SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Analysis Dataset (Complete Cases for Key Variables)

N_Analysis
2854

SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Model 0 (Unadjusted): CES-D = log(CRP)

The REG Procedure
Model: MODEL1
Dependent Variable: CESD CES-D depressive symptom score (0–60)

Number of Observations Read	2854
Number of Observations Used	2854

Analysis of Variance

Source	*DF*	*Sum of Squares*	*Mean Square*	*F Value*	*Pr > F*
Model	1	916.62943	916.62943	8.10	0.0045
Error	2852	322614	113.11856		
Corrected Total	2853	323531			

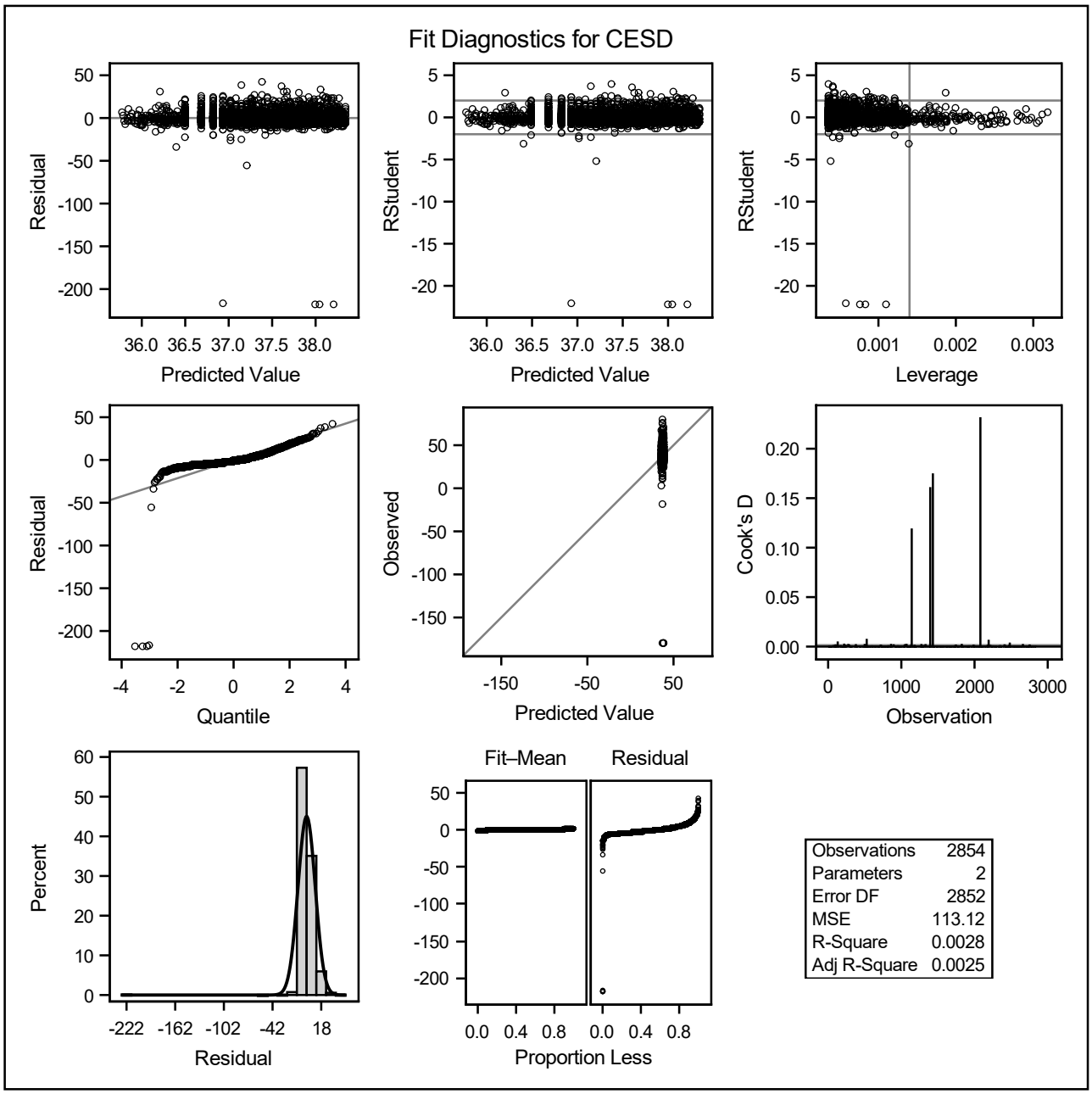
Root MSE	10.63572	*R-Square*	0.0028
Dependent Mean	37.38052	*Adj R-Sq*	0.0025
Coeff Var	28.45258		

Parameter Estimates

Variable	*Label*	*DF*	*Parameter Estimate*	*Standard Error*	*t Value*	*Pr > |t|*	*95% Confidence Limits*	
Intercept	Intercept	1	37.25613	0.20382	182.79	<.0001	36.85647	37.65579
logcrp	Log-transformed CRP	1	0.47288	0.16612	2.85	0.0045	0.14715	0.79861

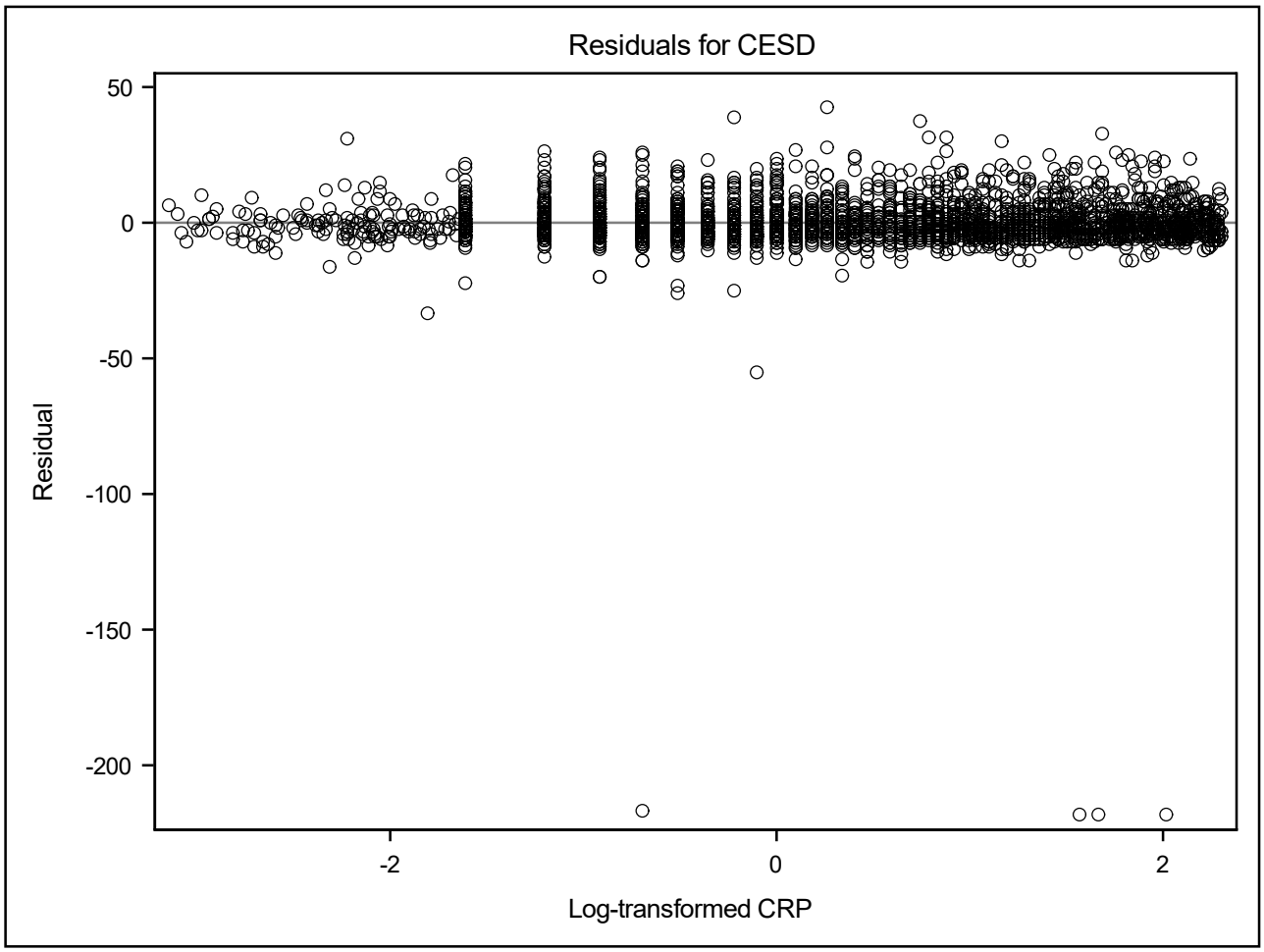
SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Model 0 (Unadjusted): CES-D = log(CRP)

The REG Procedure
Model: MODEL1
Dependent Variable: CESD CES-D depressive symptom score (0–60)



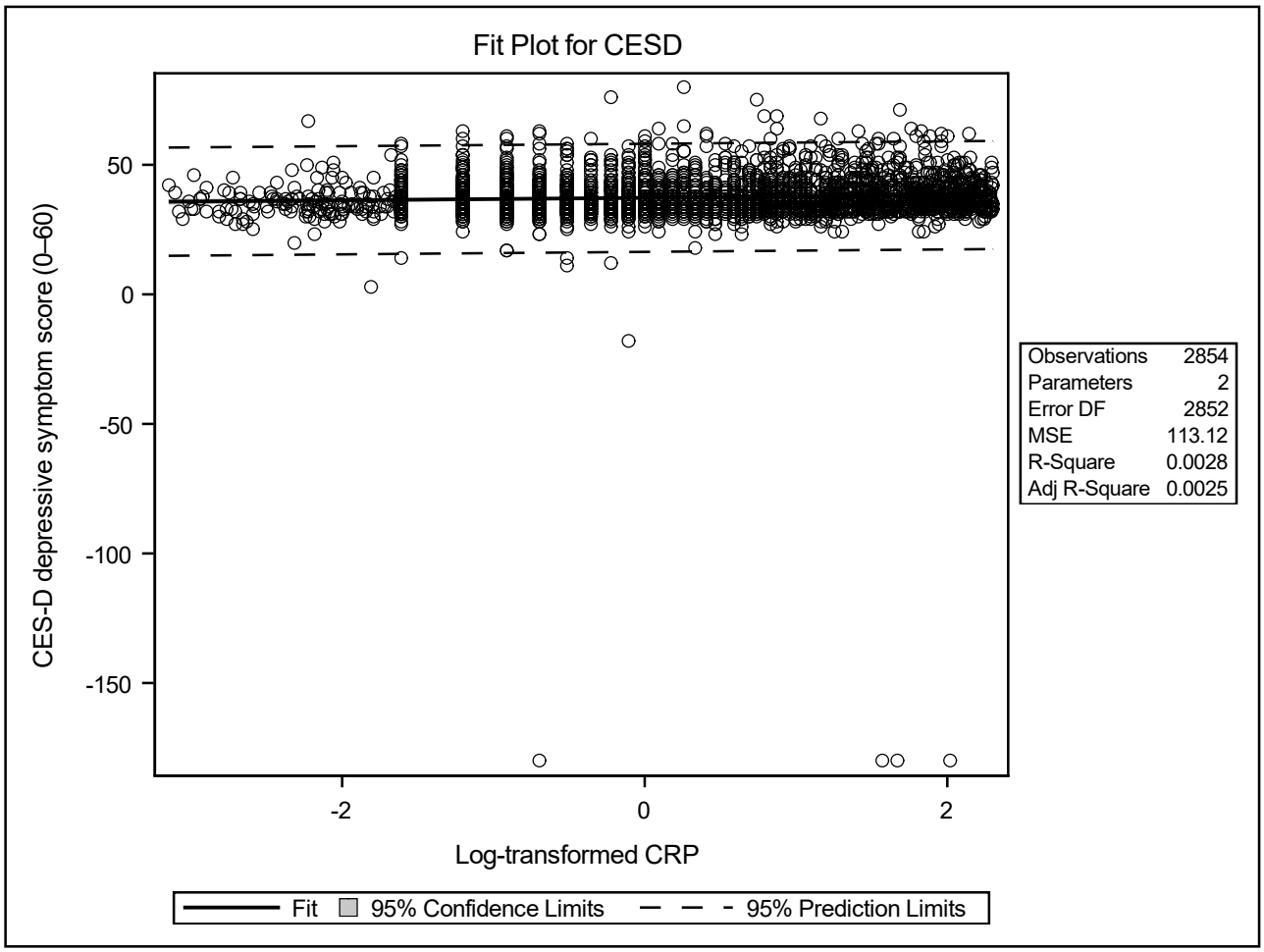
SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Model 0 (Unadjusted): CES-D = log(CRP)

The REG Procedure
Model: MODEL1
Dependent Variable: CESD CES-D depressive symptom score (0–60)



SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Model 0 (Unadjusted): CES-D = log(CRP)

The REG Procedure
Model: MODEL1
Dependent Variable: CESD CES-D depressive symptom score (0–60)



SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Model 1: CES-D = log(CRP) + BMI

The REG Procedure
Model: MODEL1
Dependent Variable: CESD CES-D depressive symptom score (0–60)

Number of Observations Read	2854
Number of Observations Used	2854

Analysis of Variance

Source	*DF*	*Sum of Squares*	*Mean Square*	*F Value*	*Pr > F*
Model	2	2655.72711	1327.86356	11.80	<.0001
Error	2851	320875	112.54824		
Corrected Total	2853	323531			

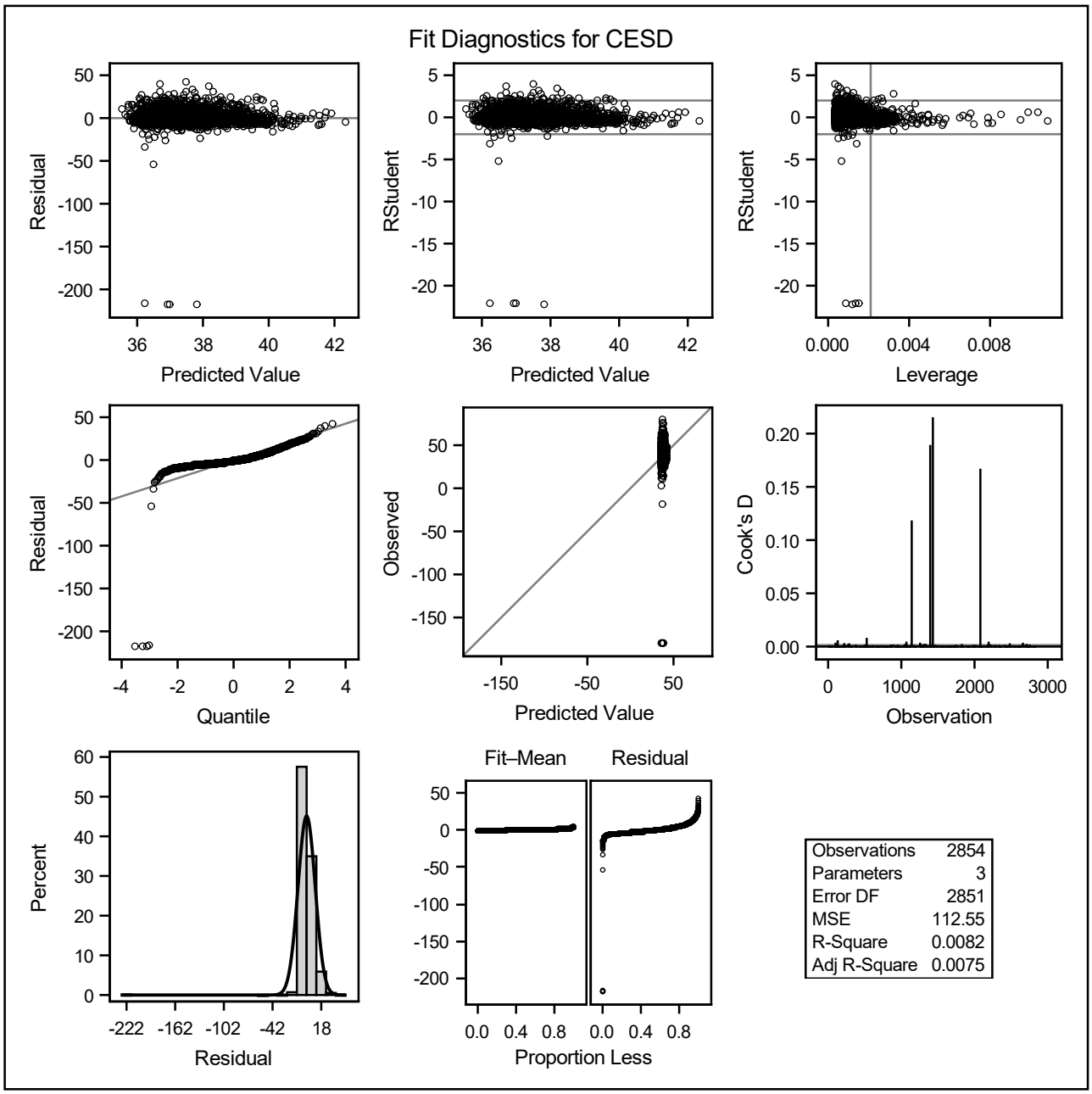
Root MSE	10.60888	*R-Square*	0.0082
Dependent Mean	37.38052	*Adj R-Sq*	0.0075
Coeff Var	28.38076		

Parameter Estimates

Variable	*Label*	*DF*	*Parameter Estimate*	*Standard Error*	*t Value*	*Pr > |t|*	*95% Confidence Limits*	
Intercept	Intercept	1	33.46845	0.98478	33.99	<.0001	31.53749	35.39940
logcrp	Log-transformed CRP	1	0.04132	0.19877	0.21	0.8354	-0.34843	0.43107
BMI0	Body Mass Index (kg/m^2)	1	0.14185	0.03609	3.93	<.0001	0.07110	0.21261

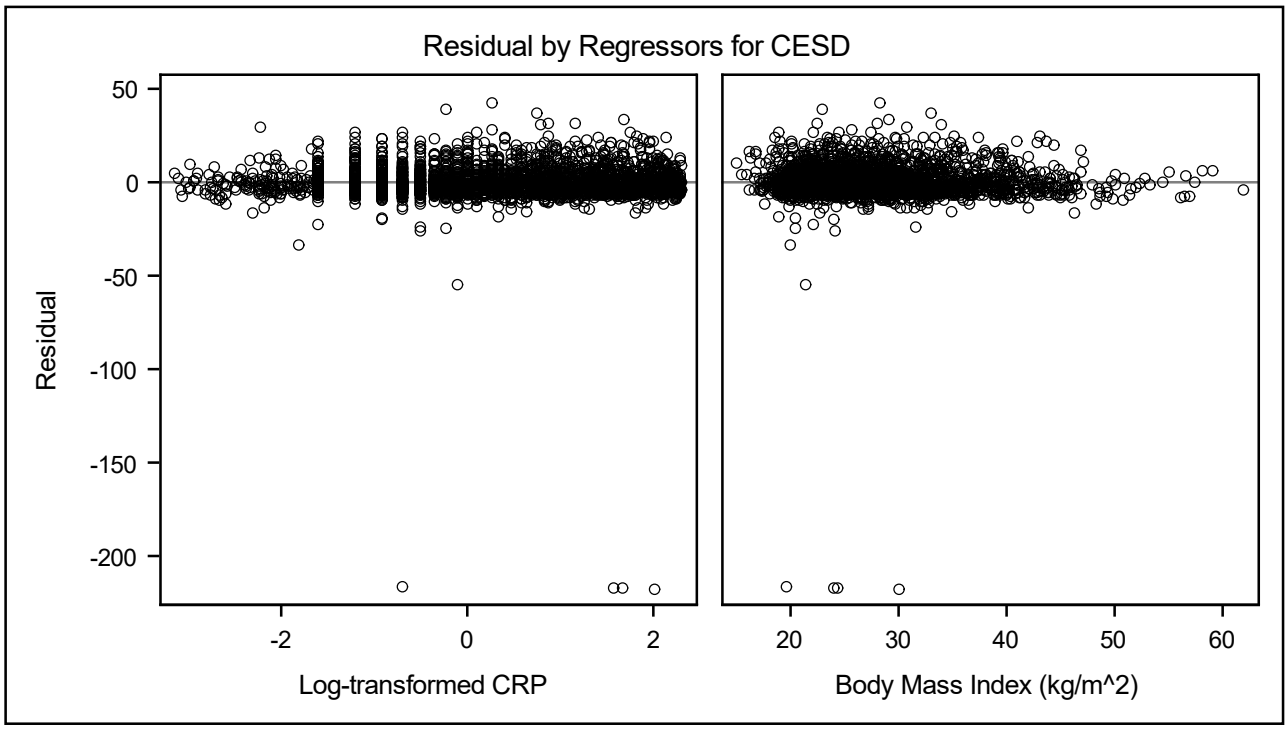
SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Model 1: CES-D = log(CRP) + BMI

The REG Procedure
Model: MODEL1
Dependent Variable: CESD CES-D depressive symptom score (0–60)



SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Model 1: CES-D = log(CRP) + BMI

The REG Procedure
Model: MODEL1
Dependent Variable: CESD CES-D depressive symptom score (0–60)



SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Model 2: CES-D = log(CRP) + BMI + Smoking

The GLM Procedure

Class Level Information

Class	*Levels*	*Values*
smoke	3	Current Former Never

Number of Observations Read	2854
Number of Observations Used	2854

SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Model 2: CES-D = log(CRP) + BMI + Smoking

The GLM Procedure

Dependent Variable: CESD CES-D depressive symptom score (0–60)

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	5679.3935	1419.8484	12.73	<.0001
Error	2849	317851.3634	111.5659		
Corrected Total	2853	323530.7568			

R-Square	Coeff Var	Root MSE	CESD Mean
0.017554	28.25664	10.56248	37.38052

Source	DF	Type I SS	Mean Square	F Value	Pr > F
logcrp	1	916.629430	916.629430	8.22	0.0042
BMI0	1	1739.097681	1739.097681	15.59	<.0001
smoke	2	3023.666367	1511.833183	13.55	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
logcrp	1	6.316249	6.316249	0.06	0.8119
BMI0	1	1906.804466	1906.804466	17.09	<.0001
smoke	2	3023.666367	1511.833183	13.55	<.0001

Parameter		Estimate		Standard Error	t Value	Pr > |t|	95% Confidence Limits	
Intercept		32.73524545	B	0.99534272	32.89	<.0001	30.78358044	34.68691047
logcrp		-0.04726762		0.19865520	-0.24	0.8119	-0.43679014	0.34225489
BMI0		0.14869688		0.03596786	4.13	<.0001	0.07817121	0.21922255
smoke	Current	2.85647869	B	0.55198544	5.17	<.0001	1.77414729	3.93881008
smoke	Former	0.37586228	B	0.47333692	0.79	0.4272	-0.55225533	1.30397989
smoke	Never	0.00000000	B	.	.	.	.	.

Note: The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Model 3 (Fully Adjusted): CES-D = log(CRP) + BMI + Smoking + Menopausal Status

The GLM Procedure

Class Level Information

Class	*Levels*	*Values*
smoke	3	Current Former Never
meno	2	EarlyPeri Premen

Number of Observations Read	2854
Number of Observations Used	2854

SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Model 3 (Fully Adjusted): CES-D = log(CRP) + BMI + Smoking + Menopausal Status

The GLM Procedure

Dependent Variable: CESD CES-D depressive symptom score (0–60)

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	6738.6748	1347.7350	12.12	<.0001
Error	2848	316792.0820	111.2332		
Corrected Total	2853	323530.7568			

R-Square	Coeff Var	Root MSE	CESD Mean
0.020829	28.21447	10.54671	37.38052

Source	DF	Type I SS	Mean Square	F Value	Pr > F
logcrp	1	916.629430	916.629430	8.24	0.0041
BMI0	1	1739.097681	1739.097681	15.63	<.0001
smoke	2	3023.666367	1511.833183	13.59	<.0001
meno	1	1059.281361	1059.281361	9.52	0.0020

Source	DF	Type III SS	Mean Square	F Value	Pr > F
logcrp	1	4.090583	4.090583	0.04	0.8479
BMI0	1	1723.400015	1723.400015	15.49	<.0001
smoke	2	2728.814359	1364.407179	12.27	<.0001
meno	1	1059.281361	1059.281361	9.52	0.0020

Parameter		Estimate		Standard Error	t Value	Pr > |t|	95% Confidence Limits	
Intercept		32.40858206	B	0.99947860	32.43	<.0001	30.44880712	34.36835700
logcrp		-0.03804311		0.19838124	-0.19	0.8479	-0.42702850	0.35094228
BMI0		0.14165041		0.03598669	3.94	<.0001	0.07108780	0.21221303
smoke	Current	2.71605944	B	0.55303675	4.91	<.0001	1.63166648	3.80045240
smoke	Former	0.31474310	B	0.47304528	0.67	0.5059	-0.61280281	1.24228901
smoke	Never	0.00000000	B	.	.	.	.	.
meno	EarlyPeri	1.23145923	B	0.39905388	3.09	0.0020	0.44899546	2.01392300
meno	Premen	0.00000000	B	.	.	.	.	.

Note: The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Stratified Analysis: Premenopausal Only (CES-D = log(CRP))

The REG Procedure
Model: MODEL1
Dependent Variable: CESD CES-D depressive symptom score (0–60)

Number of Observations Read	1564
Number of Observations Used	1564

Analysis of Variance

Source	*DF*	*Sum of Squares*	*Mean Square*	*F Value*	*Pr > F*
Model	1	643.63299	643.63299	4.78	0.0290
Error	1562	210545	134.79175		
Corrected Total	1563	211188			

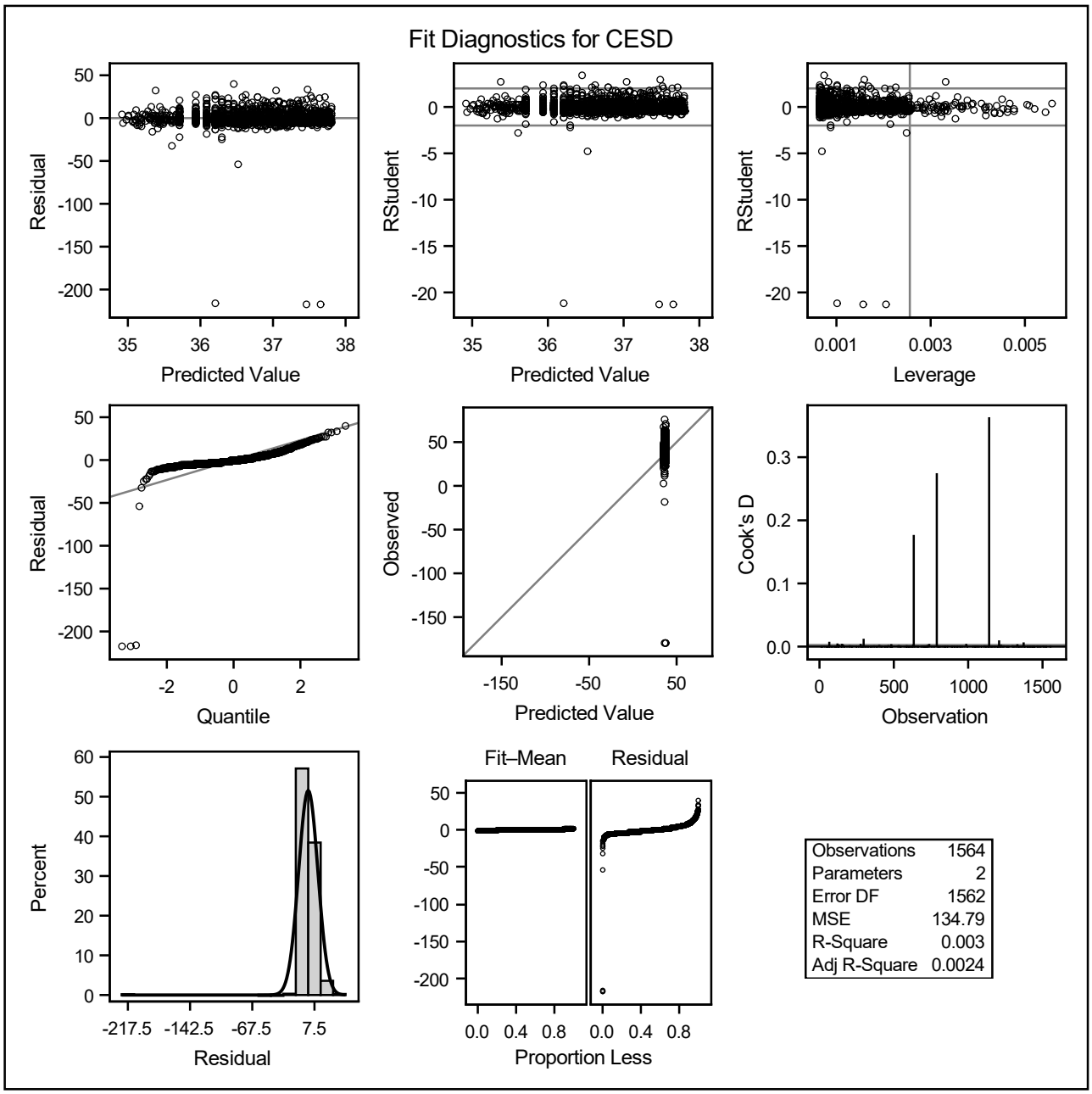
Root MSE	11.60998	*R-Square*	0.0030
Dependent Mean	36.69693	*Adj R-Sq*	0.0024
Coeff Var	31.63748		

Parameter Estimates

Variable	*Label*	*DF*	*Parameter Estimate*	*Standard Error*	*t Value*	*Pr > |t|*	*95% Confidence Limits*	
Intercept	Intercept	1	36.57434	0.29888	122.37	<.0001	35.98809	37.16060
logcrp	Log-transformed CRP	1	0.53527	0.24495	2.19	0.0290	0.05480	1.01574

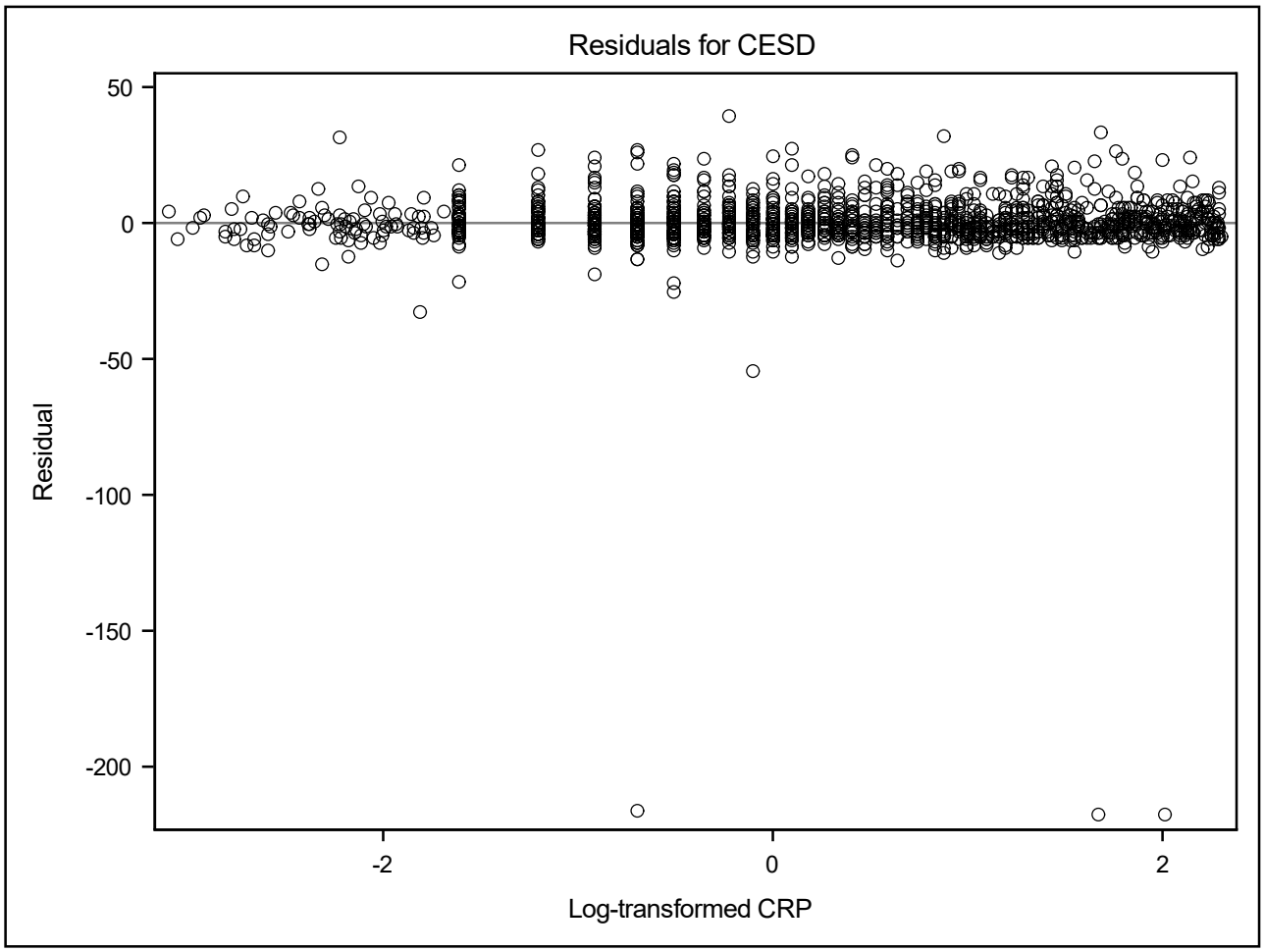
SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Stratified Analysis: Premenopausal Only (CES-D = log(CRP))

The REG Procedure
Model: MODEL1
Dependent Variable: CESD CES-D depressive symptom score (0–60)



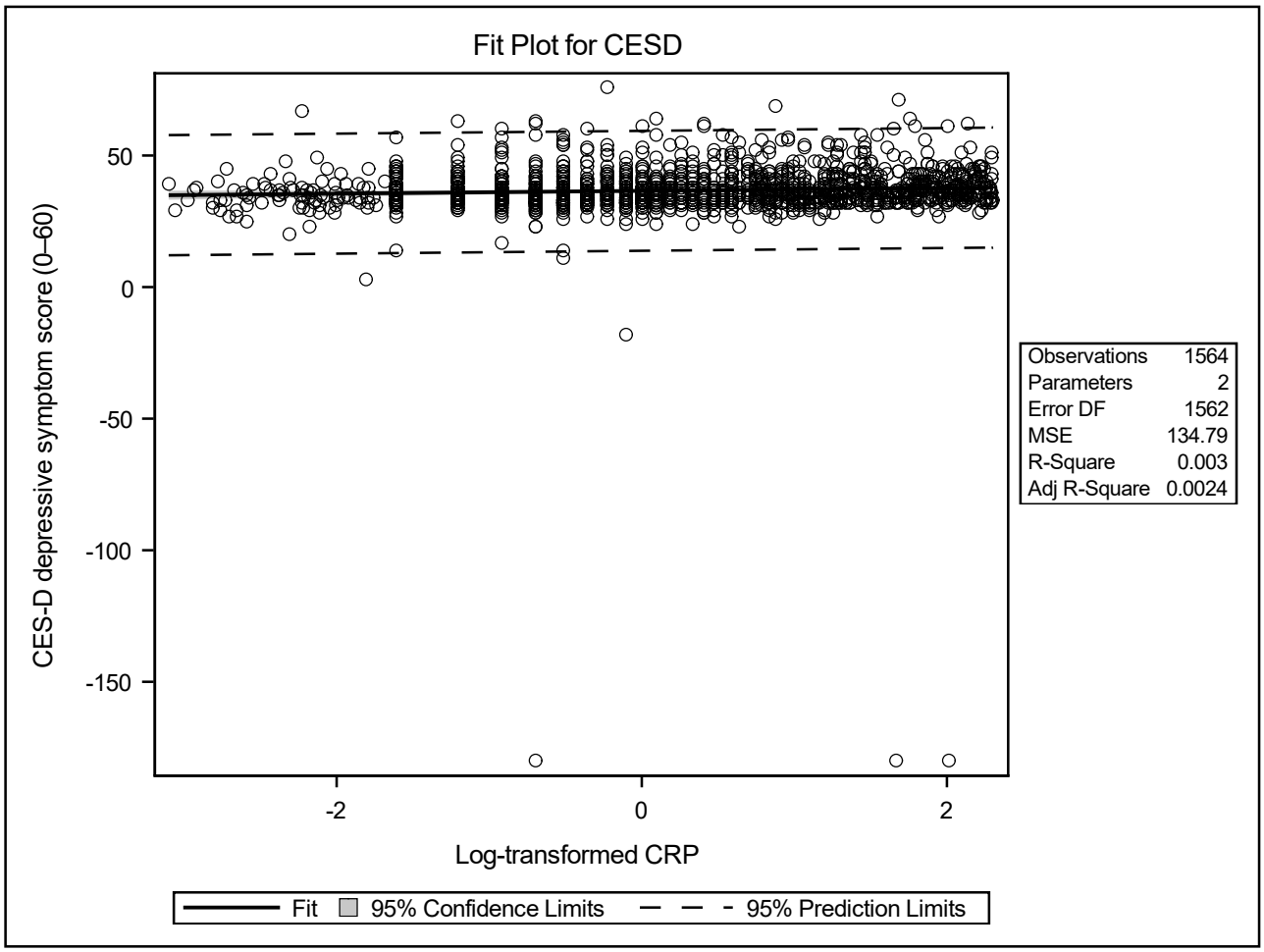
SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Stratified Analysis: Premenopausal Only (CES-D = log(CRP))

The REG Procedure
Model: MODEL1
Dependent Variable: CESD CES-D depressive symptom score (0–60)



SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Stratified Analysis: Premenopausal Only (CES-D = log(CRP))

The REG Procedure
Model: MODEL1
Dependent Variable: CESD CES-D depressive symptom score (0–60)



SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Stratified Analysis: Early Perimenopausal Only (CES-D = log(CRP))

The REG Procedure
Model: MODEL1
Dependent Variable: CESD CES-D depressive symptom score (0–60)

Number of Observations Read	1290
Number of Observations Used	1290

Analysis of Variance

Source	*DF*	*Sum of Squares*	*Mean Square*	*F Value*	*Pr > F*
Model	1	232.41795	232.41795	2.71	0.1000
Error	1288	110493	85.78655		
Corrected Total	1289	110725			

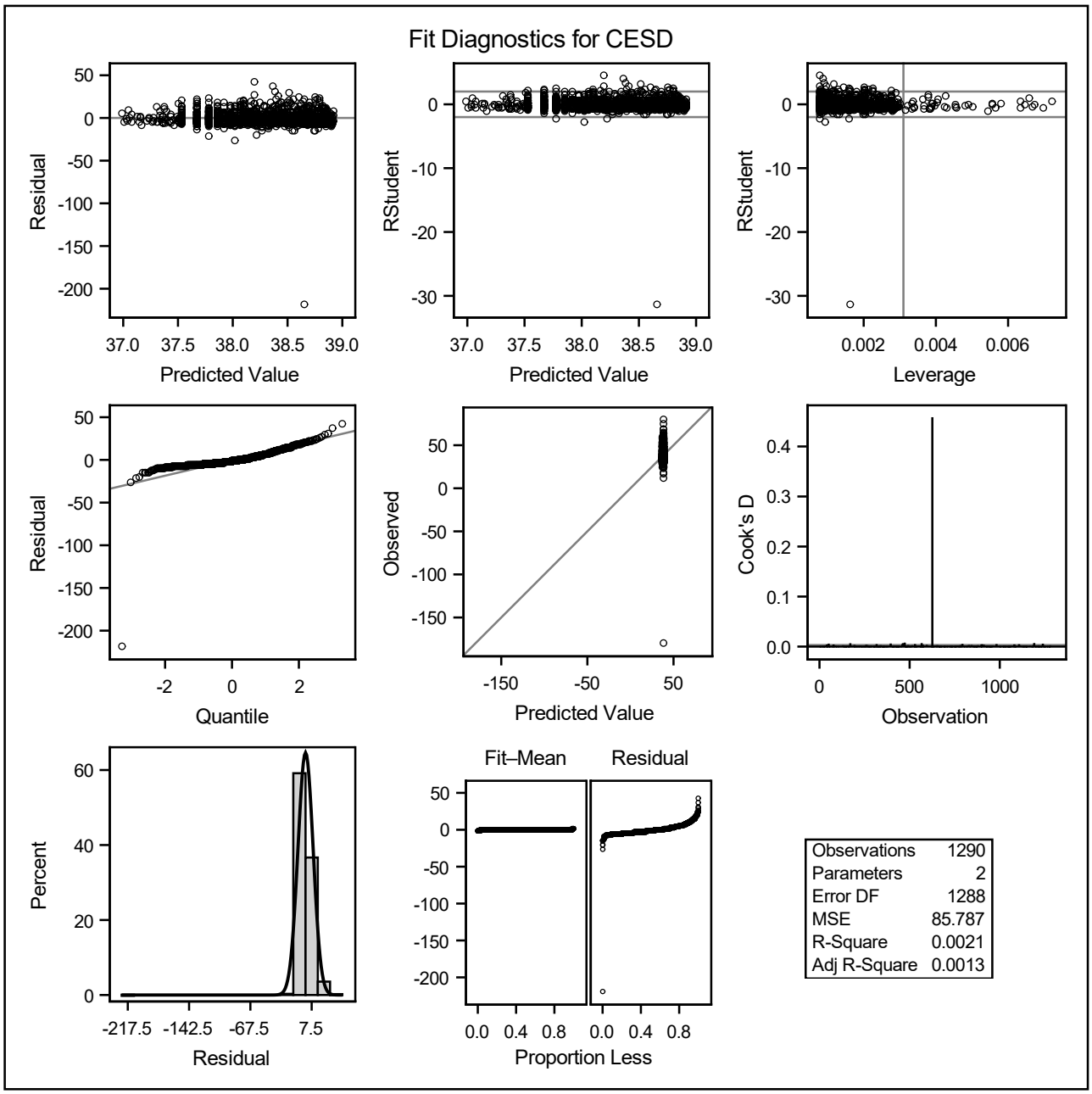
Root MSE	9.26210	*R-Square*	0.0021
Dependent Mean	38.20930	*Adj R-Sq*	0.0013
Coeff Var	24.24044		

Parameter Estimates

Variable	*Label*	*DF*	*Parameter Estimate*	*Standard Error*	*t Value*	*Pr > |t|*	*95% Confidence Limits*	
Intercept	Intercept	1	38.10141	0.26608	143.20	<.0001	37.57942	38.62341
logcrp	Log-transformed CRP	1	0.35458	0.21542	1.65	0.1000	-0.06803	0.77719

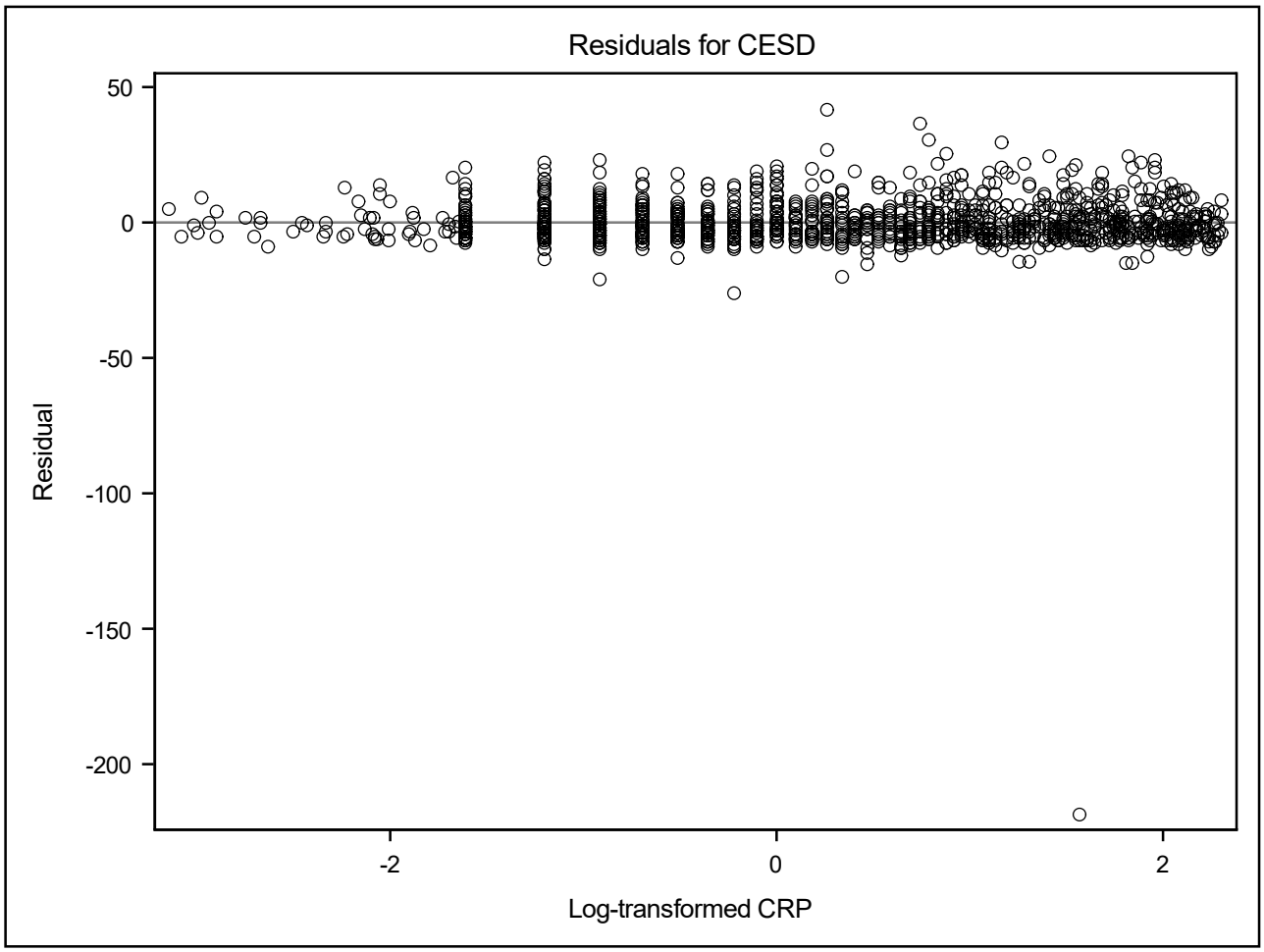
SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Stratified Analysis: Early Perimenopausal Only (CES-D = log(CRP))

The REG Procedure
Model: MODEL1
Dependent Variable: CESD CES-D depressive symptom score (0–60)



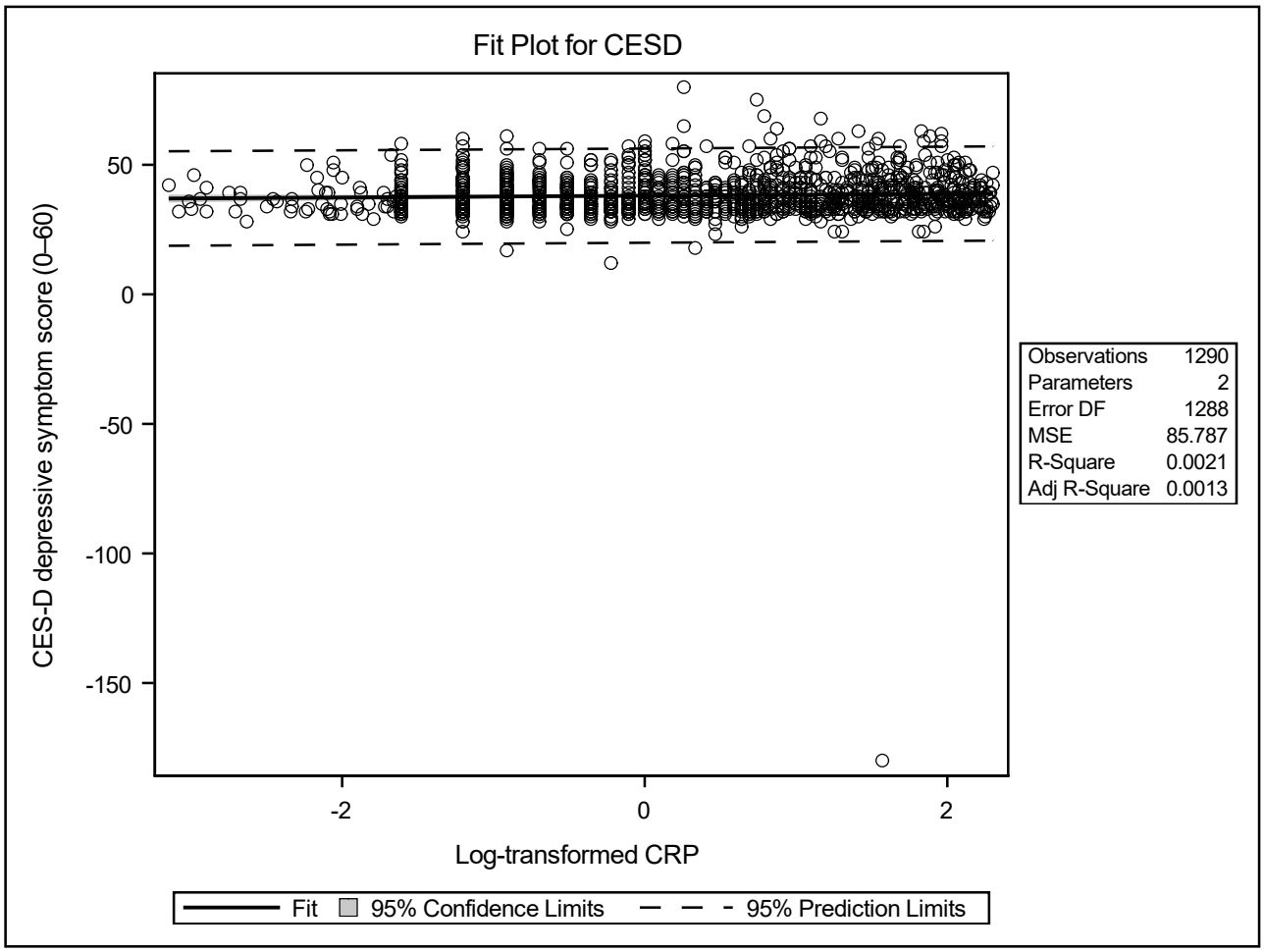
SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Stratified Analysis: Early Perimenopausal Only (CES-D = log(CRP))

The REG Procedure
Model: MODEL1
Dependent Variable: CESD CES-D depressive symptom score (0–60)



SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Stratified Analysis: Early Perimenopausal Only (CES-D = log(CRP))

The REG Procedure
Model: MODEL1
Dependent Variable: CESD CES-D depressive symptom score (0–60)



SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Stratified Analysis: Never/Former Smokers (CES-D = log(CRP))

The REG Procedure
Model: MODEL1
Dependent Variable: CESD CES-D depressive symptom score (0–60)

Number of Observations Read	2380
Number of Observations Used	2380

Analysis of Variance

Source	*DF*	*Sum of Squares*	*Mean Square*	*F Value*	*Pr > F*
Model	1	547.20377	547.20377	4.47	0.0346
Error	2378	291206	122.45838		
Corrected Total	2379	291753			

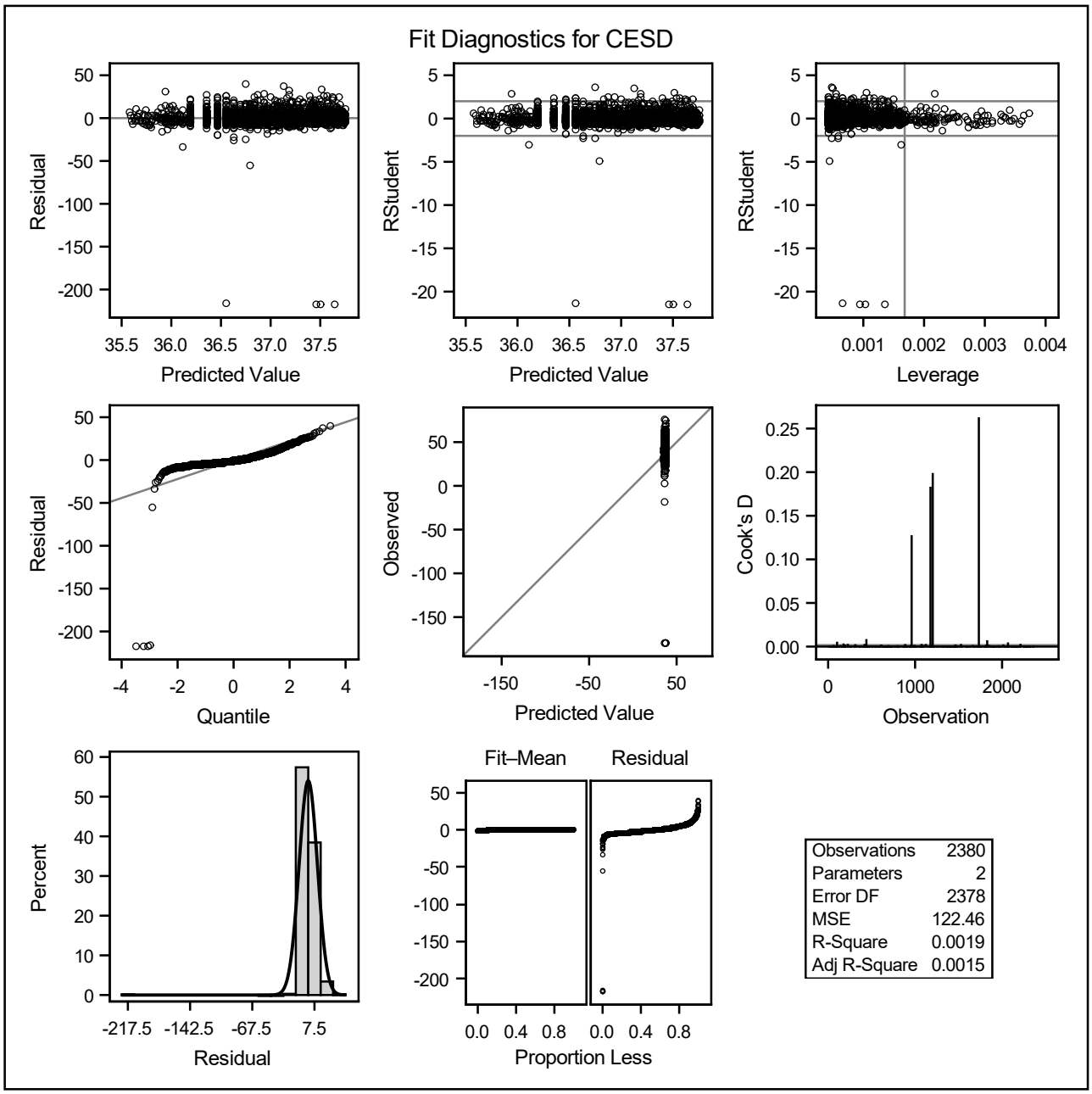
Root MSE	11.06609	*R-Square*	0.0019
Dependent Mean	36.92395	*Adj R-Sq*	0.0015
Coeff Var	29.96996		

Parameter Estimates

Variable	*Label*	*DF*	*Parameter Estimate*	*Standard Error*	*t Value*	*Pr > |t|*	*95% Confidence Limits*	
Intercept	Intercept	1	36.83421	0.23077	159.61	<.0001	36.38168	37.28674
logcrp	Log-transformed CRP	1	0.39972	0.18909	2.11	0.0346	0.02892	0.77053

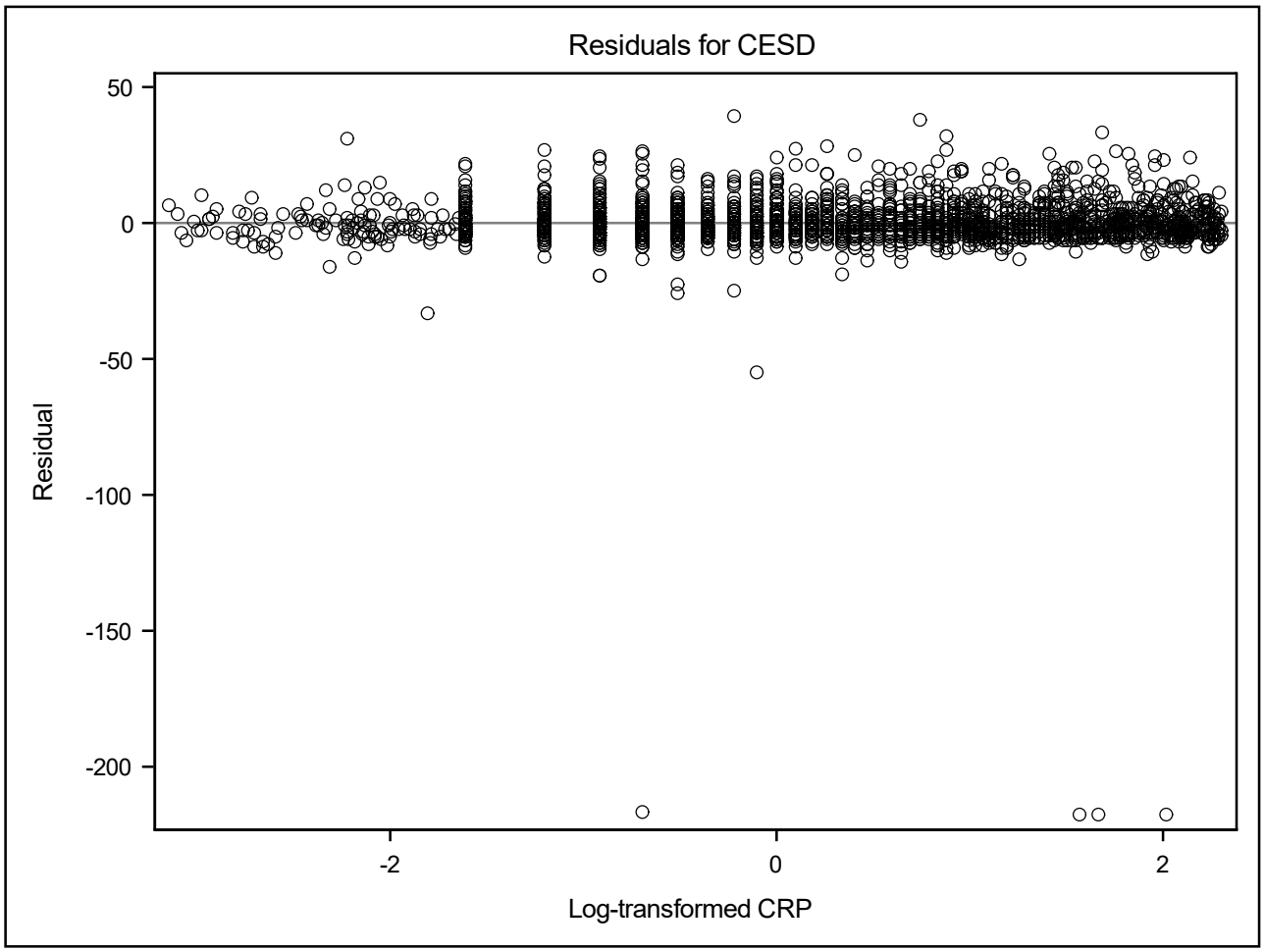
SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Stratified Analysis: Never/Former Smokers (CES-D = log(CRP))

The REG Procedure
Model: MODEL1
Dependent Variable: CESD CES-D depressive symptom score (0–60)



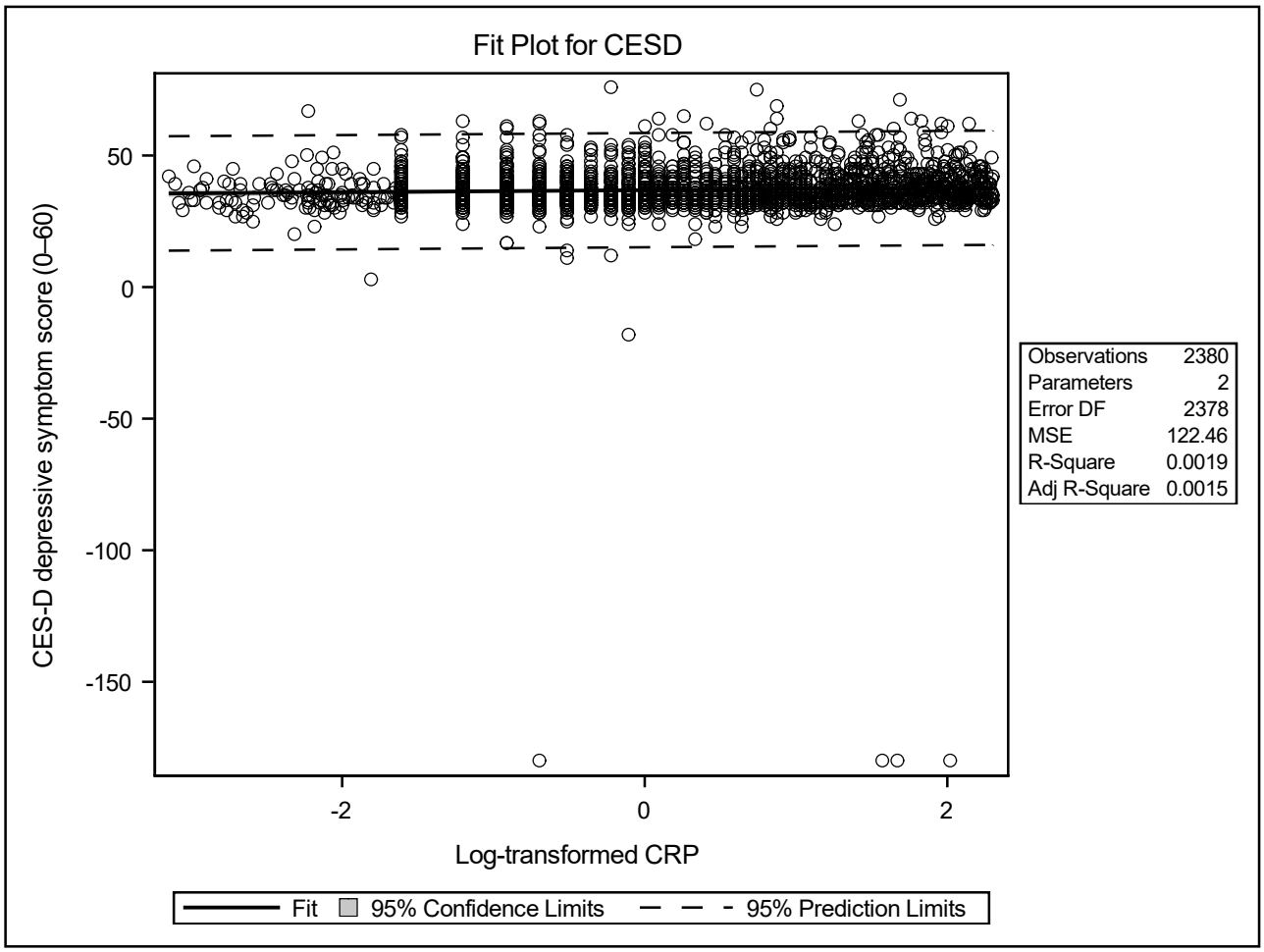
SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Stratified Analysis: Never/Former Smokers (CES-D = log(CRP))

The REG Procedure
Model: MODEL1
Dependent Variable: CESD CES-D depressive symptom score (0–60)



SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Stratified Analysis: Never/Former Smokers (CES-D = log(CRP))

The REG Procedure
Model: MODEL1
Dependent Variable: CESD CES-D depressive symptom score (0–60)



SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Stratified Analysis: Current Smokers (CES-D = log(CRP))

The REG Procedure
Model: MODEL1
Dependent Variable: CESD CES-D depressive symptom score (0–60)

Number of Observations Read	474
Number of Observations Used	474

Analysis of Variance

Source	*DF*	*Sum of Squares*	*Mean Square*	*F Value*	*Pr > F*
Model	1	154.17050	154.17050	2.54	0.1116
Error	472	28636	60.66980		
Corrected Total	473	28790			

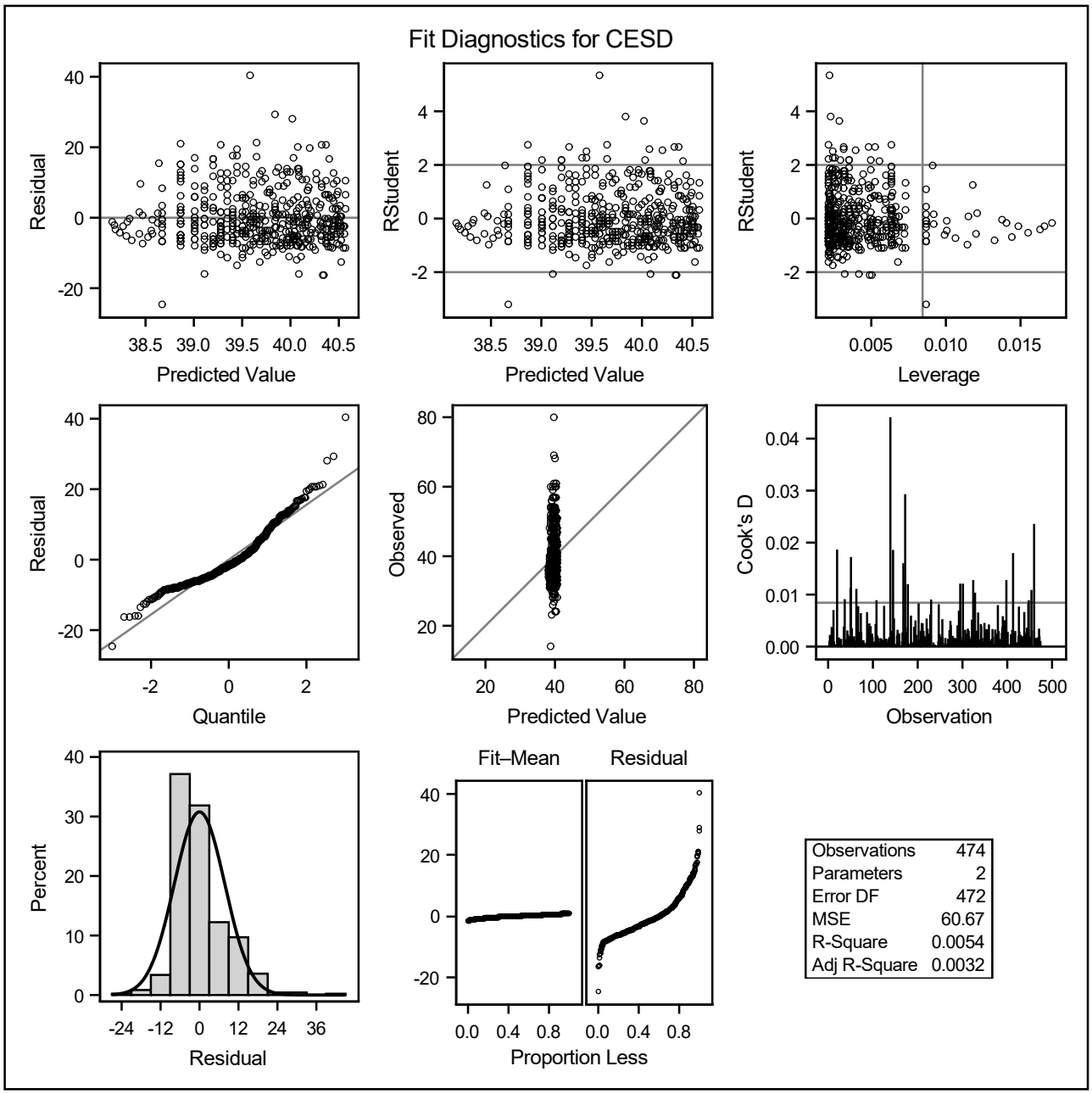
Root MSE	7.78908	*R-Square*	0.0054
Dependent Mean	39.67300	*Adj R-Sq*	0.0032
Coeff Var	19.63321		

Parameter Estimates

Variable	*Label*	*DF*	*Parameter Estimate*	*Standard Error*	*t Value*	*Pr > |t|*	*95% Confidence Limits*	
Intercept	Intercept	1	39.45118	0.38387	102.77	<.0001	38.69687	40.20549
logcrp	Log-transformed CRP	1	0.48587	0.30480	1.59	0.1116	-0.11305	1.08480

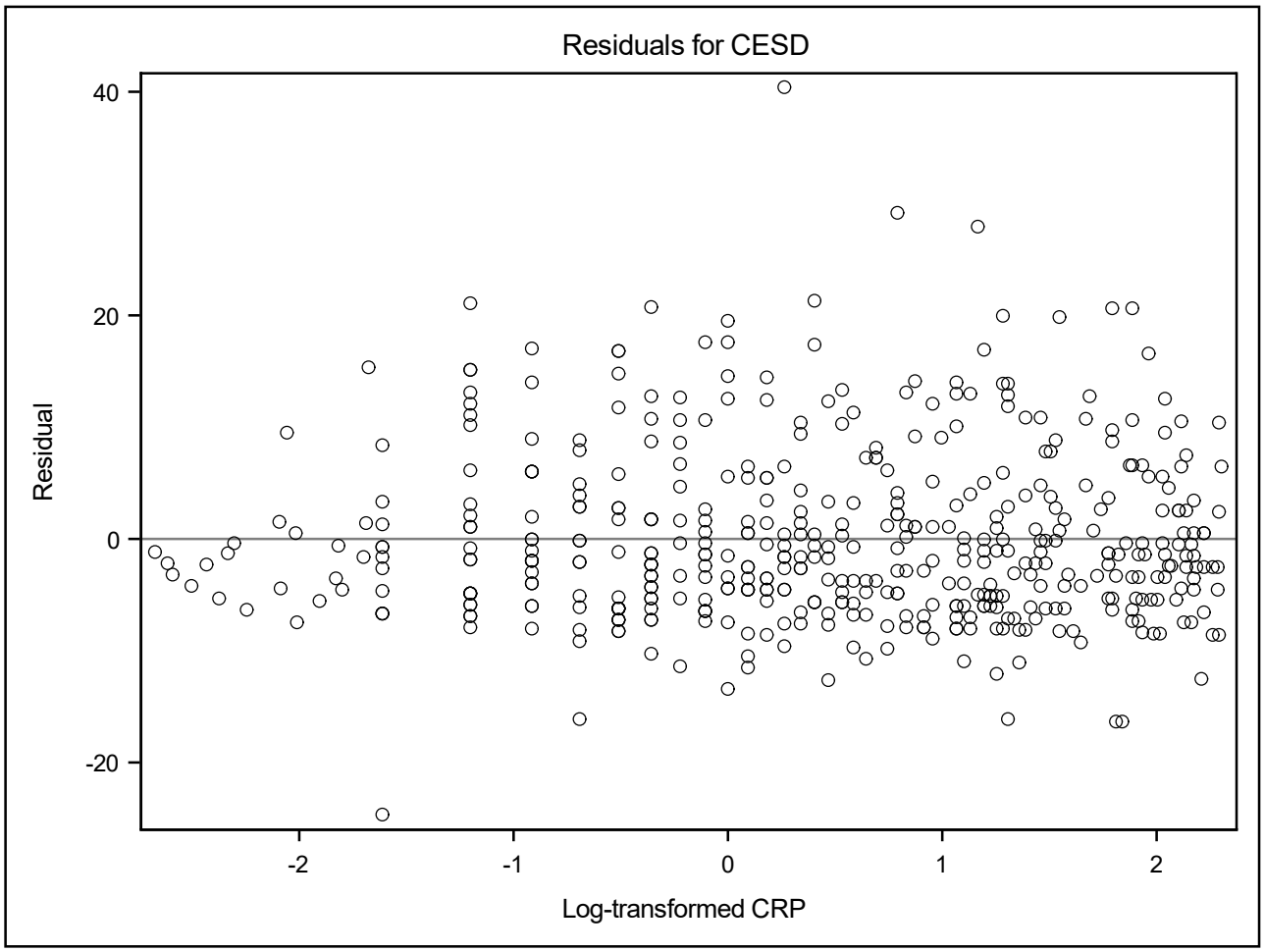
SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Stratified Analysis: Current Smokers (CES-D = log(CRP))

The REG Procedure
Model: MODEL1
Dependent Variable: CESD CES-D depressive symptom score (0–60)



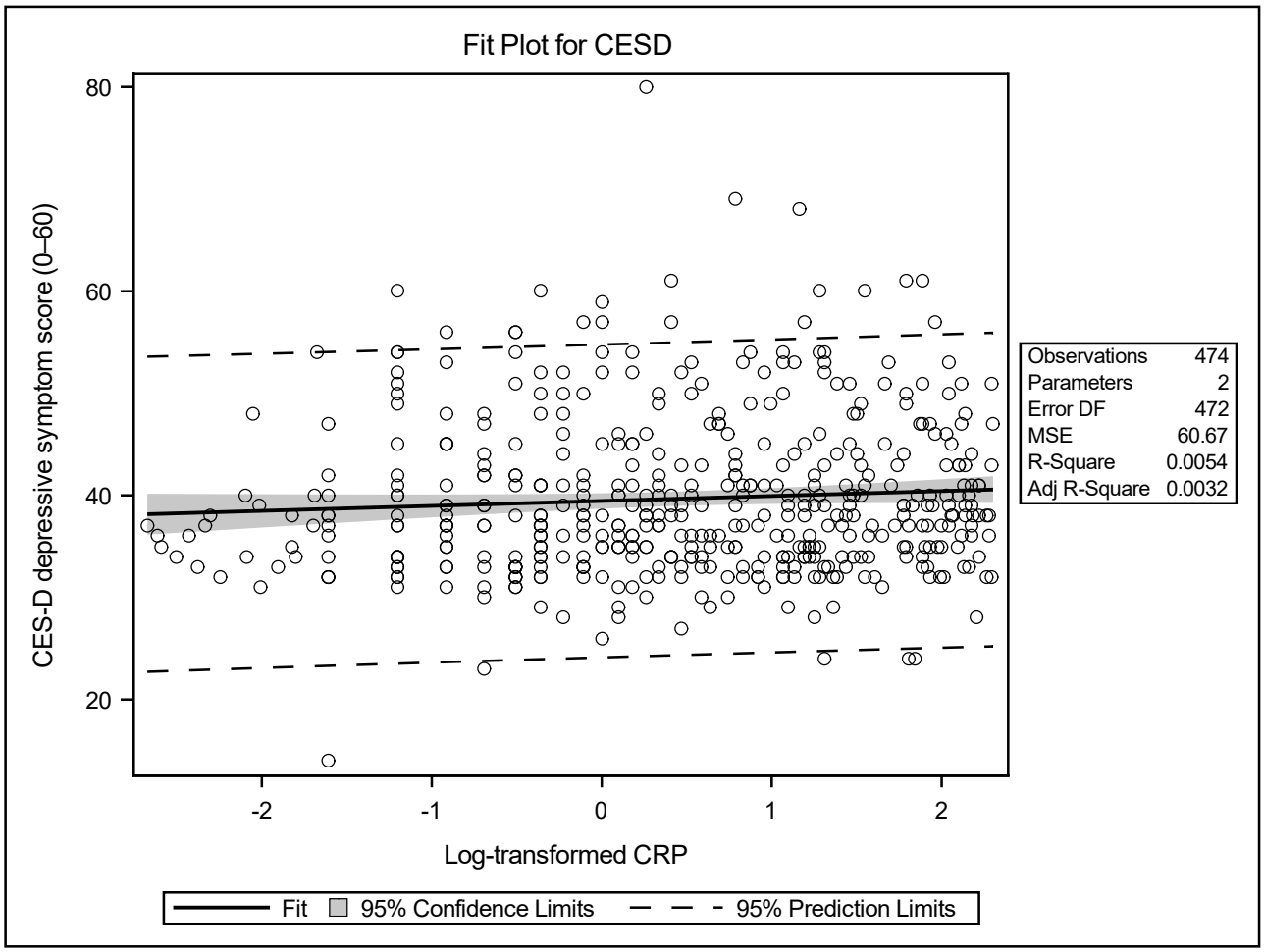
SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Stratified Analysis: Current Smokers (CES-D = log(CRP))

The REG Procedure
Model: MODEL1
Dependent Variable: CESD CES-D depressive symptom score (0–60)



SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Stratified Analysis: Current Smokers (CES-D = log(CRP))

The REG Procedure
Model: MODEL1
Dependent Variable: CESD CES-D depressive symptom score (0–60)



SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Categorical Exposure Model: CRP Tertiles (Adjusted LSMeans)
Model: CES-D = CRP Tertile + BMI + Smoking + Menopausal Status

The GLM Procedure

Class Level Information

Class	*Levels*	*Values*
crpT	3	T1_Low T2_Mid T3_High
smoke	3	Current Former Never
meno	2	EarlyPeri Premen

Number of Observations Read	2854
Number of Observations Used	2854

SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Categorical Exposure Model: CRP Tertiles (Adjusted LSMeans)
Model: CES-D = CRP Tertile + BMI + Smoking + Menopausal Status

The GLM Procedure

Dependent Variable: CESD CES-D depressive symptom score (0–60)

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	6	7004.4372	1167.4062	10.50	<.0001
Error	2847	316526.3196	111.1789		
Corrected Total	2853	323530.7568			

R-Square	Coeff Var	Root MSE	CESD Mean
0.021650	28.20758	10.54414	37.38052

Source	DF	Type I SS	Mean Square	F Value	Pr > F
crpT	2	938.797144	469.398572	4.22	0.0148
BMI0	1	1942.467822	1942.467822	17.47	<.0001
smoke	2	3054.356762	1527.178381	13.74	<.0001
meno	1	1068.815470	1068.815470	9.61	0.0020

Source	DF	Type III SS	Mean Square	F Value	Pr > F
crpT	2	269.852942	134.926471	1.21	0.2973
BMI0	1	1899.118902	1899.118902	17.08	<.0001
smoke	2	2757.242679	1378.621339	12.40	<.0001
meno	1	1068.815470	1068.815470	9.61	0.0020

Parameter		Estimate		Standard Error	t Value	Pr > |t|
Intercept		31.98063410	B	1.19867217	26.68	<.0001
crpT	T1_Low	0.16657651	B	0.57096001	0.29	0.7705
crpT	T2_Mid	0.72892339	B	0.51689382	1.41	0.1586
crpT	T3_High	0.00000000	B	.	.	.
BMI0		0.14575300		0.03526571	4.13	<.0001
smoke	Current	2.72842002	B	0.55266631	4.94	<.0001
smoke	Former	0.31242729	B	0.47294442	0.66	0.5089
smoke	Never	0.00000000	B	.	.	.
meno	EarlyPeri	1.23707148	B	0.39898320	3.10	0.0020
meno	Premen	0.00000000	B	.	.	.

Note: The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Categorical Exposure Model: CRP Tertiles (Adjusted LSMeans)
Model: CES-D = CRP Tertile + BMI + Smoking + Menopausal Status

The GLM Procedure
Least Squares Means

crpT	CESD LSMEAN	LSMEAN Number
T1_Low	37.7877957	1
T2_Mid	38.3501426	2
T3_High	37.6212192	3

Least Squares Means for effect crpT
Pr > \|t\| for H0: LSMean(i)=LSMean(j)

Dependent Variable: CESD

i/j	1	2	3
1		0.2576	0.7705
2	0.2576		0.1586
3	0.7705	0.1586	

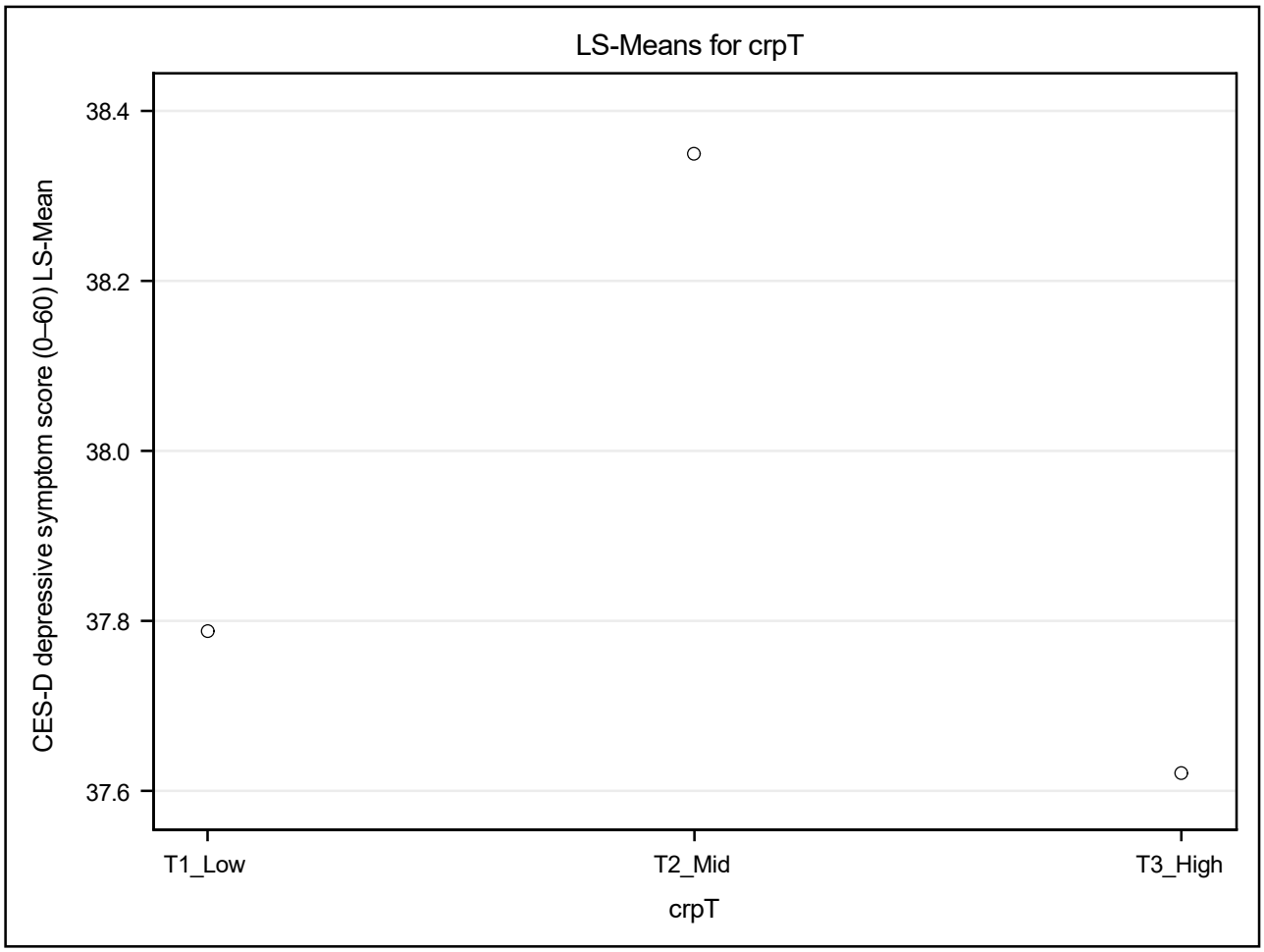
crpT	CESD LSMEAN	95% Confidence Limits	
T1_Low	37.787796	37.023135	38.552457
T2_Mid	38.350143	37.646262	39.054023
T3_High	37.621219	36.857138	38.385300

Least Squares Means for Effect crpT

i	j	Difference Between Means	95% Confidence Limits for LSMean(i)-LSMean(j)	
1	2	-0.562347	-1.536196	0.411502
1	3	0.166577	-0.952960	1.286114
2	3	0.728923	-0.284601	1.742448

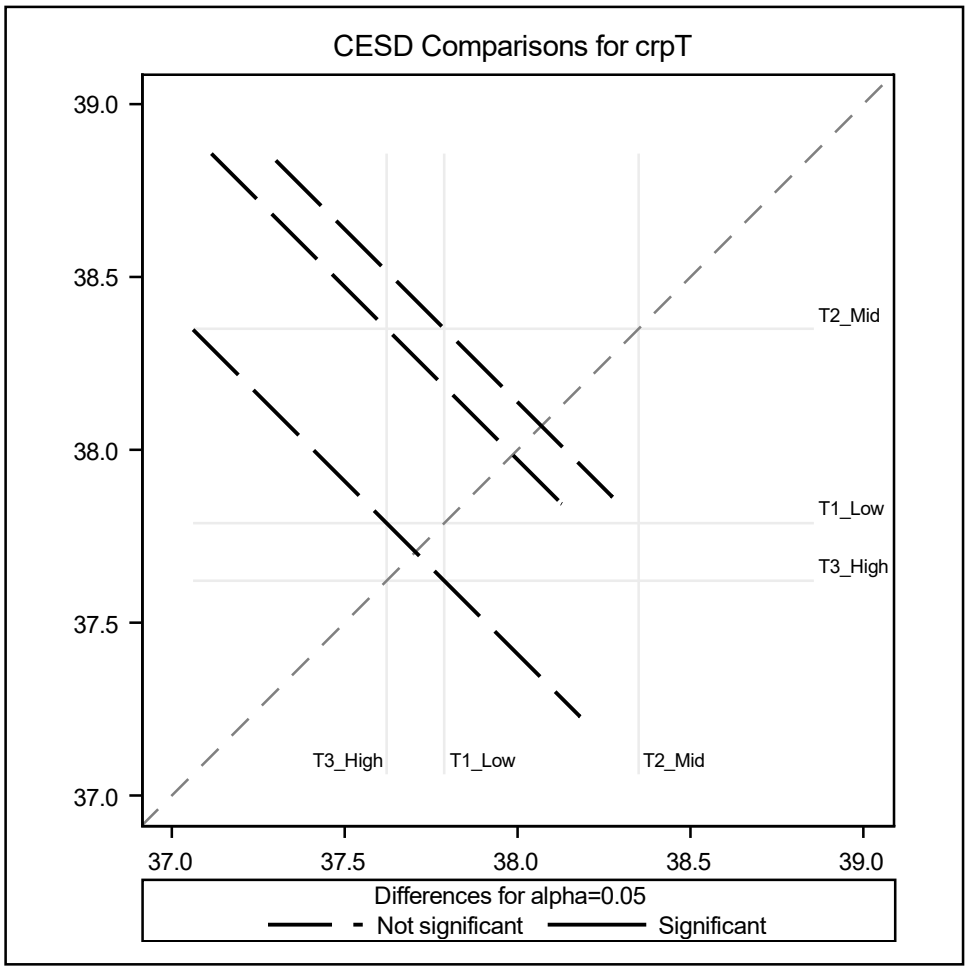
SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Categorical Exposure Model: CRP Tertiles (Adjusted LSMeans)
Model: CES-D = CRP Tertile + BMI + Smoking + Menopausal Status

The GLM Procedure
Least Squares Means



SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Categorical Exposure Model: CRP Tertiles (Adjusted LSMeans)
Model: CES-D = CRP Tertile + BMI + Smoking + Menopausal Status

The GLM Procedure
Least Squares Means



Note: To ensure overall protection level, only probabilities associated with pre-planned comparisons should be used.

SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Interaction Test: log(CRP) × Menopausal Status

The GLM Procedure

Class Level Information

Class	*Levels*	*Values*
smoke	3	Current Former Never
meno	2	EarlyPeri Premen

Number of Observations Read	2854
Number of Observations Used	2854

SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Interaction Test: log(CRP) × Menopausal Status

The GLM Procedure

Dependent Variable: CESD CES-D depressive symptom score (0–60)

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	6	6812.6145	1135.4358	10.21	<.0001
Error	2847	316718.1423	111.2463		
Corrected Total	2853	323530.7568			

R-Square	Coeff Var	Root MSE	CESD Mean
0.021057	28.21613	10.54733	37.38052

Source	DF	Type I SS	Mean Square	F Value	Pr > F
logcrp	1	916.629430	916.629430	8.24	0.0041
BMI0	1	1739.097681	1739.097681	15.63	<.0001
smoke	2	3023.666367	1511.833183	13.59	<.0001
meno	1	1059.281361	1059.281361	9.52	0.0020
logcrp*meno	1	73.939710	73.939710	0.66	0.4150

Source	DF	Type III SS	Mean Square	F Value	Pr > F
logcrp	1	8.425384	8.425384	0.08	0.7832
BMI0	1	1748.250038	1748.250038	15.72	<.0001
smoke	2	2750.456089	1375.228045	12.36	<.0001
meno	1	1131.239993	1131.239993	10.17	0.0014
logcrp*meno	1	73.939710	73.939710	0.66	0.4150

Parameter		Estimate		Standard Error	t Value	Pr > |t|
Intercept		32.34811983	B	1.00228503	32.27	<.0001
logcrp		0.08026364	B	0.24580118	0.33	0.7440
BMI0		0.14277225		0.03601511	3.96	<.0001
smoke	Current	2.72831909	B	0.55327371	4.93	<.0001
smoke	Former	0.31990882	B	0.47311557	0.68	0.4990
smoke	Never	0.00000000	B	.	.	.
meno	EarlyPeri	1.30301088	B	0.40861415	3.19	0.0014
meno	Premen	0.00000000	B	.	.	.
logcrp*meno	EarlyPeri	-0.27031467	B	0.33156866	-0.82	0.4150
logcrp*meno	Premen	0.00000000	B	.	.	.

Note: The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Interaction Test: log(CRP) × Smoking

The GLM Procedure

Class Level Information

Class	*Levels*	*Values*
smoke	3	Current Former Never
meno	2	EarlyPeri Premen

Number of Observations Read	2854
Number of Observations Used	2854

SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Interaction Test: log(CRP) × Smoking

The GLM Procedure

Dependent Variable: CESD CES-D depressive symptom score (0–60)

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	7	6761.7136	965.9591	8.68	<.0001
Error	2846	316769.0432	111.3032		
Corrected Total	2853	323530.7568			

R-Square	Coeff Var	Root MSE	CESD Mean
0.020900	28.22335	10.55004	37.38052

Source	DF	Type I SS	Mean Square	F Value	Pr > F
logcrp	1	916.629430	916.629430	8.24	0.0041
BMI0	1	1739.097681	1739.097681	15.62	<.0001
smoke	2	3023.666367	1511.833183	13.58	<.0001
meno	1	1059.281361	1059.281361	9.52	0.0021
logcrp*smoke	2	23.038786	11.519393	0.10	0.9017

Source	DF	Type III SS	Mean Square	F Value	Pr > F
logcrp	1	4.966279	4.966279	0.04	0.8327
BMI0	1	1737.407598	1737.407598	15.61	<.0001
smoke	2	2373.896141	1186.948071	10.66	<.0001
meno	1	1060.169645	1060.169645	9.53	0.0020
logcrp*smoke	2	23.038786	11.519393	0.10	0.9017

Parameter		Estimate		Standard Error	t Value	Pr > |t|
Intercept		32.38334370	B	1.00187890	32.32	<.0001
logcrp		-0.00850073	B	0.23881498	-0.04	0.9716
BMI0		0.14236602		0.03603374	3.95	<.0001
smoke	Current	2.68632659	B	0.58371487	4.60	<.0001
smoke	Former	0.36203368	B	0.48626337	0.74	0.4566
smoke	Never	0.00000000	B	.	.	.
meno	EarlyPeri	1.23223518	B	0.39926371	3.09	0.0020
meno	Premen	0.00000000	B	.	.	.
logcrp*smoke	Current	0.04671117	B	0.46517309	0.10	0.9200
logcrp*smoke	Former	-0.16137549	B	0.39843358	-0.41	0.6855
logcrp*smoke	Never	0.00000000	B	.	.	.

Note: The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Diagnostics (PROC REG): VIF + Influence (Using Smoking Dummies)

The REG Procedure
Model: MODEL1
Dependent Variable: CESD CES-D depressive symptom score (0–60)

Number of Observations Read	2854
Number of Observations Used	2854

Analysis of Variance

Source	*DF*	*Sum of Squares*	*Mean Square*	*F Value*	*Pr > F*
Model	5	6738.67484	1347.73497	12.12	<.0001
Error	2848	316792	111.23317		
Corrected Total	2853	323531			

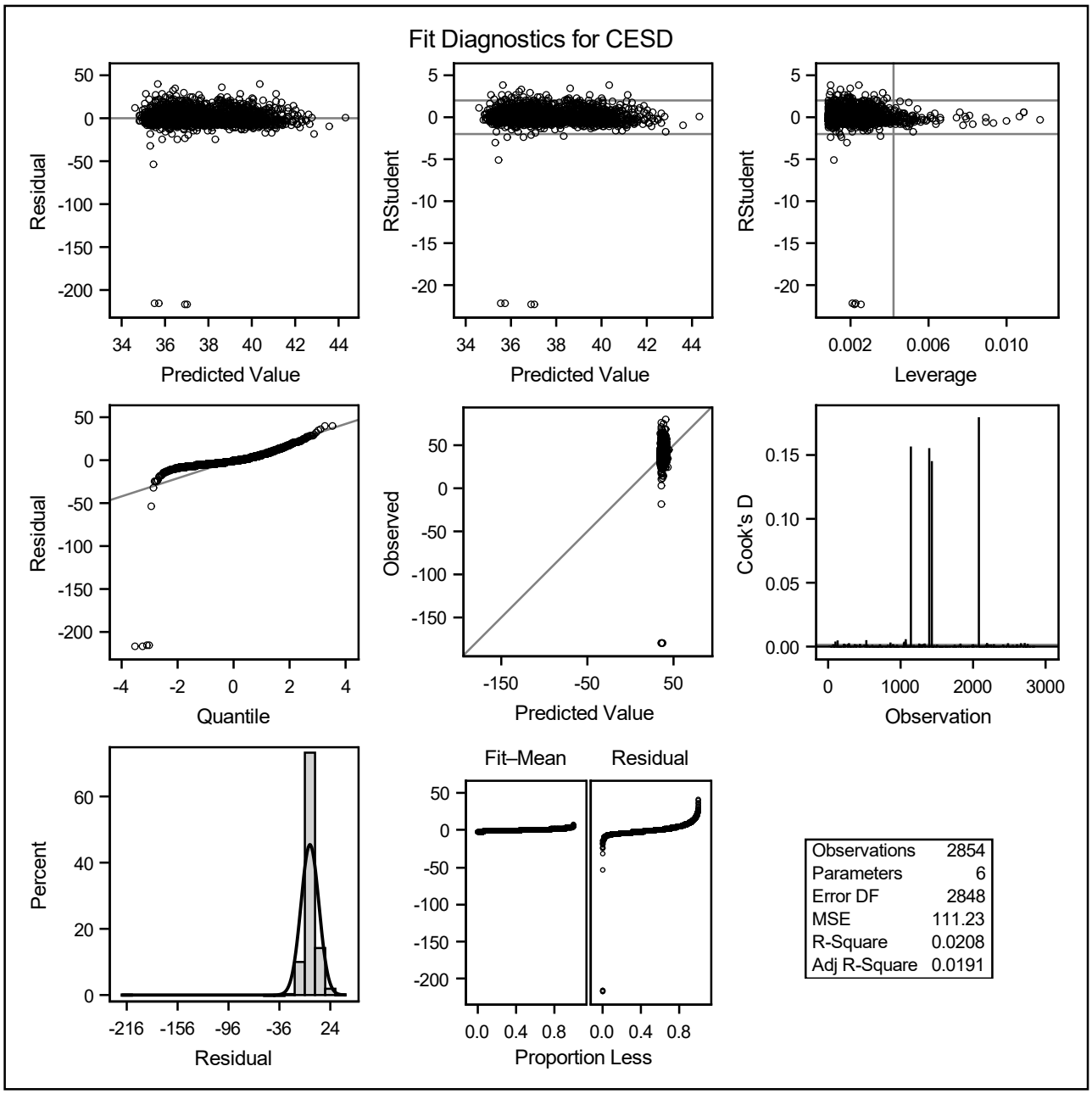
Root MSE	10.54671	*R-Square*	0.0208
Dependent Mean	37.38052	*Adj R-Sq*	0.0191
Coeff Var	28.21447		

Parameter Estimates

Variable	*Label*	*DF*	*Parameter Estimate*	*Standard Error*	*t Value*	*Pr > |t|*	*Variance Inflation*
Intercept	Intercept	1	38.56588	2.13486	18.06	<.0001	0
logcrp	Log-transformed CRP	1	-0.03804	0.19838	-0.19	0.8479	1.45029
BMI0	Body Mass Index (kg/m^2)	1	0.14165	0.03599	3.94	<.0001	1.44794
smoke_current	Dummy: Current smoker (1=Yes,0=No)	1	2.71606	0.55304	4.91	<.0001	1.08686
smoke_former	Dummy: Former smoker (1=Yes,0=No)	1	0.31474	0.47305	0.67	0.5059	1.07603
STATUS0	Menopausal status at baseline	1	-1.23146	0.39905	-3.09	0.0020	1.01205

SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Diagnostics (PROC REG): VIF + Influence (Using Smoking Dummies)

The REG Procedure
Model: MODEL1
Dependent Variable: CESD CES-D depressive symptom score (0–60)



SWAN Baseline Modeling: log(CRP) and Depressive Symptoms (CES-D)
Diagnostics (PROC REG): VIF + Influence (Using Smoking Dummies)
Potential Influential Points (\|RStudent\| > 3 OR Cook's D > 0.1)

rstud	cookd	pred	resid	CESD	logcrp	BMI0	smoke_current	smoke_former	STATUS0
-5.0921	0.00483	35.4412	-53.441	-18	-0.10536	21.3808	No	No	5
3.1020	0.00158	36.3492	32.651	69	0.87547	28.0541	No	No	5
3.4611	0.00392	38.6025	36.398	75	0.74194	33.0104	No	Yes	4
3.7730	0.00578	40.3482	39.652	80	0.26236	28.2534	Yes	No	4
-22.1478	0.15666	35.5356	-215.536	-180	-0.69315	19.6678	No	Yes	5
-22.3274	0.15540	37.0290	-217.029	-180	1.56862	24.3458	No	No	4
-22.1700	0.14522	35.7373	-215.737	-180	1.66771	23.9477	No	No	5
3.8361	0.00240	35.6591	40.341	76	-0.22314	22.8873	No	No	5
-22.3175	0.17959	36.9095	-216.909	-180	2.01490	30.0938	No	Yes	5
-3.0705	0.00284	35.3066	-32.307	3	-1.80789	19.9734	No	No	5
3.2820	0.00268	36.4704	34.530	71	1.68640	29.1279	No	No	5