Table 30-2 Multiple Regression Analysis: Prediction of Systolic Blood Pressure from BMI, Diet, Cholesterol, Age, and Gender

Please Note: Minor differences in values for the Constant under Coefficients from what is presented in the text. The highlighted values below are the correct values.

```
REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT SBP
  /METHOD=ENTER BMI DIET CHOL AGE GENDER.
```

Regression

Run using Regression > Linear

Descriptive Statistics

	Mean	Std. Deviation	N
SBP	122.0483	12.06713	145
BMI	24.8154	4.16715	145
DIET	100.3414	38.48560	145
CHOL	223.3517	27.85217	145
AGE	42.7034	13.45162	145
GENDER	.5034	.50172	145

Correlations

		SBP	BMI	DIET	CHOL	AGE	GENDER
Pearson Correlation	SBP	1.000	.679	.696	.601	-.004	-.025
	BMI	.679	1.000	.865	.674	.012	-.008
	DIET	.696	.865	1.000	.674	-.009	-.055
	CHOL	.601	.674	.674	1.000	.140	-.033
	AGE	-.004	.012	-.009	.140	1.000	-.042
	GENDER	-.025	-.008	-.055	-.033	-.042	1.000
Sig. (1-tailed)	SBP	.	.000	.000	.000	.483	.384
	BMI	.000	.	.000	.000	.444	.463
	DIET	.000	.000	.	.000	.455	.256
	CHOL	.000	.000	.000	.	.047	.348
	AGE	.483	.444	.455	.047	.	.310
	GENDER	.384	.463	.256	.348	.310	.
N	SBP	145	145	145	145	145	145
	BMI	145	145	145	145	145	145
	DIET	145	145	145	145	145	145
	CHOL	145	145	145	145	145	145
	AGE	145	145	145	145	145	145
	GENDER	145	145	145	145	145	145

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	GENDER, BMI, AGE, CHOL, DIET[b]	.	Enter

a. Dependent Variable: SBP

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.728[a]	.530	.513	8.42354

a. Predictors: (Constant), GENDER, BMI, AGE, CHOL, DIET

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11105.773	5	2221.155	31.303	.000[b]
	Residual	9862.889	139	70.956		
	Total	20968.662	144			

a. Dependent Variable: SBP

b. Predictors: (Constant), GENDER, BMI, AGE, CHOL, DIET

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	**75.035**	**7.446**		**10.077**	.000	**60.313**	**89.757**		
	BMI	.673	.347	.233	1.941	.054	-.013	1.359	.236	4.240
	DIET	.110	.038	.352	2.922	.004	.036	.185	.233	4.286
	CHOL	.092	.036	.211	2.552	.012	.021	.163	.493	2.027
	AGE	-.029	.053	-.033	-.547	.585	-.135	.076	.959	1.043
	GENDER	.047	1.407	.002	.034	.973	-2.735	2.829	.989	1.011

a. Dependent Variable: SBP

Please note highlighted values above, which are slightly different from values in the text. These are the correct values.

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions (Constant)	BMI	DIET	CHOL
1	1	5.368	1.000	.00	.00	.00	.00
	2	.464	3.400	.00	.00	.00	.00
	3	.115	6.821	.00	.00	.11	.00
	4	.043	11.224	.07	.00	.17	.02
	5	.006	31.165	.09	.40	.02	.81
	6	.004	35.450	.84	.60	.69	.17

Collinearity Diagnostics[a]

Model	Dimension	Variance Proportions AGE	GENDER
1	1	.00	.01
	2	.00	.94
	3	.38	.01
	4	.60	.04
	5	.01	.00
	6	.00	.00

a. Dependent Variable: SBP