Table 30-3 Stepwise Multiple Regression: Prediction of SBP

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REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT SBP
  /METHOD=STEPWISE BMI DIET CHOL AGE GENDER.
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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	DIET	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
2	CHOL	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).

a. Dependent Variable: SBP

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.696[a]	.484	.480	8.69951	.484	134.065	1	143	.000
2	.718[b]	.516	.509	8.45685	.032	9.324	1	142	.003

a. Predictors: (Constant), DIET

b. Predictors: (Constant), DIET, CHOL

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10146.209	1	10146.209	134.065	.000[b]
	Residual	10822.453	143	75.681		
	Total	20968.662	144			
2	Regression	10813.067	2	5406.533	75.597	.000[c]
	Residual	10155.595	142	71.518		
	Total	20968.662	144			

a. Dependent Variable: SBP

b. Predictors: (Constant), DIET

c. Predictors: (Constant), DIET, CHOL

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	100.163	2.024		49.500	.000	96.163	104.163		
	DIET	.218	.019	.696	11.579	.000	.181	.255	1.000	1.000
2	(Constant)	81.918	6.290		13.022	.000	69.483	94.353		
	DIET	.167	.025	.533	6.737	.000	.118	.216	.545	1.834
	CHOL	.105	.034	.241	3.054	.003	.037	.172	.545	1.834

a. Dependent Variable: SBP

Excluded Variables[a]

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics: Tolerance	VIF	Minimum Tolerance
1	BMI	.306[b]	2.615	.010	.214	.253	3.960	.253
	CHOL	.241[b]	3.054	.003	.248	.545	1.834	.545
	AGE	.003[b]	.049	.961	.004	1.000	1.000	1.000
	GENDER	.013[b]	.223	.824	.019	.997	1.003	.997
2	BMI	.233[c]	1.967	.051	.163	.237	4.213	.237
	AGE	-.034[c]	-.564	.574	-.047	.961	1.041	.524
	GENDER	.012[c]	.212	.832	.018	.997	1.003	.544

a. Dependent Variable: SBP

b. Predictors in the Model: (Constant), DIET

c. Predictors in the Model: (Constant), DIET, CHOL

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions: (Constant)	DIET	CHOL
1	1	1.934	1.000	.03	.03	
	2	.066	5.417	.97	.97	
2	1	2.922	1.000	.00	.01	.00
	2	.073	6.338	.05	.62	.01
	3	.005	24.241	.95	.37	.99

a. Dependent Variable: SBP