Obs	ID	Sex	Group	Days	Fatmass	FFM	MuscleGlycogen	COXIV	GIRperkgFFMperinsulin
1	1	1	1	0	43.1473	73.1527	517.538	1.37	2.6919
2	1	1	1	93	44.4567	72.8433	623.147	1.49	6.7656
3	1	1	1	96	44.4567	72.8433	726.587	1.88	6.1666
4	4	0	0	0	39.6760	51.3240	506.638	0.86	5.1617
5	4	0	0	93	38.2872	52.0128	766.439	1.12	6.2406
6	4	0	0	96	38.2448	51.9552	628.304	1.00	4.8547
7	6	1	0	0	49.7871	67.9129	519.121	1.05	4.6351
8	6	1	0	93	48.5135	68.3865	553.229	1.47	4.6936
9	6	1	0	96	49.7170	70.0830	832.371	1.58	4.4599
10	7	0	0	0	44.8836	54.4164	585.228	1.22	13.7358

Obs	TotalAdiponectin	LogTotalAdiponectin
1	2472.66	3.39316
2	1157.65	3.06358
3	1173.18	3.06936
4	1369.91	3.13669
5	1017.86	3.00769
6	1105.87	3.04371
7	1354.38	3.13174
8	795.24	2.90050
9	909.14	2.95863
10	11574.23	4.06349

Obs	ID	Sex	Group	Days	Fatmass	FFM	MuscleGlycogen	COXIV	GIRperkgFFMperinsulin	TotalAdiponectin
1	1	1	1	0	43.1473	73.1527	517.538	1.37	2.6919	2472.66
2	1	1	1	93	44.4567	72.8433	623.147	1.49	6.7656	1157.65
3	1	1	1	96	44.4567	72.8433	726.587	1.88	6.1666	1173.18
4	4	0	0	0	39.6760	51.3240	506.638	0.86	5.1617	1369.91
5	4	0	0	93	38.2872	52.0128	766.439	1.12	6.2406	1017.86
6	4	0	0	96	38.2448	51.9552	628.304	1.00	4.8547	1105.87
7	6	1	0	0	49.7871	67.9129	519.121	1.05	4.6351	1354.38
8	6	1	0	93	48.5135	68.3865	553.229	1.47	4.6936	795.24
9	6	1	0	96	49.7170	70.0830	832.371	1.58	4.4599	909.14
10	7	0	0	0	44.8836	54.4164	585.228	1.22	13.7358	11574.23

Obs	LogTotalAdiponectin	Fatmass_cent	Adiponectin_cent	MuscleGlycogen_cent	postVisit2	postVisit2_spline
1	3.39316	2.4673	-1537.73	-77.868	0	0
2	3.06358	3.7767	-2852.75	27.741	0	0
3	3.06936	3.7767	-2837.22	131.181	1	3
4	3.13669	-1.0040	-2640.48	-88.768	0	0
5	3.00769	-2.3928	-2992.53	171.033	0	0
6	3.04371	-2.4352	-2904.52	32.898	1	3
7	3.13174	9.1071	-2656.01	-76.285	0	0
8	2.90050	7.8335	-3215.16	-42.176	0	0
9	2.95863	9.0370	-3101.26	236.965	1	3
10	4.06349	4.2036	7563.84	-10.177	0	0

The Mixed Procedure

Model Information	
Data Set	WORK.EXERCISE_D
Dependent Variable	GIRperkgFFMperinsulin
Covariance Structure	Unstructured
Subject Effects	ID, ID
Estimation Method	REML
Residual Variance Method	None
Fixed Effects SE Method	Model-Based
Degrees of Freedom Method	Containment

Class Level Information		
Class	**Levels**	**Values**
ID	30	1 10 11 19 21 22 23 24 25 27 29 31 4 40 41 42 43 47 49 53 55 56 6 62 63 64 65 7 8 9
Group	2	1 0
Sex	2	0 1
Days	3	93 96 0

Dimensions	
Covariance Parameters	7
Columns in X	13
Columns in Z per Subject	1
Subjects	30
Max Obs per Subject	3

Number of Observations	
Number of Observations Read	93
Number of Observations Used	89
Number of Observations Not Used	4

Iteration History			
Iteration	**Evaluations**	**-2 Res Log Like**	**Criterion**
0	1	478.37905891	
1	2	423.42323233	0.00033472
2	1	423.40988871	0.00000063
3	1	423.40984659	0.00000000

Convergence criteria met but final Hessian is not positive definite.

The Mixed Procedure

Estimated R Matrix for ID 1			
Row	Col1	Col2	Col3
1	2.8736	2.8340	-0.1998
2	2.8340	8.3183	2.4473
3	-0.1998	2.4473	4.0666

Estimated R Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.5796	-0.05846
2	0.5796	1.0000	0.4208
3	-0.05846	0.4208	1.0000

Estimated G Matrix			
Row	Effect	ID	Col1
1	Intercept	1	9.4257

Estimated G Correlation Matrix			
Row	Effect	ID	Col1
1	Intercept	1	1.0000

Estimated V Matrix for ID 1			
Row	Col1	Col2	Col3
1	12.2993	12.2596	9.2258
2	12.2596	17.7440	11.8730
3	9.2258	11.8730	13.4923

Estimated V Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.8299	0.7162
2	0.8299	1.0000	0.7673
3	0.7162	0.7673	1.0000

The Mixed Procedure

Covariance Parameter Estimates		
Cov Parm	**Subject**	**Estimate**
UN(1,1)	ID	9.4257
UN(1,1)	ID	2.8736
UN(2,1)	ID	2.8340
UN(2,2)	ID	8.3183
UN(3,1)	ID	-0.1998
UN(3,2)	ID	2.4473
UN(3,3)	ID	4.0666

Fit Statistics	
-2 Res Log Likelihood	423.4
AIC (Smaller is Better)	437.4
AICC (Smaller is Better)	439.0
BIC (Smaller is Better)	447.2

Null Model Likelihood Ratio Test		
DF	**Chi-Square**	**Pr > ChiSq**
6	54.97	<.0001

Solution for Fixed Effects								
Effect	**Group**	**Sex**	**Days**	**Estimate**	**Standard Error**	**DF**	**t Value**	**Pr > |t|**
Sex		0		8.2982	1.1000	53	7.54	<.0001
Sex		1		5.2972	1.2348	53	4.29	<.0001
Days			93	1.6389	0.6302	53	2.60	0.0120
Days			96	1.1010	0.7928	53	1.39	0.1707
Days			0	0	.	.	.	.
Group*Days	1		93	1.3904	1.5771	53	0.88	0.3820
Group*Days	1		96	0.5446	1.3922	53	0.39	0.6972
Group*Days	1		0	0.9457	1.3128	53	0.72	0.4745
Group*Days	0		93	0	.	.	.	.
Group*Days	0		96	0	.	.	.	.
Group*Days	0		0	0	.	.	.	.
Fatmass_cent				-0.1235	0.08294	53	-1.49	0.1425
MuscleGlycogen_cent				-0.00180	0.001988	53	-0.91	0.3690

The Mixed Procedure

Covariance Matrix for Fixed Effects													
Row	Effect	Group	Sex	Days	Col1	Col2	Col3	Col4	Col5	Col6	Col7	Col8	Col9
1	Sex		0		1.2100	0.5414	-0.02047	-0.2955		-0.9418	-0.7449	-0.9177	
2	Sex		1		0.5414	1.5246	-0.00094	-0.2628		-0.9549	-0.7515	-0.9405	
3	Days			93	-0.02047	-0.00094	0.3972	0.1967		-0.3779	-0.1736	0.01579	
4	Days			96	-0.2955	-0.2628	0.1967	0.6286		0.08274	-0.2229	0.2309	
5	Days			0									
6	Group*Days	1		93	-0.9418	-0.9549	-0.3779	0.08274		2.4873	1.6985	1.7168	
7	Group*Days	1		96	-0.7449	-0.7515	-0.1736	-0.2229		1.6985	1.9383	1.3154	
8	Group*Days	1		0	-0.9177	-0.9405	0.01579	0.2309		1.7168	1.3154	1.7235	
9	Group*Days	0		93									
10	Group*Days	0		96									
11	Group*Days	0		0									
12	Fatmass_cent				-0.02703	0.004655	0.004187	0.004545		0.02144	0.02314	0.02138	
13	MuscleGlycogen_cent				0.000397	0.000283	-0.00002	-0.00064		-0.00028	-0.00044	-9.95E-6	

Covariance Matrix for Fixed Effects				
Row	Col10	Col11	Col12	Col13
1			-0.02703	0.000397
2			0.004655	0.000283
3			0.004187	-0.00002
4			0.004545	-0.00064
5				
6			0.02144	-0.00028
7			0.02314	-0.00044
8			0.02138	-9.95E-6
9				
10				
11				
12			0.006879	-8.8E-6
13			-8.8E-6	3.952E-6

Type 3 Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Sex	1	53	5.45	0.0234
Days	2	53	8.87	0.0005
Group*Days	3	53	0.33	0.8025

The Mixed Procedure

Type 3 Tests of Fixed Effects				
Effect	**Num DF**	**Den DF**	**F Value**	**Pr > F**
Fatmass_cent	1	53	2.22	0.1425
MuscleGlycogen_cent	1	53	0.82	0.3690

Contrasts				
Label	**Num DF**	**Den DF**	**F Value**	**Pr > F**
between Visit 2 and Visit 3	1	53	2.43	0.1248

The Mixed Procedure

Model Information	
Data Set	WORK.EXERCISE_D
Dependent Variable	GIRperkgFFMperinsulin
Covariance Structures	Unstructured, Heterogeneous Autoregressive
Subject Effects	ID, ID
Estimation Method	REML
Residual Variance Method	None
Fixed Effects SE Method	Model-Based
Degrees of Freedom Method	Containment

Class Level Information		
Class	**Levels**	**Values**
ID	30	1 10 11 19 21 22 23 24 25 27 29 31 4 40 41 42 43 47 49 53 55 56 6 62 63 64 65 7 8 9
Group	2	1 0
Sex	2	0 1
Days	3	93 96 0

Dimensions	
Covariance Parameters	5
Columns in X	13
Columns in Z per Subject	1
Subjects	30
Max Obs per Subject	3

Number of Observations	
Number of Observations Read	93
Number of Observations Used	89
Number of Observations Not Used	4

Iteration History			
Iteration	**Evaluations**	**-2 Res Log Like**	**Criterion**
0	1	478.37905891	
1	3	424.52256144	0.00227975
2	1	424.13299652	0.00076065
3	1	424.01102617	0.00020397
4	1	423.97869363	0.00001815

The Mixed Procedure

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
5	1	423.97604235	0.00000022
6	1	423.97601224	0.00000000

Convergence criteria met.

Estimated R Matrix for ID 1			
Row	Col1	Col2	Col3
1	5.2333	4.8130	2.5165
2	4.8130	10.7441	5.6178
3	2.5165	5.6178	7.1298

Estimated R Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.6419	0.4120
2	0.6419	1.0000	0.6419
3	0.4120	0.6419	1.0000

Estimated G Matrix			
Row	Effect	ID	Col1
1	Intercept	1	6.6780

Estimated G Correlation Matrix			
Row	Effect	ID	Col1
1	Intercept	1	1.0000

Estimated V Matrix for ID 1			
Row	Col1	Col2	Col3
1	11.9114	11.4910	9.1946
2	11.4910	17.4221	12.2958
3	9.1946	12.2958	13.8079

The Mixed Procedure

Estimated V Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.7977	0.7169
2	0.7977	1.0000	0.7928
3	0.7169	0.7928	1.0000

Covariance Parameter Estimates		
Cov Parm	Subject	Estimate
UN(1,1)	ID	6.6780
Var(1)	ID	5.2333
Var(2)	ID	10.7441
Var(3)	ID	7.1298
ARH(1)	ID	0.6419

Fit Statistics	
-2 Res Log Likelihood	424.0
AIC (Smaller is Better)	434.0
AICC (Smaller is Better)	434.8
BIC (Smaller is Better)	441.0

Null Model Likelihood Ratio Test		
DF	Chi-Square	Pr > ChiSq
4	54.40	<.0001

Solution for Fixed Effects								
Effect	Group	Sex	Days	Estimate	Standard Error	DF	t Value	Pr > |t|
Sex		0		8.2808	1.0883	53	7.61	<.0001
Sex		1		5.2905	1.2231	53	4.33	<.0001
Days			93	1.6355	0.6755	53	2.42	0.0189
Days			96	1.1535	0.7944	53	1.45	0.1524
Days			0	0	.	.	.	.
Group*Days	1		93	1.4075	1.5643	53	0.90	0.3723
Group*Days	1		96	0.5542	1.4079	53	0.39	0.6954
Group*Days	1		0	0.9179	1.2932	53	0.71	0.4810
Group*Days	0		93	0	.	.	.	.

The Mixed Procedure

Solution for Fixed Effects								
Effect	**Group**	**Sex**	**Days**	**Estimate**	**Standard Error**	**DF**	**t Value**	**Pr > |t|**
Group*Days	0		96	0	.	.	.	.
Group*Days	0		0	0	.	.	.	.
Fatmass_cent				-0.1309	0.08348	53	-1.57	0.1227
MuscleGlycogen_cent				-0.00215	0.002020	53	-1.06	0.2921

The Mixed Procedure

Covariance Matrix for Fixed Effects													
Row	Effect	Group	Sex	Days	Col1	Col2	Col3	Col4	Col5	Col6	Col7	Col8	Col9
1	Sex		0		1.1844	0.5143	-0.04787	-0.2720		-0.8890	-0.7448	-0.8909	
2	Sex		1		0.5143	1.4961	-0.02805	-0.2381		-0.9004	-0.7491	-0.9121	
3	Days			93	-0.04787	-0.02805	0.4563	0.2564		-0.4096	-0.2059	0.04313	
4	Days			96	-0.2720	-0.2381	0.2564	0.6311		-0.00055	-0.2459	0.2049	
5	Days			0									
6	Group*Days	1		93	-0.8890	-0.9004	-0.4096	-0.00055		2.4470	1.7572	1.6146	
7	Group*Days	1		96	-0.7448	-0.7491	-0.2059	-0.2459		1.7572	1.9822	1.3117	
8	Group*Days	1		0	-0.8909	-0.9121	0.04313	0.2049		1.6146	1.3117	1.6723	
9	Group*Days	0		93									
10	Group*Days	0		96									
11	Group*Days	0		0									
12	Fatmass_cent				-0.02732	0.004828	0.004238	0.004452		0.02172	0.02333	0.02165	
13	MuscleGlycogen_cent				0.000409	0.000289	-0.00002	-0.00066		-0.00029	-0.00046	-6.2E-6	

Covariance Matrix for Fixed Effects				
Row	Col10	Col11	Col12	Col13
1			-0.02732	0.000409
2			0.004828	0.000289
3			0.004238	-0.00002
4			0.004452	-0.00066
5				
6			0.02172	-0.00029
7			0.02333	-0.00046
8			0.02165	-6.2E-6
9				
10				
11				
12			0.006968	-7.97E-6
13			-7.97E-6	4.082E-6

Type 3 Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Sex	1	53	5.41	0.0238
Days	2	53	7.97	0.0009
Group*Days	3	53	0.37	0.7746

The Mixed Procedure

Type 3 Tests of Fixed Effects				
Effect	**Num DF**	**Den DF**	**F Value**	**Pr > F**
Fatmass_cent	1	53	2.46	0.1227
MuscleGlycogen_cent	1	53	1.13	0.2921

Contrasts				
Label	**Num DF**	**Den DF**	**F Value**	**Pr > F**
between Visit 2 and Visit 3	1	53	2.33	0.1328

rand unstrucutred, main ARH(1), Group specific var-cov matrix

The Mixed Procedure

Model Information	
Data Set	WORK.EXERCISE_D
Dependent Variable	GIRperkgFFMperinsulin
Covariance Structures	Unstructured, Heterogeneous Autoregressive
Subject Effects	ID, ID
Group Effect	Group
Estimation Method	REML
Residual Variance Method	None
Fixed Effects SE Method	Model-Based
Degrees of Freedom Method	Containment

Class Level Information		
Class	**Levels**	**Values**
ID	30	1 10 11 19 21 22 23 24 25 27 29 31 4 40 41 42 43 47 49 53 55 56 6 62 63 64 65 7 8 9
Group	2	1 0
Sex	2	0 1
Days	3	93 96 0

Dimensions	
Covariance Parameters	6
Columns in X	13
Columns in Z per Subject	2
Subjects	30
Max Obs per Subject	3

Number of Observations	
Number of Observations Read	93
Number of Observations Used	89
Number of Observations Not Used	4

Iteration History			
Iteration	**Evaluations**	**-2 Res Log Like**	**Criterion**
0	1	478.37905891	
1	3	424.10508039	0.00328923
2	1	423.54834435	0.00128668
3	2	423.32489462	0.00039571
4	2	423.26089297	0.00005409

rand unstrucutred, main ARH(1), Group specific var-cov matrix

The Mixed Procedure

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
5	1	423.25274516	0.00000132
6	1	423.25255997	0.00000000

Convergence criteria met.

Estimated R Matrix for ID 1			
Row	Col1	Col2	Col3
1	6.4745	6.2925	3.4266
2	6.2925	12.5945	6.8583
3	3.4266	6.8583	7.6914

Estimated R Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.6968	0.4856
2	0.6968	1.0000	0.6968
3	0.4856	0.6968	1.0000

Estimated G Matrix					
Row	Effect	ID	Group	Col1	Col2
1	Intercept	1	1	3.3775	
2	Intercept	1	0		8.6699

Estimated G Correlation Matrix					
Row	Effect	ID	Group	Col1	Col2
1	Intercept	1	1	1.0000	
2	Intercept	1	0		1.0000

Estimated V Matrix for ID 1			
Row	Col1	Col2	Col3
1	9.8520	9.6699	6.8041
2	9.6699	15.9720	10.2358
3	6.8041	10.2358	11.0688

rand unstrucutred, main ARH(1), Group specific var-cov matrix

The Mixed Procedure

Estimated V Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.7709	0.6516
2	0.7709	1.0000	0.7698
3	0.6516	0.7698	1.0000

Covariance Parameter Estimates			
Cov Parm	Subject	Group	Estimate
UN(1,1)	ID	Group 1	3.3775
UN(1,1)	ID	Group 0	8.6699
Var(1)	ID		6.4745
Var(2)	ID		12.5945
Var(3)	ID		7.6914
ARH(1)	ID		0.6968

Fit Statistics	
-2 Res Log Likelihood	423.3
AIC (Smaller is Better)	435.3
AICC (Smaller is Better)	436.4
BIC (Smaller is Better)	443.7

Null Model Likelihood Ratio Test		
DF	Chi-Square	Pr > ChiSq
5	55.13	<.0001

Solution for Fixed Effects								
Effect	Group	Sex	Days	Estimate	Standard Error	DF	t Value	Pr > |t|
Sex		0		8.2629	1.1745	53	7.04	<.0001
Sex		1		5.1865	1.2962	53	4.00	0.0002
Days			93	1.6425	0.6824	53	2.41	0.0196
Days			96	1.2091	0.7915	53	1.53	0.1326
Days			0	0	.	.	.	.
Group*Days	1		93	1.4879	1.6220	53	0.92	0.3631
Group*Days	1		96	0.6307	1.4115	53	0.45	0.6568
Group*Days	1		0	0.9582	1.3323	53	0.72	0.4752

rand unstrucutred, main ARH(1), Group specific var-cov matrix

The Mixed Procedure

Solution for Fixed Effects								
Effect	**Group**	**Sex**	**Days**	**Estimate**	**Standard Error**	**DF**	**t Value**	**Pr > |t|**
Group*Days	0		93	0	.	.	.	.
Group*Days	0		96	0	.	.	.	.
Group*Days	0		0	0	.	.	.	.
Fatmass_cent				-0.1211	0.08214	53	-1.47	0.1464
MuscleGlycogen_cent				-0.00247	0.001988	53	-1.24	0.2199

rand unstrucutred, main ARH(1), Group specific var-cov matrix

The Mixed Procedure

Covariance Matrix for Fixed Effects													
Row	Effect	Group	Sex	Days	Col1	Col2	Col3	Col4	Col5	Col6	Col7	Col8	Col9
1	Sex		0		1.3794	0.7860	-0.02888	-0.2909		-1.1327	-0.9448	-1.1171	
2	Sex		1		0.7860	1.6802	-0.01358	-0.2643		-1.1543	-0.9649	-1.1506	
3	Days			93	-0.02888	-0.01358	0.4657	0.2628		-0.4361	-0.2297	0.02600	
4	Days			96	-0.2909	-0.2643	0.2628	0.6265		0.01543	-0.2233	0.2286	
5	Days			0									
6	Group*Days	1		93	-1.1327	-1.1543	-0.4361	0.01543		2.6310	1.8593	1.7495	
7	Group*Days	1		96	-0.9448	-0.9649	-0.2297	-0.2233		1.8593	1.9923	1.3700	
8	Group*Days	1		0	-1.1171	-1.1506	0.02600	0.2286		1.7495	1.3700	1.7749	
9	Group*Days	0		93									
10	Group*Days	0		96									
11	Group*Days	0		0									
12	Fatmass_cent				-0.02417	0.000627	0.004102	0.004284		0.02168	0.02308	0.02147	
13	MuscleGlycogen_cent				0.000388	0.000292	-0.00002	-0.00064		-0.00029	-0.00044	-7.06E-6	

Covariance Matrix for Fixed Effects				
Row	Col10	Col11	Col12	Col13
1			-0.02417	0.000388
2			0.000627	0.000292
3			0.004102	-0.00002
4			0.004284	-0.00064
5				
6			0.02168	-0.00029
7			0.02308	-0.00044
8			0.02147	-7.06E-6
9				
10				
11				
12			0.006746	-7.56E-6
13			-7.56E-6	3.953E-6

rand unstrucutred, main ARH(1), Group specific var-cov matrix

The Mixed Procedure

Type 3 Tests of Fixed Effects				
Effect	**Num DF**	**Den DF**	**F Value**	**Pr > F**
Sex	1	53	6.36	0.0147
Days	2	53	8.00	0.0009
Group*Days	3	53	0.37	0.7757
Fatmass_cent	1	53	2.17	0.1464
MuscleGlycogen_cent	1	53	1.54	0.2199

The Mixed Procedure

Model Information	
Data Set	WORK.EXERCISE_D
Dependent Variable	GIRperkgFFMperinsulin
Covariance Structures	Unstructured, Ante-dependence
Subject Effects	ID, ID
Estimation Method	REML
Residual Variance Method	None
Fixed Effects SE Method	Model-Based
Degrees of Freedom Method	Containment

Class Level Information		
Class	**Levels**	**Values**
ID	30	1 10 11 19 21 22 23 24 25 27 29 31 4 40 41 42 43 47 49 53 55 56 6 62 63 64 65 7 8 9
Group	2	1 0
Sex	2	0 1
Days	3	93 96 0

Dimensions	
Covariance Parameters	6
Columns in X	13
Columns in Z per Subject	1
Subjects	30
Max Obs per Subject	3

Number of Observations	
Number of Observations Read	93
Number of Observations Used	89
Number of Observations Not Used	4

Iteration History			
Iteration	**Evaluations**	**-2 Res Log Like**	**Criterion**
0	1	478.37905891	
1	3	423.98839995	0.00229849
2	1	423.59181162	0.00086628
3	1	423.44437964	0.00020230
4	1	423.41229526	0.00001661

The Mixed Procedure

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
5	1	423.40986704	0.00000015
6	1	423.40984659	0.00000000

Convergence criteria met.

Estimated R Matrix for ID 1			
Row	Col1	Col2	Col3
1	5.9039	5.8642	2.8305
2	5.8642	11.3486	5.4776
3	2.8305	5.4776	7.0970

Estimated R Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.7164	0.4373
2	0.7164	1.0000	0.6104
3	0.4373	0.6104	1.0000

Estimated G Matrix			
Row	Effect	ID	Col1
1	Intercept	1	6.3954

Estimated G Correlation Matrix			
Row	Effect	ID	Col1
1	Intercept	1	1.0000

Estimated V Matrix for ID 1			
Row	Col1	Col2	Col3
1	12.2993	12.2596	9.2259
2	12.2596	17.7440	11.8730
3	9.2259	11.8730	13.4924

The Mixed Procedure

Estimated V Correlation Matrix for ID 1			
Row	**Col1**	**Col2**	**Col3**
1	1.0000	0.8299	0.7162
2	0.8299	1.0000	0.7673
3	0.7162	0.7673	1.0000

Covariance Parameter Estimates		
Cov Parm	**Subject**	**Estimate**
UN(1,1)	ID	6.3954
Var(1)	ID	5.9039
Var(2)	ID	11.3486
Var(3)	ID	7.0970
Rho(1)	ID	0.7164
Rho(2)	ID	0.6104

Fit Statistics	
-2 Res Log Likelihood	423.4
AIC (Smaller is Better)	435.4
AICC (Smaller is Better)	436.6
BIC (Smaller is Better)	443.8

Null Model Likelihood Ratio Test		
DF	**Chi-Square**	**Pr > ChiSq**
5	54.97	<.0001

Solution for Fixed Effects								
Effect	**Group**	**Sex**	**Days**	**Estimate**	**Standard Error**	**DF**	**t Value**	**Pr > |t|**
Sex		0		8.2982	1.1000	53	7.54	<.0001
Sex		1		5.2972	1.2348	53	4.29	<.0001
Days			93	1.6389	0.6302	53	2.60	0.0120
Days			96	1.1010	0.7928	53	1.39	0.1707
Days			0	0	.	.	.	.
Group*Days	1		93	1.3904	1.5771	53	0.88	0.3820
Group*Days	1		96	0.5446	1.3922	53	0.39	0.6972
Group*Days	1		0	0.9457	1.3128	53	0.72	0.4745

The Mixed Procedure

Solution for Fixed Effects								
Effect	**Group**	**Sex**	**Days**	**Estimate**	**Standard Error**	**DF**	**t Value**	**Pr > |t|**
Group*Days	0		93	0	.	.	.	.
Group*Days	0		96	0	.	.	.	.
Group*Days	0		0	0	.	.	.	.
Fatmass_cent				-0.1235	0.08294	53	-1.49	0.1425
MuscleGlycogen_cent				-0.00180	0.001988	53	-0.91	0.3690

The Mixed Procedure

Covariance Matrix for Fixed Effects													
Row	Effect	Group	Sex	Days	Col1	Col2	Col3	Col4	Col5	Col6	Col7	Col8	Col9
1	Sex		0		1.2100	0.5414	-0.02047	-0.2955		-0.9418	-0.7449	-0.9177	
2	Sex		1		0.5414	1.5247	-0.00094	-0.2628		-0.9549	-0.7515	-0.9405	
3	Days			93	-0.02047	-0.00094	0.3972	0.1967		-0.3779	-0.1736	0.01579	
4	Days			96	-0.2955	-0.2628	0.1967	0.6286		0.08273	-0.2229	0.2309	
5	Days			0									
6	Group*Days	1		93	-0.9418	-0.9549	-0.3779	0.08273		2.4873	1.6985	1.7168	
7	Group*Days	1		96	-0.7449	-0.7515	-0.1736	-0.2229		1.6985	1.9383	1.3154	
8	Group*Days	1		0	-0.9177	-0.9405	0.01579	0.2309		1.7168	1.3154	1.7235	
9	Group*Days	0		93									
10	Group*Days	0		96									
11	Group*Days	0		0									
12	Fatmass_cent				-0.02703	0.004655	0.004187	0.004545		0.02144	0.02314	0.02138	
13	MuscleGlycogen_cent				0.000397	0.000283	-0.00002	-0.00064		-0.00028	-0.00044	-9.95E-6	

Covariance Matrix for Fixed Effects				
Row	Col10	Col11	Col12	Col13
1			-0.02703	0.000397
2			0.004655	0.000283
3			0.004187	-0.00002
4			0.004545	-0.00064
5				
6			0.02144	-0.00028
7			0.02314	-0.00044
8			0.02138	-9.95E-6
9				
10				
11				
12			0.006879	-8.8E-6
13			-8.8E-6	3.952E-6

Type 3 Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Sex	1	53	5.45	0.0234
Days	2	53	8.87	0.0005
Group*Days	3	53	0.33	0.8025

The Mixed Procedure

Type 3 Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Fatmass_cent	1	53	2.22	0.1425
MuscleGlycogen_cent	1	53	0.82	0.3690

The Mixed Procedure

Model Information	
Data Set	WORK.EXERCISE_D
Dependent Variable	GIRperkgFFMperinsulin
Covariance Structures	Unstructured, Heterogeneous Compound Symmetry
Subject Effects	ID, ID
Estimation Method	REML
Residual Variance Method	None
Fixed Effects SE Method	Model-Based
Degrees of Freedom Method	Containment

Class Level Information		
Class	**Levels**	**Values**
ID	30	1 10 11 19 21 22 23 24 25 27 29 31 4 40 41 42 43 47 49 53 55 56 6 62 63 64 65 7 8 9
Group	2	1 0
Sex	2	0 1
Days	3	93 96 0

Dimensions	
Covariance Parameters	5
Columns in X	13
Columns in Z per Subject	1
Subjects	30
Max Obs per Subject	3

Number of Observations	
Number of Observations Read	93
Number of Observations Used	89
Number of Observations Not Used	4

Iteration History			
Iteration	**Evaluations**	**-2 Res Log Like**	**Criterion**
0	1	478.37905891	
1	2	431.16081594	0.02237492
2	1	427.32700904	0.00417549
3	1	426.65916521	0.00035690
4	1	426.59530242	0.00083113
5	4	426.56690787	0.00035316

The Mixed Procedure

Iteration History			
Iteration	**Evaluations**	**-2 Res Log Like**	**Criterion**
6	1	426.50502731	0.00034825
7	1	426.43977333	0.00026652
8	1	426.40324398	0.00024743
9	1	426.35974060	0.00034263
10	3	426.33905186	0.00040623
11	2	426.25496492	0.00396464
12	4	426.19476680	0.00132033
13	3	425.90819472	.
14	1	425.57331460	0.00004437
15	1	425.56702831	0.00000004
16	1	425.56702334	0.00000000

Convergence criteria met.

Estimated R Matrix for ID 1			
Row	**Col1**	**Col2**	**Col3**
1	12.2942	11.0875	9.9272
2	11.0875	17.0028	11.6745
3	9.9272	11.6745	13.6304

Estimated R Correlation Matrix for ID 1			
Row	**Col1**	**Col2**	**Col3**
1	1.0000	0.7669	0.7669
2	0.7669	1.0000	0.7669
3	0.7669	0.7669	1.0000

Estimated G Matrix			
Row	**Effect**	**ID**	**Col1**
1	Intercept	1	

Estimated G Correlation Matrix			
Row	**Effect**	**ID**	**Col1**
1	Intercept	1	1.0000

The Mixed Procedure

Estimated V Matrix for ID 1			
Row	Col1	Col2	Col3
1	12.2942	11.0875	9.9272
2	11.0875	17.0028	11.6745
3	9.9272	11.6745	13.6304

Estimated V Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.7669	0.7669
2	0.7669	1.0000	0.7669
3	0.7669	0.7669	1.0000

Estimated G matrix is not positive definite.

Covariance Parameter Estimates		
Cov Parm	Subject	Estimate
UN(1,1)	ID	0
Var(1)	ID	12.2942
Var(2)	ID	17.0028
Var(3)	ID	13.6304
CSH	ID	0.7669

Fit Statistics	
-2 Res Log Likelihood	425.6
AIC (Smaller is Better)	433.6
AICC (Smaller is Better)	434.1
BIC (Smaller is Better)	439.2

Null Model Likelihood Ratio Test		
DF	Chi-Square	Pr > ChiSq
3	52.81	<.0001

The Mixed Procedure

Solution for Fixed Effects

Effect	Group	Sex	Days	Estimate	Standard Error	DF	t Value	Pr > |t|
Sex		0		8.2448	1.1060	53	7.45	<.0001
Sex		1		5.3643	1.2504	53	4.29	<.0001
Days			93	1.6259	0.7152	53	2.27	0.0271
Days			96	1.2138	0.7338	53	1.65	0.1040
Days			0	0	.	.	.	.
Group*Days	1		93	1.3506	1.5482	53	0.87	0.3869
Group*Days	1		96	0.5255	1.3998	53	0.38	0.7089
Group*Days	1		0	0.8443	1.3144	53	0.64	0.5234
Group*Days	0		93	0	.	.	.	.
Group*Days	0		96	0	.	.	.	.
Group*Days	0		0	0	.	.	.	.
Fatmass_cent				-0.1492	0.08557	53	-1.74	0.0871
MuscleGlycogen_cent				-0.00258	0.001999	53	-1.29	0.2029

The Mixed Procedure

Covariance Matrix for Fixed Effects													
Row	Effect	Group	Sex	Days	Col1	Col2	Col3	Col4	Col5	Col6	Col7	Col8	Col9
1	Sex		0		1.2232	0.5194	-0.1046	-0.2420		-0.8566	-0.7946	-0.9194	
2	Sex		1		0.5194	1.5634	-0.08383	-0.2157		-0.8779	-0.8058	-0.9418	
3	Days			93	-0.1046	-0.08383	0.5114	0.2155		-0.4081	-0.1088	0.09993	
4	Days			96	-0.2420	-0.2157	0.2155	0.5384		0.01283	-0.1836	0.1790	
5	Days			0									
6	Group*Days	1		93	-0.8566	-0.8779	-0.4081	0.01283		2.3968	1.6752	1.5635	
7	Group*Days	1		96	-0.7946	-0.8058	-0.1088	-0.1836		1.6752	1.9595	1.4129	
8	Group*Days	1		0	-0.9194	-0.9418	0.09993	0.1790		1.5635	1.4129	1.7276	
9	Group*Days	0		93									
10	Group*Days	0		96									
11	Group*Days	0		0									
12	Fatmass_cent				-0.02840	0.005554	0.004439	0.003987		0.02231	0.02405	0.02275	
13	MuscleGlycogen_cent				0.000374	0.000307	-0.00002	-0.00064		-0.00028	-0.00044	2.914E-6	

Covariance Matrix for Fixed Effects				
Row	Col10	Col11	Col12	Col13
1			-0.02840	0.000374
2			0.005554	0.000307
3			0.004439	-0.00002
4			0.003987	-0.00064
5				
6			0.02231	-0.00028
7			0.02405	-0.00044
8			0.02275	2.914E-6
9				
10				
11				
12			0.007323	-4.07E-6
13			-4.07E-6	3.996E-6

Type 3 Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Sex	1	53	4.75	0.0338
Days	2	53	6.99	0.0020
Group*Days	3	53	0.34	0.7980

The Mixed Procedure

Type 3 Tests of Fixed Effects				
Effect	**Num DF**	**Den DF**	**F Value**	**Pr > F**
Fatmass_cent	1	53	3.04	0.0871
MuscleGlycogen_cent	1	53	1.66	0.2029

rand unstrucutred, main csh, Group specific var cov matrix

The Mixed Procedure

Model Information	
Data Set	WORK.EXERCISE_D
Dependent Variable	GIRperkgFFMperinsulin
Covariance Structures	Unstructured, Heterogeneous Compound Symmetry
Subject Effects	ID, ID
Group Effect	Group
Estimation Method	REML
Residual Variance Method	None
Fixed Effects SE Method	Model-Based
Degrees of Freedom Method	Containment

Class Level Information		
Class	**Levels**	**Values**
ID	30	1 10 11 19 21 22 23 24 25 27 29 31 4 40 41 42 43 47 49 53 55 56 6 62 63 64 65 7 8 9
Group	2	1 0
Sex	2	0 1
Days	3	93 96 0

Dimensions	
Covariance Parameters	6
Columns in X	13
Columns in Z per Subject	2
Subjects	30
Max Obs per Subject	3

Number of Observations	
Number of Observations Read	93
Number of Observations Used	89
Number of Observations Not Used	4

Iteration History			
Iteration	**Evaluations**	**-2 Res Log Like**	**Criterion**
0	1	478.37905891	
1	2	430.75696466	0.02081472
2	1	427.20675570	0.00371786
3	1	426.61448757	0.00035392
4	1	426.54900888	0.00038184

rand unstrucutred, main csh, Group specific var cov matrix

The Mixed Procedure

Iteration History			
Iteration	**Evaluations**	**-2 Res Log Like**	**Criterion**
5	1	426.50495804	0.00056106
6	1	426.40871602	0.00050122
7	3	426.36852278	0.00030055
8	1	426.31290713	0.00039553
9	3	426.27597775	0.00048631
10	2	426.17813687	0.00143667
11	2	426.03929826	0.00249143
12	3	425.44213897	.
13	2	425.37137733	0.00001432
14	1	425.36934144	0.00000002
15	1	425.36933895	0.00000000

Convergence criteria met.

Estimated R Matrix for ID 1			
Row	**Col1**	**Col2**	**Col3**
1	11.0900	9.8622	8.6671
2	9.8622	15.8207	10.3519
3	8.6671	10.3519	12.2189

Estimated R Correlation Matrix for ID 1			
Row	**Col1**	**Col2**	**Col3**
1	1.0000	0.7446	0.7446
2	0.7446	1.0000	0.7446
3	0.7446	0.7446	1.0000

Estimated G Matrix					
Row	**Effect**	**ID**	**Group**	**Col1**	**Col2**
1	Intercept	1	1		
2	Intercept	1	0		2.7531

rand unstrucutred, main csh, Group specific var cov matrix

The Mixed Procedure

Estimated G Correlation Matrix					
Row	Effect	ID	Group	Col1	Col2
1	Intercept	1	1	1.0000	
2	Intercept	1	0		1.0000

Estimated V Matrix for ID 1			
Row	Col1	Col2	Col3
1	11.0900	9.8622	8.6671
2	9.8622	15.8207	10.3519
3	8.6671	10.3519	12.2189

Estimated V Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.7446	0.7446
2	0.7446	1.0000	0.7446
3	0.7446	0.7446	1.0000

Estimated G matrix is not positive definite.

Covariance Parameter Estimates			
Cov Parm	Subject	Group	Estimate
UN(1,1)	ID	Group 1	0
UN(1,1)	ID	Group 0	2.7531
Var(1)	ID		11.0900
Var(2)	ID		15.8207
Var(3)	ID		12.2189
CSH	ID		0.7446

Fit Statistics	
-2 Res Log Likelihood	425.4
AIC (Smaller is Better)	435.4
AICC (Smaller is Better)	436.2
BIC (Smaller is Better)	442.4

Null Model Likelihood Ratio Test		
DF	Chi-Square	Pr > ChiSq
4	53.01	<.0001

rand unstrucutred, main csh, Group specific var cov matrix

The Mixed Procedure

Solution for Fixed Effects								
Effect	**Group**	**Sex**	**Days**	**Estimate**	**Standard Error**	**DF**	**t Value**	**Pr > |t|**
Sex		0		8.2362	1.1492	53	7.17	<.0001
Sex		1		5.3331	1.2885	53	4.14	0.0001
Days			93	1.6275	0.7184	53	2.27	0.0276
Days			96	1.2382	0.7283	53	1.70	0.0950
Days			0	0	.	.	.	.
Group*Days	1		93	1.3689	1.5610	53	0.88	0.3845
Group*Days	1		96	0.5498	1.4028	53	0.39	0.6967
Group*Days	1		0	0.8522	1.3284	53	0.64	0.5239
Group*Days	0		93	0	.	.	.	.
Group*Days	0		96	0	.	.	.	.
Group*Days	0		0	0	.	.	.	.
Fatmass_cent				-0.1473	0.08559	53	-1.72	0.0911
MuscleGlycogen_cent				-0.00272	0.001988	53	-1.37	0.1764

rand unstrucutred, main csh, Group specific var cov matrix

The Mixed Procedure

Covariance Matrix for Fixed Effects													
Row	Effect	Group	Sex	Days	Col1	Col2	Col3	Col4	Col5	Col6	Col7	Col8	Col9
1	Sex		0		1.3207	0.6446	-0.1053	-0.2444		-0.9633	-0.8984	-1.0279	
2	Sex		1		0.6446	1.6601	-0.08664	-0.2202		-0.9918	-0.9175	-1.0577	
3	Days			93	-0.1053	-0.08664	0.5160	0.2125		-0.4111	-0.1043	0.1016	
4	Days			96	-0.2444	-0.2202	0.2125	0.5304		0.01916	-0.1737	0.1828	
5	Days			0									
6	Group*Days	1		93	-0.9633	-0.9918	-0.4111	0.01916		2.4366	1.6957	1.5975	
7	Group*Days	1		96	-0.8984	-0.9175	-0.1043	-0.1737		1.6957	1.9679	1.4422	
8	Group*Days	1		0	-1.0279	-1.0577	0.1016	0.1828		1.5975	1.4422	1.7645	
9	Group*Days	0		93									
10	Group*Days	0		96									
11	Group*Days	0		0									
12	Fatmass_cent				-0.02714	0.003401	0.004440	0.003898		0.02256	0.02427	0.02304	
13	MuscleGlycogen_cent				0.000368	0.000303	-0.00002	-0.00064		-0.00027	-0.00043	4.554E-6	

Covariance Matrix for Fixed Effects				
Row	Col10	Col11	Col12	Col13
1			-0.02714	0.000368
2			0.003401	0.000303
3			0.004440	-0.00002
4			0.003898	-0.00064
5				
6			0.02256	-0.00027
7			0.02427	-0.00043
8			0.02304	4.554E-6
9				
10				
11				
12			0.007326	-3.5E-6
13			-3.5E-6	3.954E-6

rand unstrucutred, main csh, Group specific var cov matrix

The Mixed Procedure

Type 3 Tests of Fixed Effects				
Effect	**Num DF**	**Den DF**	**F Value**	**Pr > F**
Sex	1	53	4.98	0.0299
Days	2	53	6.99	0.0020
Group*Days	3	53	0.33	0.8009
Fatmass_cent	1	53	2.96	0.0911
MuscleGlycogen_cent	1	53	1.88	0.1764