

Data Analytics in SAS

Section 1

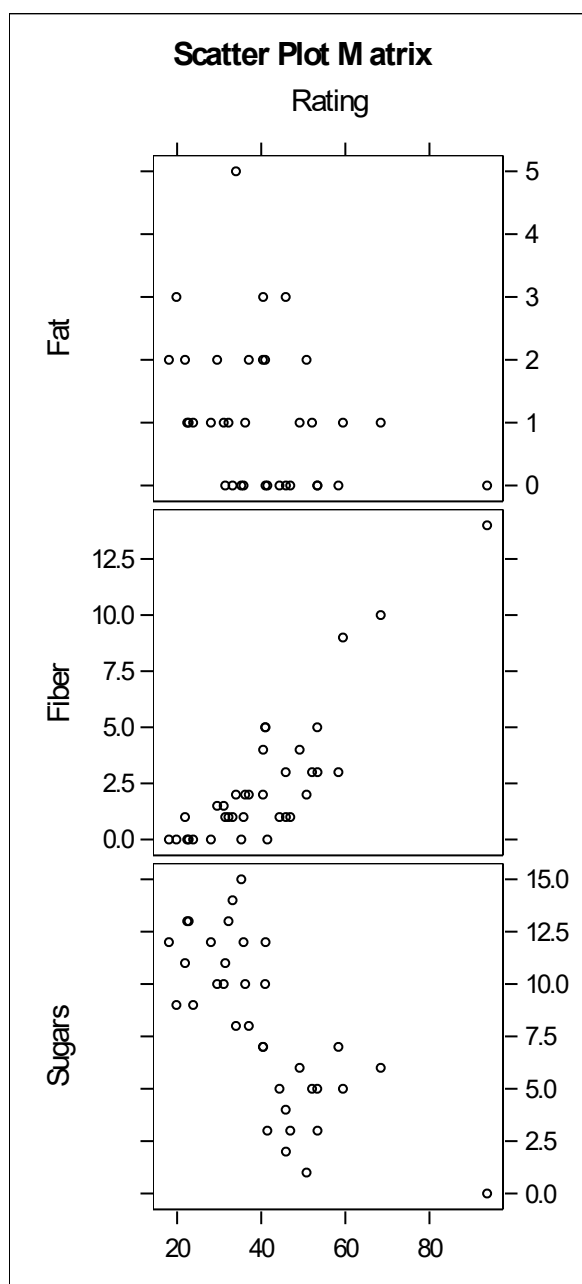
Correlations and plots between nutrition rating and independent variables

3 With Variables:	Fat Fiber Sugars
1 Variables:	Rating

Pearson Correlation Coefficients, N = 35 Prob > r under H0: Rho=0	
	Rating
Fat	-0.30822
Fat	0.0716
Fiber	0.84987
Fiber	<.0001
Sugars	-0.72533
Sugars	<.0001

Model: MODEL1

Dependent Variable: Rating Rating



Model: MODEL1

Dependent Variable: Rating Rating

Question 1.4

Number of Observations Read	35
Number of Observations Used	35

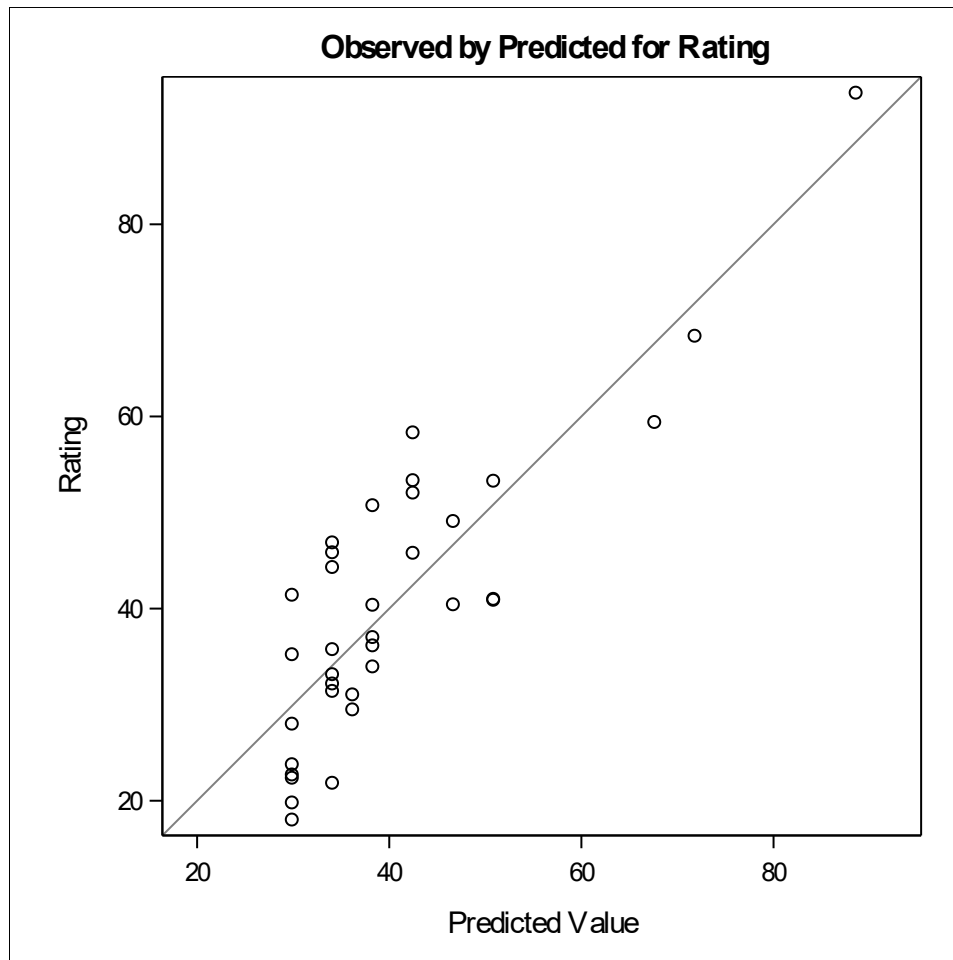
Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	5732.87596	5732.87596	85.83	<.0001
Error	33	2204.24404	66.79527		
Corrected Total	34	7937.12000			

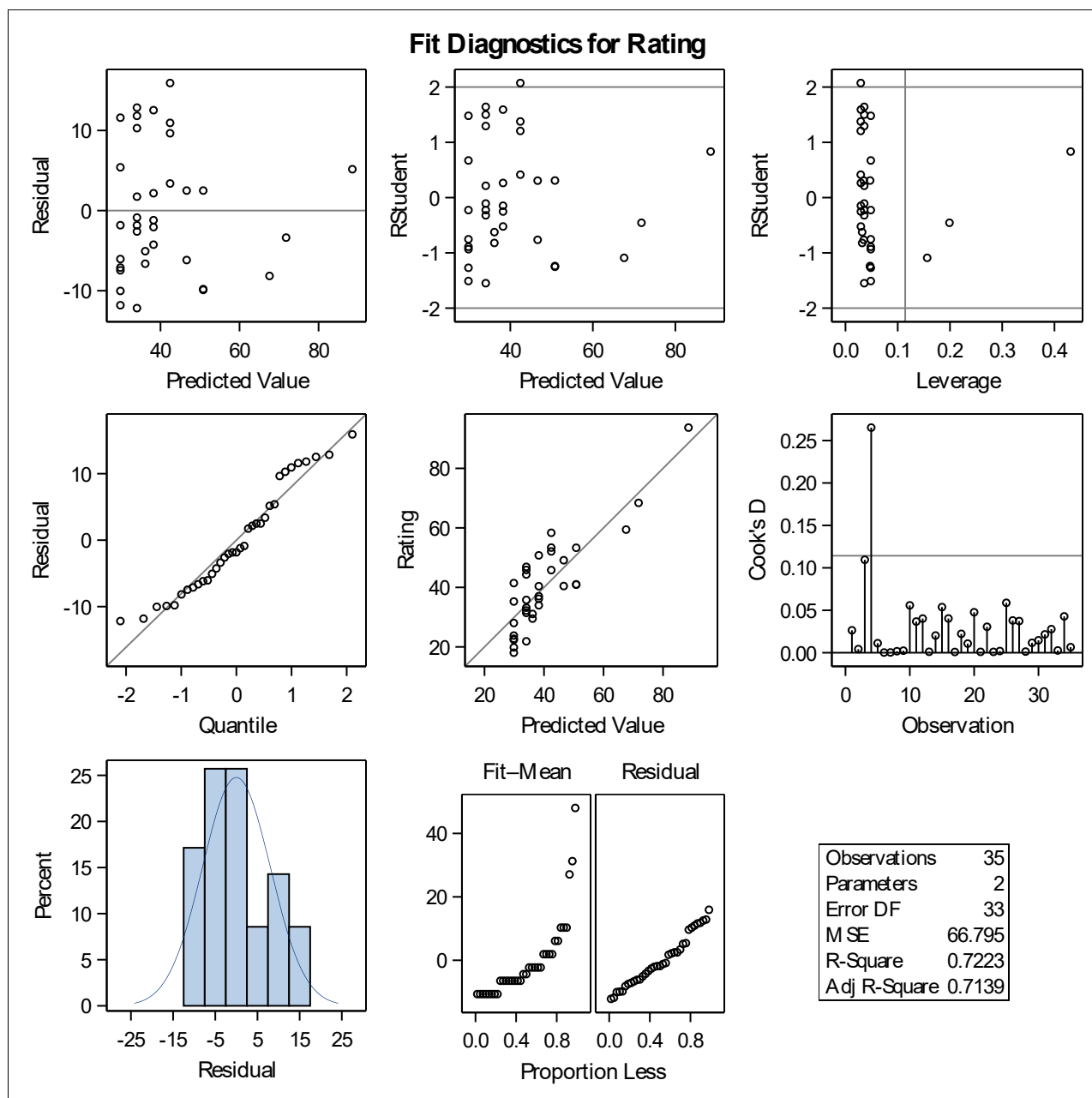
Root MSE	8.17284	R-Square	0.7223
Dependent Mean	40.51392	Adj R-Sq	0.7139
Coeff Var	20.17291		

Parameter Estimates						
Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept	Intercept	1	29.85346	1.79793	16.60	<.0001
Fiber	Fiber	1	4.19231	0.45252	9.26	<.0001

Model: MODEL1

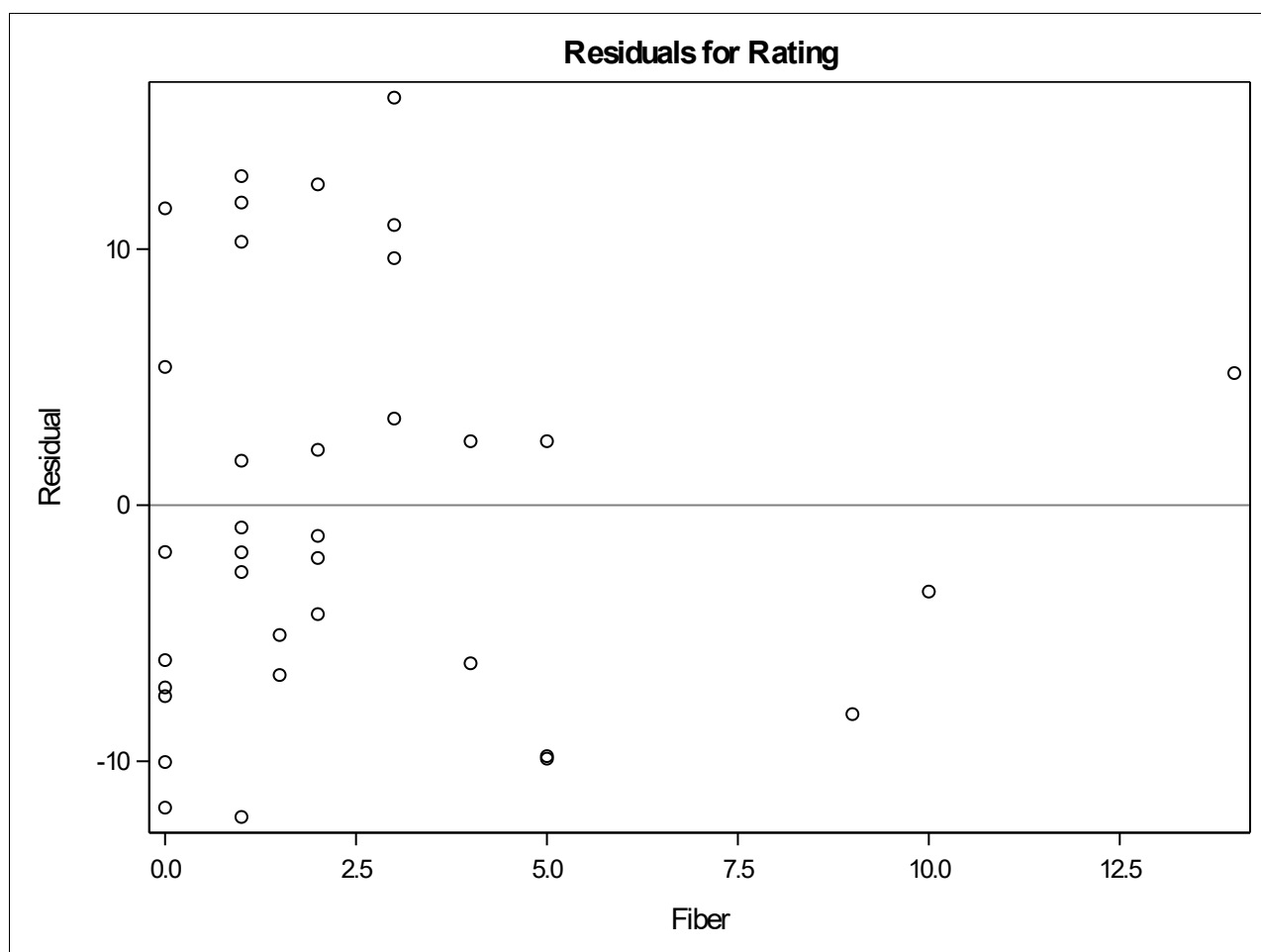
Dependent Variable: Rating Rating



Model: MODEL1**Dependent Variable: Rating Rating**

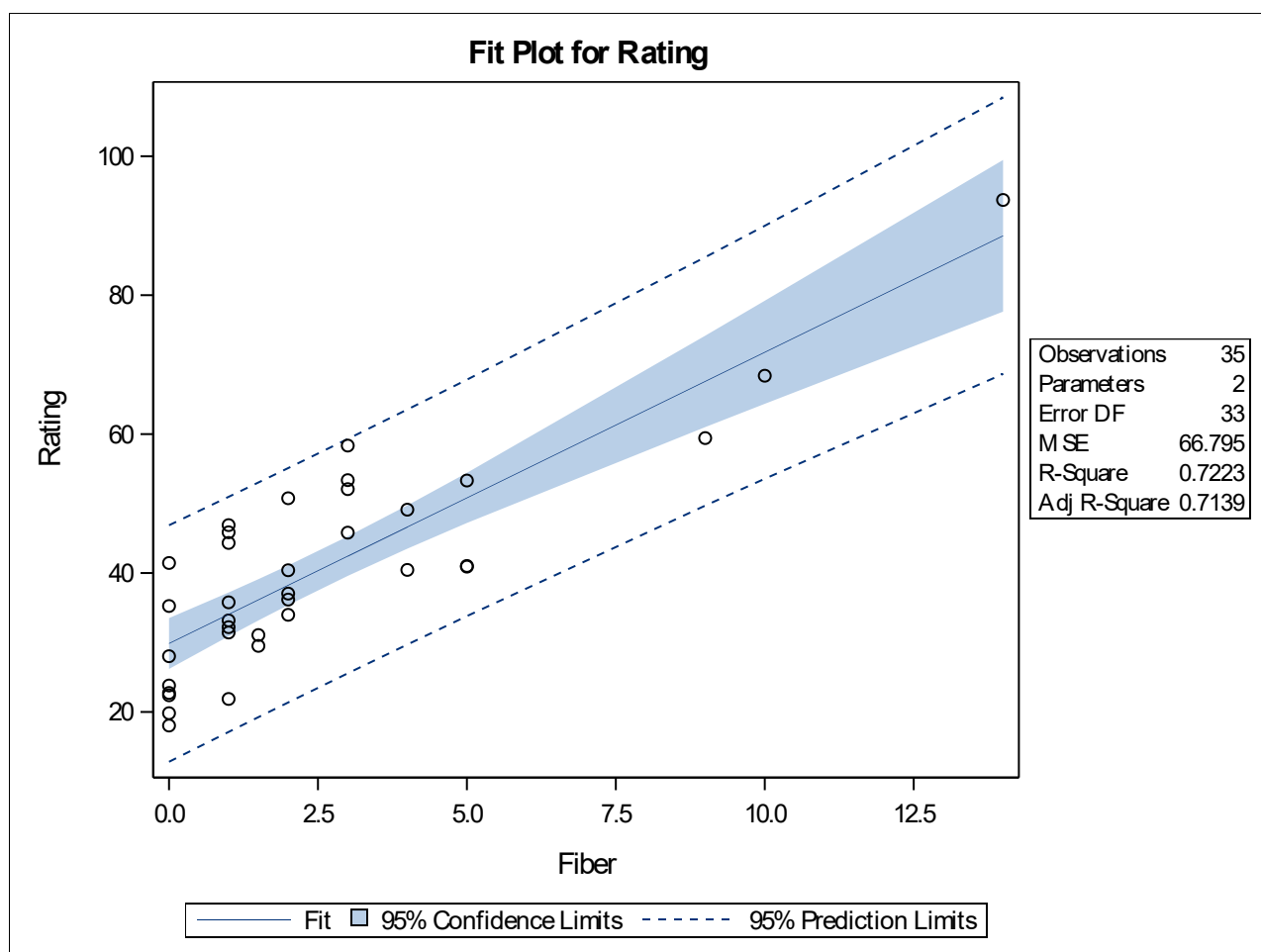
Model: MODEL1

Dependent Variable: Rating Rating



Model: MODEL1

Dependent Variable: Rating Rating



Model: MODEL1

Dependent Variable: Rating Rating

Section 2

Linear regression output for relationship between nutrition rating and fibre content

Number of Observations Read	35
Number of Observations Used	35

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	6835.24586	3417.62293	99.25	<.0001
Error	32	1101.87414	34.43357		
Corrected Total	34	7937.12000			

Root MSE	5.86801	R-Square	0.8612
Dependent Mean	40.51392	Adj R-Sq	0.8525
Coeff Var	14.48394		

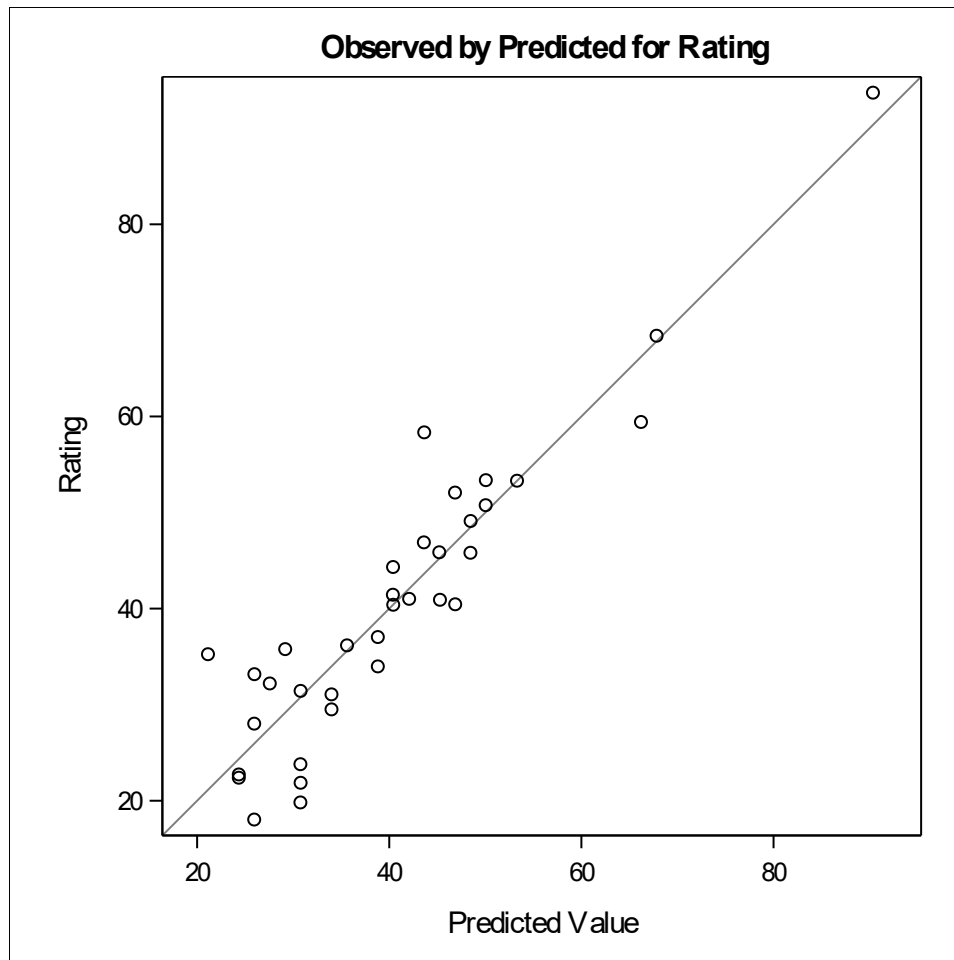
Model: MODEL1

Dependent Variable: Rating Rating

Parameter Estimates						
Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept	Intercept	1	45.18756	3.00184	15.05	<.0001
Fiber	Fiber	1	3.22591	0.36706	8.79	<.0001
Sugars	Sugars	1	-1.60386	0.28346	-5.66	<.0001

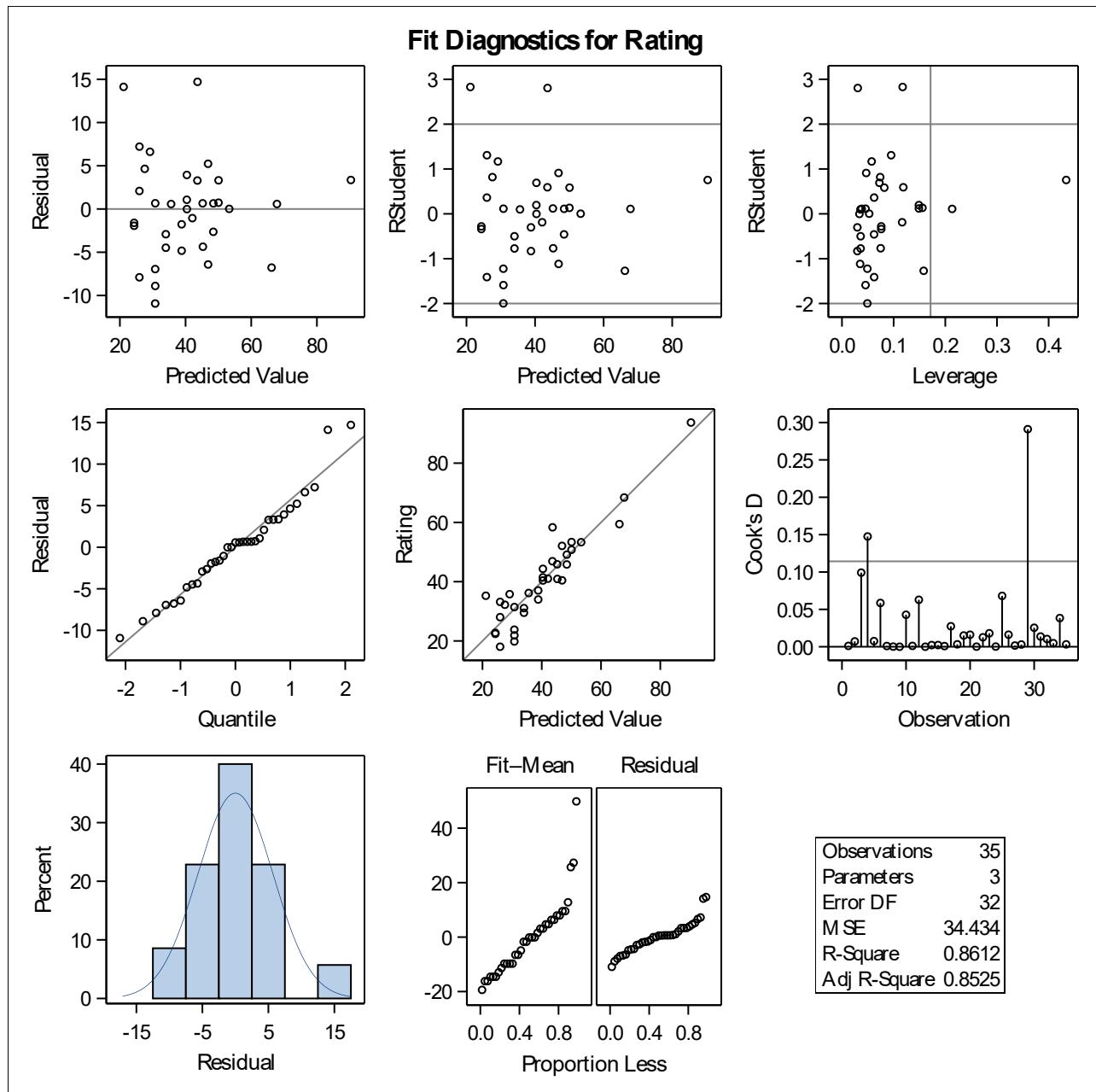
Model: MODEL1

Dependent Variable: Rating Rating



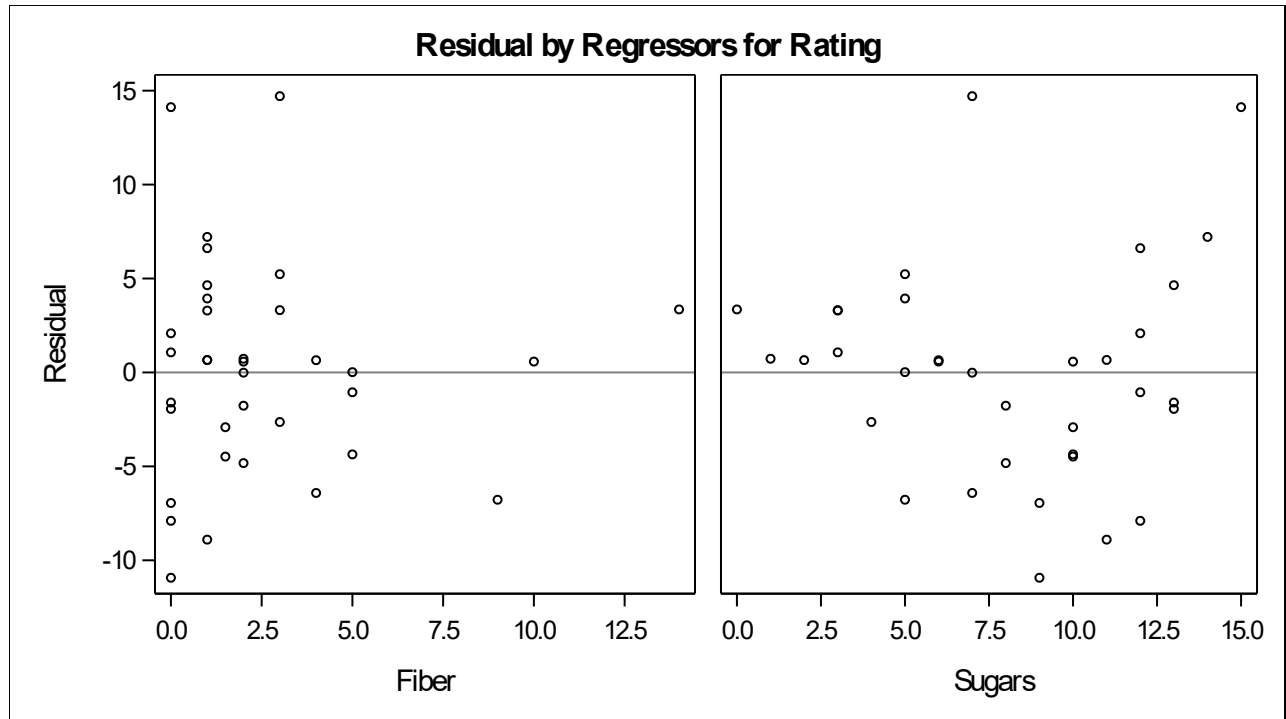
Model: MODEL1

Dependent Variable: Rating Rating



Model: MODEL1

Dependent Variable: Rating Rating



Model: MODEL1

Dependent Variable: Rating Rating

Section 3

Linear regression output for relationship between nutrition rating and fibre content and additional independent variable

Number of Observations Read	35
Number of Observations Used	35

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	7273.83813	2424.61271	113.32	<.0001
Error	31	663.28187	21.39619		
Corrected Total	34	7937.12000			

Root MSE	4.62560	R-Square	0.9164
Dependent Mean	40.51392	Adj R-Sq	0.9083
Coeff Var	11.41731		

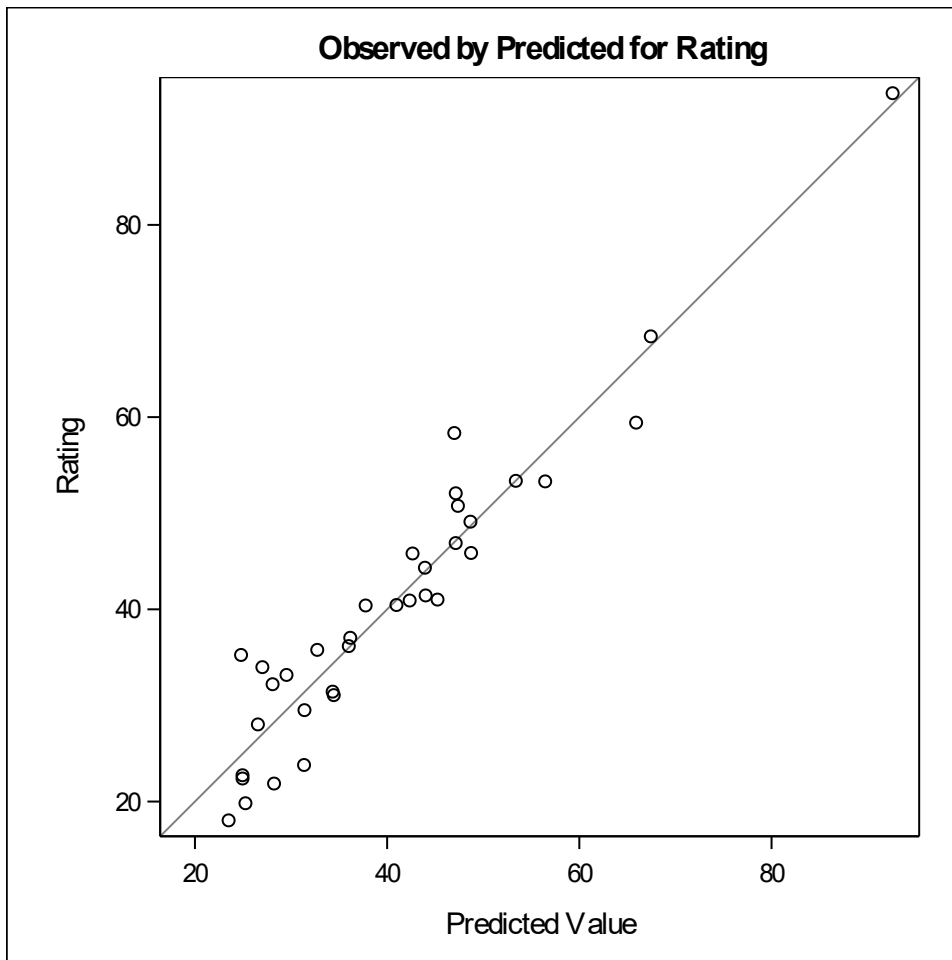
Model: MODEL1

Dependent Variable: Rating Rating

Parameter Estimates						
Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept	Intercept	1	48.80712	2.49768	19.54	<.0001
Fiber	Fiber	1	3.12813	0.29015	10.78	<.0001
Sugars	Sugars	1	-1.60062	0.22345	-7.16	<.0001
Fat	Fat	1	-3.04853	0.67333	-4.53	<.0001

Model: MODEL1
Dependent Variable: Rating Rating

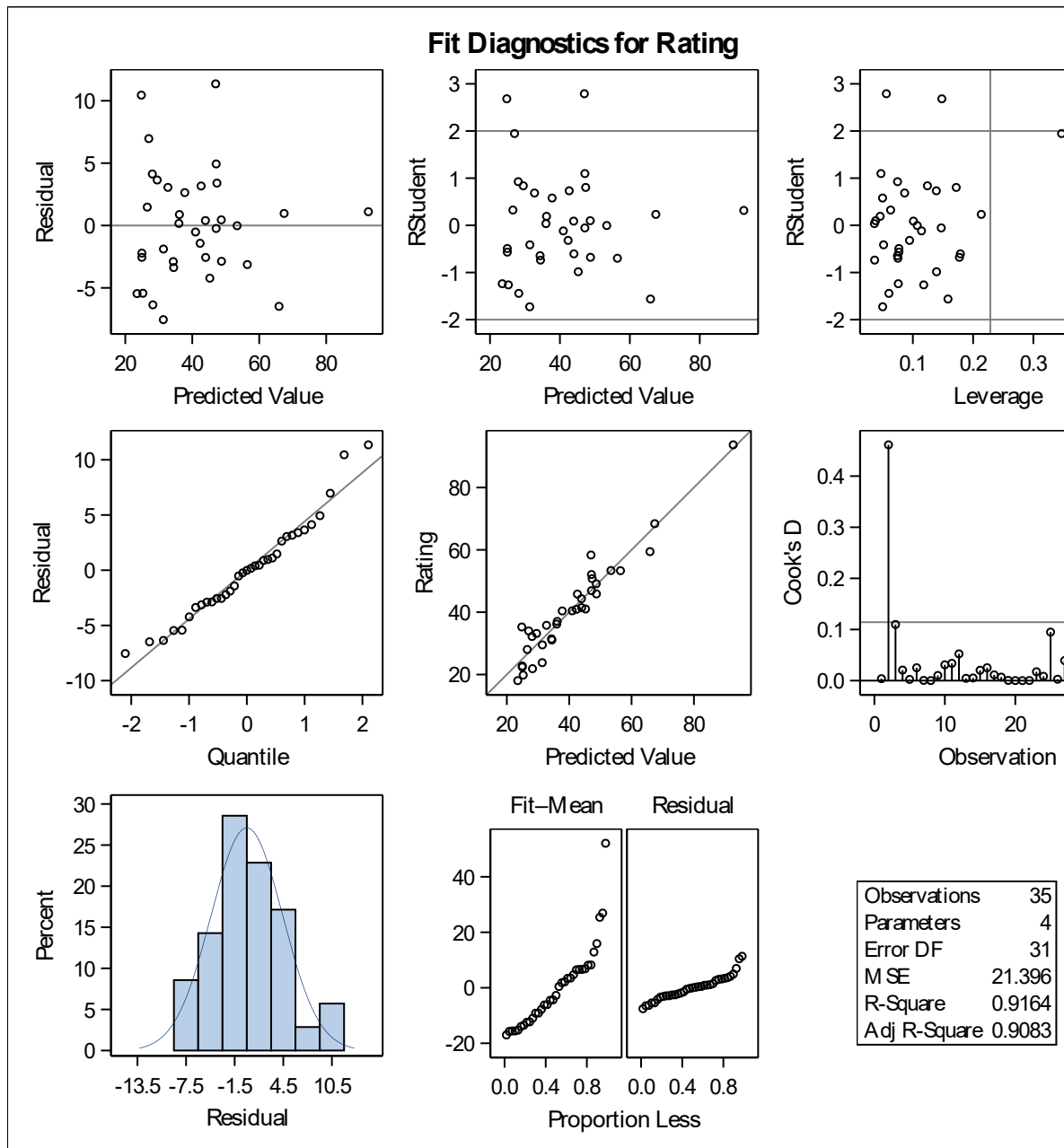
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Model: MODEL1
Dependent Variable: Rating Rating

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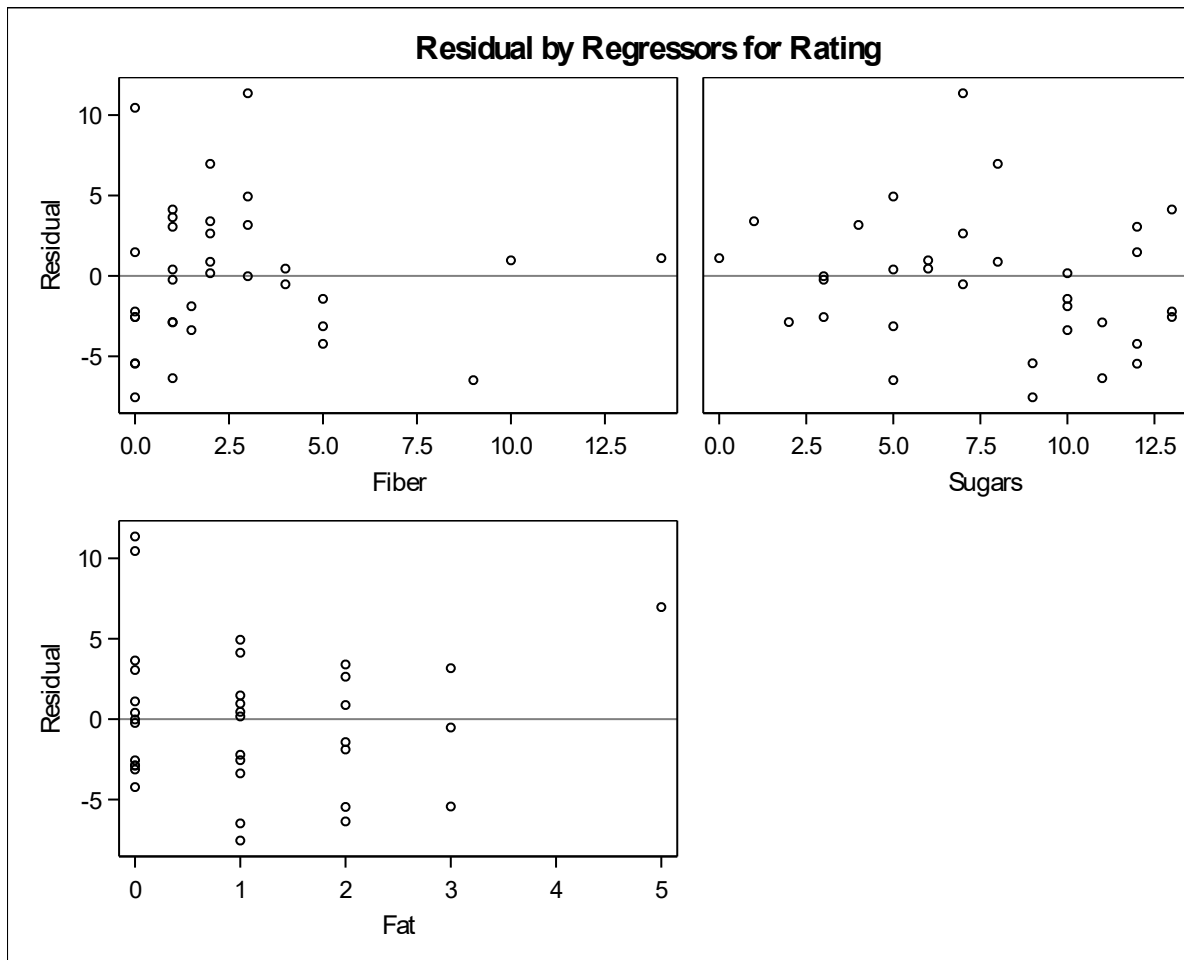


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Model: MODEL1

Dependent Variable: Rating Rating

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