.29

0.0061

Tukey-Kramer

0.0471

**plt\*fxnlgrp**

M

MV

MN

G

27.9877

5.3390

4

5.24

0.0063

Tukey-Kramer

0.0485

**plt\*fxnlgrp**

M

MV

MN

MV

-5.4997

2.2800

4

-2.41

0.0734

Tukey-Kramer

0.4097

**plt\*fxnlgrp**

M

MV

MN

S

27.6043

5.3390

4

5.17

0.0067

Tukey-Kramer

0.0508

**plt\*fxnlgrp**

M

MV

N

F

27.8809

5.3390

4

5.22

0.0064

Tukey-Kramer

0.0491

**plt\*fxnlgrp**

M

MV

N

G

26.7742

5.3390

4

5.01

0.0074

Tukey-Kramer

0.0562

**plt\*fxnlgrp**

M

MV

N

S

27.5517

5.3390

4

5.16

0.0067

Tukey-Kramer

0.0511

**plt\*fxnlgrp**

MN

F

MN

G

-0.2416

5.0593

4

-0.05

0.9642

Tukey-Kramer

1.0000

**plt\*fxnlgrp**

MN

F

MN

MV

-33.7289

5.0593

4

-6.67

0.0026

Tukey-Kramer

0.0210

**plt\*fxnlgrp**

MN

F

MN

S

-0.6250

5.0593

4

-0.12

0.9076

Tukey-Kramer

1.0000

**plt\*fxnlgrp**

MN

F

N

F

-0.3483

2.2800

4

-0.15

0.8860

Tukey-Kramer

1.0000

**plt\*fxnlgrp**

MN

F

N

G

-1.4550

5.3390

4

-0.27

0.7987

Tukey-Kramer

1.0000

**plt\*fxnlgrp**

MN

F

N

S

-0.6775

5.3390

4

-0.13

0.9051

Tukey-Kramer

1.0000

**plt\*fxnlgrp**

MN

G

MN

MV

-33.4874

5.0593

4

-6.62

0.0027

Tukey-Kramer

0.0215

**plt\*fxnlgrp**

MN

G

MN

S

-0.3834

5.0593

4

-0.08

0.9432

Tukey-Kramer

1.0000

**plt\*fxnlgrp**

MN

G

N

F

-0.1067

5.3390

4

-0.02

0.9850

Tukey-Kramer

1.0000

**plt\*fxnlgrp**

MN

G

N

G

-1.2134

2.2800

4

-0.53

0.6228

Tukey-Kramer

0.9983

**plt\*fxnlgrp**

MN

G

N

S

-0.4360

5.3390

4

-0.08

0.9388

Tukey-Kramer

1.0000

**plt\*fxnlgrp**

MN

MV

MN

S

33.1040

5.0593

4

6.54

0.0028

Tukey-Kramer

0.0224

**plt\*fxnlgrp**

MN

MV

N

F

33.3806

5.3390

4

6.25

0.0033

Tukey-Kramer

0.0264

**plt\*fxnlgrp**

MN

MV

N

G

32.2739

5.3390

4

6.04

0.0038

Tukey-Kramer

0.0297

**plt\*fxnlgrp**

MN

MV

N

S

33.0514

5.3390

4

6.19

0.0035

Tukey-Kramer

0.0273

**plt\*fxnlgrp**

MN

S

N

F

0.2767

5.3390

4

0.05

0.9612

Tukey-Kramer

1.0000

**plt\*fxnlgrp**

MN

S

N

G

-0.8300

5.3390

4

-0.16

0.8840

Tukey-Kramer

1.0000

**plt\*fxnlgrp**

MN

S

N

S

-0.05257

2.2800

4

-0.02

0.9827

Tukey-Kramer

1.0000

**plt\*fxnlgrp**

N

F

N

G

-1.1067

5.0593

4

-0.22

0.8376

Tukey-Kramer

1.0000

**plt\*fxnlgrp**

N

F

N

S

-0.3292

5.0593

4

-0.07

0.9512

Tukey-Kramer

1.0000

**plt\*fxnlgrp**

N

G

N

S

0.7775

5.0593

4

0.15

0.8853

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

M

MV

C

MN

F

28.3045

6.0067

8

4.71

0.0015

Tukey-Kramer

0.0704

**ntrt\*plt\*fxnlgrp**

C

M

MV

C

MN

G

27.7465

6.0067

8

4.62

0.0017

Tukey-Kramer

0.0780

**ntrt\*plt\*fxnlgrp**

C

M

MV

C

MN

MV

-12.3337

3.4563

8

-3.57

0.0073

Tukey-Kramer

0.2465

**ntrt\*plt\*fxnlgrp**

C

M

MV

C

MN

S

28.2322

6.0067

8

4.70

0.0015

Tukey-Kramer

0.0714

**ntrt\*plt\*fxnlgrp**

C

M

MV

C

N

F

28.3148

6.0067

8

4.71

0.0015

Tukey-Kramer

0.0703

**ntrt\*plt\*fxnlgrp**

C

M

MV

C

N

G

22.8724

6.0067

8

3.81

0.0052

Tukey-Kramer

0.1906

**ntrt\*plt\*fxnlgrp**

C

M

MV

C

N

S

28.4260

6.0067

8

4.73

0.0015

Tukey-Kramer

0.0689

**ntrt\*plt\*fxnlgrp**

C

M

MV

NHN

M

MV

-0.3002

3.3712

8

-0.09

0.9312

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

M

MV

NHN

MN

F

31.6206

6.0067

8

5.26

0.0008

Tukey-Kramer

0.0387

**ntrt\*plt\*fxnlgrp**

C

M

MV

NHN

MN

G

31.3305

6.0067

8

5.22

0.0008

Tukey-Kramer

0.0408

**ntrt\*plt\*fxnlgrp**

C

M

MV

NHN

MN

MV

6.3576

3.6317

8

1.75

0.1181

Tukey-Kramer

0.9480

**ntrt\*plt\*fxnlgrp**

C

M

MV

NHN

MN

S

30.8810

6.0067

8

5.14

0.0009

Tukey-Kramer

0.0442

**ntrt\*plt\*fxnlgrp**

C

M

MV

NHN

N

F

30.6285

6.0067

8

5.10

0.0009

Tukey-Kramer

0.0462

**ntrt\*plt\*fxnlgrp**

C

M

MV

NHN

N

G

31.5386

6.0067

8

5.25

0.0008

Tukey-Kramer

0.0393

**ntrt\*plt\*fxnlgrp**

C

M

MV

NHN

N

S

30.8788

6.0067

8

5.14

0.0009

Tukey-Kramer

0.0442

**ntrt\*plt\*fxnlgrp**

C

M

MV

NO

M

MV

7.6389

3.3712

8

2.27

0.0532

Tukey-Kramer

0.7723

**ntrt\*plt\*fxnlgrp**

C

M

MV

NO

MN

F

32.1013

6.0067

8

5.34

0.0007

Tukey-Kramer

0.0355

**ntrt\*plt\*fxnlgrp**

C

M

MV

NO

MN

G

32.2247

6.0067

8

5.36

0.0007

Tukey-Kramer

0.0348

**ntrt\*plt\*fxnlgrp**

C

M

MV

NO

MN

MV

-3.1842

3.6317

8

-0.88

0.4062

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

M

MV

NO

MN

S

31.0382

6.0067

8

5.17

0.0009

Tukey-Kramer

0.0430

**ntrt\*plt\*fxnlgrp**

C

M

MV

NO

N

F

32.0381

6.0067

8

5.33

0.0007

Tukey-Kramer

0.0359

**ntrt\*plt\*fxnlgrp**

C

M

MV

NO

N

G

33.2504

6.0067

8

5.54

0.0006

Tukey-Kramer

0.0290

**ntrt\*plt\*fxnlgrp**

C

M

MV

NO

N

S

30.6889

6.0067

8

5.11

0.0009

Tukey-Kramer

0.0457

**ntrt\*plt\*fxnlgrp**

C

MN

F

C

MN

G

-0.5580

5.5684

8

-0.10

0.9226

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

F

C

MN

MV

-40.6382

5.5684

8

-7.30

<.0001

Tukey-Kramer

0.0052

**ntrt\*plt\*fxnlgrp**

C

MN

F

C

MN

S

-0.07225

5.5684

8

-0.01

0.9900

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

F

C

N

F

0.01035

3.4563

8

0.00

0.9977

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

F

C

N

G

-5.4321

6.0067

8

-0.90

0.3922

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

F

C

N

S

0.1216

6.0067

8

0.02

0.9843

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

F

NHN

M

MV

-28.6047

6.0067

8

-4.76

0.0014

Tukey-Kramer

0.0667

**ntrt\*plt\*fxnlgrp**

C

MN

F

NHN

MN

F

3.3162

3.3712

8

0.98

0.3541

Tukey-Kramer

0.9999

**ntrt\*plt\*fxnlgrp**

C

MN

F

NHN

MN

G

3.0260

5.8529

8

0.52

0.6191

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

F

NHN

MN

MV

-21.9469

5.8529

8

-3.75

0.0056

Tukey-Kramer

0.2029

**ntrt\*plt\*fxnlgrp**

C

MN

F

NHN

MN

S

2.5766

5.8529

8

0.44

0.6714

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

F

NHN

N

F

2.3241

3.6317

8

0.64

0.5401

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

F

NHN

N

G

3.2341

6.0067

8

0.54

0.6049

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

F

NHN

N

S

2.5744

6.0067

8

0.43

0.6795

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

F

NO

M

MV

-20.6655

6.0067

8

-3.44

0.0088

Tukey-Kramer

0.2820

**ntrt\*plt\*fxnlgrp**

C

MN

F

NO

MN

F

3.7968

3.3712

8

1.13

0.2927

Tukey-Kramer

0.9993

**ntrt\*plt\*fxnlgrp**

C

MN

F

NO

MN

G

3.9202

5.8529

8

0.67

0.5218

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

F

NO

MN

MV

-31.4887

5.8529

8

-5.38

0.0007

Tukey-Kramer

0.0342

**ntrt\*plt\*fxnlgrp**

C

MN

F

NO

MN

S

2.7338

5.8529

8

0.47

0.6529

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

F

NO

N

F

3.7336

3.6317

8

1.03

0.3340

Tukey-Kramer

0.9998

**ntrt\*plt\*fxnlgrp**

C

MN

F

NO

N

G

4.9460

6.0067

8

0.82

0.4341

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

F

NO

N

S

2.3844

6.0067

8

0.40

0.7018

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

G

C

MN

MV

-40.0802

5.5684

8

-7.20

<.0001

Tukey-Kramer

0.0056

**ntrt\*plt\*fxnlgrp**

C

MN

G

C

MN

S

0.4857

5.5684

8

0.09

0.9326

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

G

C

N

F

0.5683

6.0067

8

0.09

0.9269

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

G

C

N

G

-4.8741

3.4563

8

-1.41

0.1962

Tukey-Kramer

0.9915

**ntrt\*plt\*fxnlgrp**

C

MN

G

C

N

S

0.6796

6.0067

8

0.11

0.9127

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

G

NHN

M

MV

-28.0467

6.0067

8

-4.67

0.0016

Tukey-Kramer

0.0738

**ntrt\*plt\*fxnlgrp**

C

MN

G

NHN

MN

F

3.8741

5.8529

8

0.66

0.5266

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

G

NHN

MN

G

3.5840

3.3712

8

1.06

0.3188

Tukey-Kramer

0.9997

**ntrt\*plt\*fxnlgrp**

C

MN

G

NHN

MN

MV

-21.3889

5.8529

8

-3.65

0.0065

Tukey-Kramer

0.2249

**ntrt\*plt\*fxnlgrp**

C

MN

G

NHN

MN

S

3.1345

5.8529

8

0.54

0.6068

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

G

NHN

N

F

2.8821

6.0067

8

0.48

0.6442

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

G

NHN

N

G

3.7921

3.6317

8

1.04

0.3269

Tukey-Kramer

0.9997

**ntrt\*plt\*fxnlgrp**

C

MN

G

NHN

N

S

3.1324

6.0067

8

0.52

0.6162

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

G

NO

M

MV

-20.1075

6.0067

8

-3.35

0.0101

Tukey-Kramer

0.3104

**ntrt\*plt\*fxnlgrp**

C

MN

G

NO

MN

F

4.3548

5.8529

8

0.74

0.4781

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

G

NO

MN

G

4.4782

3.3712

8

1.33

0.2207

Tukey-Kramer

0.9953

**ntrt\*plt\*fxnlgrp**

C

MN

G

NO

MN

MV

-30.9307

5.8529

8

-5.28

0.0007

Tukey-Kramer

0.0379

**ntrt\*plt\*fxnlgrp**

C

MN

G

NO

MN

S

3.2918

5.8529

8

0.56

0.5892

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

G

NO

N

F

4.2916

6.0067

8

0.71

0.4953

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

G

NO

N

G

5.5040

3.6317

8

1.52

0.1681

Tukey-Kramer

0.9835

**ntrt\*plt\*fxnlgrp**

C

MN

G

NO

N

S

2.9424

6.0067

8

0.49

0.6374

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

MV

C

MN

S

40.5660

5.5684

8

7.29

<.0001

Tukey-Kramer

0.0052

**ntrt\*plt\*fxnlgrp**

C

MN

MV

C

N

F

40.6485

6.0067

8

6.77

0.0001

Tukey-Kramer

0.0084

**ntrt\*plt\*fxnlgrp**

C

MN

MV

C

N

G

35.2061

6.0067

8

5.86

0.0004

Tukey-Kramer

0.0207

**ntrt\*plt\*fxnlgrp**

C

MN

MV

C

N

S

40.7598

6.0067

8

6.79

0.0001

Tukey-Kramer

0.0083

**ntrt\*plt\*fxnlgrp**

C

MN

MV

NHN

M

MV

12.0335

3.6317

8

3.31

0.0106

Tukey-Kramer

0.3214

**ntrt\*plt\*fxnlgrp**

C

MN

MV

NHN

MN

F

43.9544

5.8529

8

7.51

<.0001

Tukey-Kramer

0.0043

**ntrt\*plt\*fxnlgrp**

C

MN

MV

NHN

MN

G

43.6642

5.8529

8

7.46

<.0001

Tukey-Kramer

0.0044

**ntrt\*plt\*fxnlgrp**

C

MN

MV

NHN

MN

MV

18.6913

3.3712

8

5.54

0.0005

Tukey-Kramer

0.0288

**ntrt\*plt\*fxnlgrp**

C

MN

MV

NHN

MN

S

43.2148

5.8529

8

7.38

<.0001

Tukey-Kramer

0.0048

**ntrt\*plt\*fxnlgrp**

C

MN

MV

NHN

N

F

42.9623

6.0067

8

7.15

<.0001

Tukey-Kramer

0.0059

**ntrt\*plt\*fxnlgrp**

C

MN

MV

NHN

N

G

43.8723

6.0067

8

7.30

<.0001

Tukey-Kramer

0.0051

**ntrt\*plt\*fxnlgrp**

C

MN

MV

NHN

N

S

43.2126

6.0067

8

7.19

<.0001

Tukey-Kramer

0.0057

**ntrt\*plt\*fxnlgrp**

C

MN

MV

NO

M

MV

19.9727

3.6317

8

5.50

0.0006

Tukey-Kramer

0.0302

**ntrt\*plt\*fxnlgrp**

C

MN

MV

NO

MN

F

44.4350

5.8529

8

7.59

<.0001

Tukey-Kramer

0.0040

**ntrt\*plt\*fxnlgrp**

C

MN

MV

NO

MN

G

44.5584

5.8529

8

7.61

<.0001

Tukey-Kramer

0.0039

**ntrt\*plt\*fxnlgrp**

C

MN

MV

NO

MN

MV

9.1495

3.3712

8

2.71

0.0265

Tukey-Kramer

0.5625

**ntrt\*plt\*fxnlgrp**

C

MN

MV

NO

MN

S

43.3720

5.8529

8

7.41

<.0001

Tukey-Kramer

0.0047

**ntrt\*plt\*fxnlgrp**

C

MN

MV

NO

N

F

44.3718

6.0067

8

7.39

<.0001

Tukey-Kramer

0.0048

**ntrt\*plt\*fxnlgrp**

C

MN

MV

NO

N

G

45.5842

6.0067

8

7.59

<.0001

Tukey-Kramer

0.0040

**ntrt\*plt\*fxnlgrp**

C

MN

MV

NO

N

S

43.0226

6.0067

8

7.16

<.0001

Tukey-Kramer

0.0058

**ntrt\*plt\*fxnlgrp**

C

MN

S

C

N

F

0.08259

6.0067

8

0.01

0.9894

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

S

C

N

G

-5.3599

6.0067

8

-0.89

0.3983

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

S

C

N

S

0.1938

3.4563

8

0.06

0.9567

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

S

NHN

M

MV

-28.5325

6.0067

8

-4.75

0.0014

Tukey-Kramer

0.0676

**ntrt\*plt\*fxnlgrp**

C

MN

S

NHN

MN

F

3.3884

5.8529

8

0.58

0.5786

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

S

NHN

MN

G

3.0983

5.8529

8

0.53

0.6109

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

S

NHN

MN

MV

-21.8747

5.8529

8

-3.74

0.0057

Tukey-Kramer

0.2056

**ntrt\*plt\*fxnlgrp**

C

MN

S

NHN

MN

S

2.6488

3.3712

8

0.79

0.4547

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

S

NHN

N

F

2.3963

6.0067

8

0.40

0.7004

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

S

NHN

N

G

3.3064

6.0067

8

0.55

0.5970

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

S

NHN

N

S

2.6466

3.6317

8

0.73

0.4869

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

S

NO

M

MV

-20.5933

6.0067

8

-3.43

0.0090

Tukey-Kramer

0.2856

**ntrt\*plt\*fxnlgrp**

C

MN

S

NO

MN

F

3.8691

5.8529

8

0.66

0.5272

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

S

NO

MN

G

3.9925

5.8529

8

0.68

0.5144

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

S

NO

MN

MV

-31.4164

5.8529

8

-5.37

0.0007

Tukey-Kramer

0.0347

**ntrt\*plt\*fxnlgrp**

C

MN

S

NO

MN

S

2.8060

3.3712

8

0.83

0.4293

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

S

NO

N

F

3.8059

6.0067

8

0.63

0.5440

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

S

NO

N

G

5.0182

6.0067

8

0.84

0.4277

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

MN

S

NO

N

S

2.4567

3.6317

8

0.68

0.5178

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

N

F

C

N

G

-5.4425

5.5684

8

-0.98

0.3570

Tukey-Kramer

0.9999

**ntrt\*plt\*fxnlgrp**

C

N

F

C

N

S

0.1112

5.5684

8

0.02

0.9846

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

N

F

NHN

M

MV

-28.6150

6.0067

8

-4.76

0.0014

Tukey-Kramer

0.0666

**ntrt\*plt\*fxnlgrp**

C

N

F

NHN

MN

F

3.3058

3.6317

8

0.91

0.3893

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

N

F

NHN

MN

G

3.0157

6.0067

8

0.50

0.6292

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

N

F

NHN

MN

MV

-21.9573

6.0067

8

-3.66

0.0064

Tukey-Kramer

0.2246

**ntrt\*plt\*fxnlgrp**

C

N

F

NHN

MN

S

2.5662

6.0067

8

0.43

0.6805

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

N

F

NHN

N

F

2.3137

3.3712

8

0.69

0.5119

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

N

F

NHN

N

G

3.2238

5.8529

8

0.55

0.5968

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

N

F

NHN

N

S

2.5640

5.8529

8

0.44

0.6729

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

N

F

NO

M

MV

-20.6759

6.0067

8

-3.44

0.0088

Tukey-Kramer

0.2815

**ntrt\*plt\*fxnlgrp**

C

N

F

NO

MN

F

3.7865

3.6317

8

1.04

0.3276

Tukey-Kramer

0.9997

**ntrt\*plt\*fxnlgrp**

C

N

F

NO

MN

G

3.9099

6.0067

8

0.65

0.5333

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

N

F

NO

MN

MV

-31.4990

6.0067

8

-5.24

0.0008

Tukey-Kramer

0.0396

**ntrt\*plt\*fxnlgrp**

C

N

F

NO

MN

S

2.7234

6.0067

8

0.45

0.6623

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

N

F

NO

N

F

3.7233

3.3712

8

1.10

0.3015

Tukey-Kramer

0.9994

**ntrt\*plt\*fxnlgrp**

C

N

F

NO

N

G

4.9356

5.8529

8

0.84

0.4236

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

N

F

NO

N

S

2.3741

5.8529

8

0.41

0.6957

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

N

G

C

N

S

5.5537

5.5684

8

1.00

0.3478

Tukey-Kramer

0.9999

**ntrt\*plt\*fxnlgrp**

C

N

G

NHN

M

MV

-23.1726

6.0067

8

-3.86

0.0048

Tukey-Kramer

0.1805

**ntrt\*plt\*fxnlgrp**

C

N

G

NHN

MN

F

8.7483

6.0067

8

1.46

0.1834

Tukey-Kramer

0.9885

**ntrt\*plt\*fxnlgrp**

C

N

G

NHN

MN

G

8.4581

3.6317

8

2.33

0.0482

Tukey-Kramer

0.7439

**ntrt\*plt\*fxnlgrp**

C

N

G

NHN

MN

MV

-16.5148

6.0067

8

-2.75

0.0251

Tukey-Kramer

0.5462

**ntrt\*plt\*fxnlgrp**

C

N

G

NHN

MN

S

8.0087

6.0067

8

1.33

0.2192

Tukey-Kramer

0.9951

**ntrt\*plt\*fxnlgrp**

C

N

G

NHN

N

F

7.7562

5.8529

8

1.33

0.2217

Tukey-Kramer

0.9954

**ntrt\*plt\*fxnlgrp**

C

N

G

NHN

N

G

8.6662

3.3712

8

2.57

0.0331

Tukey-Kramer

0.6301

**ntrt\*plt\*fxnlgrp**

C

N

G

NHN

N

S

8.0065

5.8529

8

1.37

0.2085

Tukey-Kramer

0.9937

**ntrt\*plt\*fxnlgrp**

C

N

G

NO

M

MV

-15.2334

6.0067

8

-2.54

0.0349

Tukey-Kramer

0.6466

**ntrt\*plt\*fxnlgrp**

C

N

G

NO

MN

F

9.2289

6.0067

8

1.54

0.1630

Tukey-Kramer

0.9814

**ntrt\*plt\*fxnlgrp**

C

N

G

NO

MN

G

9.3524

3.6317

8

2.58

0.0329

Tukey-Kramer

0.6279

**ntrt\*plt\*fxnlgrp**

C

N

G

NO

MN

MV

-26.0566

6.0067

8

-4.34

0.0025

Tukey-Kramer

0.1064

**ntrt\*plt\*fxnlgrp**

C

N

G

NO

MN

S

8.1659

6.0067

8

1.36

0.2111

Tukey-Kramer

0.9941

**ntrt\*plt\*fxnlgrp**

C

N

G

NO

N

F

9.1657

5.8529

8

1.57

0.1560

Tukey-Kramer

0.9781

**ntrt\*plt\*fxnlgrp**

C

N

G

NO

N

G

10.3781

3.3712

8

3.08

0.0152

Tukey-Kramer

0.4056

**ntrt\*plt\*fxnlgrp**

C

N

G

NO

N

S

7.8165

5.8529

8

1.34

0.2185

Tukey-Kramer

0.9951

**ntrt\*plt\*fxnlgrp**

C

N

S

NHN

M

MV

-28.7263

6.0067

8

-4.78

0.0014

Tukey-Kramer

0.0652

**ntrt\*plt\*fxnlgrp**

C

N

S

NHN

MN

F

3.1946

6.0067

8

0.53

0.6093

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

N

S

NHN

MN

G

2.9044

6.0067

8

0.48

0.6417

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

N

S

NHN

MN

MV

-22.0685

6.0067

8

-3.67

0.0063

Tukey-Kramer

0.2202

**ntrt\*plt\*fxnlgrp**

C

N

S

NHN

MN

S

2.4550

3.6317

8

0.68

0.5181

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

N

S

NHN

N

F

2.2025

5.8529

8

0.38

0.7165

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

N

S

NHN

N

G

3.1125

5.8529

8

0.53

0.6093

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

N

S

NHN

N

S

2.4528

3.3712

8

0.73

0.4876

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

N

S

NO

M

MV

-20.7871

6.0067

8

-3.46

0.0086

Tukey-Kramer

0.2761

**ntrt\*plt\*fxnlgrp**

C

N

S

NO

MN

F

3.6752

6.0067

8

0.61

0.5576

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

N

S

NO

MN

G

3.7987

6.0067

8

0.63

0.5448

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

N

S

NO

MN

MV

-31.6103

6.0067

8

-5.26

0.0008

Tukey-Kramer

0.0388

**ntrt\*plt\*fxnlgrp**

C

N

S

NO

MN

S

2.6122

3.6317

8

0.72

0.4924

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

N

S

NO

N

F

3.6121

5.8529

8

0.62

0.5543

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

N

S

NO

N

G

4.8244

5.8529

8

0.82

0.4337

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

C

N

S

NO

N

S

2.2628

3.3712

8

0.67

0.5210

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

M

MV

NHN

MN

F

31.9209

6.0067

8

5.31

0.0007

Tukey-Kramer

0.0367

**ntrt\*plt\*fxnlgrp**

NHN

M

MV

NHN

MN

G

31.6307

6.0067

8

5.27

0.0008

Tukey-Kramer

0.0386

**ntrt\*plt\*fxnlgrp**

NHN

M

MV

NHN

MN

MV

6.6578

3.4563

8

1.93

0.0902

Tukey-Kramer

0.9025

**ntrt\*plt\*fxnlgrp**

NHN

M

MV

NHN

MN

S

31.1813

6.0067

8

5.19

0.0008

Tukey-Kramer

0.0419

**ntrt\*plt\*fxnlgrp**

NHN

M

MV

NHN

N

F

30.9288

6.0067

8

5.15

0.0009

Tukey-Kramer

0.0438

**ntrt\*plt\*fxnlgrp**

NHN

M

MV

NHN

N

G

31.8388

6.0067

8

5.30

0.0007

Tukey-Kramer

0.0372

**ntrt\*plt\*fxnlgrp**

NHN

M

MV

NHN

N

S

31.1791

6.0067

8

5.19

0.0008

Tukey-Kramer

0.0419

**ntrt\*plt\*fxnlgrp**

NHN

M

MV

NO

M

MV

7.9392

3.3712

8

2.36

0.0463

Tukey-Kramer

0.7319

**ntrt\*plt\*fxnlgrp**

NHN

M

MV

NO

MN

F

32.4015

6.0067

8

5.39

0.0007

Tukey-Kramer

0.0337

**ntrt\*plt\*fxnlgrp**

NHN

M

MV

NO

MN

G

32.5249

6.0067

8

5.41

0.0006

Tukey-Kramer

0.0330

**ntrt\*plt\*fxnlgrp**

NHN

M

MV

NO

MN

MV

-2.8840

3.6317

8

-0.79

0.4500

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

M

MV

NO

MN

S

31.3385

6.0067

8

5.22

0.0008

Tukey-Kramer

0.0407

**ntrt\*plt\*fxnlgrp**

NHN

M

MV

NO

N

F

32.3383

6.0067

8

5.38

0.0007

Tukey-Kramer

0.0341

**ntrt\*plt\*fxnlgrp**

NHN

M

MV

NO

N

G

33.5507

6.0067

8

5.59

0.0005

Tukey-Kramer

0.0276

**ntrt\*plt\*fxnlgrp**

NHN

M

MV

NO

N

S

30.9891

6.0067

8

5.16

0.0009

Tukey-Kramer

0.0433

**ntrt\*plt\*fxnlgrp**

NHN

MN

F

NHN

MN

G

-0.2902

5.5684

8

-0.05

0.9597

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

MN

F

NHN

MN

MV

-25.2631

5.5684

8

-4.54

0.0019

Tukey-Kramer

0.0854

**ntrt\*plt\*fxnlgrp**

NHN

MN

F

NHN

MN

S

-0.7396

5.5684

8

-0.13

0.8976

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

MN

F

NHN

N

F

-0.9921

3.4563

8

-0.29

0.7814

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

MN

F

NHN

N

G

-0.08205

6.0067

8

-0.01

0.9894

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

MN

F

NHN

N

S

-0.7418

6.0067

8

-0.12

0.9048

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

MN

F

NO

M

MV

-23.9817

6.0067

8

-3.99

0.0040

Tukey-Kramer

0.1557

**ntrt\*plt\*fxnlgrp**

NHN

MN

F

NO

MN

F

0.4806

3.3712

8

0.14

0.8901

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

MN

F

NO

MN

G

0.6041

5.8529

8

0.10

0.9203

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

MN

F

NO

MN

MV

-34.8049

5.8529

8

-5.95

0.0003

Tukey-Kramer

0.0190

**ntrt\*plt\*fxnlgrp**

NHN

MN

F

NO

MN

S

-0.5824

5.8529

8

-0.10

0.9232

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

MN

F

NO

N

F

0.4175

3.6317

8

0.11

0.9113

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

MN

F

NO

N

G

1.6298

6.0067

8

0.27

0.7930

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

MN

F

NO

N

S

-0.9318

6.0067

8

-0.16

0.8806

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

MN

G

NHN

MN

MV

-24.9729

5.5684

8

-4.48

0.0020

Tukey-Kramer

0.0905

**ntrt\*plt\*fxnlgrp**

NHN

MN

G

NHN

MN

S

-0.4495

5.5684

8

-0.08

0.9377

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

MN

G

NHN

N

F

-0.7019

6.0067

8

-0.12

0.9099

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

MN

G

NHN

N

G

0.2081

3.4563

8

0.06

0.9535

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

MN

G

NHN

N

S

-0.4516

6.0067

8

-0.08

0.9419

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

MN

G

NO

M

MV

-23.6915

6.0067

8

-3.94

0.0043

Tukey-Kramer

0.1642

**ntrt\*plt\*fxnlgrp**

NHN

MN

G

NO

MN

F

0.7708

5.8529

8

0.13

0.8985

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

MN

G

NO

MN

G

0.8942

3.3712

8

0.27

0.7975

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

MN

G

NO

MN

MV

-34.5147

5.8529

8

-5.90

0.0004

Tukey-Kramer

0.0200

**ntrt\*plt\*fxnlgrp**

NHN

MN

G

NO

MN

S

-0.2922

5.8529

8

-0.05

0.9614

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

MN

G

NO

N

F

0.7076

6.0067

8

0.12

0.9091

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

MN

G

NO

N

G

1.9200

3.6317

8

0.53

0.6114

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

MN

G

NO

N

S

-0.6416

6.0067

8

-0.11

0.9176

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

MN

MV

NHN

MN

S

24.5235

5.5684

8

4.40

0.0023

Tukey-Kramer

0.0989

**ntrt\*plt\*fxnlgrp**

NHN

MN

MV

NHN

N

F

24.2710

6.0067

8

4.04

0.0037

Tukey-Kramer

0.1477

**ntrt\*plt\*fxnlgrp**

NHN

MN

MV

NHN

N

G

25.1810

6.0067

8

4.19

0.0030

Tukey-Kramer

0.1250

**ntrt\*plt\*fxnlgrp**

NHN

MN

MV

NHN

N

S

24.5213

6.0067

8

4.08

0.0035

Tukey-Kramer

0.1411

**ntrt\*plt\*fxnlgrp**

NHN

MN

MV

NO

M

MV

1.2814

3.6317

8

0.35

0.7333

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

MN

MV

NO

MN

F

25.7437

5.8529

8

4.40

0.0023

Tukey-Kramer

0.0995

**ntrt\*plt\*fxnlgrp**

NHN

MN

MV

NO

MN

G

25.8672

5.8529

8

4.42

0.0022

Tukey-Kramer

0.0972

**ntrt\*plt\*fxnlgrp**

NHN

MN

MV

NO

MN

MV

-9.5418

3.3712

8

-2.83

0.0221

Tukey-Kramer

0.5096

**ntrt\*plt\*fxnlgrp**

NHN

MN

MV

NO

MN

S

24.6807

5.8529

8

4.22

0.0029

Tukey-Kramer

0.1216

**ntrt\*plt\*fxnlgrp**

NHN

MN

MV

NO

N

F

25.6805

6.0067

8

4.28

0.0027

Tukey-Kramer

0.1140

**ntrt\*plt\*fxnlgrp**

NHN

MN

MV

NO

N

G

26.8929

6.0067

8

4.48

0.0021

Tukey-Kramer

0.0912

**ntrt\*plt\*fxnlgrp**

NHN

MN

MV

NO

N

S

24.3313

6.0067

8

4.05

0.0037

Tukey-Kramer

0.1461

**ntrt\*plt\*fxnlgrp**

NHN

MN

S

NHN

N

F

-0.2525

6.0067

8

-0.04

0.9675

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

MN

S

NHN

N

G

0.6576

6.0067

8

0.11

0.9155

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

MN

S

NHN

N

S

-0.00217

3.4563

8

-0.00

0.9995

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

MN

S

NO

M

MV

-23.2421

6.0067

8

-3.87

0.0047

Tukey-Kramer

0.1782

**ntrt\*plt\*fxnlgrp**

NHN

MN

S

NO

MN

F

1.2203

5.8529

8

0.21

0.8401

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

MN

S

NO

MN

G

1.3437

5.8529

8

0.23

0.8242

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

MN

S

NO

MN

MV

-34.0652

5.8529

8

-5.82

0.0004

Tukey-Kramer

0.0216

**ntrt\*plt\*fxnlgrp**

NHN

MN

S

NO

MN

S

0.1572

3.3712

8

0.05

0.9639

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

MN

S

NO

N

F

1.1571

6.0067

8

0.19

0.8520

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

MN

S

NO

N

G

2.3694

6.0067

8

0.39

0.7035

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

MN

S

NO

N

S

-0.1921

3.6317

8

-0.05

0.9591

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

N

F

NHN

N

G

0.9100

5.5684

8

0.16

0.8742

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

N

F

NHN

N

S

0.2503

5.5684

8

0.04

0.9652

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

N

F

NO

M

MV

-22.9896

6.0067

8

-3.83

0.0050

Tukey-Kramer

0.1866

**ntrt\*plt\*fxnlgrp**

NHN

N

F

NO

MN

F

1.4727

3.6317

8

0.41

0.6957

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

N

F

NO

MN

G

1.5962

6.0067

8

0.27

0.7972

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

N

F

NO

MN

MV

-33.8128

6.0067

8

-5.63

0.0005

Tukey-Kramer

0.0263

**ntrt\*plt\*fxnlgrp**

NHN

N

F

NO

MN

S

0.4097

6.0067

8

0.07

0.9473

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

N

F

NO

N

F

1.4096

3.3712

8

0.42

0.6869

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

N

F

NO

N

G

2.6219

5.8529

8

0.45

0.6661

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

N

F

NO

N

S

0.06034

5.8529

8

0.01

0.9920

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

N

G

NHN

N

S

-0.6597

5.5684

8

-0.12

0.9086

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

N

G

NO

M

MV

-23.8996

6.0067

8

-3.98

0.0041

Tukey-Kramer

0.1581

**ntrt\*plt\*fxnlgrp**

NHN

N

G

NO

MN

F

0.5627

6.0067

8

0.09

0.9277

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

N

G

NO

MN

G

0.6861

3.6317

8

0.19

0.8549

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

N

G

NO

MN

MV

-34.7228

6.0067

8

-5.78

0.0004

Tukey-Kramer

0.0225

**ntrt\*plt\*fxnlgrp**

NHN

N

G

NO

MN

S

-0.5003

6.0067

8

-0.08

0.9357

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

N

G

NO

N

F

0.4995

5.8529

8

0.09

0.9341

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

N

G

NO

N

G

1.7119

3.3712

8

0.51

0.6253

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

N

G

NO

N

S

-0.8497

5.8529

8

-0.15

0.8882

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

N

S

NO

M

MV

-23.2399

6.0067

8

-3.87

0.0047

Tukey-Kramer

0.1783

**ntrt\*plt\*fxnlgrp**

NHN

N

S

NO

MN

F

1.2224

6.0067

8

0.20

0.8438

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

N

S

NO

MN

G

1.3459

6.0067

8

0.22

0.8283

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

N

S

NO

MN

MV

-34.0631

6.0067

8

-5.67

0.0005

Tukey-Kramer

0.0252

**ntrt\*plt\*fxnlgrp**

NHN

N

S

NO

MN

S

0.1594

3.6317

8

0.04

0.9661

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

N

S

NO

N

F

1.1593

5.8529

8

0.20

0.8479

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

N

S

NO

N

G

2.3716

5.8529

8

0.41

0.6959

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NHN

N

S

NO

N

S

-0.1900

3.3712

8

-0.06

0.9564

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NO

M

MV

NO

MN

F

24.4623

6.0067

8

4.07

0.0036

Tukey-Kramer

0.1426

**ntrt\*plt\*fxnlgrp**

NO

M

MV

NO

MN

G

24.5858

6.0067

8

4.09

0.0035

Tukey-Kramer

0.1394

**ntrt\*plt\*fxnlgrp**

NO

M

MV

NO

MN

MV

-10.8232

3.4563

8

-3.13

0.0140

Tukey-Kramer

0.3854

**ntrt\*plt\*fxnlgrp**

NO

M

MV

NO

MN

S

23.3993

6.0067

8

3.90

0.0046

Tukey-Kramer

0.1732

**ntrt\*plt\*fxnlgrp**

NO

M

MV

NO

N

F

24.3992

6.0067

8

4.06

0.0036

Tukey-Kramer

0.1443

**ntrt\*plt\*fxnlgrp**

NO

M

MV

NO

N

G

25.6115

6.0067

8

4.26

0.0027

Tukey-Kramer

0.1155

**ntrt\*plt\*fxnlgrp**

NO

M

MV

NO

N

S

23.0499

6.0067

8

3.84

0.0050

Tukey-Kramer

0.1845

**ntrt\*plt\*fxnlgrp**

NO

MN

F

NO

MN

G

0.1234

5.5684

8

0.02

0.9829

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NO

MN

F

NO

MN

MV

-35.2855

5.5684

8

-6.34

0.0002

Tukey-Kramer

0.0128

**ntrt\*plt\*fxnlgrp**

NO

MN

F

NO

MN

S

-1.0630

5.5684

8

-0.19

0.8534

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NO

MN

F

NO

N

F

-0.06318

3.4563

8

-0.02

0.9859

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NO

MN

F

NO

N

G

1.1492

6.0067

8

0.19

0.8530

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NO

MN

F

NO

N

S

-1.4124

6.0067

8

-0.24

0.8200

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NO

MN

G

NO

MN

MV

-35.4089

5.5684

8

-6.36

0.0002

Tukey-Kramer

0.0126

**ntrt\*plt\*fxnlgrp**

NO

MN

G

NO

MN

S

-1.1865

5.5684

8

-0.21

0.8366

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NO

MN

G

NO

N

F

-0.1866

6.0067

8

-0.03

0.9760

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NO

MN

G

NO

N

G

1.0257

3.4563

8

0.30

0.7742

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NO

MN

G

NO

N

S

-1.5358

6.0067

8

-0.26

0.8046

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NO

MN

MV

NO

MN

S

34.2225

5.5684

8

6.15

0.0003

Tukey-Kramer

0.0155

**ntrt\*plt\*fxnlgrp**

NO

MN

MV

NO

N

F

35.2223

6.0067

8

5.86

0.0004

Tukey-Kramer

0.0207

**ntrt\*plt\*fxnlgrp**

NO

MN

MV

NO

N

G

36.4347

6.0067

8

6.07

0.0003

Tukey-Kramer

0.0168

**ntrt\*plt\*fxnlgrp**

NO

MN

MV

NO

N

S

33.8731

6.0067

8

5.64

0.0005

Tukey-Kramer

0.0261

**ntrt\*plt\*fxnlgrp**

NO

MN

S

NO

N

F

0.9999

6.0067

8

0.17

0.8719

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NO

MN

S

NO

N

G

2.2122

6.0067

8

0.37

0.7222

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NO

MN

S

NO

N

S

-0.3494

3.4563

8

-0.10

0.9220

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NO

N

F

NO

N

G

1.2123

5.5684

8

0.22

0.8331

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NO

N

F

NO

N

S

-1.3492

5.5684

8

-0.24

0.8146

Tukey-Kramer

1.0000

**ntrt\*plt\*fxnlgrp**

NO

N

G

NO

N

S

-2.5616

5.5684

8

-0.46

0.6577

Tukey-Kramer

1.0000