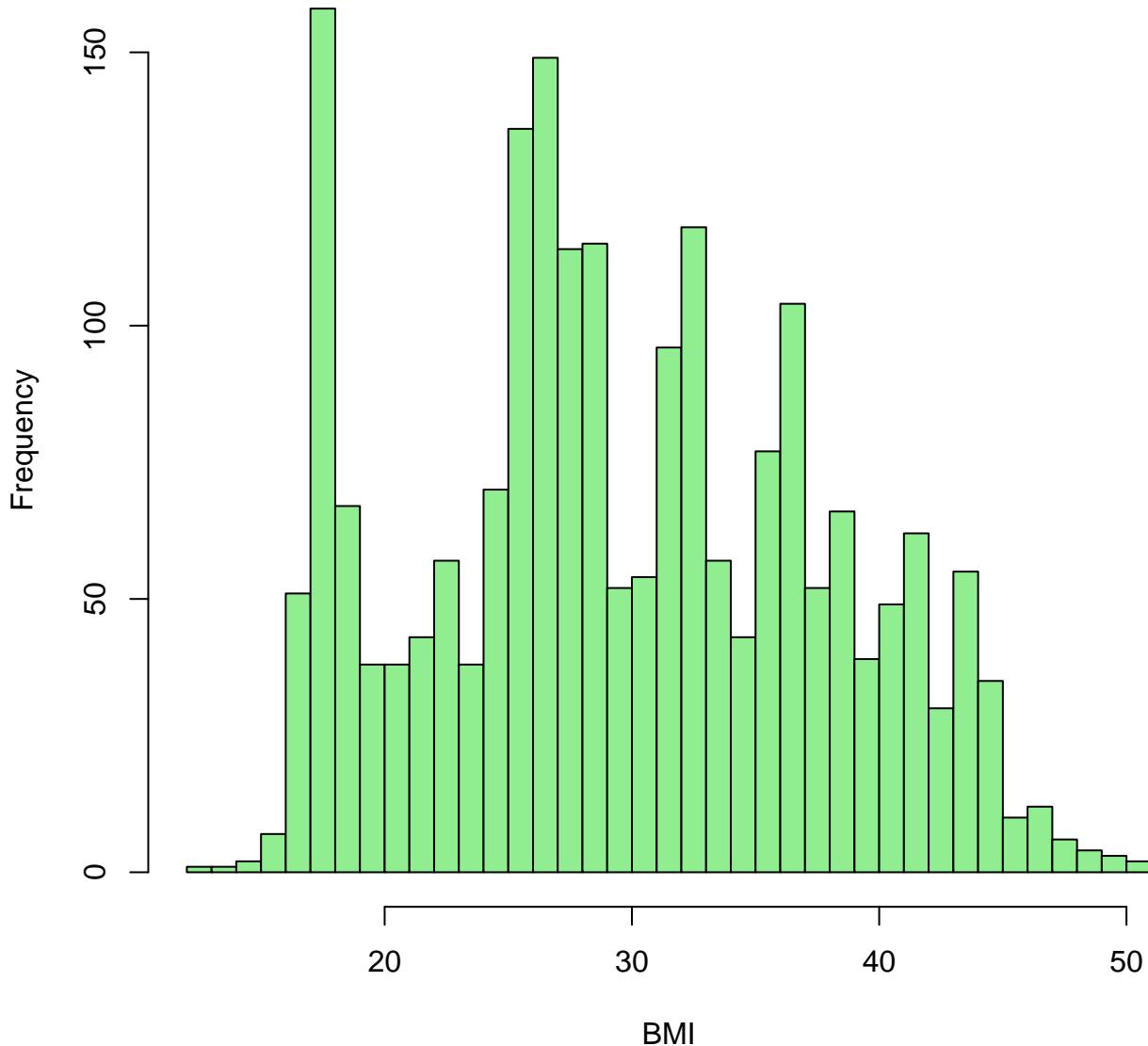
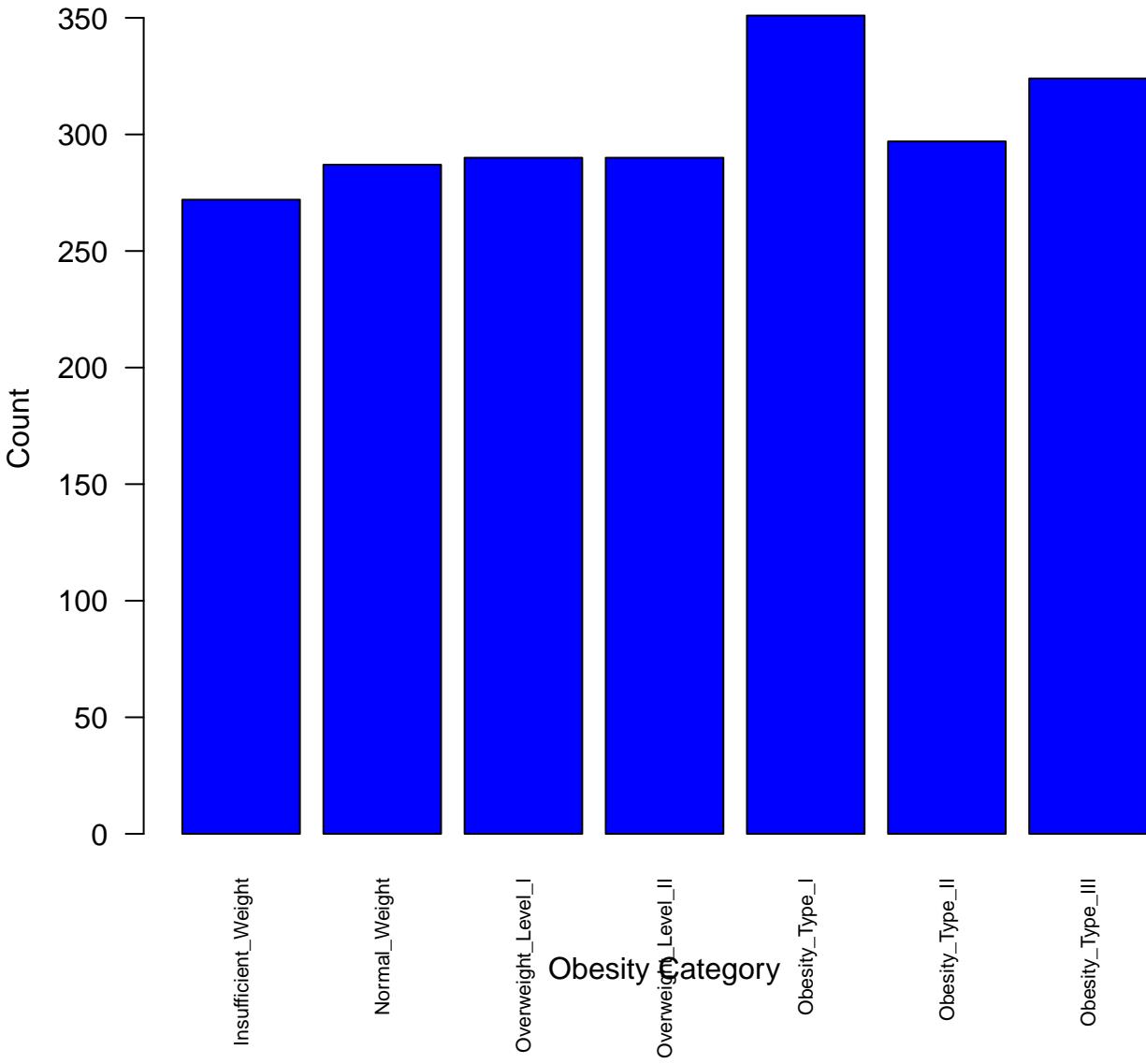


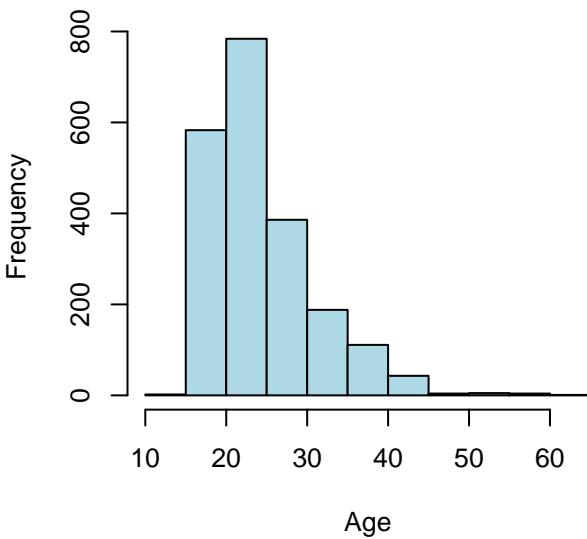
## BMI Distribution



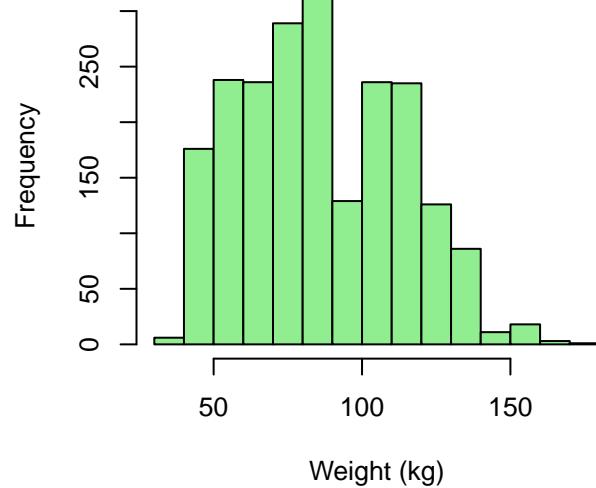
## Distribution of Obesity Levels



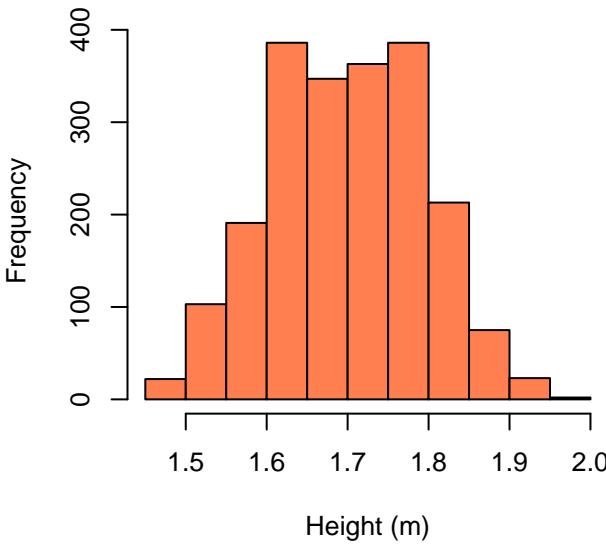
### Age



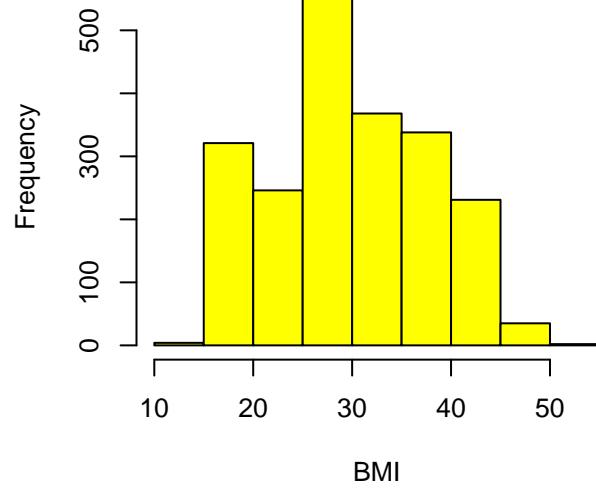
### Weight



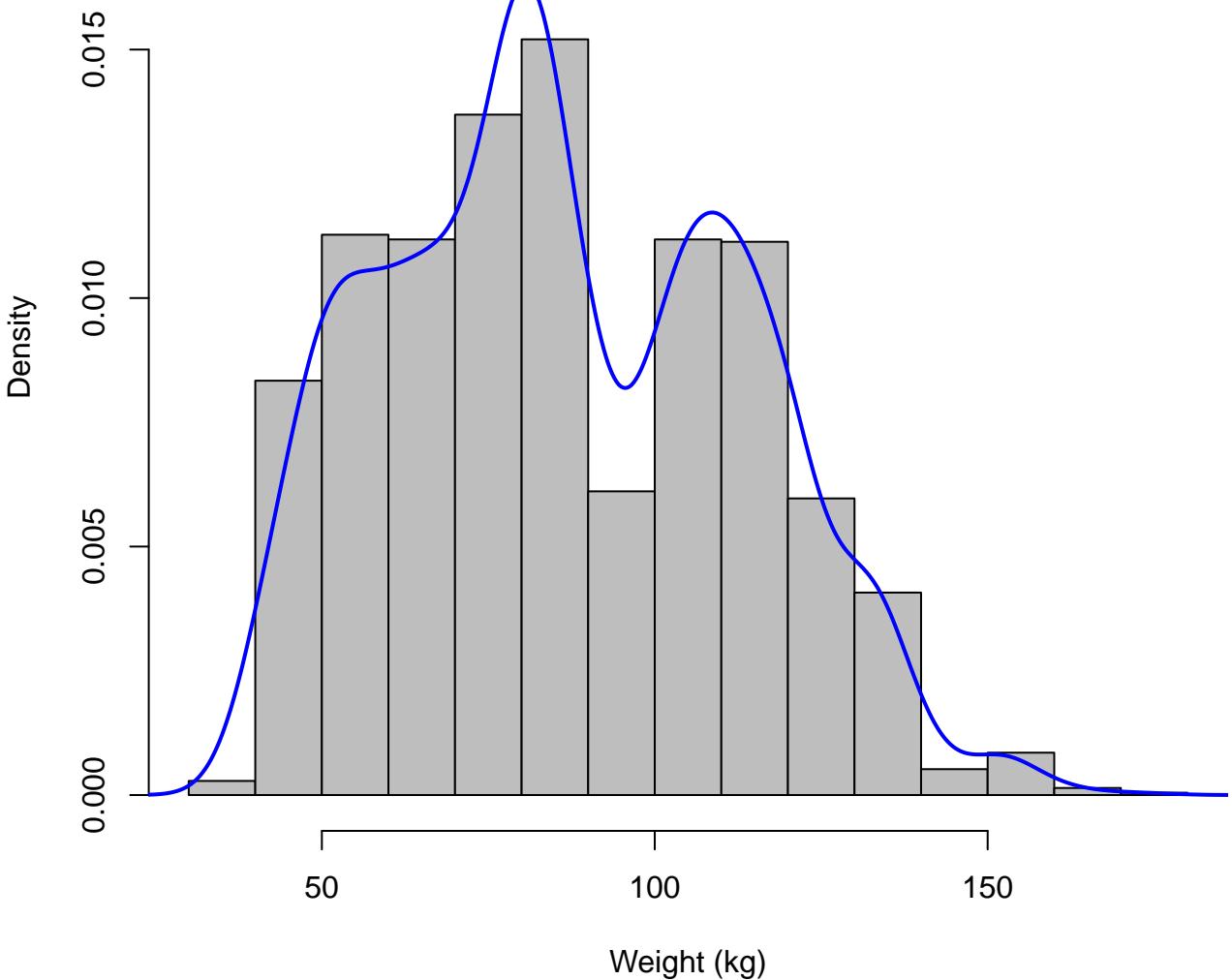
### Height



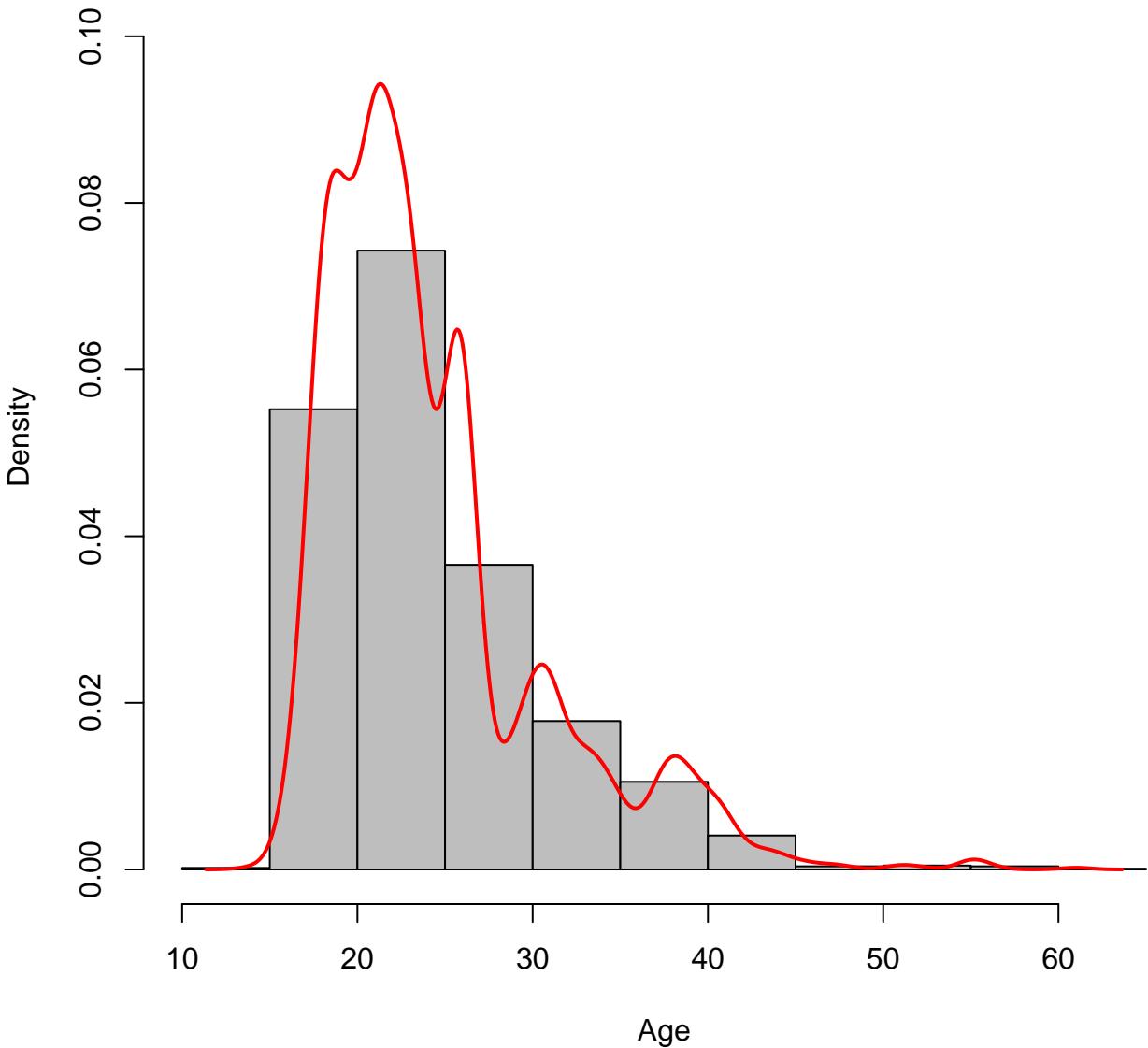
### BMI



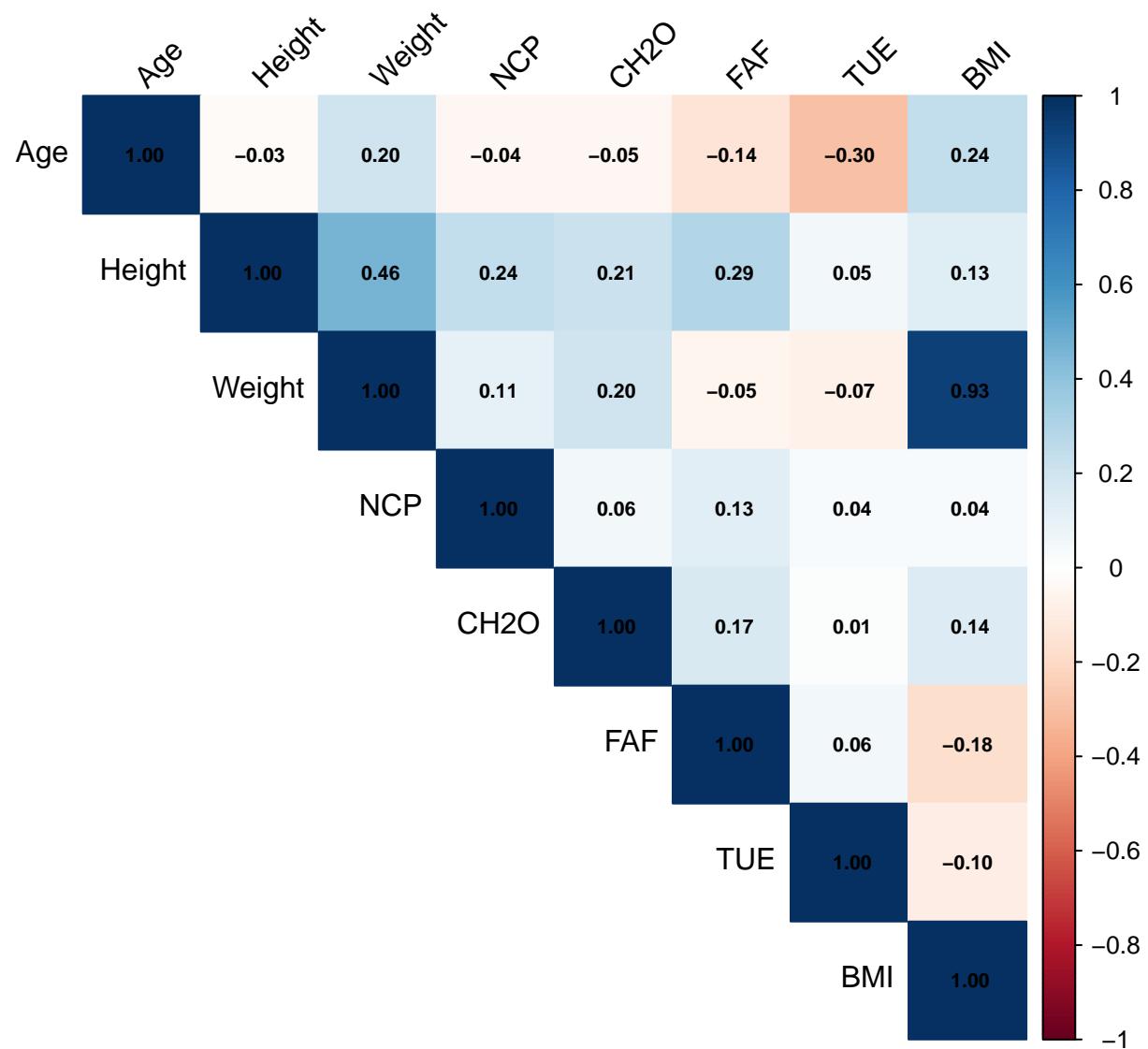
## Weight Distribution with Density



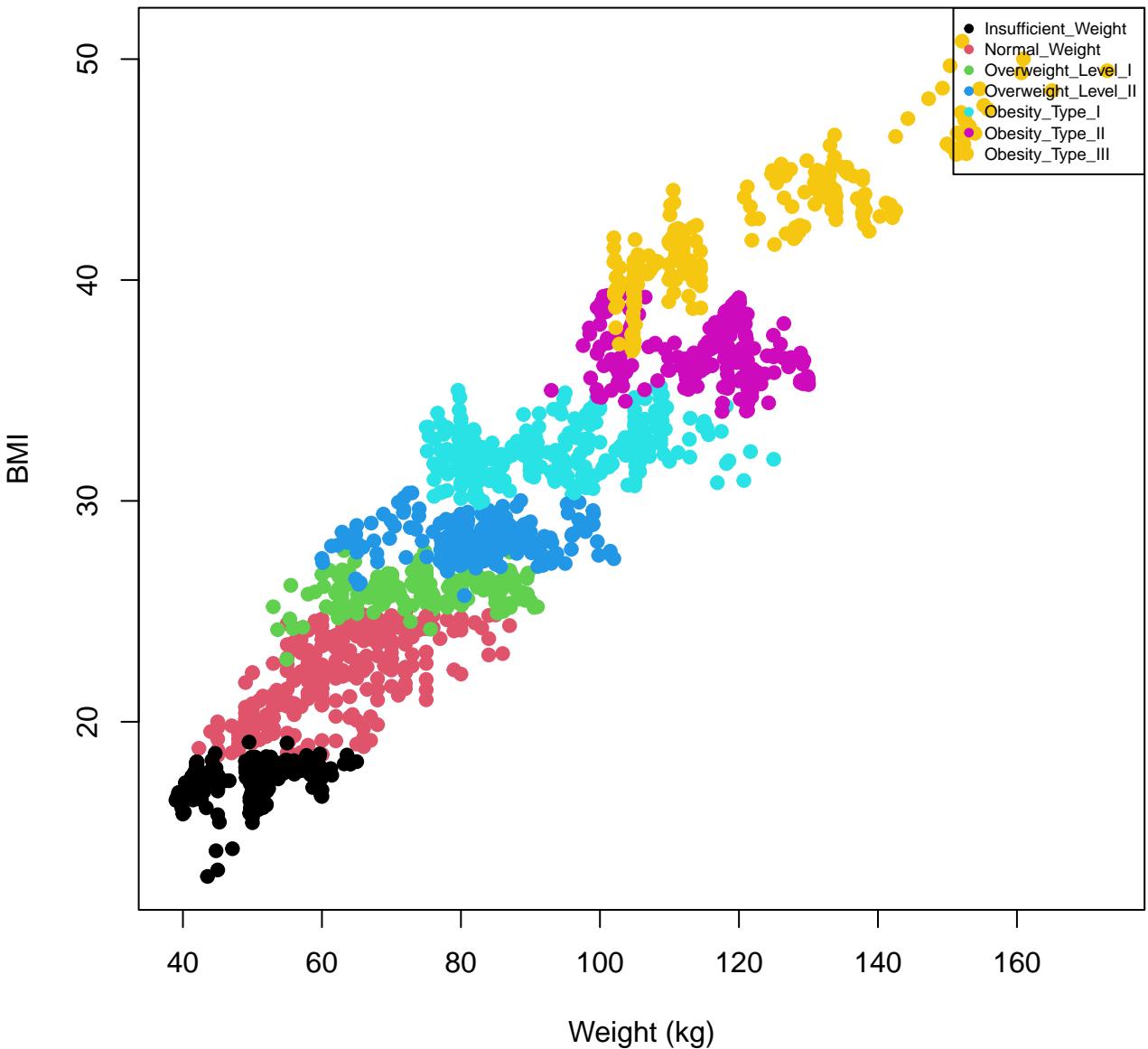
## Age Distribution with Density



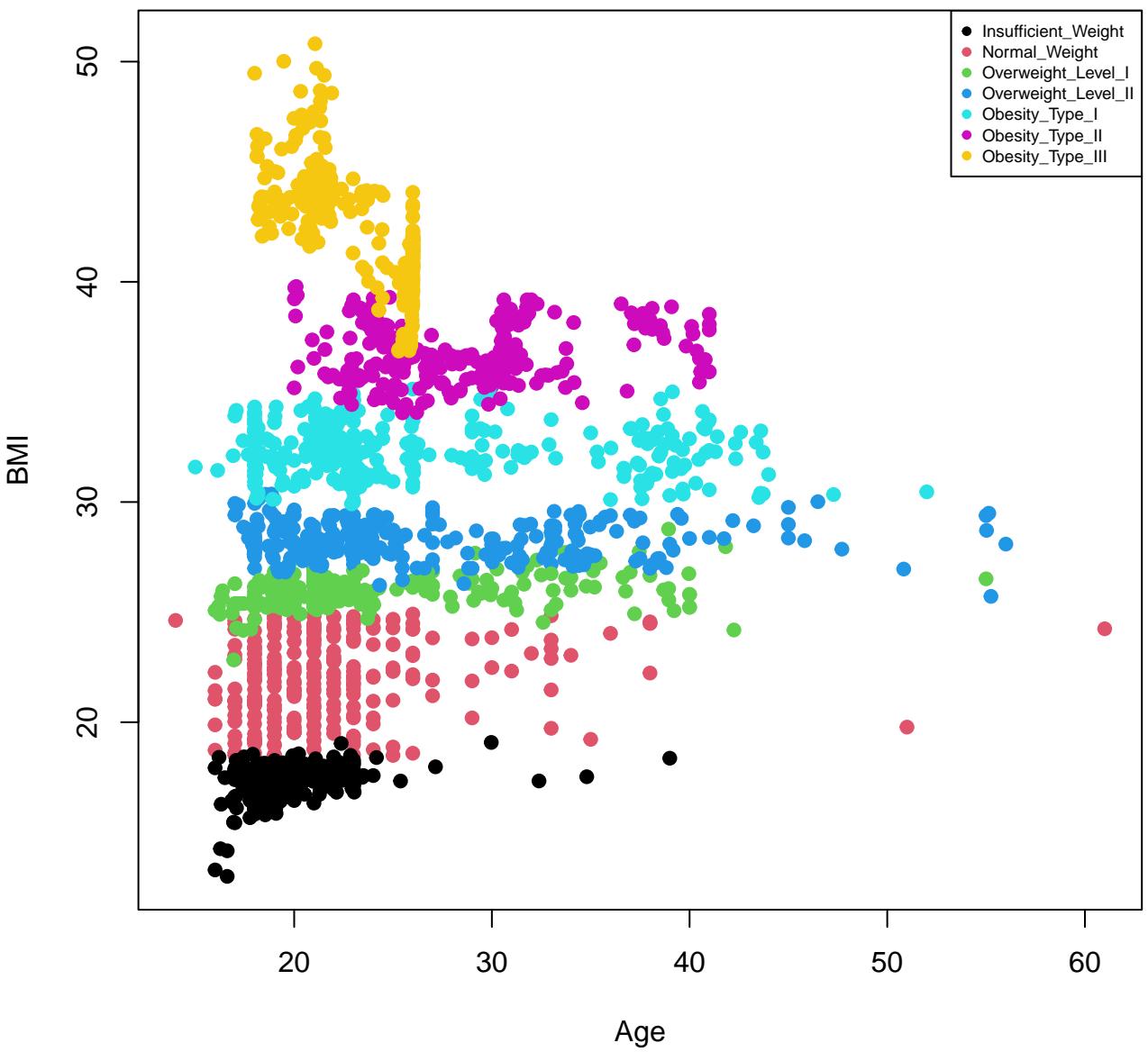
## Correlation Matrix – Numeric Features



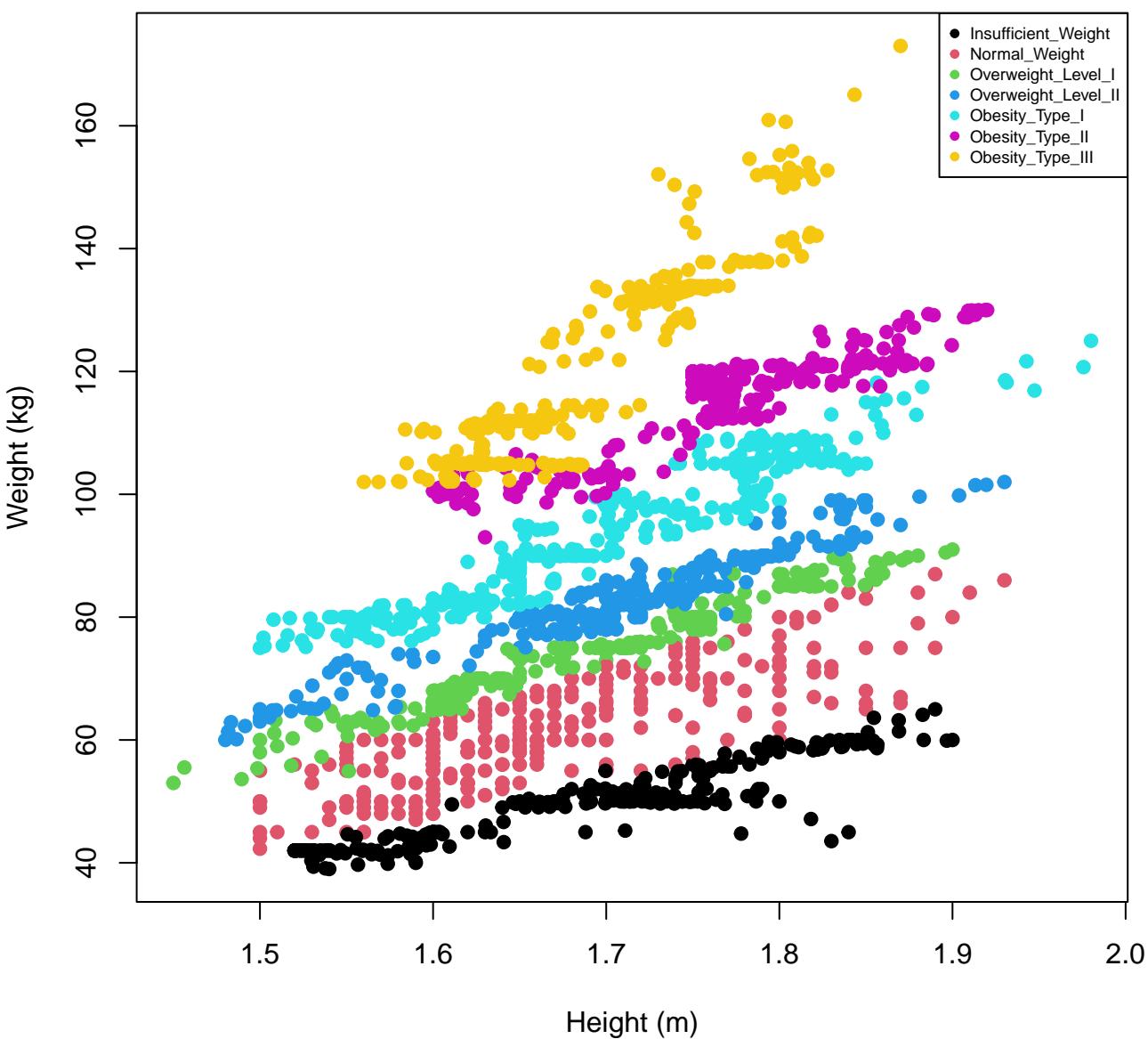
## Weight vs BMI by Obesity Level



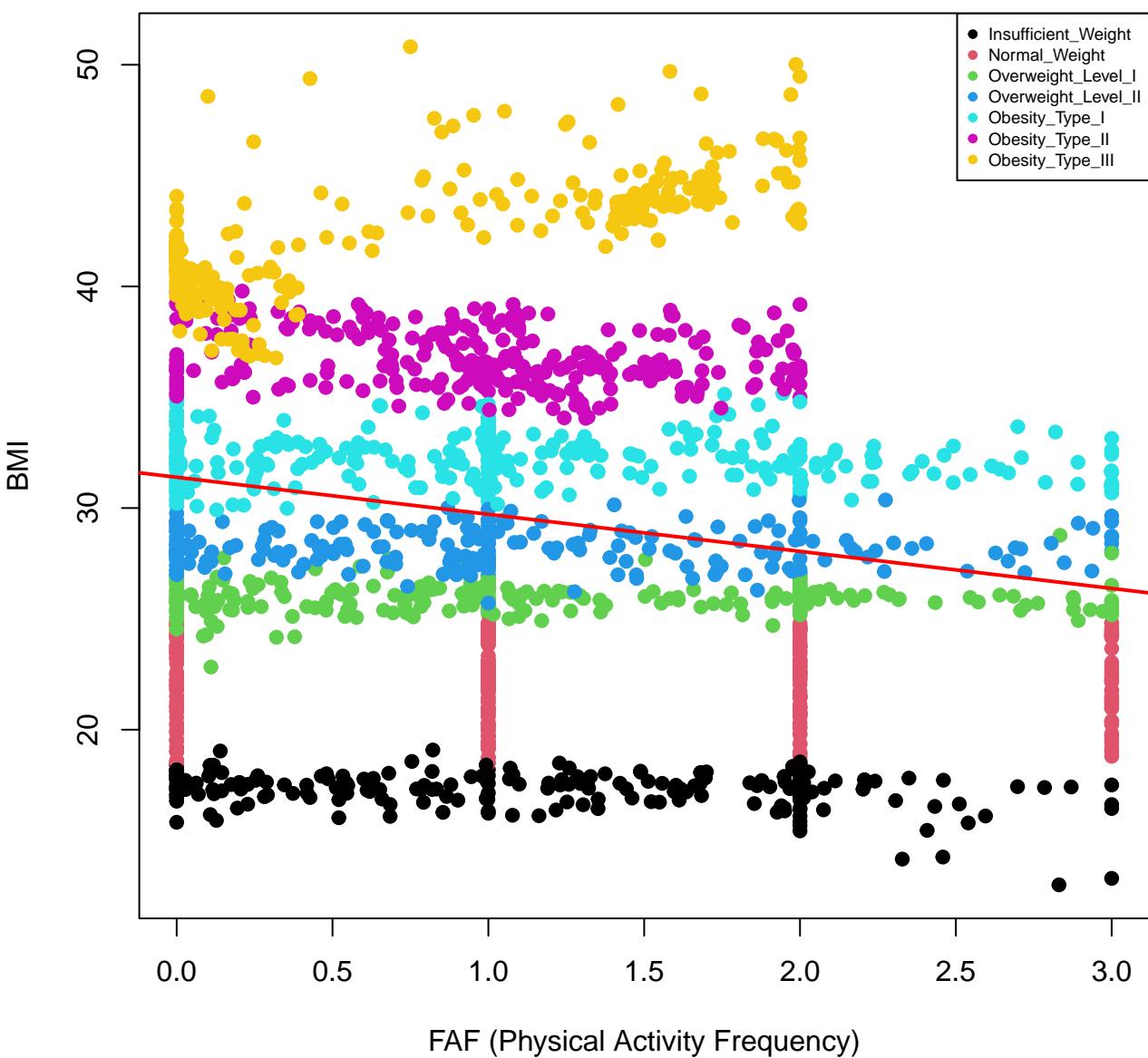
## Age vs BMI by Obesity Level



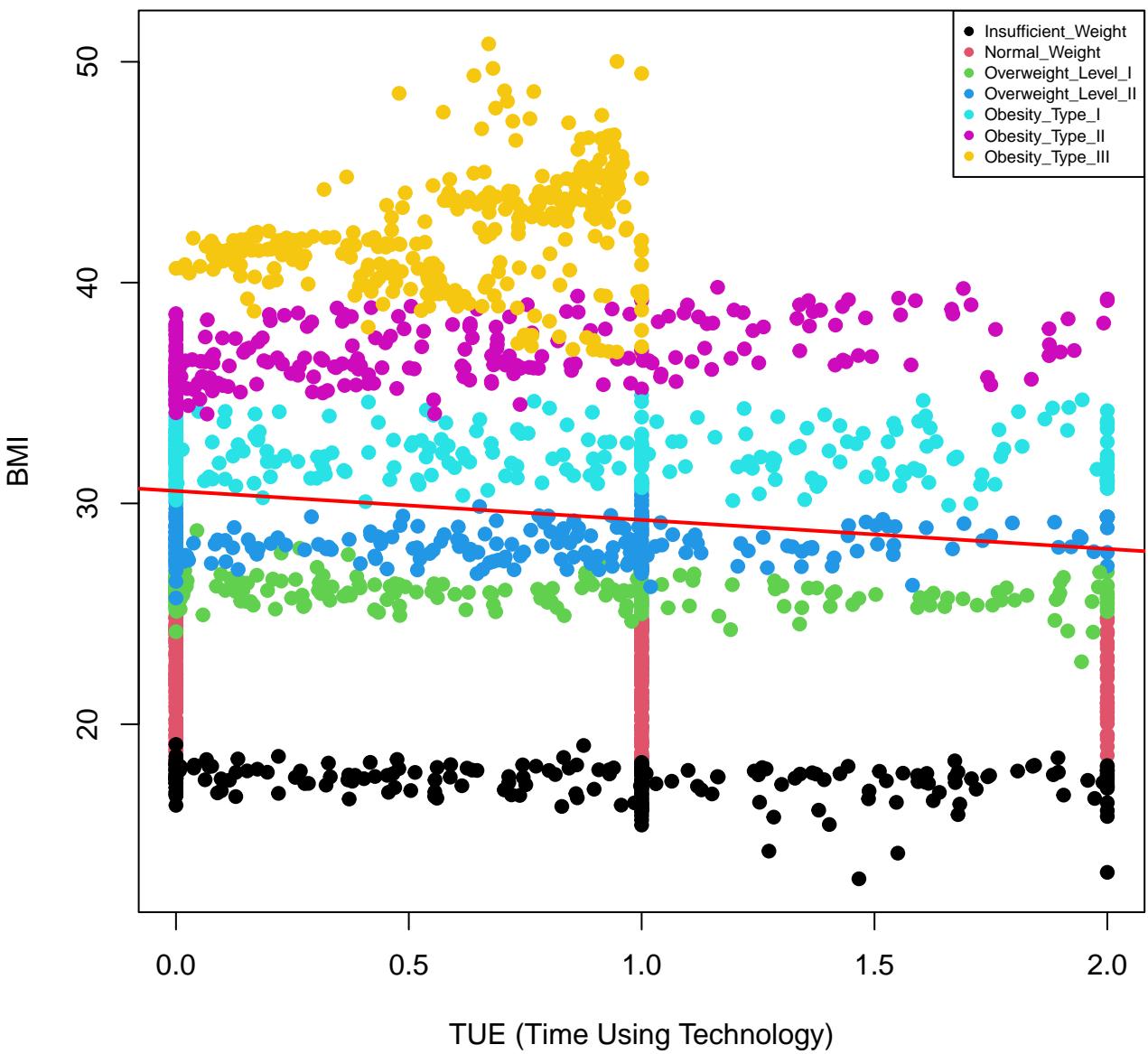
## Weight vs Height by Obesity Level



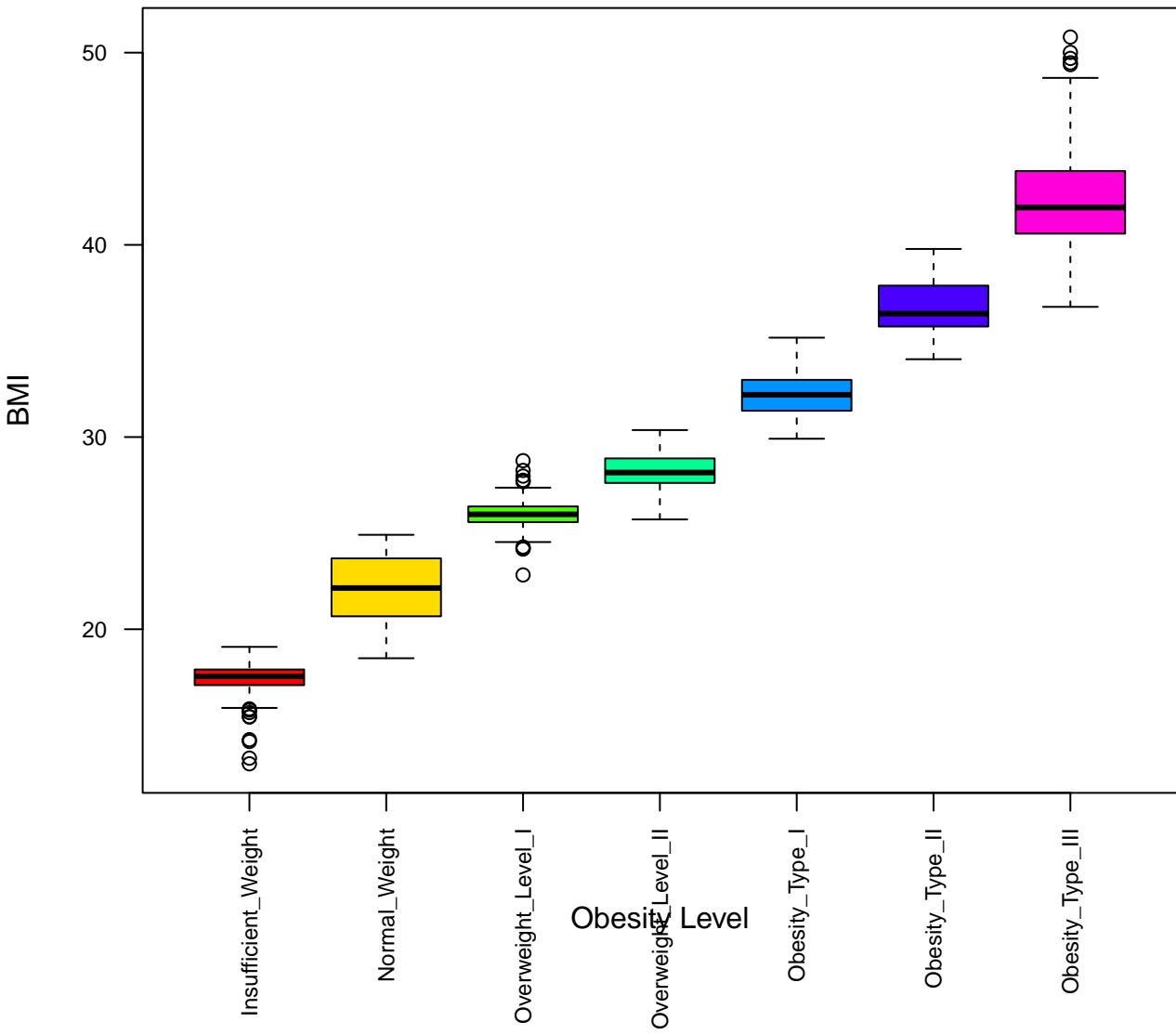
# Physical Activity Frequency vs BMI (Negative Correlation)

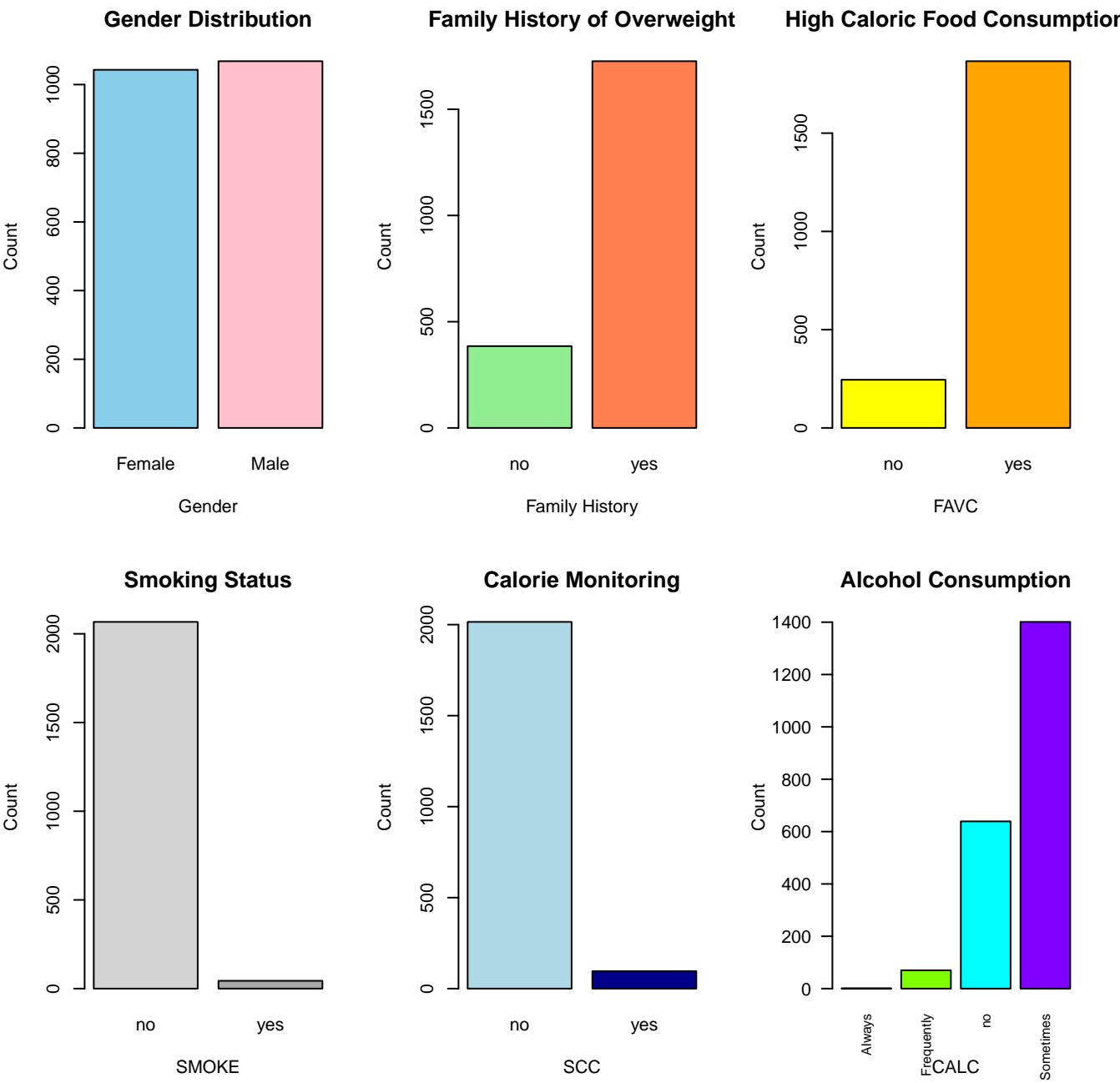


## Technology Use Time vs BMI (Negative Correlation)

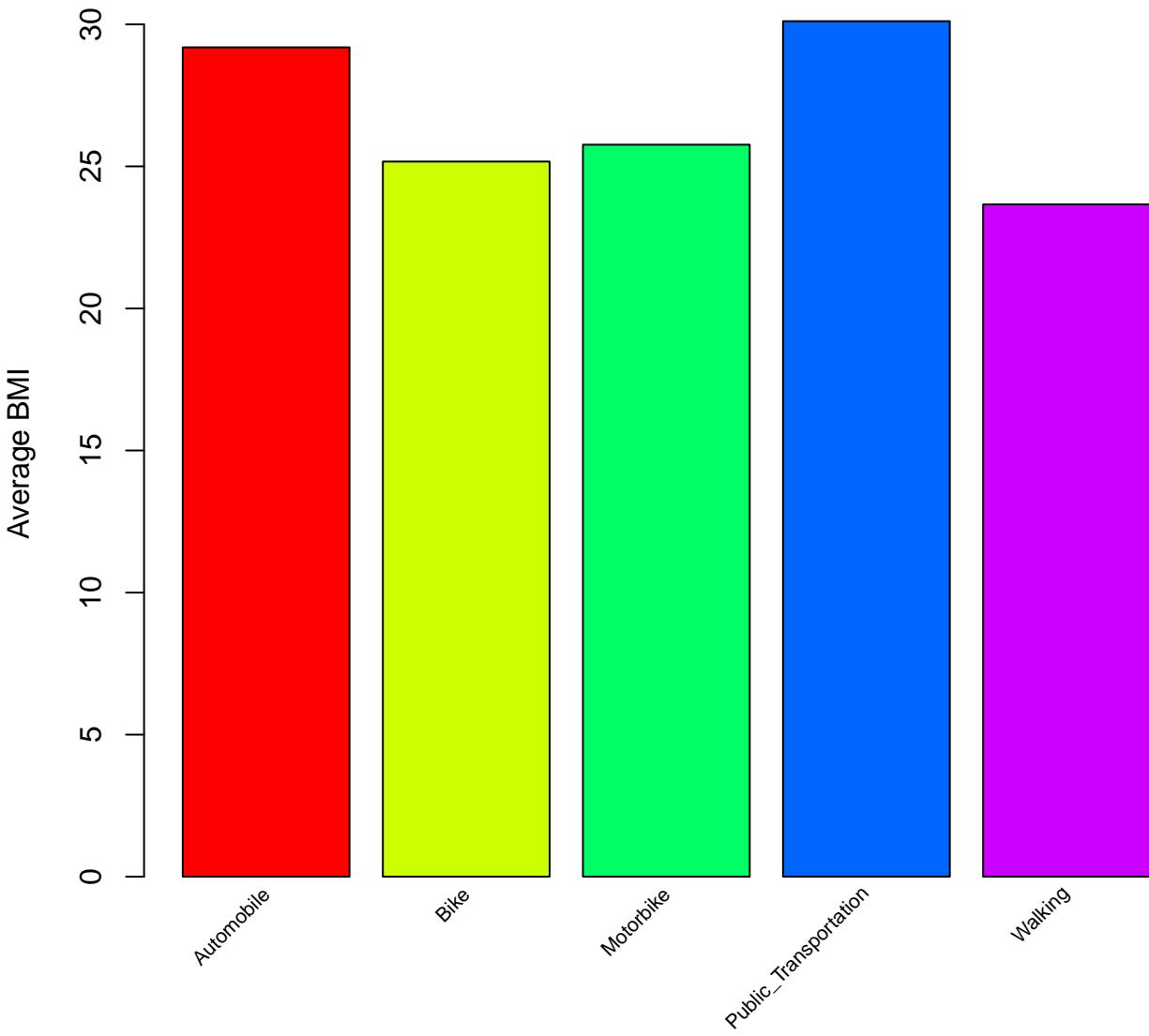


# BMI Distribution by Obesity Level

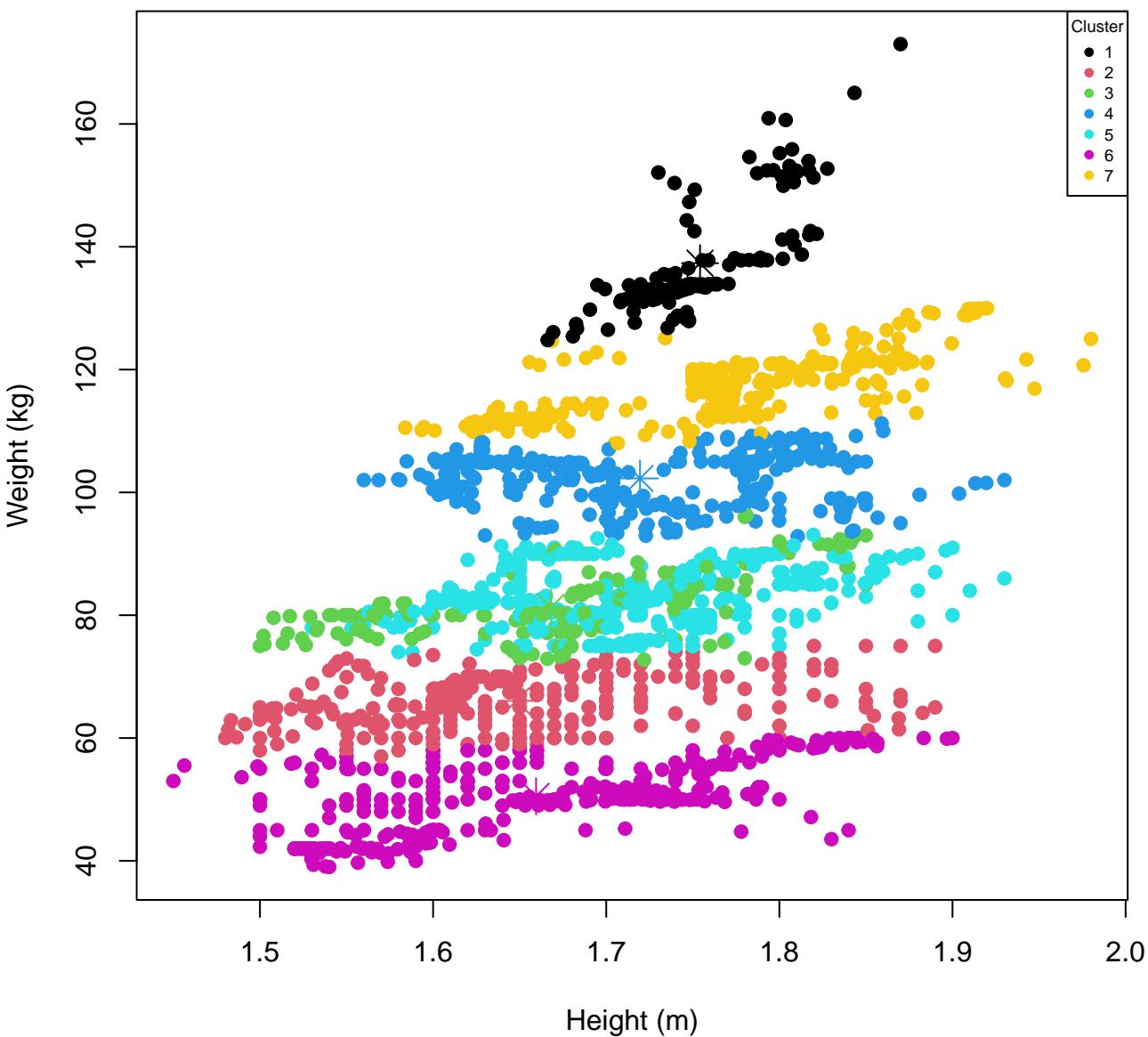




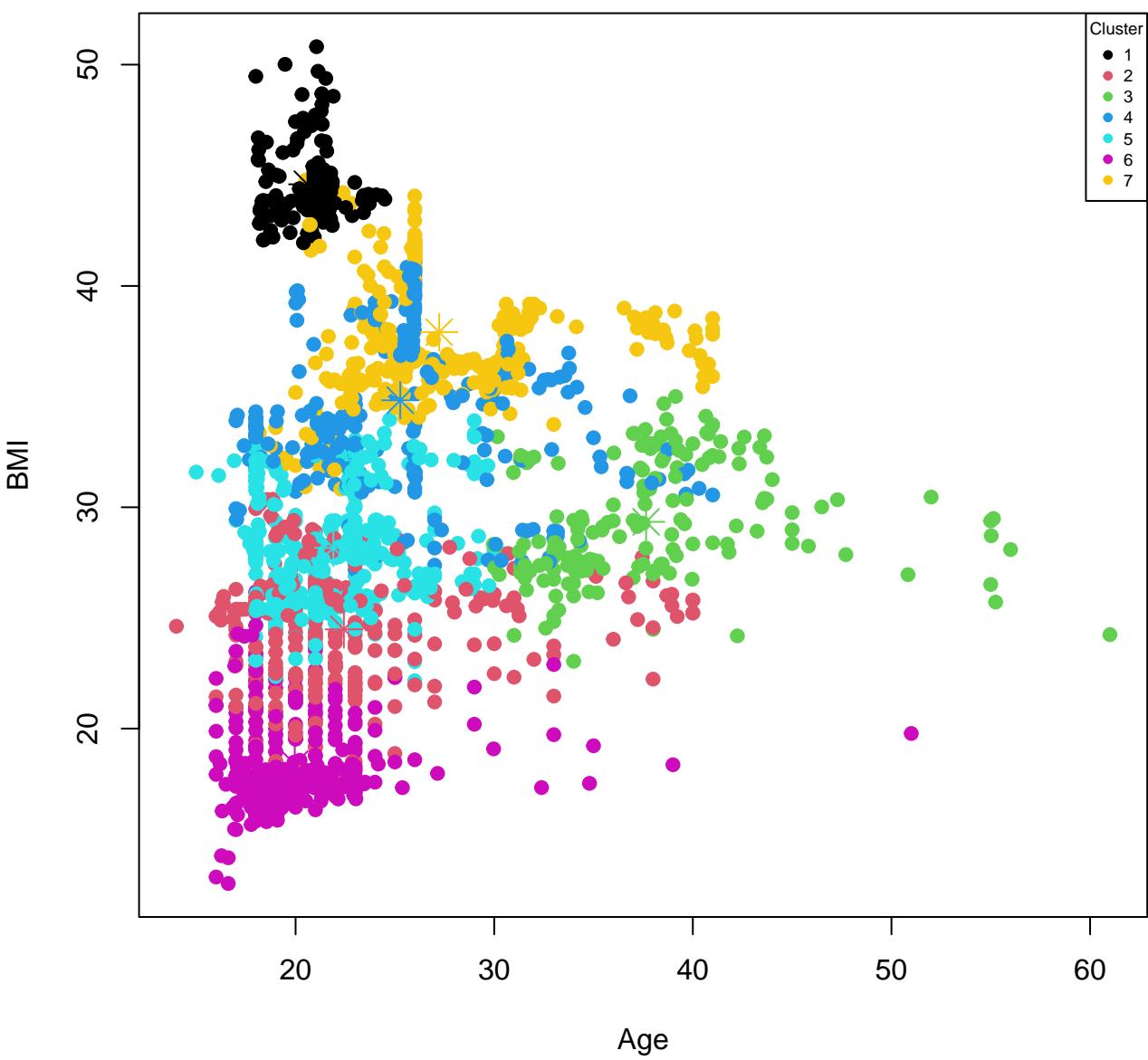
## Average BMI by Transportation Method



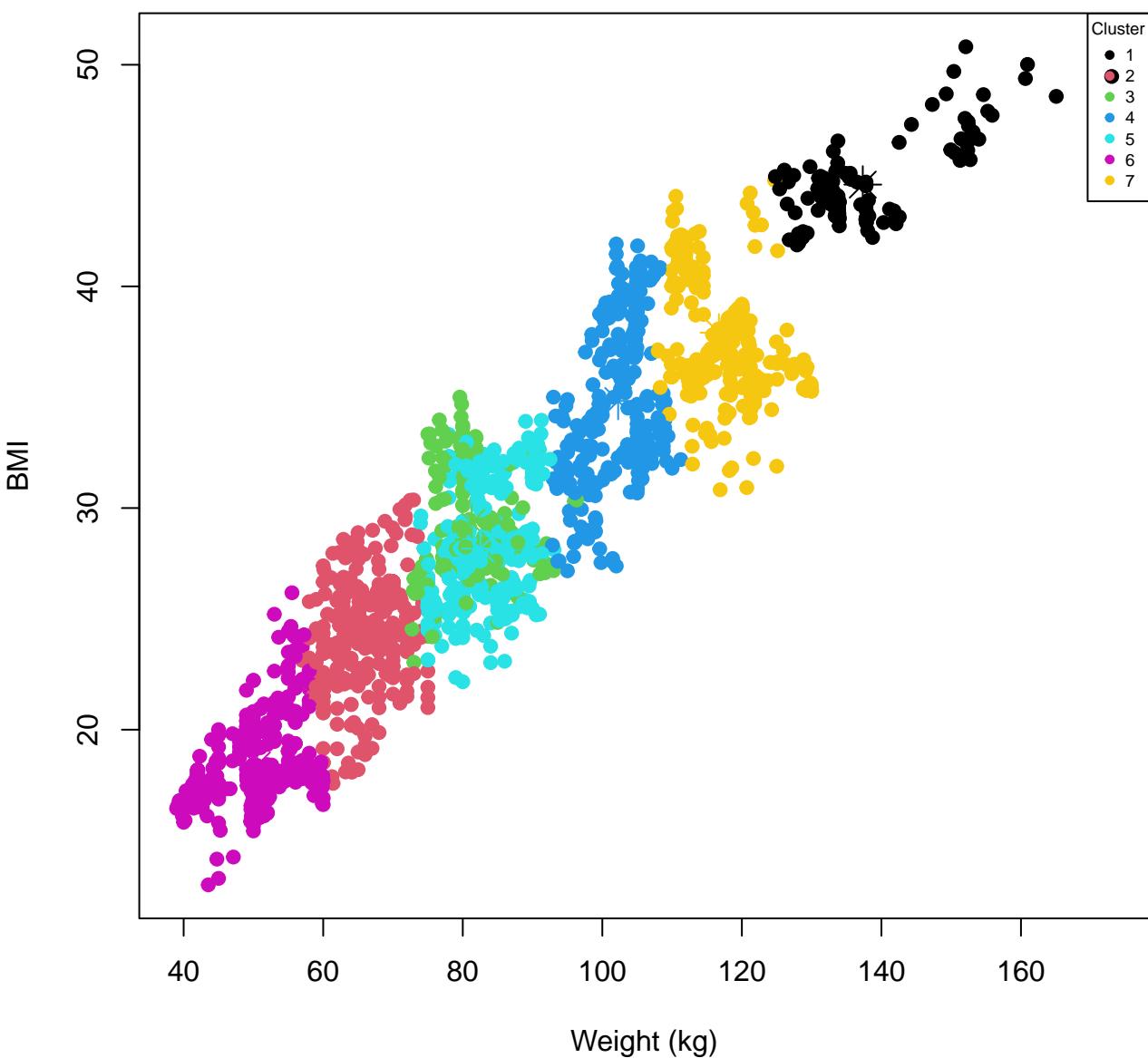
## K-means Clusters (Height vs Weight)



## K-means Clusters (Age vs BMI)



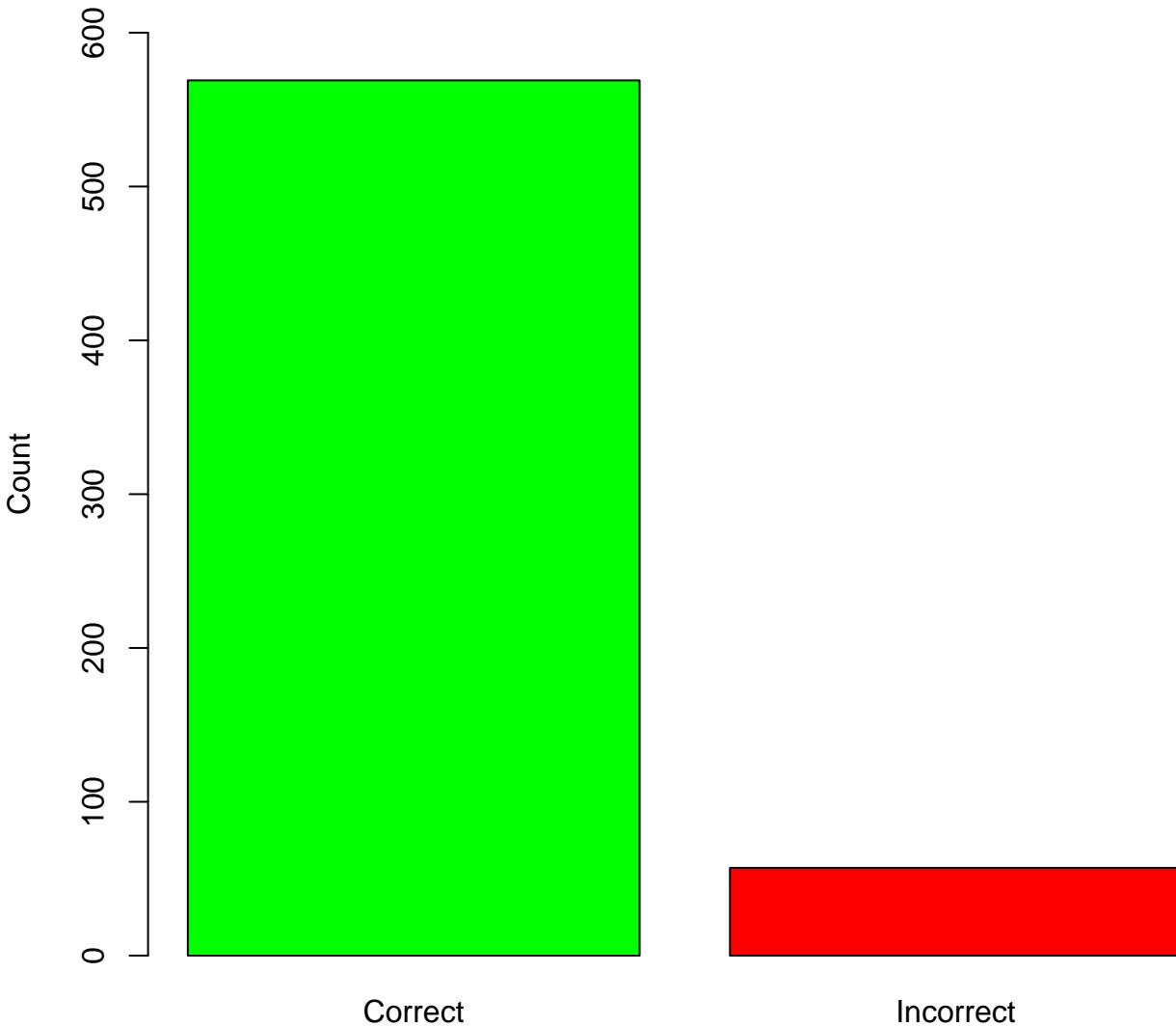
## K-means Clusters (Weight vs BMI)



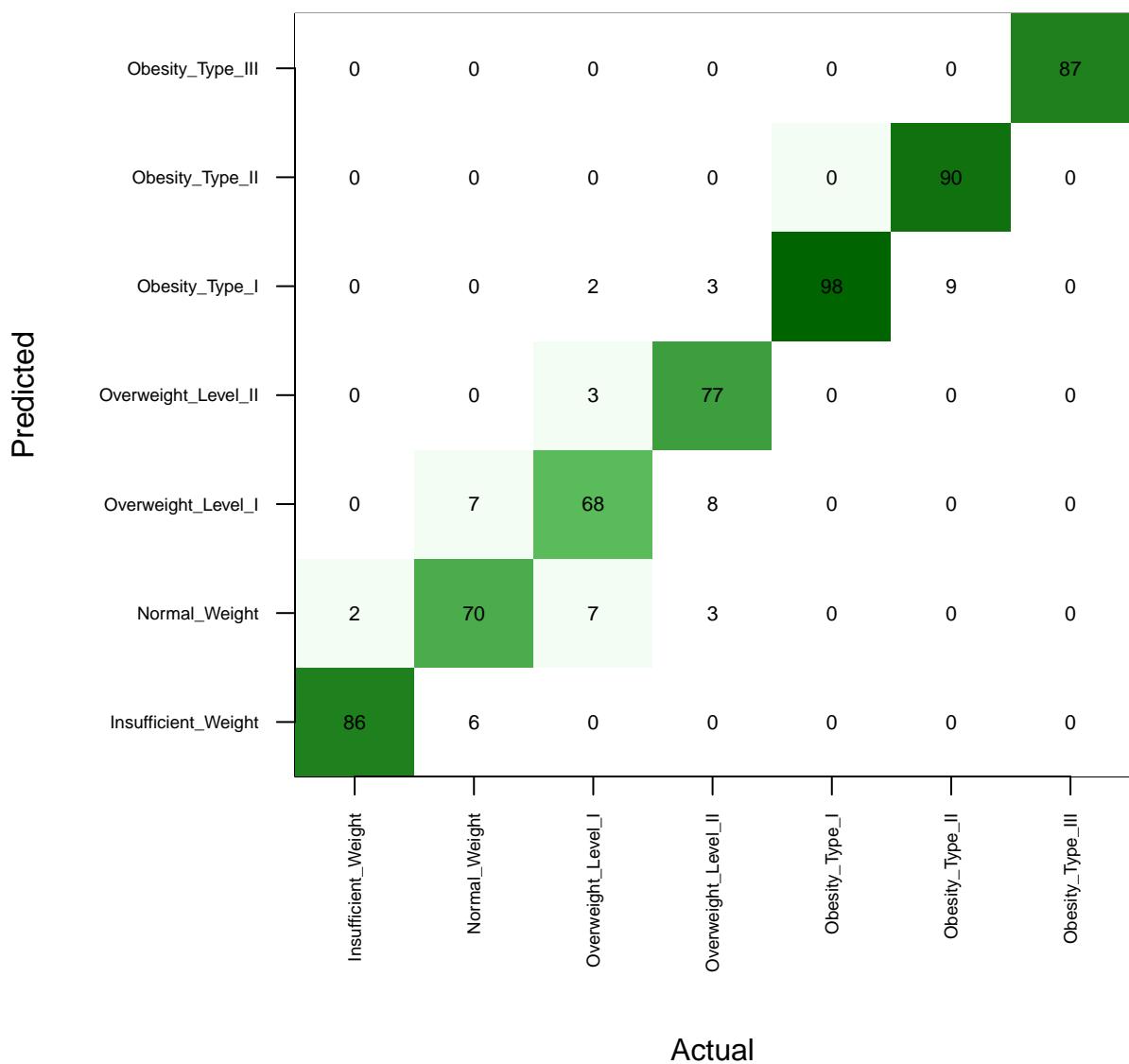
## Decision Tree Confusion Matrix

		Actual						
		Insufficient_Weight	Normal_Weight	Overweight_Level_I	Overweight_Level_II	Obesity_Type_I	Obesity_Type_II	Obesity_Type_III
Predicted	Insufficient_Weight	89	3	0	0	0	0	87
	Normal_Weight	4	66	11	1	0	0	0
Overweight_Level_I	0	8	74	1	0	0	0	0
Overweight_Level_II	0	0	5	68	6	1	0	0
Obesity_Type_I	0	0	0	4	100	8	0	0
Obesity_Type_II	0	0	0	0	5	85	0	0
Obesity_Type_III	0	0	0	0	0	0	87	0

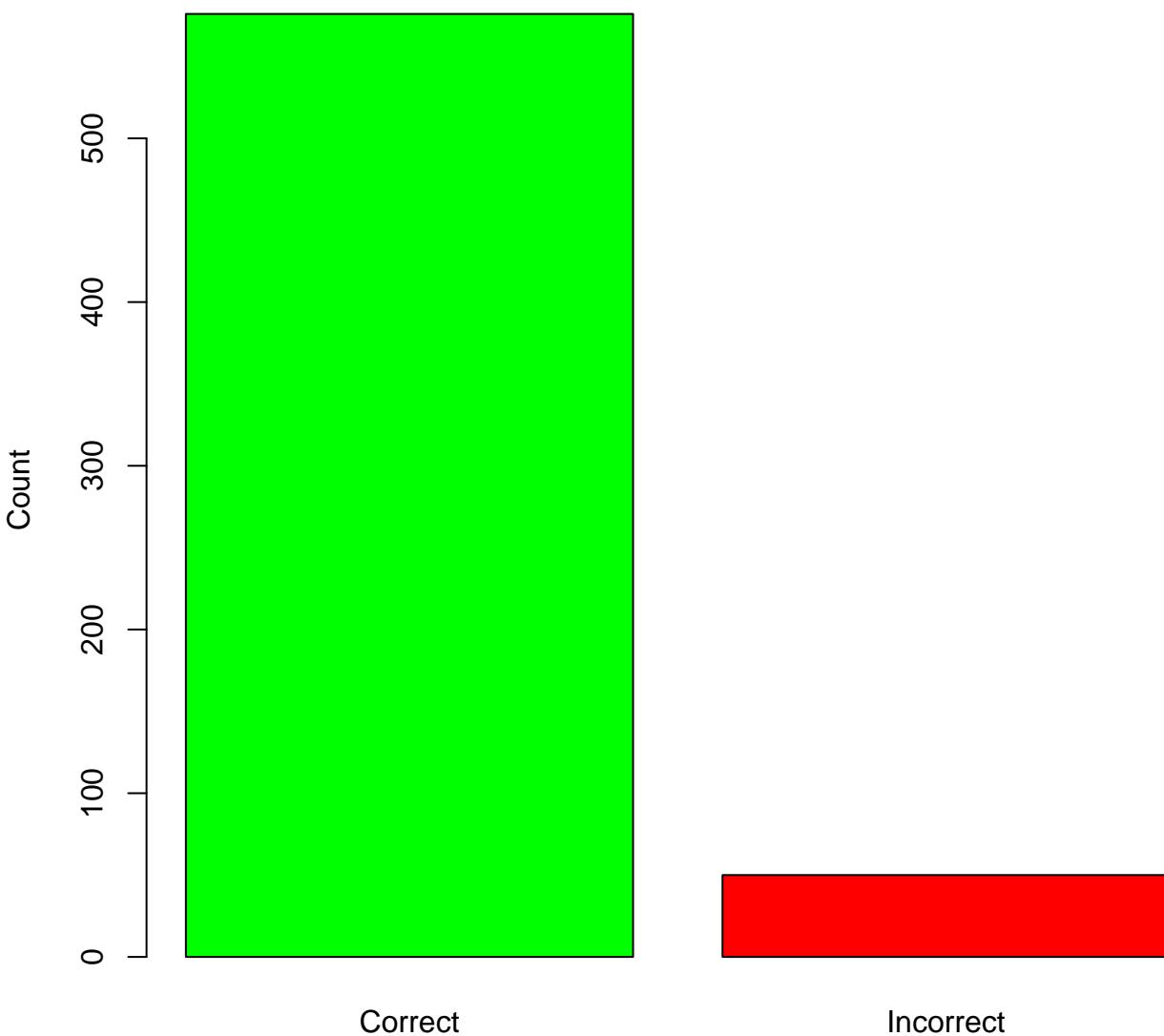
## Decision Tree Predictions



## SVM Confusion Matrix



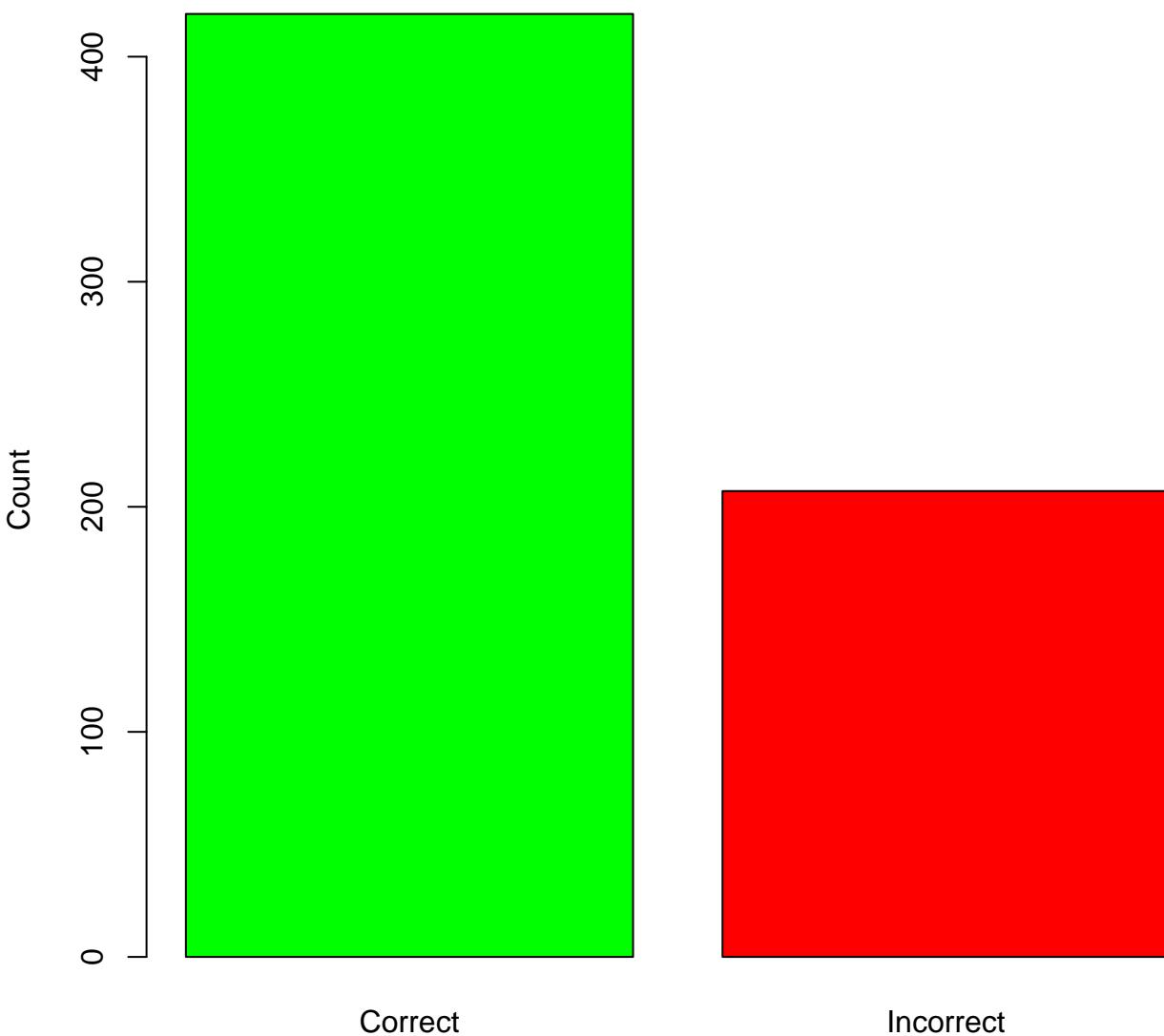
## SVM Predictions



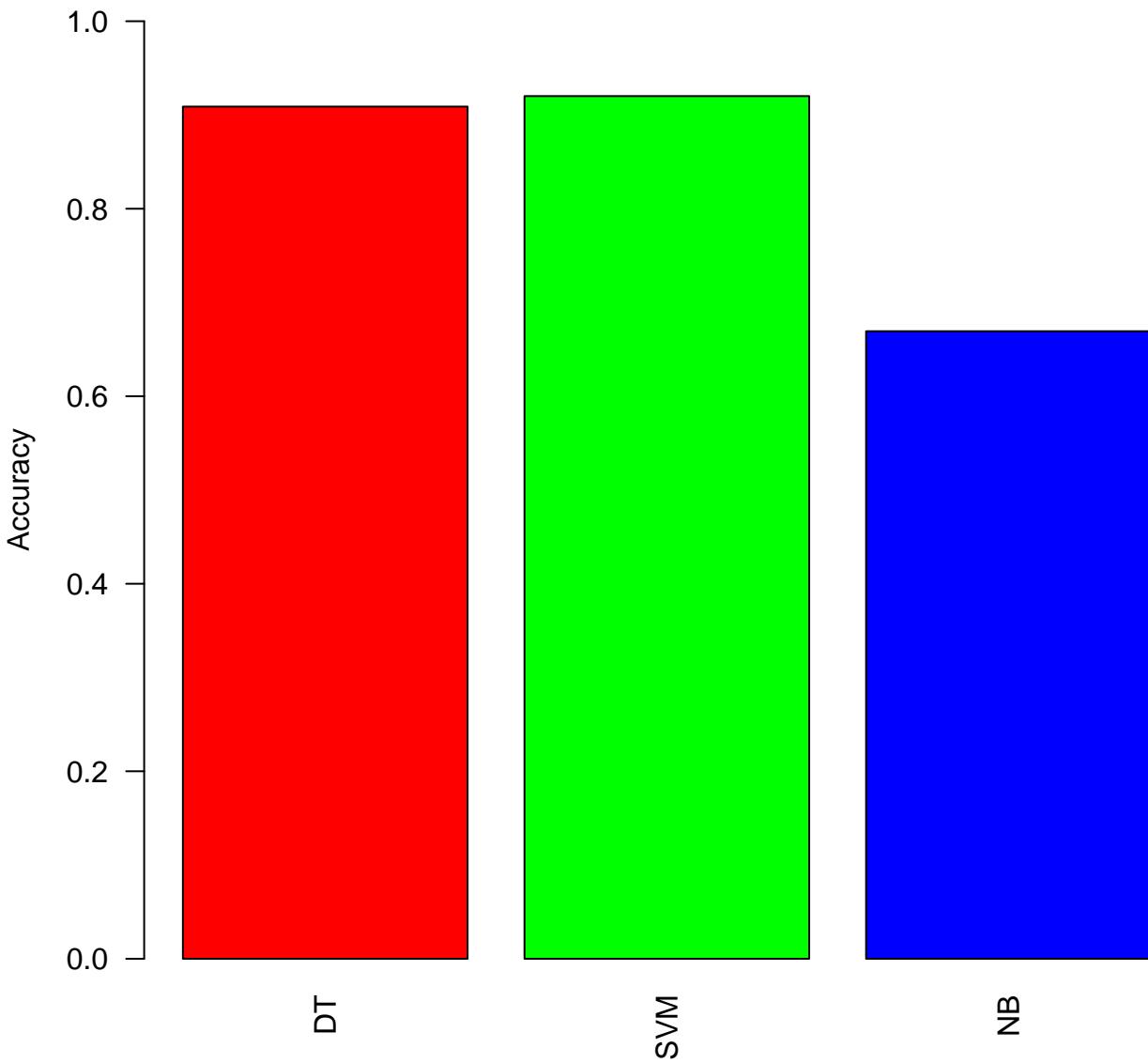
## Naive Bayes Confusion Matrix

	Actual						
Predicted	Insufficient_Weight	Normal_Weight	Overweight_Level_I	Overweight_Level_II	Obesity_Type_I	Obesity_Type_II	Obesity_Type_III
Insufficient_Weight	85	6	1	0	0	0	0
Normal_Weight	21	46	8	5	0	0	0
Overweight_Level_I	2	12	48	11	10	0	0
Overweight_Level_II	0	11	4	38	22	4	1
Obesity_Type_I	0	0	10	19	42	27	14
Obesity_Type_II	0	0	0	0	15	73	2
Obesity_Type_III	0	0	0	0	0	0	87

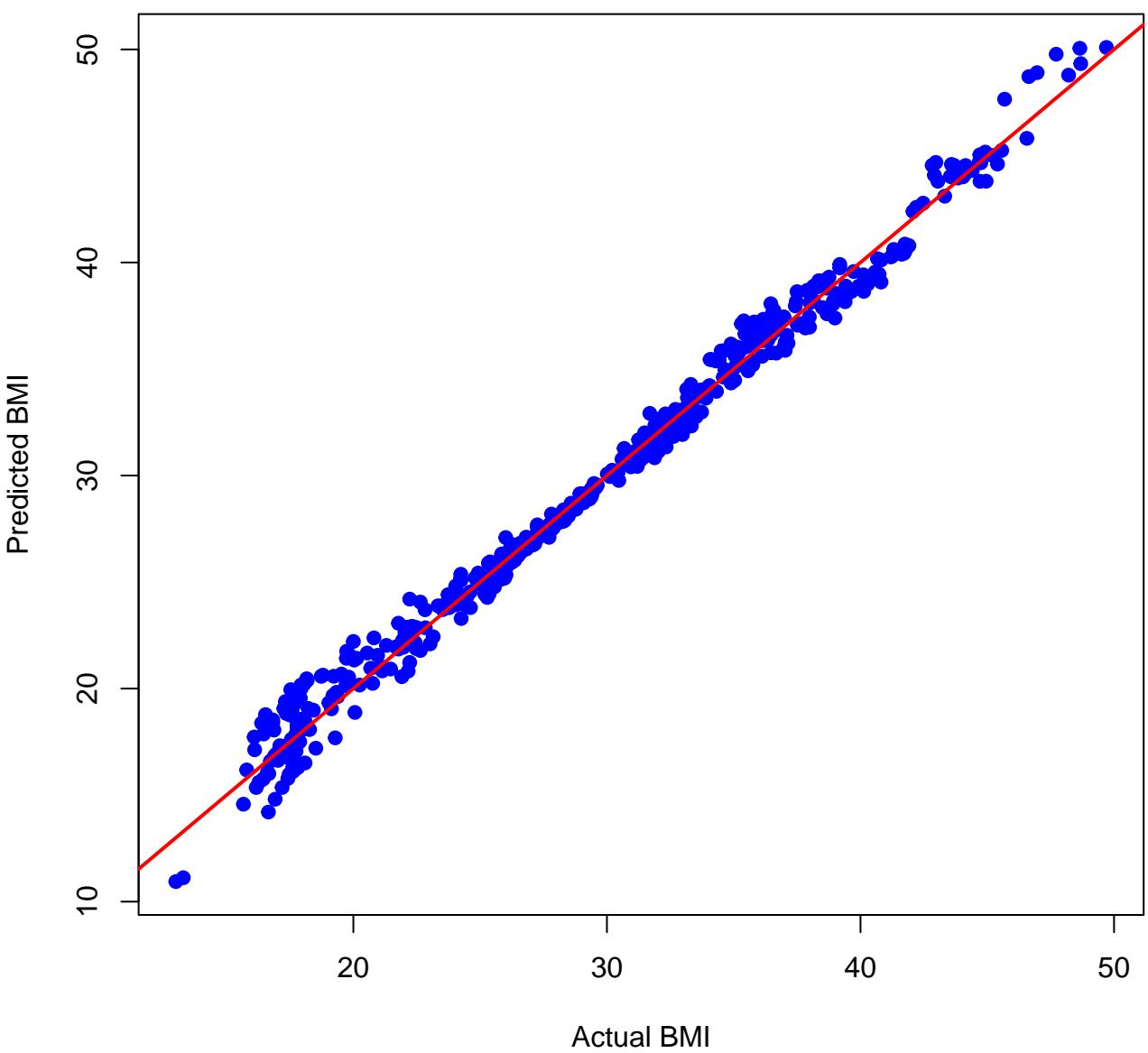
## Naive Bayes Predictions



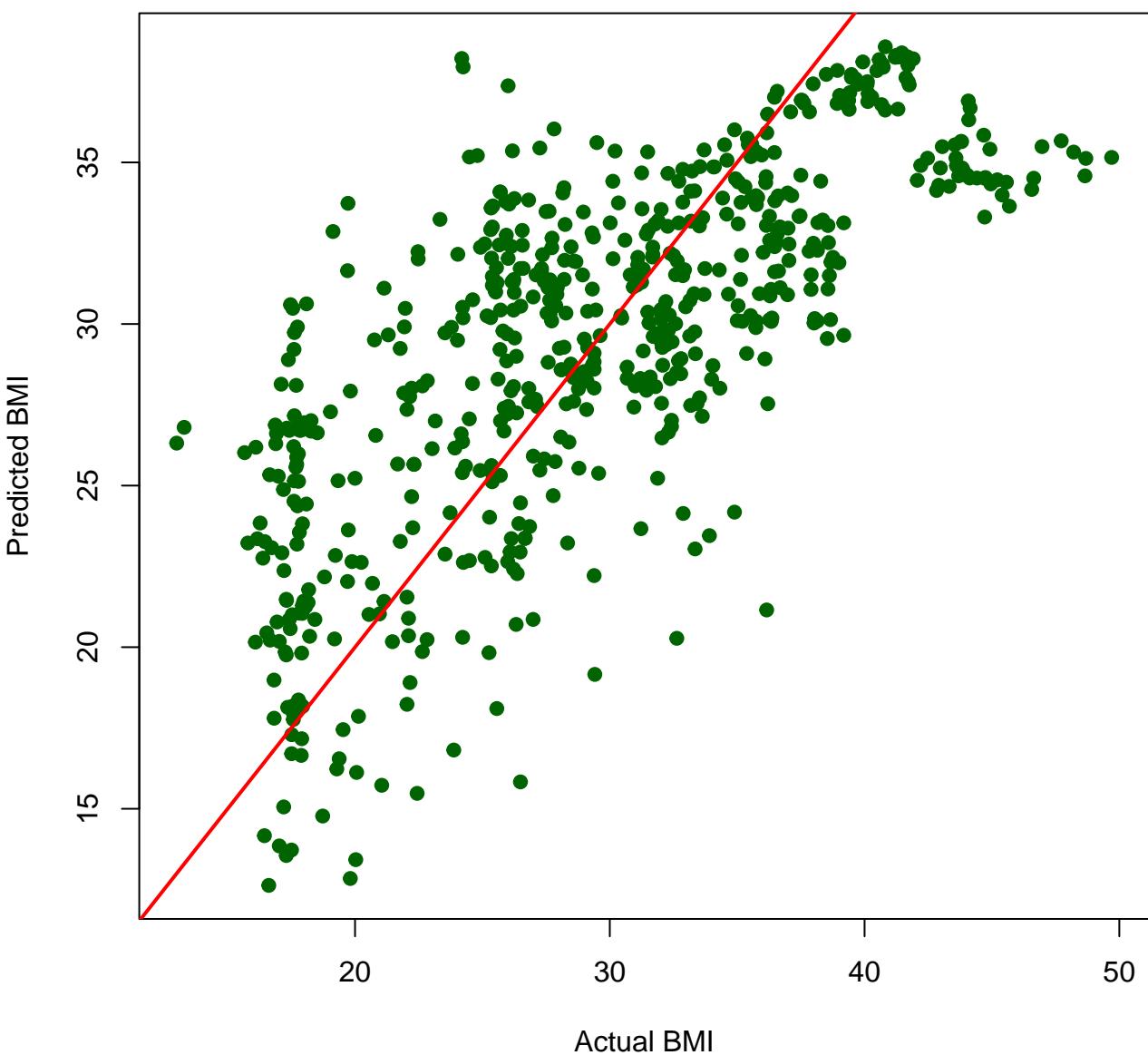
## Classification Model Accuracy Comparison



## Actual vs Predicted BMI



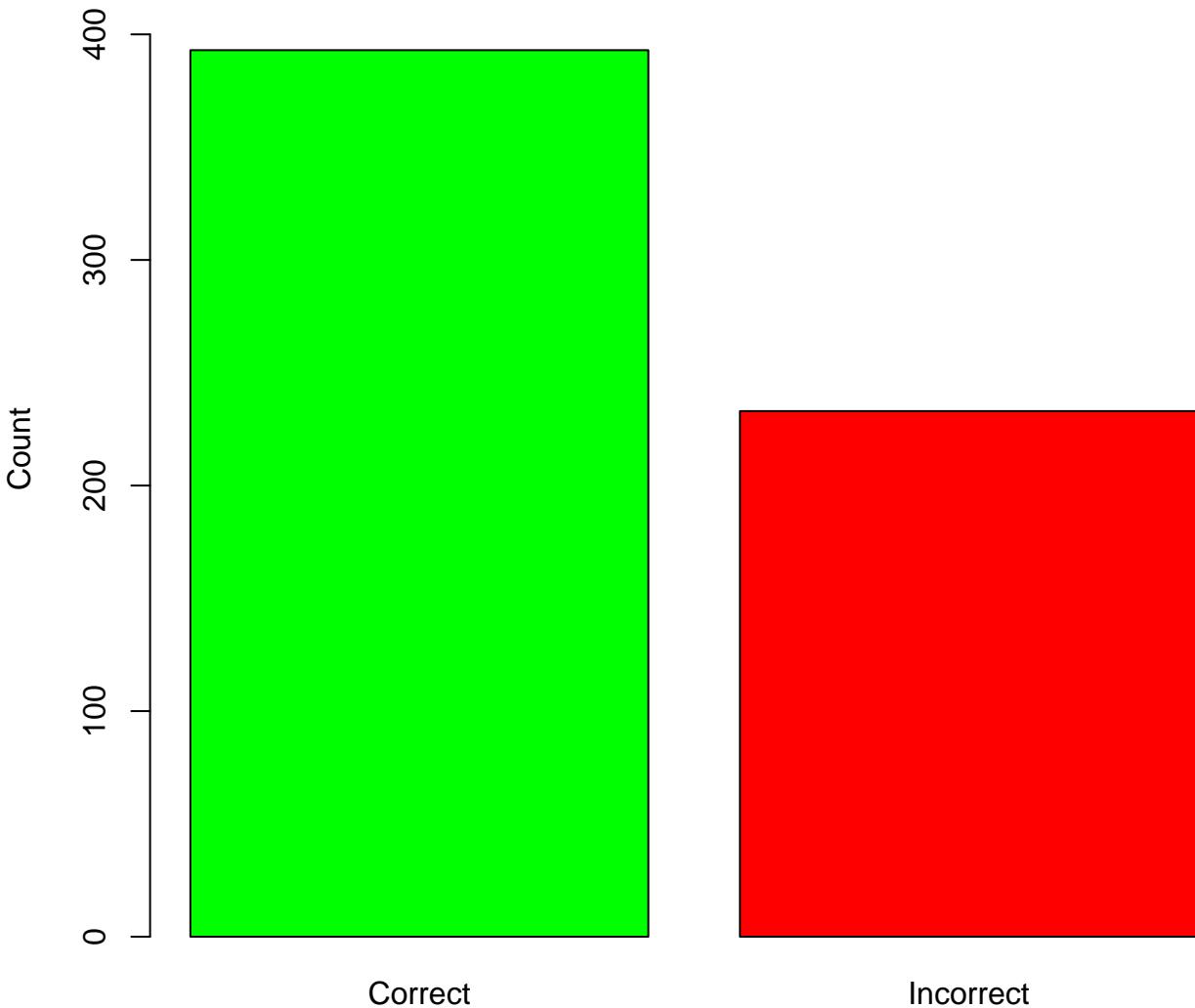
## Actual vs Predicted BMI (Lifestyle Only)



## Decision Tree Confusion Matrix (Lifestyle Only)

		Actual						
		Insufficient_Weight	Normal_Weight	Overweight_Level_I	Overweight_Level_II	Obesity_Type_I	Obesity_Type_II	Obesity_Type_III
Predicted	Insufficient_Weight	65	15	6	4	2	0	0
	Normal_Weight	9	33	17	11	2	7	3
Overweight_Level_I	1	12	52	3	8	4	3	0
Overweight_Level_II	2	12	10	20	8	28	0	0
Obesity_Type_I	3	4	21	6	46	30	2	0
Obesity_Type_II	0	0	0	0	0	90	0	0
Obesity_Type_III	0	0	0	0	0	0	87	0

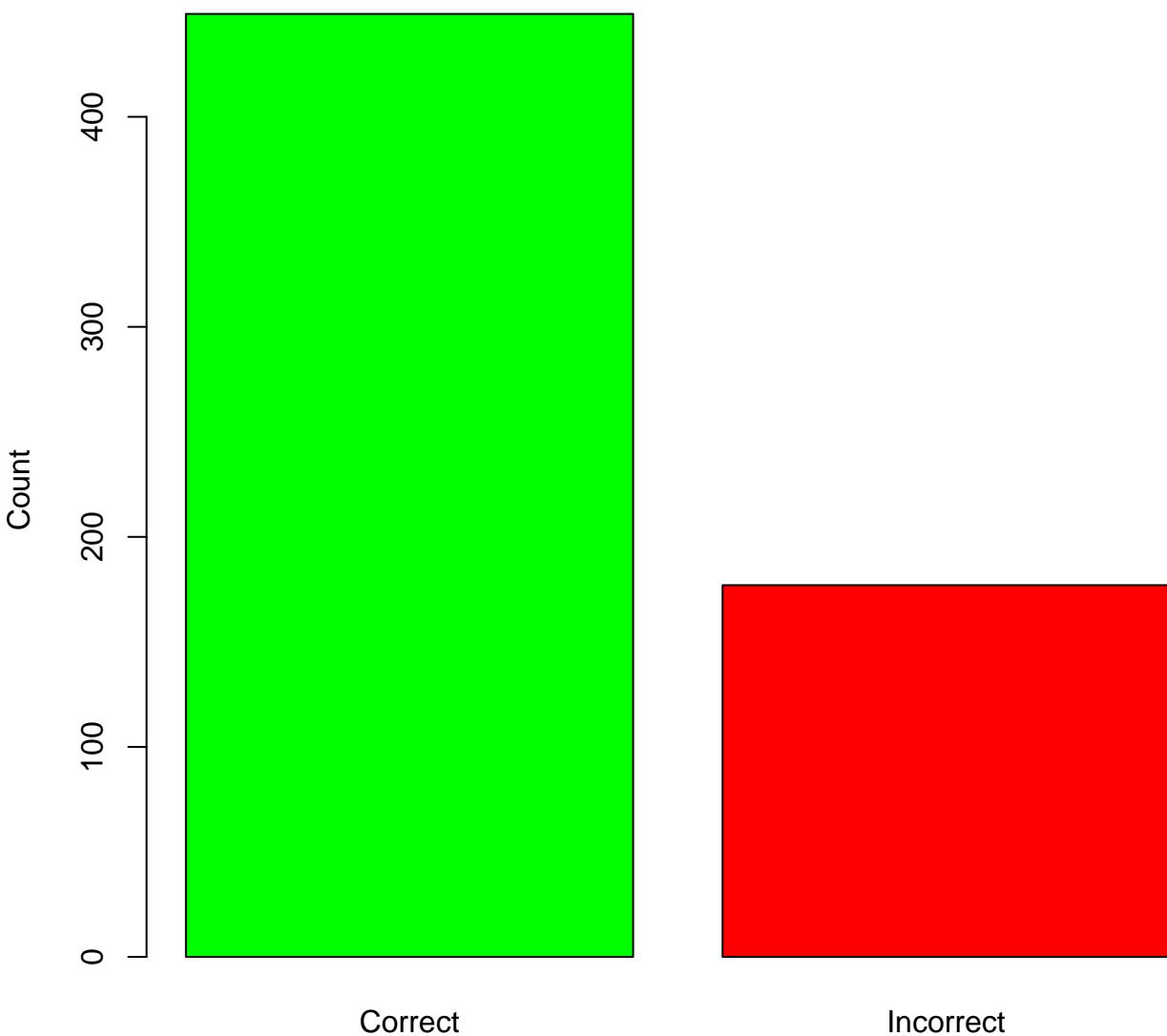
## Decision Tree Predictions (Lifestyle Only)



## SVM Confusion Matrix (Lifestyle Only)

	Actual						
Predicted	Insufficient_Weight	Normal_Weight	Overweight_Level_I	Overweight_Level_II	Obesity_Type_I	Obesity_Type_II	Obesity_Type_III
Obesity_Type_III	0	0	0	0	0	0	87
Obesity_Type_II	0	1	0	1	1	87	0
Obesity_Type_I	2	6	10	10	64	17	3
Overweight_Level_II	1	5	5	51	8	10	0
Overweight_Level_I	4	12	45	6	12	2	2
Normal_Weight	13	49	10	5	2	3	0
Insufficient_Weight	66	21	3	0	1	1	0

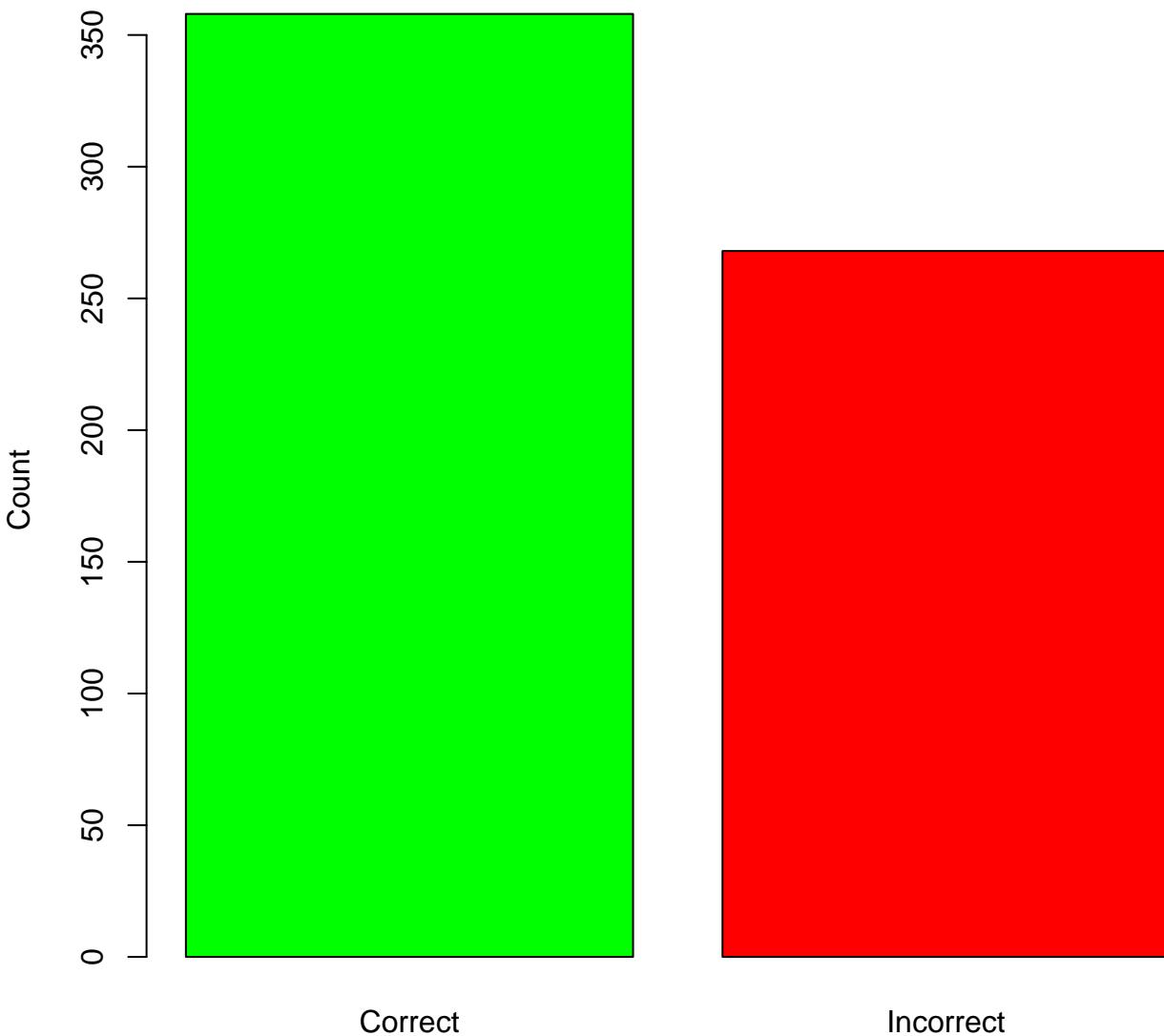
## SVM Predictions (Lifestyle Only)



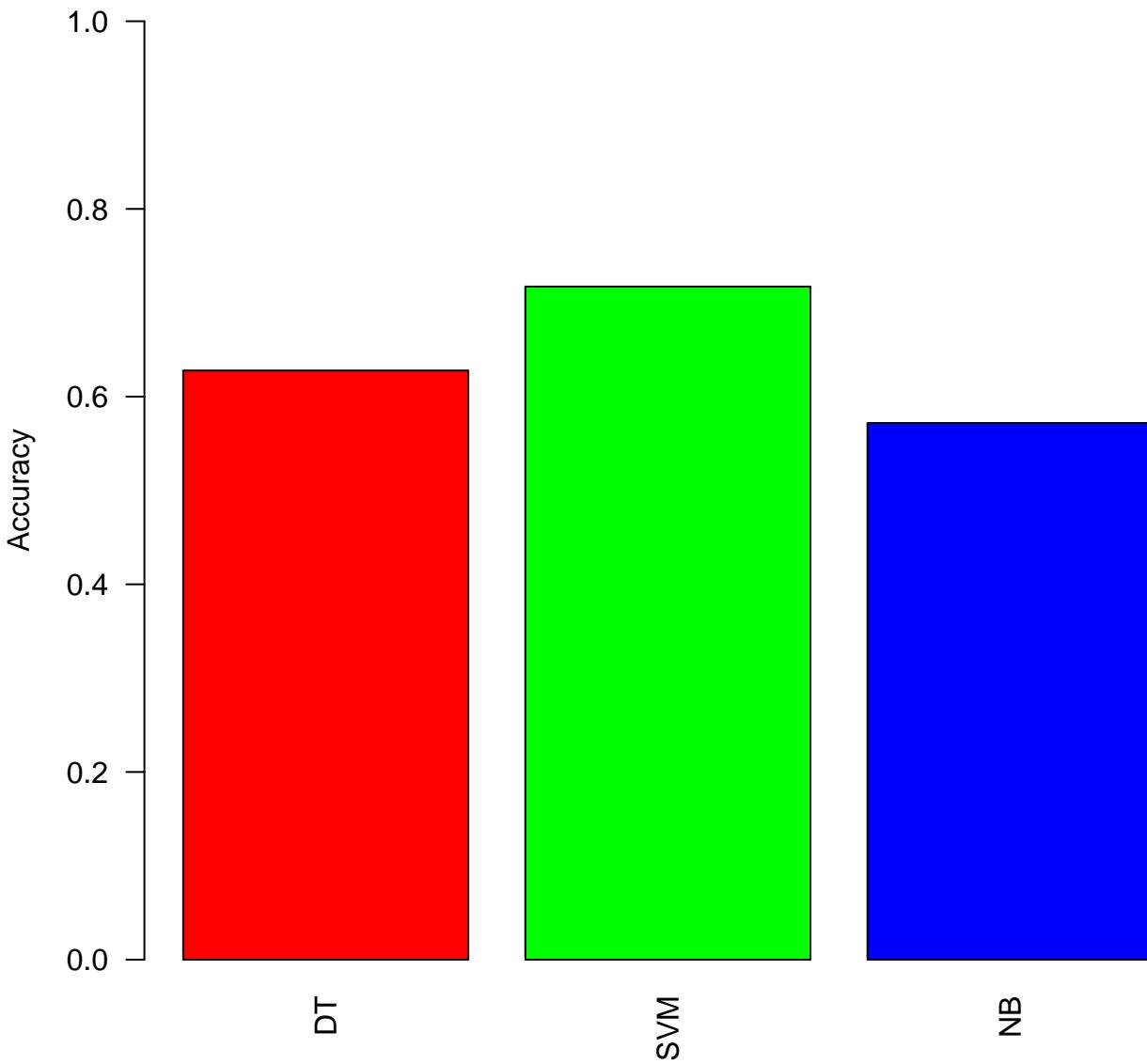
## Naive Bayes Confusion Matrix (Lifestyle Only)

	Actual						
Predicted	Insufficient_Weight	Normal_Weight	Overweight_Level_I	Overweight_Level_II	Obesity_Type_I	Obesity_Type_II	Obesity_Type_III
Obesity_Type_III	0	0	0	0	0	0	87
Obesity_Type_II	0	0	1	2	5	80	2
Obesity_Type_I	4	5	9	6	54	20	14
Overweight_Level_II	6	7	3	19	27	17	1
Overweight_Level_I	9	12	25	7	16	7	7
Normal_Weight	21	31	5	6	4	1	14
Insufficient_Weight	62	12	1	0	10	1	6

## Naive Bayes Predictions (Lifestyle Only)



## Classification Model Accuracy Comparison (Lifestyle Only)



## Model Accuracy: Full Features vs Lifestyle Only

