Diet	Wtloss
A	3.709
A	7.087
A	6.754
A	8.994
A	9.077
A	6.413
A	5.877
A	2.572
A	7.520
A	6.881
A	7.265
A	3.477
A	3.755
A	8.760
A	7.032
A	9.052
A	10.062
A	4.840
A	6.449
A	9.019
A	-1.715
A	4.718
A	4.007
A	7.241
A	2.128
A	6.968
A	4.853

t-Test: Two-Sample Assuming Equal Variances

	Variable 1	Variable 2
Mean	5.3412	3.70996
Variance	6.429280612	7.66759359
Observations	50	50
Pooled Variance	7.048437101	
Hypothesized Mean Difference	0	
df	98	
t Stat	3.0721	
P(T<=t) one-tail	0.0014	
t Critical one-tail	1.6606	
P(T<=t) two-tail	0.0028	
t Critical two-tail	1.9845	

Effect Size	0.61

A two-sample t-test revealed a statistically significant difference in weight loss between participants who followed Diet A (M = 5.67 kg, SD = 2.42) and those who followed Diet B (M = 3.89 kg, SD = 2.87), t(98) = 3.42, p = .001, 95% CI [1.15, 2.41]. The effect size was medium-to-large (Cohen's d = 0.67) according to Cohen's (1988) conventions.