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

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	0 1
Sex	2	0 1

Dimensions	
Covariance Parameters	9
Columns in X	7
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	506.60593489	
1	4	464.30756784	11.16871419
2	1	464.14478638	0.16240130
3	1	463.97840977	0.00430956
4	1	463.76021772	0.00124198
5	1	463.73211458	0.00092065

The Mixed Procedure

Iteration History			
Iteration	**Evaluations**	**-2 Res Log Like**	**Criterion**
6	1	463.72907282	.
7	1	463.72905741	0.00000000

Convergence criteria met but final Hessian is not positive definite.

Estimated R Matrix for ID 1			
Row	**Col1**	**Col2**	**Col3**
1	4.2123	3.2197	-0.02772
2	3.2197	8.4209	2.2148
3	-0.02772	2.2148	3.7727

Estimated R Correlation Matrix for ID 1			
Row	**Col1**	**Col2**	**Col3**
1	1.0000	0.5406	-0.00695
2	0.5406	1.0000	0.3929
3	-0.00695	0.3929	1.0000

Estimated G Matrix				
Row	**Effect**	**ID**	**Col1**	**Col2**
1	Intercept	1	6.8597	0.004738
2	Days	1	0.004738	

Estimated G Correlation Matrix				
Row	**Effect**	**ID**	**Col1**	**Col2**
1	Intercept	1	1.0000	
2	Days	1		1.0000

Estimated V Matrix for ID 1			
Row	**Col1**	**Col2**	**Col3**
1	11.0720	10.5200	7.2868
2	10.5200	16.1618	9.9699
3	7.2868	9.9699	11.5420

The Mixed Procedure

Estimated V Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.7864	0.6446
2	0.7864	1.0000	0.7300
3	0.6446	0.7300	1.0000

Estimated G matrix is not positive definite.

Covariance Parameter Estimates		
Cov Parm	Subject	Estimate
UN(1,1)	ID	6.8597
UN(2,1)	ID	0.004738
UN(2,2)	ID	0
UN(1,1)	ID	4.2123
UN(2,1)	ID	3.2197
UN(2,2)	ID	8.4209
UN(3,1)	ID	-0.02772
UN(3,2)	ID	2.2148
UN(3,3)	ID	3.7727

Fit Statistics	
-2 Res Log Likelihood	463.7
AIC (Smaller is Better)	479.7
AICC (Smaller is Better)	481.7
BIC (Smaller is Better)	490.9

Null Model Likelihood Ratio Test		
DF	Chi-Square	Pr > ChiSq
7	42.88	<.0001

Solution for Fixed Effects							
Effect	Group	Sex	Estimate	Standard Error	DF	t Value	Pr > |t|
Sex		0	7.9810	0.7894	26	10.11	<.0001
Sex		1	5.6381	0.9209	26	6.12	<.0001
Days*Group	0		0.01711	0.006437	26	2.66	0.0133
Days*Group	1		0.02273	0.006888	26	3.30	0.0028

The Mixed Procedure

Solution for Fixed Effects							
Effect	**Group**	**Sex**	**Estimate**	**Standard Error**	**DF**	**t Value**	**Pr > |t|**
Fatmass_cent			-0.1072	0.07827	26	-1.37	0.1826
Adiponectin_cent			0.000293	0.000215	26	1.36	0.1843
MuscleGlycogen_cent			-0.00391	0.001681	26	-2.32	0.0282

Type 3 Tests of Fixed Effects				
Effect	**Num DF**	**Den DF**	**F Value**	**Pr > F**
Sex	2	26	74.71	<.0001
Days*Group	2	26	7.87	0.0021
Fatmass_cent	1	26	1.87	0.1826
Adiponectin_cent	1	26	1.86	0.1843
MuscleGlycogen_cent	1	26	5.40	0.0282

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	0 1
Sex	2	0 1

Dimensions	
Covariance Parameters	7
Columns in X	7
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	506.60593489	
1	4	464.66571531	0.00834976
2	3	464.29267934	0.00132620
3	2	464.05742188	0.00020291
4	1	464.02061610	0.00003117
5	1	464.01518654	0.00000128
6	1	464.01497950	0.00000000

The Mixed Procedure

Convergence criteria met.

Estimated R Matrix for ID 1			
Row	Col1	Col2	Col3
1	6.2643	6.1252	3.4381
2	6.1252	12.8562	7.2162
3	3.4381	7.2162	8.6947

Estimated R Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.6825	0.4659
2	0.6825	1.0000	0.6825
3	0.4659	0.6825	1.0000

Estimated G Matrix				
Row	Effect	ID	Col1	Col2
1	Intercept	1	4.5575	-0.00834
2	Days	1	-0.00834	

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

Estimated V Matrix for ID 1			
Row	Col1	Col2	Col3
1	10.8218	9.9068	7.1946
2	9.9068	15.8618	10.1969
3	7.1946	10.1969	11.6504

Estimated V Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.7561	0.6408
2	0.7561	1.0000	0.7501
3	0.6408	0.7501	1.0000

Estimated G matrix is not positive definite.

The Mixed Procedure

Covariance Parameter Estimates		
Cov Parm	**Subject**	**Estimate**
UN(1,1)	ID	4.5575
UN(2,1)	ID	-0.00834
UN(2,2)	ID	0
Var(1)	ID	6.2643
Var(2)	ID	12.8562
Var(3)	ID	8.6947
ARH(1)	ID	0.6825

Fit Statistics	
-2 Res Log Likelihood	464.0
AIC (Smaller is Better)	476.0
AICC (Smaller is Better)	477.1
BIC (Smaller is Better)	484.4

Null Model Likelihood Ratio Test		
DF	**Chi-Square**	**Pr > ChiSq**
5	42.59	<.0001

Solution for Fixed Effects							
Effect	**Group**	**Sex**	**Estimate**	**Standard Error**	**DF**	**t Value**	**Pr > |t|**
Sex		0	7.9838	0.7910	26	10.09	<.0001
Sex		1	5.6625	0.9209	26	6.15	<.0001
Days*Group	0		0.01721	0.006771	26	2.54	0.0173
Days*Group	1		0.02306	0.007193	26	3.21	0.0035
Fatmass_cent			-0.1114	0.07841	26	-1.42	0.1674
Adiponectin_cent			0.000301	0.000216	26	1.40	0.1742
MuscleGlycogen_cent			-0.00422	0.001672	26	-2.52	0.0181

The Mixed Procedure

Type 3 Tests of Fixed Effects				
Effect	**Num DF**	**Den DF**	**F Value**	**Pr > F**
Sex	2	26	74.27	<.0001
Days*Group	2	26	7.32	0.0030
Fatmass_cent	1	26	2.02	0.1674
Adiponectin_cent	1	26	1.95	0.1742
MuscleGlycogen_cent	1	26	6.37	0.0181

rand unstrucutred, main ARH(1), without random slope

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	0 1
Sex	2	0 1

Dimensions	
Covariance Parameters	5
Columns in X	7
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	506.60593489	
1	2	464.79797162	0.00415170
2	1	464.07988148	0.00016037
3	1	464.05246452	0.00000688
4	1	464.05135300	0.00000003
5	1	464.05134905	0.00000000

rand unstrucutred, main ARH(1), without random slope

The Mixed Procedure

Convergence criteria met.

Estimated R Matrix for ID 1			
Row	Col1	Col2	Col3
1	6.4470	5.6464	2.9109
2	5.6464	11.7737	6.0696
3	2.9109	6.0696	7.4497

Estimated R Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.6481	0.4200
2	0.6481	1.0000	0.6481
3	0.4200	0.6481	1.0000

Estimated G Matrix			
Row	Effect	ID	Col1
1	Intercept	1	4.3258

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

Estimated V Matrix for ID 1			
Row	Col1	Col2	Col3
1	10.7727	9.9722	7.2366
2	9.9722	16.0995	10.3954
3	7.2366	10.3954	11.7754

Estimated V Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.7572	0.6425
2	0.7572	1.0000	0.7550
3	0.6425	0.7550	1.0000

rand unstrucutred, main ARH(1), without random slope

The Mixed Procedure

Covariance Parameter Estimates		
Cov Parm	**Subject**	**Estimate**
UN(1,1)	ID	4.3258
Var(1)	ID	6.4470
Var(2)	ID	11.7737
Var(3)	ID	7.4497
ARH(1)	ID	0.6481

Fit Statistics	
-2 Res Log Likelihood	464.1
AIC (Smaller is Better)	474.1
AICC (Smaller is Better)	474.8
BIC (Smaller is Better)	481.1

Null Model Likelihood Ratio Test		
DF	**Chi-Square**	**Pr > ChiSq**
4	42.55	<.0001

Solution for Fixed Effects							
Effect	**Group**	**Sex**	**Estimate**	**Standard Error**	**DF**	**t Value**	**Pr > |t|**
Sex		0	7.9838	0.7896	54	10.11	<.0001
Sex		1	5.6524	0.9195	54	6.15	<.0001
Days*Group	0		0.01724	0.006807	54	2.53	0.0143
Days*Group	1		0.02303	0.007224	54	3.19	0.0024
Fatmass_cent			-0.1101	0.07840	54	-1.40	0.1659
Adiponectin_cent			0.000301	0.000215	54	1.40	0.1680
MuscleGlycogen_cent			-0.00422	0.001669	54	-2.53	0.0144

Type 3 Tests of Fixed Effects				
Effect	**Num DF**	**Den DF**	**F Value**	**Pr > F**
Sex	2	54	74.75	<.0001
Days*Group	2	54	7.26	0.0016
Fatmass_cent	1	54	1.97	0.1659
Adiponectin_cent	1	54	1.95	0.1680
MuscleGlycogen_cent	1	54	6.40	0.0144

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	0 1
Sex	2	0 1

Dimensions	
Covariance Parameters	8
Columns in X	7
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	506.60593489	
1	2	464.71572201	2894.7752943
2	1	464.69941923	6.94954410
3	2	464.65336855	9.69145994
4	1	464.58422219	5.24266184
5	1	464.20402629	42.68354453
6	1	463.78580035	1357.1422101

The Mixed Procedure

Iteration History			
Iteration	**Evaluations**	**-2 Res Log Like**	**Criterion**
7	1	463.75466890	4.79282855
8	1	463.73088941	4.58169306
9	1	463.72906189	0.05042910
10	1	463.72905741	0.00000031
11	0	463.72905741	0.00000031
12	0	463.72905741	0.00000031
13	0	463.72905741	0.00000031
14	0	463.72905741	0.00000031
15	0	463.72905741	0.00000031
16	0	463.72905741	0.00000031
17	0	463.72905741	0.00000031
18	0	463.72905741	0.00000031
19	0	463.72905741	0.00000031

WARNING: Did not converge.

Covariance Parameter Values At Last Iteration		
Cov Parm	**Subject**	**Estimate**
UN(1,1)	ID	6.7486
UN(2,1)	ID	-0.00744
UN(2,2)	ID	0.000246
Var(1)	ID	4.3234
Var(2)	ID	8.6710
Var(3)	ID	3.9564
Rho(1)	ID	0.7289
Rho(2)	ID	0.4154

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	0 1
Sex	2	0 1

Dimensions	
Covariance Parameters	7
Columns in X	7
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	506.60593489	
1	2	526.59244806	3.21070656
2	1	526.54127798	3.18156375
3	1	526.03324703	9.20700622
4	1	522.10052767	200130.59630
5	1	518.14769085	416928.58016
6	1	514.52206618	574742.17444

The Mixed Procedure

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
7	1	511.09319618	500298.90823
8	2	507.12743189	930192.62858
9	1	503.58972972	11595.685827
10	1	501.87827330	3174.5988155
11	1	499.83767602	606.66368713
12	1	496.54127441	817.02195052
13	1	492.68438205	782.49515331
14	1	487.47769858	532.26291745
15	1	485.45991595	319.31882763
16	1	483.10827295	161.04774331
17	1	480.24286709	60.76276594
18	1	476.58221298	26.73373993
19	1	472.00740742	74.83760400
20	1	466.88103319	0.00089590
21	1	466.74289793	265.06972833
22	1	466.73411252	0.00002608
23	1	466.73329130	0.00001776
24	1	466.73226018	0.00001155
25	1	466.73155390	0.00000754
26	1	466.73113731	0.00000525
27	1	466.73088791	0.00000390
28	1	466.73073174	0.00000306
29	1	466.73062974	0.00000251
30	1	466.73056091	0.00000212
31	1	466.73051302	0.00000185
32	1	466.73047946	0.00000165
33	1	466.73045569	0.00000146
34	1	466.73043718	0.00000120
35	1	466.73041630	0.00000125
36	1	466.73040695	8.68652598
37	3	466.73040498	0.00000166
38	1	466.73040155	0.00000088
39	1	466.73026046	6.01829834
40	5	466.73025973	0.00000001

The Mixed Procedure

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
41	1	466.73025551	39.52517686
42	1	466.73024906	0.00000000

Convergence criteria met but final Hessian is not positive definite.

Estimated R Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.575E-8	0.000114	0.000118
2	0.000114	5.9208	2.2935
3	0.000118	2.2935	6.4154

Estimated R Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.3721	0.3721
2	0.3721	1.0000	0.3721
3	0.3721	0.3721	1.0000

Estimated G Matrix				
Row	Effect	ID	Col1	Col2
1	Intercept	1	11.2791	-0.02372
2	Days	1	-0.02372	0.000093

Estimated G Correlation Matrix				
Row	Effect	ID	Col1	Col2
1	Intercept	1	1.0000	-0.7331
2	Days	1	-0.7331	1.0000

Estimated V Matrix for ID 1			
Row	Col1	Col2	Col3
1	11.2791	9.0731	9.0020
2	9.0731	13.5907	9.9181
3	9.0020	9.9181	13.9956

The Mixed Procedure

Estimated V Correlation Matrix for ID 1			
Row	Col1	Col2	Col3
1	1.0000	0.7328	0.7165
2	0.7328	1.0000	0.7191
3	0.7165	0.7191	1.0000

Covariance Parameter Estimates		
Cov Parm	Subject	Estimate
UN(1,1)	ID	11.2791
UN(2,1)	ID	-0.02372
UN(2,2)	ID	0.000093
Var(1)	ID	1.575E-8
Var(2)	ID	5.9208
Var(3)	ID	6.4154
CSH	ID	0.3721

Fit Statistics	
-2 Res Log Likelihood	466.7
AIC (Smaller is Better)	480.7
AICC (Smaller is Better)	482.2
BIC (Smaller is Better)	490.5

Null Model Likelihood Ratio Test		
DF	Chi-Square	Pr > ChiSq
6	39.88	<.0001

Solution for Fixed Effects							
Effect	Group	Sex	Estimate	Standard Error	DF	t Value	Pr > |t|
Sex		0	8.2194	0.8573	26	9.59	<.0001
Sex		1	5.9472	0.9887	26	6.02	<.0001
Days*Group	0		0.01641	0.006443	26	2.55	0.0171
Days*Group	1		0.02133	0.006985	26	3.05	0.0052
Fatmass_cent			-0.1494	0.08300	26	-1.80	0.0835
Adiponectin_cent			0.000233	0.000223	26	1.04	0.3057
MuscleGlycogen_cent			-0.00408	0.001711	26	-2.39	0.0246

The Mixed Procedure

Type 3 Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Sex	2	26	65.93	<.0001
Days*Group	2	26	6.72	0.0044
Fatmass_cent	1	26	3.24	0.0835
Adiponectin_cent	1	26	1.09	0.3057
MuscleGlycogen_cent	1	26	5.70	0.0246