

First Attempt

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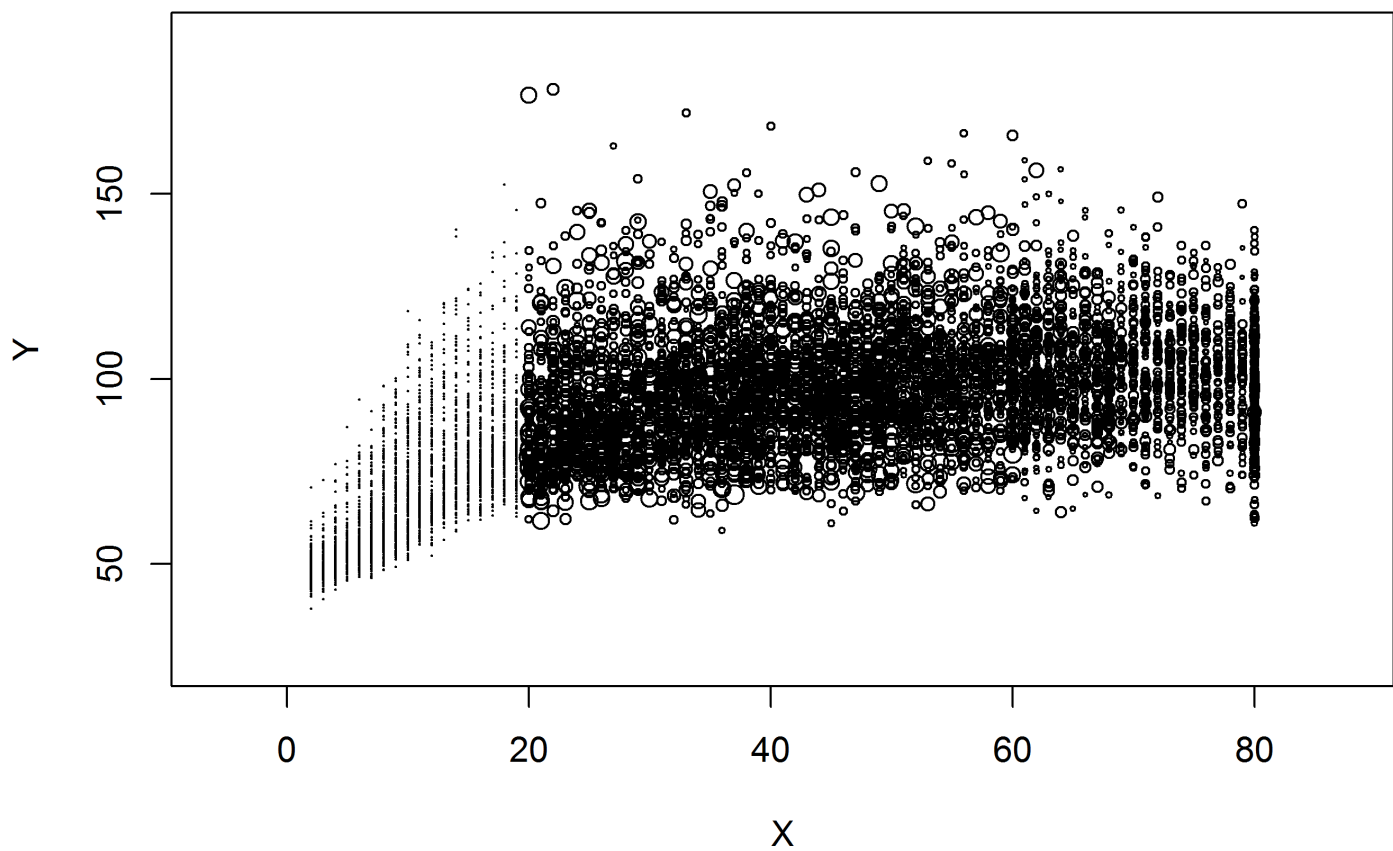
Friday, August 05, 2016

```
waistKeepVars <- c(
  "SEQN",
  "BMXWAIST" )
bodyMeasure2007 <- bodyMeasure2007[, waistKeepVars]
waistData <- merge(DEM02007, bodyMeasure2007)
waistData <- subset(waistData, RIDSTATR %in% 2)
waistData<-transform(waistData, race=c( 3 , 3 , 1 , 2 , 4 ) [RIDRETH1])
waistData$weightedTotal <- 1
# recode the RIDRETH1 variable as:
  # mexican american and other hispanic -> 3
  # non-hispanic white -> 1
  # non-hispanic black -> 2
  # other race including multi-racial -> 4

waistData<-transform(waistData, agecat=cut(RIDAGEYR,c(0,19,39,59, Inf)))
designC <- svydesign(id=~SDMVPSU,
strata=~SDMVSTRA,nest=TRUE,weights=~WTMEC2YR,data=waistData)
racegender3<-as.data.frame(svytable(~race+RIAGENDR,designC))
racegenderage3<-expand.grid(race=1:4,RIAGENDR=1:2,agecat=levels(waistData$agecat))
racegenderage3$Freq<- as.vector(outer(racegender3$Freq, popage/sum(popage)))
somedata5<-subset(waistData, !is.na(BMXWAIST) )
design5 <- svydesign(id=~SDMVPSU,
strata=~SDMVSTRA,nest=TRUE,weights=~WTMEC2YR,data=somedata5)
#AVERAGE WAIST CIRCUMFERENCE BY RACE AND GENDER
svyby(~BMXWAIST,~race+RIAGENDR,design=subset(postStratify(design5,~race+RIAGENDR+agecat,racegenderage3),RIDA
GEYR>=20),svymean,na.rm=TRUE)
```

##	race	RIAGENDR	BMXWAIST	se
## 1.1	1	1	101.79962	0.4975653
## 2.1	2	1	98.08629	0.6994934
## 3.1	3	1	100.66385	0.8588086
## 4.1	4	1	92.85033	1.4619712
## 1.2	1	2	94.33647	0.9016983
## 2.2	2	2	100.27014	0.9861477
## 3.2	3	2	96.29276	0.7047820
## 4.2	4	2	88.77544	1.6984473

```
svyplot(BMXWAIST~RIDAGEYR, design = subset(postStratify(design5,~race+RIAGENDR+agecat,racegenderage3),RIDA
GEYR>=20) , style = "bubble")
```



```
#MERGE data sets
```

```
NHANES2007DATA<-merge(DEMO2007,chol2007 , All = TRUE)
NHANES2007DATA<-merge(NHANES2007DATA,Diet2007, All = TRUE)
NHANES2007DATA<-merge(NHANES2007DATA,cons2007, All = TRUE)
NHANES2007DATA<-merge(NHANES2007DATA,OCP_E2007, All = TRUE)
NHANES2007DATA<-merge(NHANES2007DATA,health2007, All = TRUE)
```

```
NHANES2009DATA<-merge(DEMO2009,chol2009, All = TRUE)
NHANES2009DATA<-merge(NHANES2009DATA,Diet2009, All = TRUE)
NHANES2009DATA<-merge(NHANES2009DATA,cons2009, All = TRUE)
NHANES2009DATA<-merge(NHANES2009DATA,OCP_F2009, All = TRUE)
NHANES2009DATA<-merge(NHANES2009DATA,health2009, All = TRUE)
```

```
mergedSET <- rbind(NHANES2009DATA, NHANES2007DATA)
```

```
mergedSET <-subset(mergedSET, RIDSTATR %in% 2 | RIDSTATR %in% 1)
mergedSET<-transform(mergedSET, HI_CHOL = ifelse(LBXTC>=240,1,0))
mergedSET<-transform(mergedSET, race=c( 3 , 3 , 1 , 2 , 4 )[RIDRETH1])
mergedSET$weightedTotal <- 1
mergedSET$WTMEC4YR <- mergedSET$WTMEC2YR / 2
mergedSET$WTINT4YR <- mergedSET$WTINT2YR / 2
# recode the RIDRETH1 variable as:
  # mexican american and other hispanic -> 3
  # non-hispanic white -> 1
  # non-hispanic black -> 2
  # other race including multi-racial -> 4
mergedSET<-transform(mergedSET, agecat=cut(RIDAGEYR,c(0,19,39,59, Inf)))
```

```
mergedSET$CBQ020[mergedSET$CBQ020== 77] <- NA #RECODE FOR DATA THAT CANT BE ANALYZED
mergedSET$CBQ020[mergedSET$CBQ020== 99] <- NA
mergedSET$CBQ030[mergedSET$CBQ030== 77] <- NA
mergedSET$CBQ030[mergedSET$CBQ030== 99] <- NA
mergedSET$CBQ040[mergedSET$CBQ040== 77] <- NA
mergedSET$CBQ040[mergedSET$CBQ040== 99] <- NA
mergedSET$CBQ060[mergedSET$CBQ060== 77] <- NA
mergedSET$CBQ060[mergedSET$CBQ060== 99] <- NA
mergedSET$DBQ700[mergedSET$DBQ700== 7] <- NA
mergedSET$DBQ700[mergedSET$DBQ700== 9] <- NA
mergedSET$DBD895[mergedSET$DBD895== 5555] <- NA
mergedSET$DBD895[mergedSET$DBD895== 9999] <- NA
mergedSET$HSD010[mergedSET$HSD010== 9] <- NA
mergedSET$CBD160[mergedSET$CBD160 == 777] <- NA
mergedSET$CBD160[mergedSET$CBD160 == 999] <- NA
```

```
NHANES2009DATA<-subset(NHANES2009DATA, RIDSTATR %in% 2)
NHANES2009DATA<-transform(NHANES2009DATA, HI_CHOL = ifelse(LBXTC>=240,1,0))
```

```
NHANES2009DATA<-transform(NHANES2009DATA, race=c( 3 , 3 , 1 , 2 , 4 )[RIDRETH1])
NHANES2009DATA$weightedTotal <- 1
# recode the RIDRETH1 variable as:
  # mexican american and other hispanic -> 3
  # non-hispanic white -> 1
  # non-hispanic black -> 2
  # other race including multi-racial -> 4

NHANES2009DATA<-transform(NHANES2009DATA, agecat=cut(RIDAGEYR,c(0,19,39,59, Inf)))
```

ALL RECODING DONE, BUILD MODELS

```

designA <- svydesign(id=~SDMVPSU,
strata=~SDMVSTRA,nest=TRUE,weights=~WTMEC2YR,data=NHANES2009DATA)

designB <- svydesign(id=~SDMVPSU,
strata=~SDMVSTRA,nest=TRUE,weights=~WTINT4YR,data=mergedSET)

popage<-c(55901,77670,72816,45364)

racegender<-as.data.frame(svytable(~race+RIAGENDR,designA))
racegenderage<-expand.grid(race=1:4,RIAGENDR=1:2,agecat=levels(NHANES2009DATA$agecat))
racegenderage$Freq<- as.vector(outer(racegender$Freq, popage/sum(popage)))

racegender2<-as.data.frame(svytable(~race+RIAGENDR,designB))
racegenderage2<-expand.grid(race=1:4,RIAGENDR=1:2,agecat=levels(mergedSET$agecat))
racegenderage2$Freq<- as.vector(outer(racegender$Freq, popage/sum(popage)))

####REPLACE AND REWEIGHT NA

somedata<-subset(NHANES2009DATA, !is.na(LBXTTC) )
somedata2 <- subset(mergedSET, !is.na(DBQ700) & !is.na(DBD895) & !is.na(DBD900))
somedata3 <- subset(mergedSET, !is.na(CBQ020) & !is.na(CBQ030) & !is.na(CBQ040) & !is.na(CBQ060) & !is.na(CB
D160))
somedata4 <- subset(mergedSET, !is.na(HSD010))

design1 <- svydesign(id=~SDMVPSU,
strata=~SDMVSTRA,nest=TRUE,weights=~WTMEC2YR,data=somedata)

design2 <- svydesign(id=~SDMVPSU,
strata=~SDMVSTRA,nest=TRUE,weights=~WTINT4YR,data=somedata2)

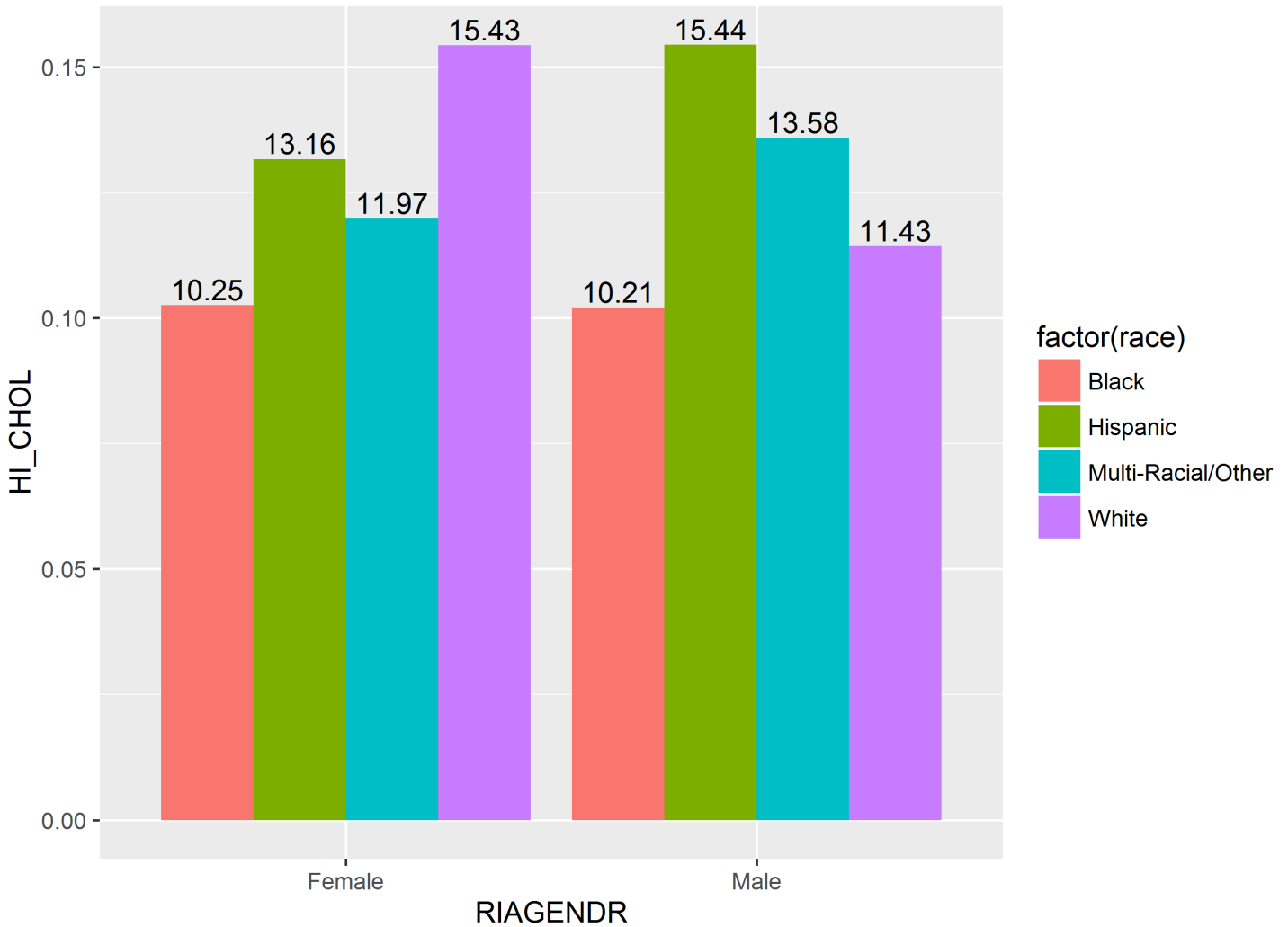
design3 <- svydesign(id=~SDMVPSU,
strata=~SDMVSTRA,nest=TRUE,weights=~WTINT4YR,data=somedata3)

design4 <- svydesign(id=~SDMVPSU,
strata=~SDMVSTRA,nest=TRUE,weights=~WTINT4YR,data=somedata4)

choLEX <- svyby(~HI_CHOL,~race+RIAGENDR,design=subset(postStratify(design1,~race+RIAGENDR+agecat,racegendera
ge),RIDAGEYR>=20),svymean,na.rm=TRUE)
choLEX$race <- c("White", "Black", "Hispanic", "Multi-Racial/Other", "White", "Black", "Hispanic", "Multi-Ra
cial/Other")
choLEX$RIAGENDR <- c("Male", "Male", "Male", "Male", "Female", "Female", "Female", "Female")
choLEX$HI_CHOLP <- round(choLEX$HI_CHOL, 4)*100
# recode the RIDRETH1 variable as:
# mexican american and other hispanic -> 3
# non-hispanic white -> 1
# non-hispanic black -> 2
# other race including multi-racial -> 4

```

```
ggplot(cholEX, aes(x=RIAGENDR, y=HI_CHOL, fill=factor(race)))+
  geom_bar(position="dodge", stat="identity") + geom_text(aes(label=HI_CHOLP),
position=position_dodge(width=0.9), vjust=-0.25)
```



#ABOVE CHART Corresponds to http://www.cdc.gov/nchs/data/databriefs/db92_fig1.png

```
teachersD1 <- subset(postStratify(design1,~race+RIAGENDR+agecat,racegenderage),RIDAGEYR>=20 & OCD231 == 15 &
OCD241 == 8)
teachersD2 <- subset(postStratify(design2,~race+RIAGENDR+agecat,racegenderage2),RIDAGEYR>=20 & OCD231 == 15
& OCD241 == 8)
teachersD3 <- subset(postStratify(design3,~race+RIAGENDR+agecat,racegenderage2),RIDAGEYR>=20 & OCD231 == 15
& OCD241 == 8)
teachersD4 <- subset(postStratify(design4,~race+RIAGENDR+agecat,racegenderage2),RIDAGEYR>=20 & OCD231 == 15
& OCD241 == 8)
```

#NOTE that this is 1 year data N = 134 for teachers

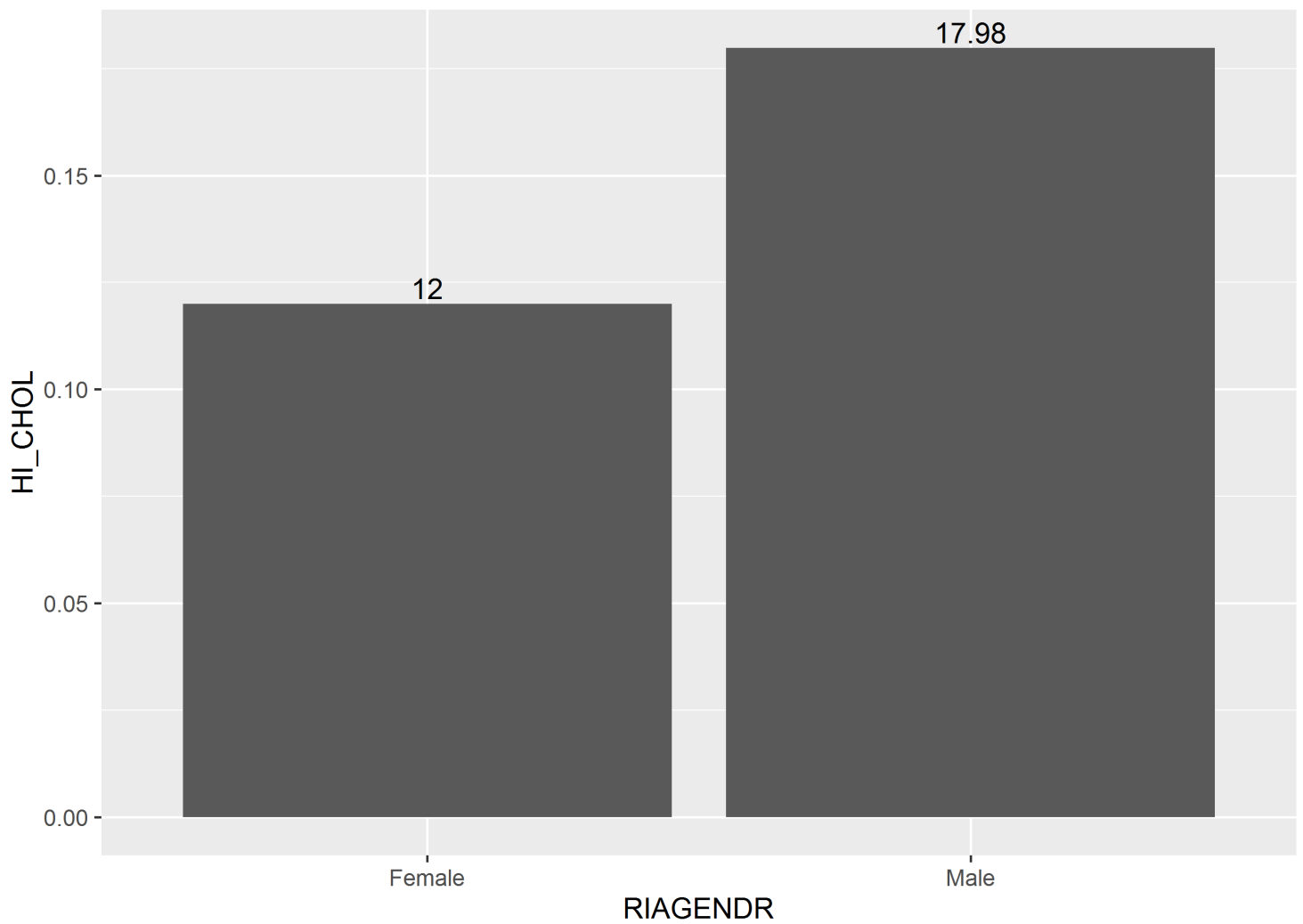
```
teachcholEX <- svyby(~HI_CHOL,~RIAGENDR,design= teachersD1,svymean,na.rm=TRUE)
teachcholEX
```

```
##    RIAGENDR    HI_CHOL          se
## 1         1 0.1797654 0.08611458
## 2         2 0.1199541 0.03104876
```

```
cholCompare <- svyby(~HI_CHOL,~RIAGENDR,design= subset(postStratify(design1,~race+RIAGENDR+agecat,racegender
age),RIDAGEYR>=20),svymean,na.rm=TRUE)
#Compared to NHANES2009
cholCompare
```

```
##    RIAGENDR    HI_CHOL          se
## 1         1 0.1204007 0.008613865
## 2         2 0.1422642 0.007895680
```

```
teachcholEX$RIAGENDR <- c("Male", "Female")
teachcholEX$HI_CHOLP <- round(teachcholEX$HI_CHOL, 4)*100
# recode the RIDRETH1 variable as:
  # mexican american and other hispanic -> 3
  # non-hispanic white -> 1
  # non-hispanic black -> 2
  # other race including multi-racial -> 4
ggplot(teachcholEX, aes(x=RIAGENDR, y=HI_CHOL))+
  geom_bar(position="dodge", stat="identity") + geom_text(aes(label=HI_CHOLP),
position=position_dodge(width=0.9), vjust=-0.25)
```



```
# Number of Meals not prepared at home N = 244
teachMeanMeals <- svyby(~DBD895,~RIAGENDR,design= teachersD2,svymean,na.rm=TRUE)
meanMeals <- svyby(~DBD895,~RIAGENDR,design= subset(postStratify(design2,~race+RIAGENDR+agecat,racegenderage
2),RIDAGEYR>=20),svymean,na.rm=TRUE)
teachMeanMeals
```

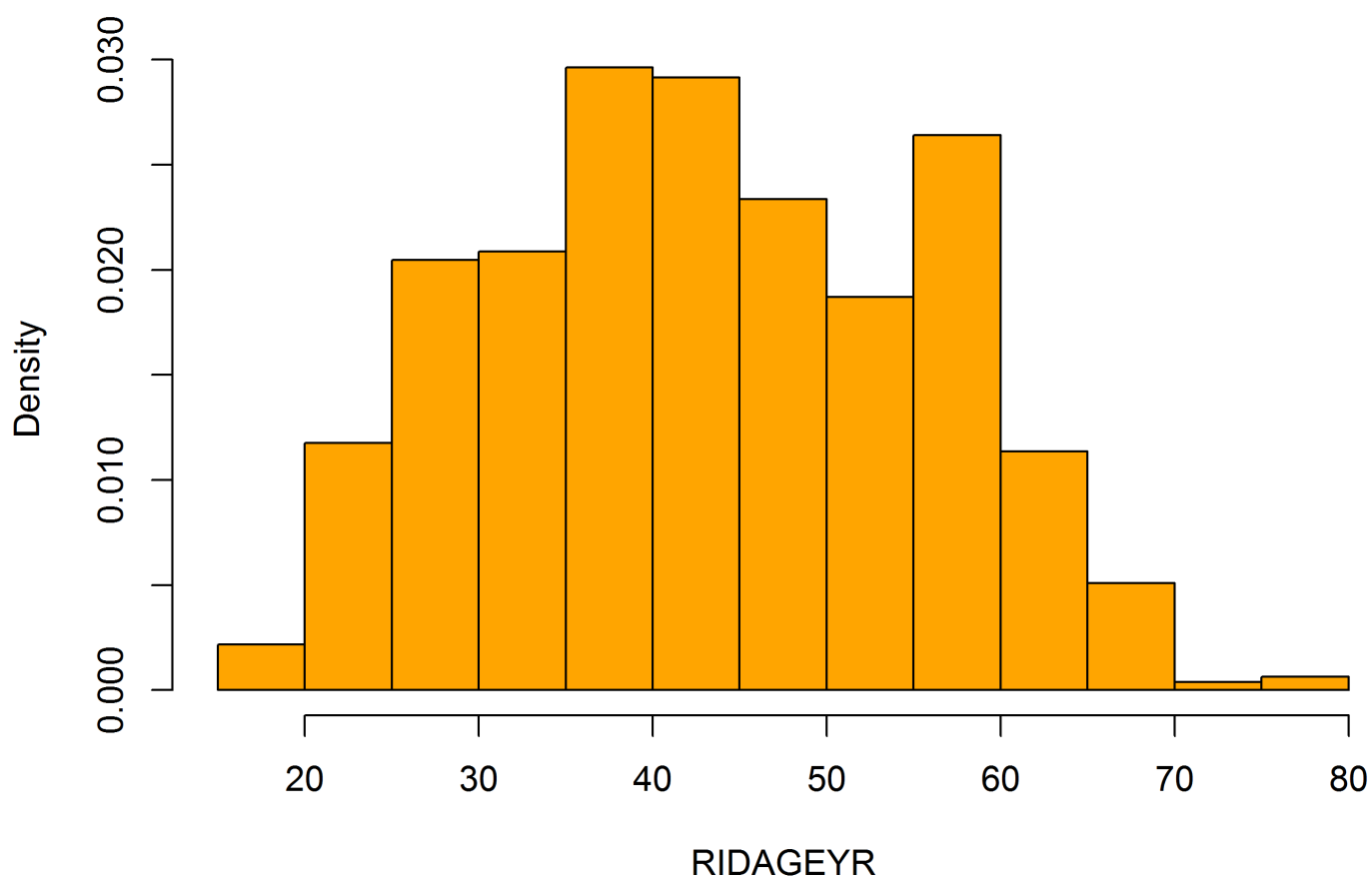
```
##   RIAGENDR   DBD895      se
## 1      1  5.492258 0.5886663
## 2      2  3.822003 0.2884262
```

```
meanMeals
```

```
##   RIAGENDR   DBD895      se
## 1      1  5.210445 0.09475403
## 2      2  3.847865 0.05515648
```

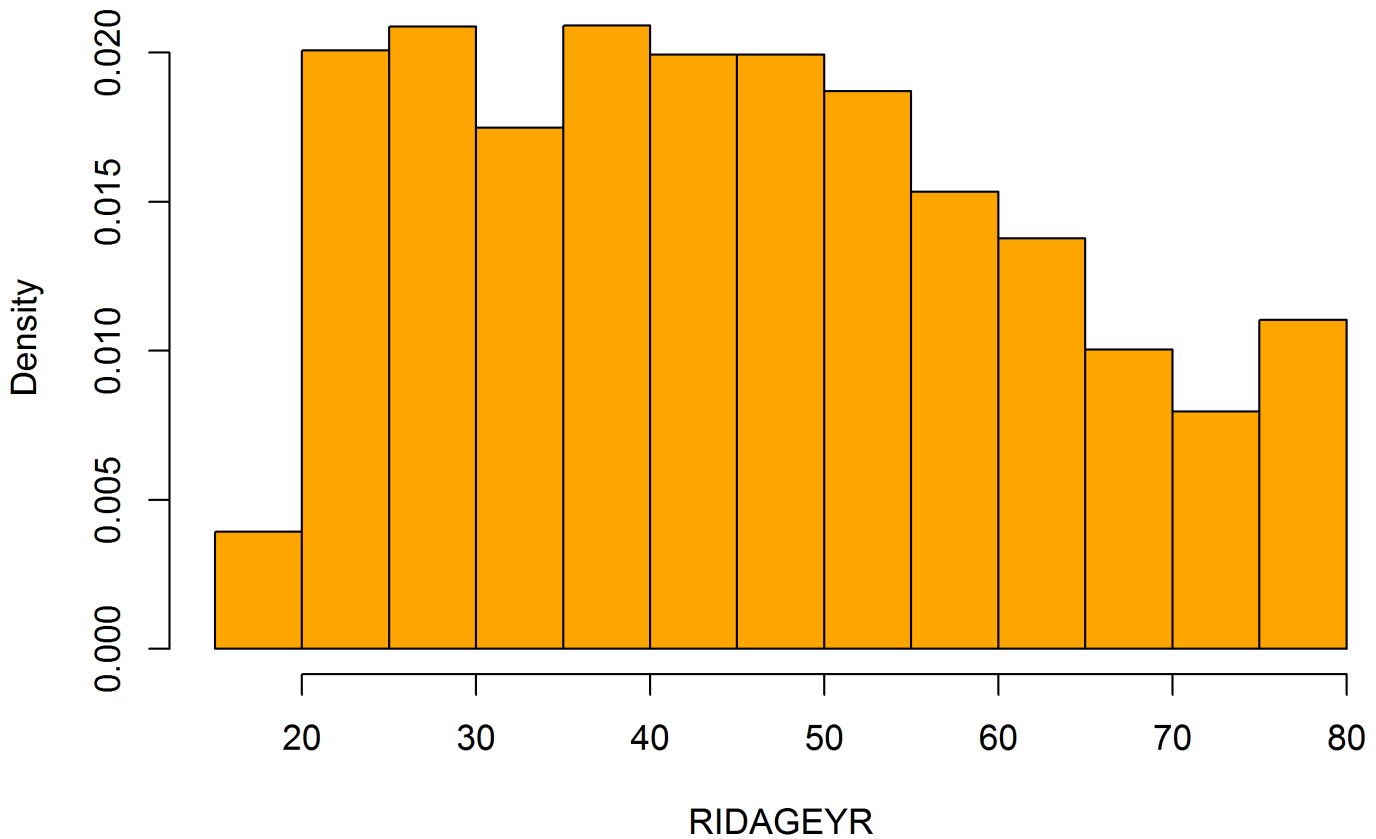
```
svyhist(~RIDAGEYR, teachersD3, main="Teacher Weighted Age Distribution",col="orange")
```


Teacher Weighted Age Distribution



```
svyhist(~RIDAGEYR,subset(postStratify(design2,~race+RIAGENDR+agecat,racegenderage2),RIDAGEYR>=20) , main="Weighted Age Distribution",col="orange")
```

Weighted Age Distribution



```
# Number of Meals from a fastfood place a week N = 244
teachFastMeals <- svyby(~DBD900,~RIAGENDR,design= teachersD2,svymean,na.rm=TRUE)
fastMeals <- svyby(~DBD900,~RIAGENDR,design= subset(postStratify(design2,~race+RIAGENDR+agecat,racegenderage
2),RIDAGEYR>=20),svymean,na.rm=TRUE)
teachFastMeals
```

```
##   RIAGENDR   DBD900      se
## 1      1 2.104578 0.4871250
## 2      2 1.452956 0.1813128
```

```
fastMeals
```

```
##   RIAGENDR   DBD900      se
## 1      1 2.882372 0.5376737
## 2      2 1.646069 0.0460875
```

```
#Number of times someone cooked dinner at home N = 275
teachDinMeals <- svyby(~CBD160, ~RIAGENDR, design = teachersD3, svymean, na.rm = TRUE)
dinMeals <- svyby(~CBD160, ~RIAGENDR, design = subset(postStratify(design3,~race+RIAGENDR+agecat,racegenderage2),RIDAGEYR>=20) , svymean, na.rm = TRUE)
teachDinMeals
```

```
##    RIAGENDR    CBD160      se
## 1         1 4.652224 0.3210291
## 2         2 4.888584 0.1821728
```

```
dinMeals
```

```
##    RIAGENDR    CBD160      se
## 1         1 4.987265 0.05075695
## 2         2 5.084036 0.05074969
```

```
#HOW OFTEN IS FRUIT AVAILABLE(weighted teachers, weighted pop, unwtd teach ct), N = 275
teachfruitQ <- svyby(~weightedTotal,~CBQ020,design= teachersD3,svytotal,na.rm=TRUE)
teachfruitQ$FREQ <- (teachfruitQ$weightedTotal / sum(teachfruitQ$weightedTotal)) * 100

fruitQ <- svyby(~weightedTotal,~CBQ020,design=subset(postStratify(design3,~race+RIAGENDR+agecat,racegenderage2),RIDAGEYR>=20),svytotal,na.rm=TRUE)####MUST be older than 20
fruitQ$FREQ <- (fruitQ$weightedTotal / sum(fruitQ$weightedTotal)) * 100

svyby(~weightedTotal,~CBQ020,design=subset(postStratify(design3,~race+RIAGENDR+agecat,racegenderage2),RIDAGEYR>=20),unwtd.count,na.rm=TRUE)####MUST be older than 20
```

```
##    CBQ020 counts se
## 1         1   7699  0
## 2         2   2230  0
## 3         3   1290  0
## 4         4    329  0
## 5         5     75  0
```

```
svyby(~weightedTotal,~CBQ020,design= teachersD3,unwtd.count,na.rm=TRUE)
```

```
##    CBQ020 counts se
## 1         1    210  0
## 2         2     52  0
## 3         3     11  0
## 4         4      2  0
```

```

teachvegQ <- svyby(~weightedTotal,~CBQ030,design= teachersD3,svytotal,na.rm=TRUE)
teachvegQ$FREQ <- (teachvegQ$weightedTotal / sum(teachvegQ$weightedTotal)) * 100

vegQ <-
svyby(~weightedTotal,~CBQ030,design=subset(postStratify(design3,~race+RIAGENDR+agecat,racegenderage2),RIDAGEYR>=20),svytotal,na.rm=TRUE)####MUST be older than 20
vegQ$FREQ <- (vegQ$weightedTotal / sum(vegQ$weightedTotal)) * 100

teachsaltQ <- svyby(~weightedTotal,~CBQ040,design= teachersD3,svytotal,na.rm=TRUE)
teachsaltQ$FREQ <- (teachsaltQ$weightedTotal / sum(teachsaltQ$weightedTotal)) * 100

saltQ <- svyby(~weightedTotal,~CBQ040,design=subset(postStratify(design3,~race+RIAGENDR+agecat,racegenderage2),RIDAGEYR>=20),svytotal,na.rm=TRUE)####MUST be older than 20
saltQ$FREQ <- (saltQ$weightedTotal / sum(saltQ$weightedTotal)) * 100

teachsoftQ <- svyby(~weightedTotal,~CBQ060,design= teachersD3,svytotal,na.rm=TRUE)
teachsoftQ$FREQ <- (teachsoftQ$weightedTotal / sum(teachsoftQ$weightedTotal)) * 100

softQ <- svyby(~weightedTotal,~CBQ060,design=subset(postStratify(design3,~race+RIAGENDR+agecat,racegenderage2),RIDAGEYR>=20),svytotal,na.rm=TRUE)####MUST be older than 20
softQ$FREQ <- (softQ$weightedTotal / sum(softQ$weightedTotal)) * 100

teachDBQ <- svyby(~weightedTotal,~DBQ700,design= teachersD2,svytotal,na.rm=TRUE)
teachDBQ$FREQ <- (teachDBQ$weightedTotal / sum(teachDBQ$weightedTotal)) * 100

DBQ <-
svyby(~weightedTotal,~DBQ700,design=subset(postStratify(design2,~race+RIAGENDR+agecat,racegenderage2),RIDAGEYR>=20),svytotal,na.rm=TRUE)####MUST be older than 20
DBQ$FREQ <- (DBQ$weightedTotal / sum(DBQ$weightedTotal)) * 100

####N = 250 for gen health
teachGenHealth <- svyby(~weightedTotal,~HSD010,design= teachersD4,svytotal,na.rm=TRUE)
teachGenHealth$FREQ <- (teachGenHealth$weightedTotal / sum(teachGenHealth$weightedTotal)) * 100

genHealth <-svyby(~weightedTotal,~HSD010,design= subset(postStratify(design4,~race+RIAGENDR+agecat,racegenderage2),RIDAGEYR>=20),svytotal,na.rm=TRUE)
genHealth$FREQ <- (genHealth$weightedTotal / sum(genHealth$weightedTotal)) * 100

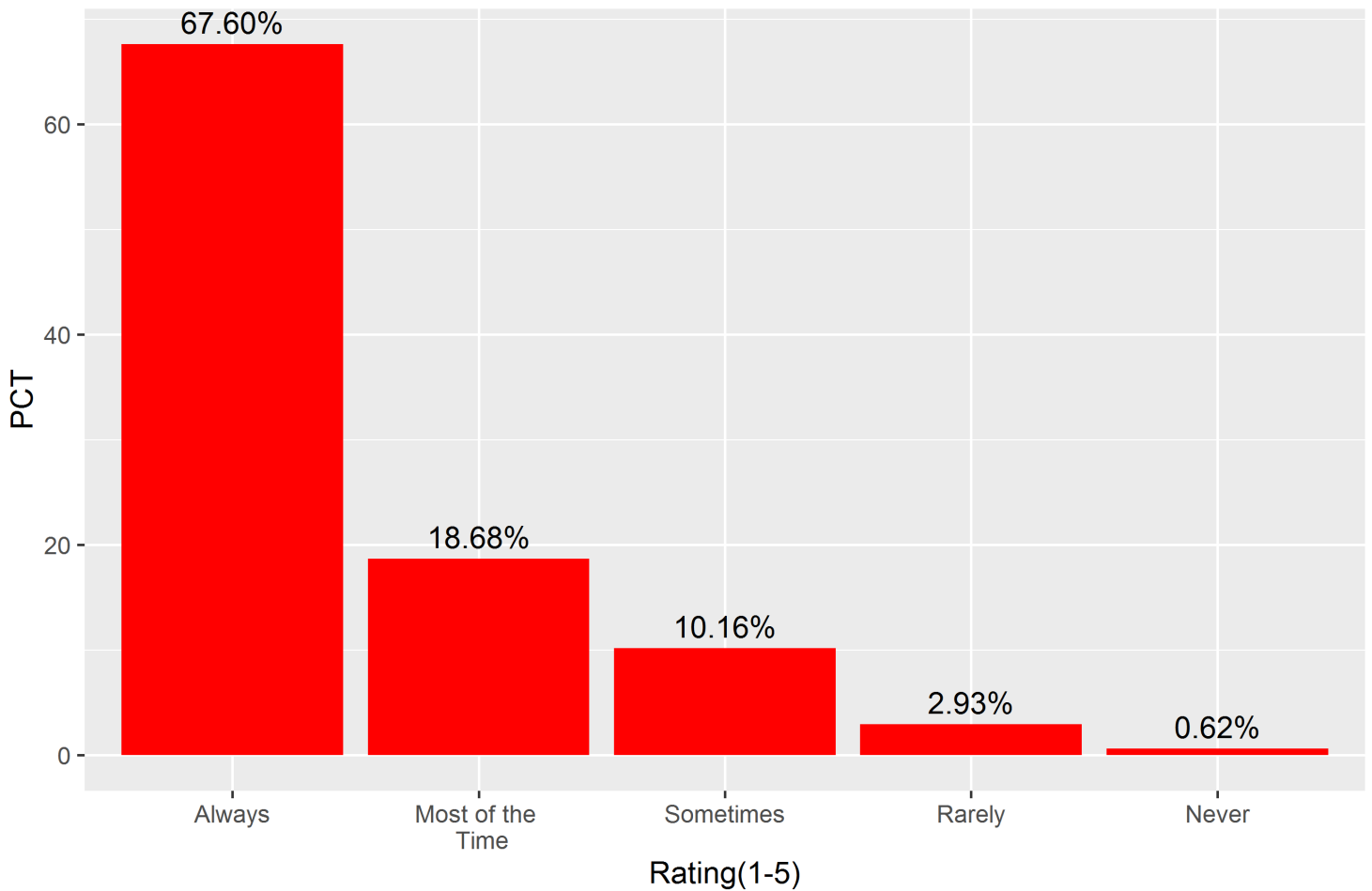
```

```

fruitQ$CBQ020 <- c("Always","Most of the \n Time", "Sometimes", "Rarely" , "Never")
fruitQ$test <- "Overall(N= 11, 638)"
positions <- c("Always","Most of the \n Time", "Sometimes", "Rarely" , "Never")
ggplot(fruitQ, aes(x=CBQ020, y = FREQ)) + geom_bar(stat="identity" , fill = "red")+
  geom_text(aes(label = sprintf("%.2f%%", FREQ), vjust = -.5))+ labs(title = "How often do you have fruits
\n in your home?(Total) N= 11,638", x = "Rating(1-5)", y = "PCT")+ scale_x_discrete(limits = positions)

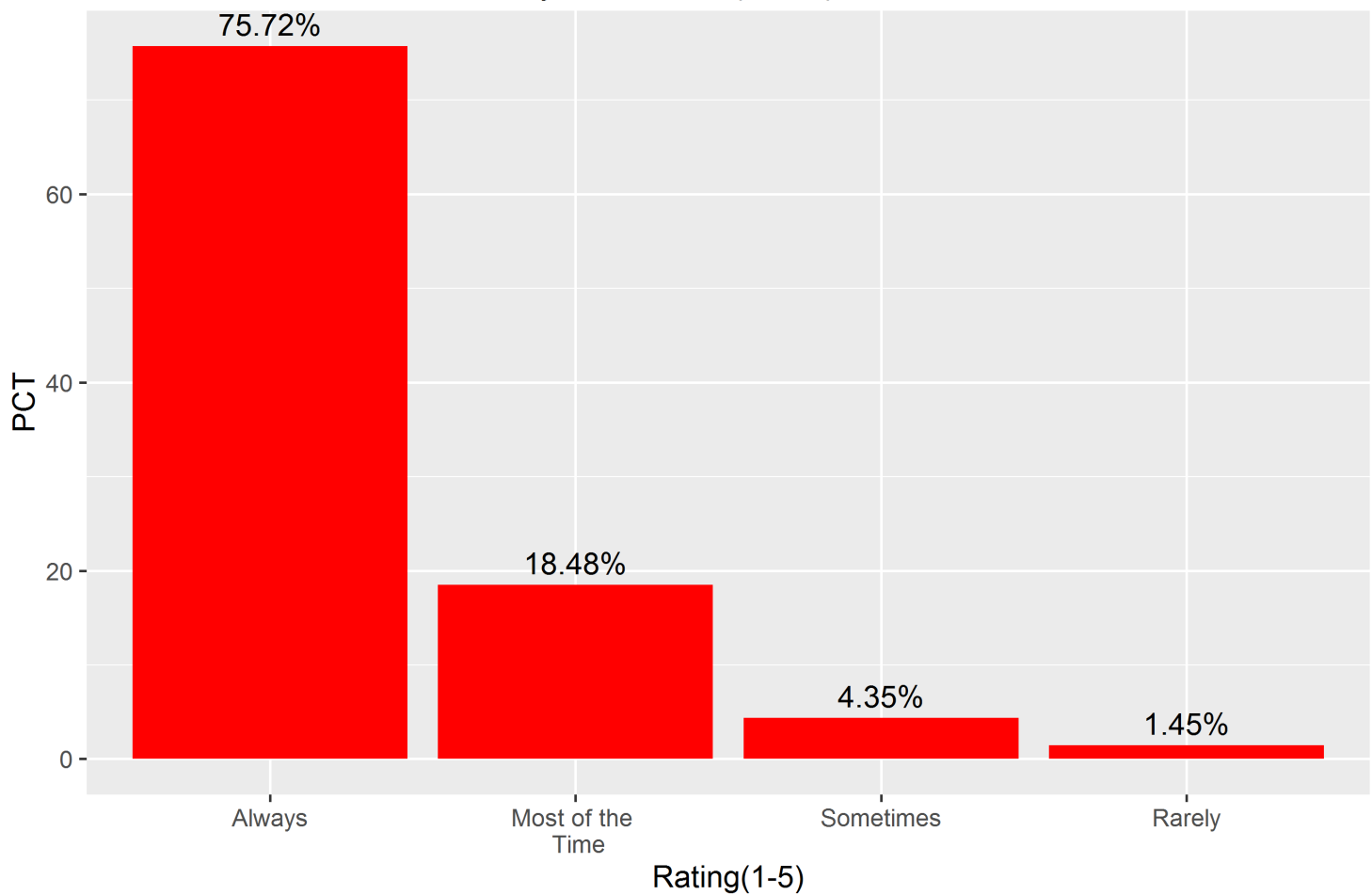
```

How often do you have fruits in your home?(Total) N= 11,638



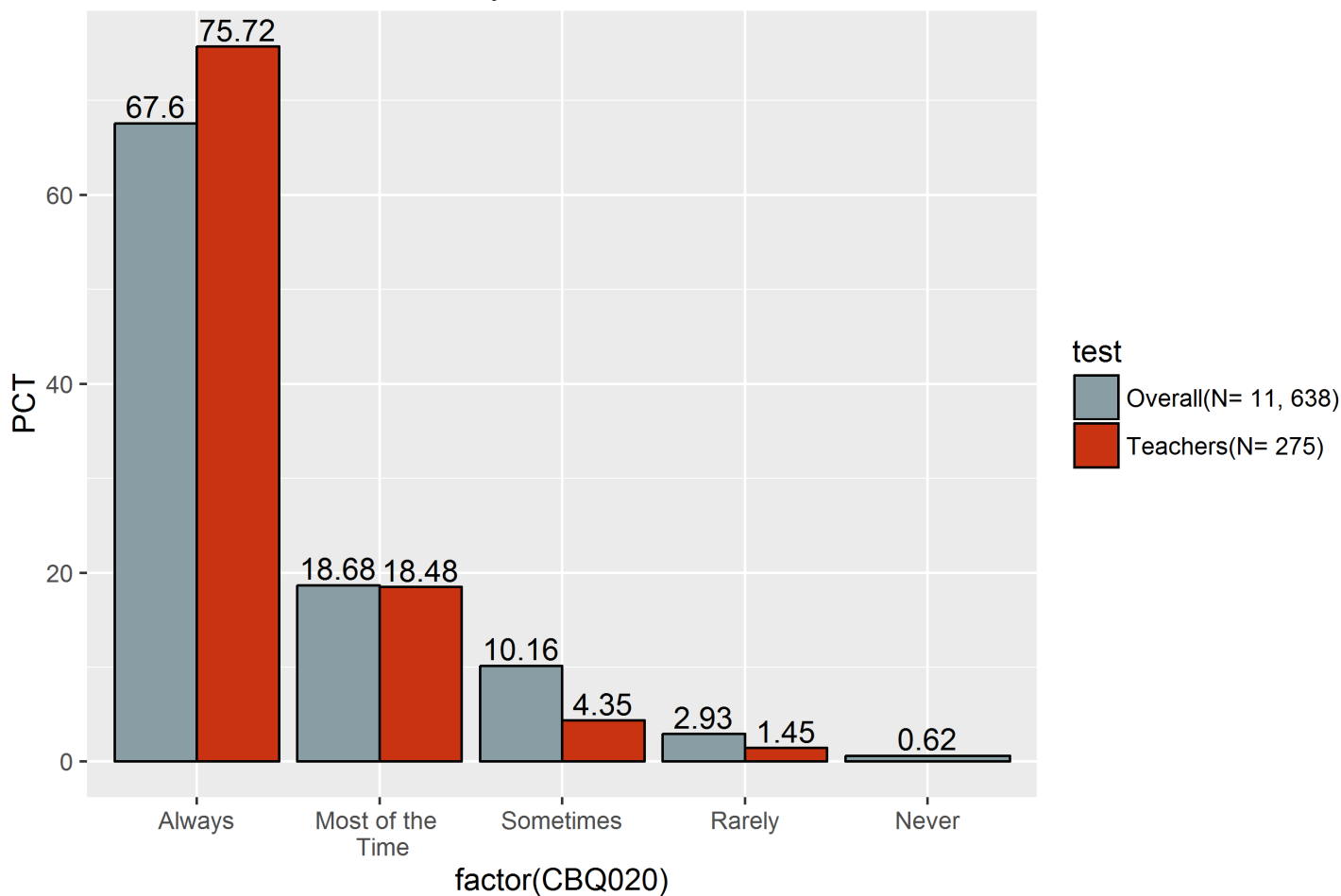
```
teachfruitQ$CBQ020 <- c("Always","Most of the \n Time", "Sometimes", "Rarely")
teachfruitQ$test <- "Teachers(N= 275)"
positions <- c("Always","Most of the \n Time", "Sometimes", "Rarely")
ggplot(teachfruitQ, aes(x=CBQ020, y = FREQ)) + geom_bar(stat="identity" , fill = "red")+
  geom_text(aes(label = sprintf("%.2f%%", FREQ), vjust = -.5))+ labs(title = "How often do you have fruits
\n in your home?(Total) N= 275", x = "Rating(1-5)", y = "PCT")+ scale_x_discrete(limits = positions)
```

How often do you have fruits in your home?(Total) N= 275



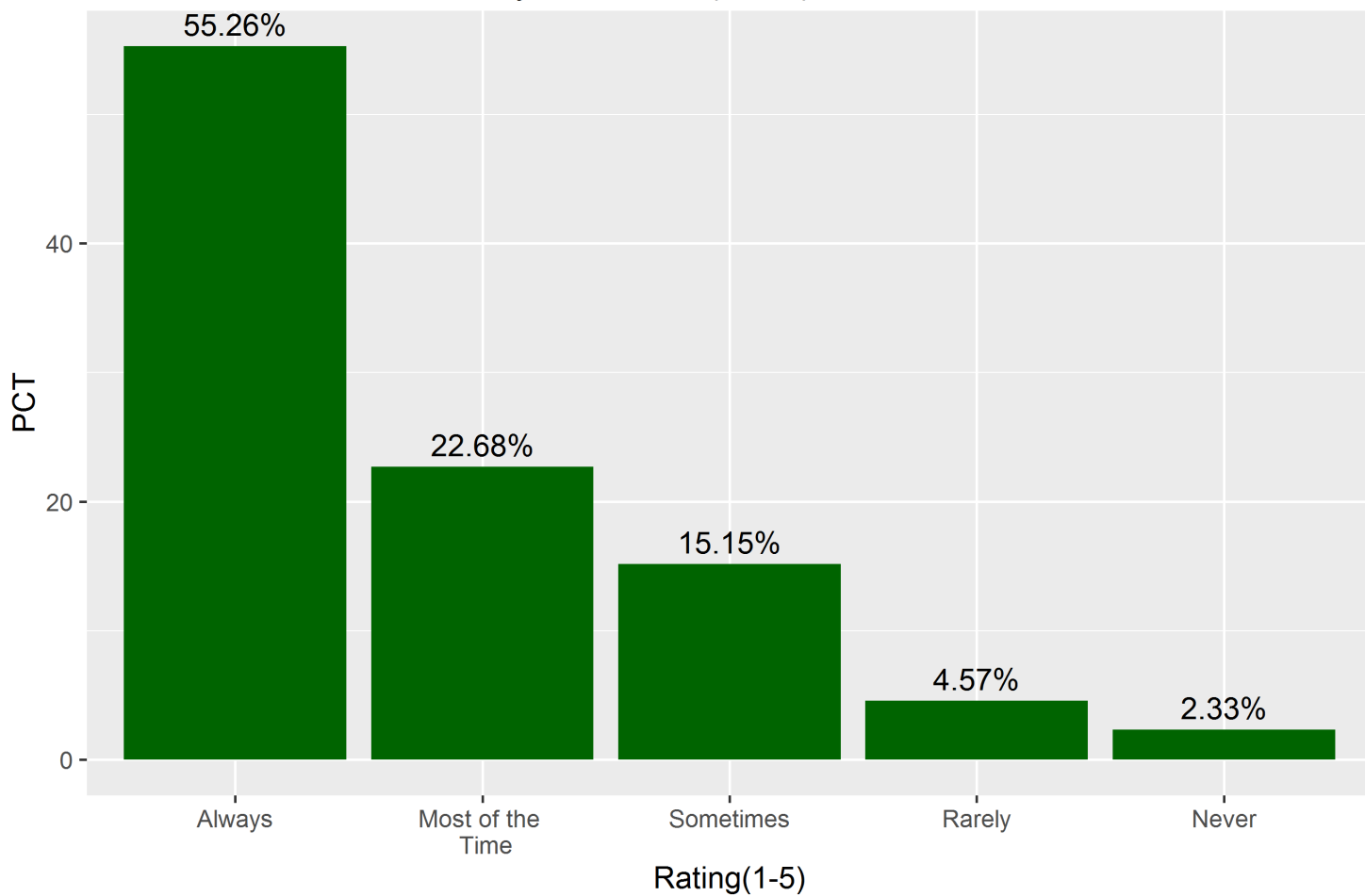
```
graphCombine5 <- rbind(fruitQ, teachfruitQ)
positions <- c("Always","Most of the \n Time", "Sometimes", "Rarely" , "Never")
ggplot(graphCombine5, aes(factor(CBQ020), FREQ, fill = test)) +
  geom_bar(stat="identity", position = "dodge", colour = "black") +labs(title = "How often do you have fruits \n in your home?", y = "PCT")+ scale_x_discrete(limits = positions) + geom_text(aes(label=round(FREQ , 2)), position=position_dodge(width=0.9), vjust=-0.25) + scale_fill_manual(values=wes_palette(n=3, name="Royal11"))
```

How often do you have fruits in your home?



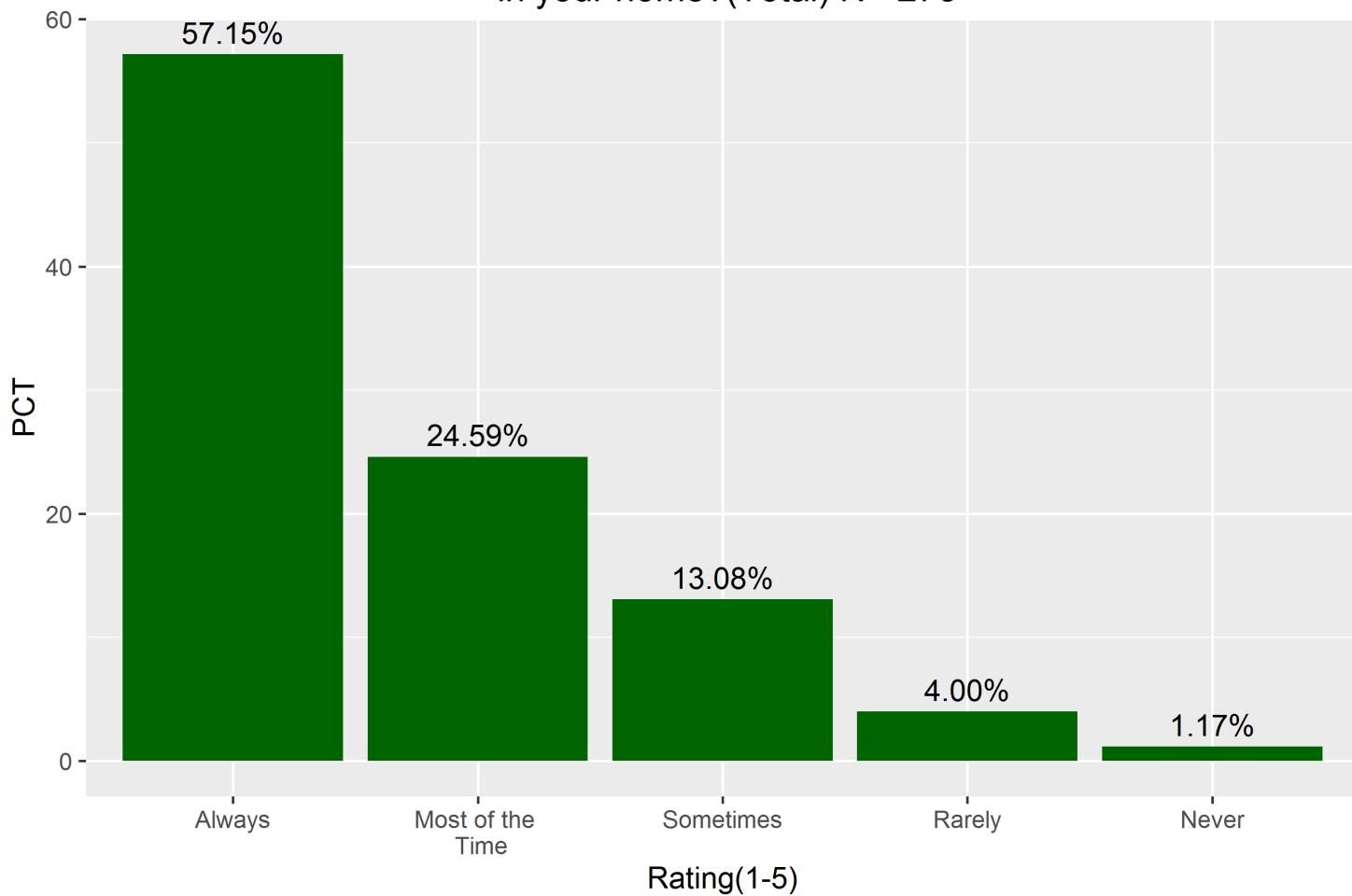
```
vegQ$CBQ030 <- c("Always","Most of the \n Time", "Sometimes", "Rarely" , "Never")
vegQ$test <- "Overall(N = 11,638)"
positions <- c("Always","Most of the \n Time", "Sometimes", "Rarely" , "Never")
ggplot(vegQ, aes(x=CBQ030, y = FREQ)) + geom_bar(stat="identity" , fill = "dark green")+
  geom_text(aes(label = sprintf("%.2f%%", FREQ)), vjust = -.5)+ labs(title = "How often do you have dark gre
en vegetables \n in your home?(Total) N= 11,638", x = "Rating(1-5)", y = "PCT")+ scale_x_discrete(limits = p
ositions)
```

How often do you have dark green vegetables in your home?(Total) N= 11,638



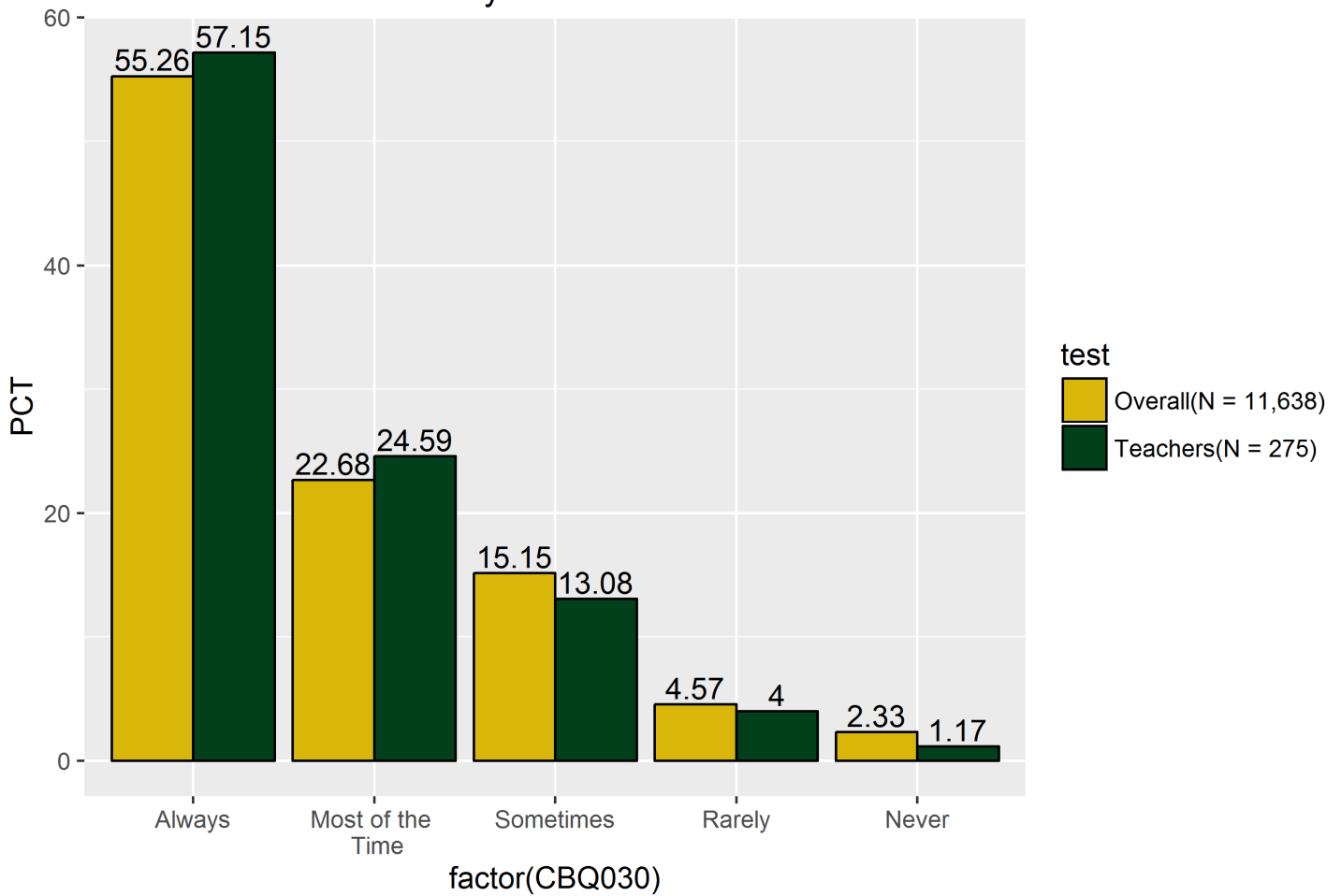
```
teachvegQ$CBQ030 <- c("Always","Most of the \n Time", "Sometimes", "Rarely" , "Never")
teachvegQ$test <- "Teachers(N = 275)"
positions <- c("Always","Most of the \n Time", "Sometimes", "Rarely" , "Never")
ggplot(teachvegQ, aes(x=CBQ030, y = FREQ)) + geom_bar(stat="identity" , fill = "dark green")+
  geom_text(aes(label = sprintf("%.2f%%", FREQ)), vjust = -.5)+ labs(title = "How often do you have dark gre
en vegetables \n in your home?(Total) N= 275", x = "Rating(1-5)", y = "PCT")+ scale_x_discrete(limits = posi
tions)
```


How often do you have dark green vegetables in your home?(Total) N= 275



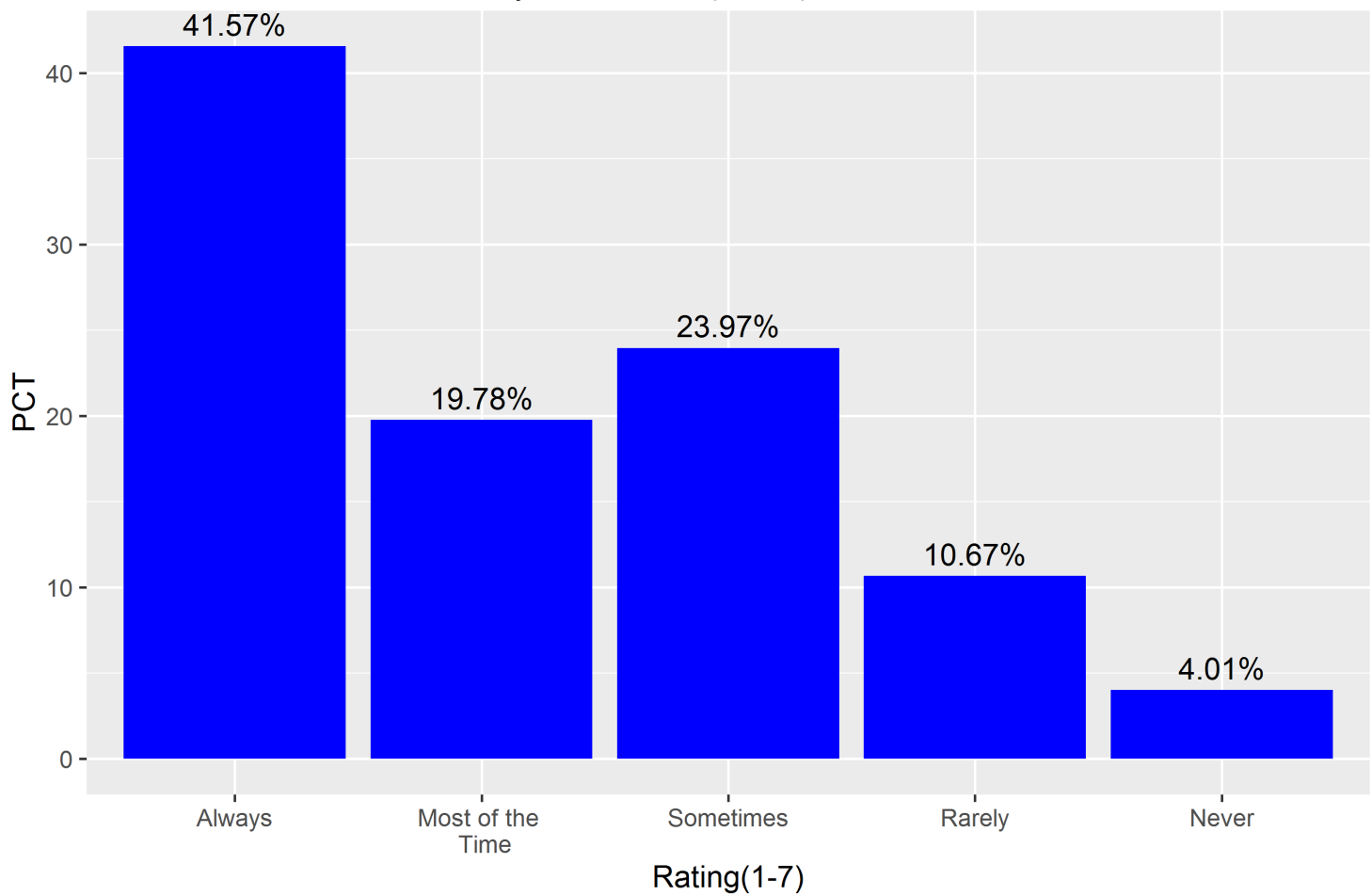
```
graphCombine4 <- rbind(vegQ, teachvegQ)
positions <- c("Always","Most of the \n Time", "Sometimes", "Rarely" , "Never")
ggplot(graphCombine4, aes(factor(CBQ030), FREQ, fill = test)) +
  geom_bar(stat="identity", position = "dodge", colour = "black") +labs(title = "How often do you have dark
green vegetables \n in your home?", y = "PCT")+ scale_x_discrete(limits = positions) +
geom_text(aes(label=round(FREQ , 2)), position=position_dodge(width=0.9), vjust=-0.25) + scale_fill_manual(v
alues=wes_palette(n=3, name="Cavalcanti"))
```

How often do you have dark green vegetables in your home?



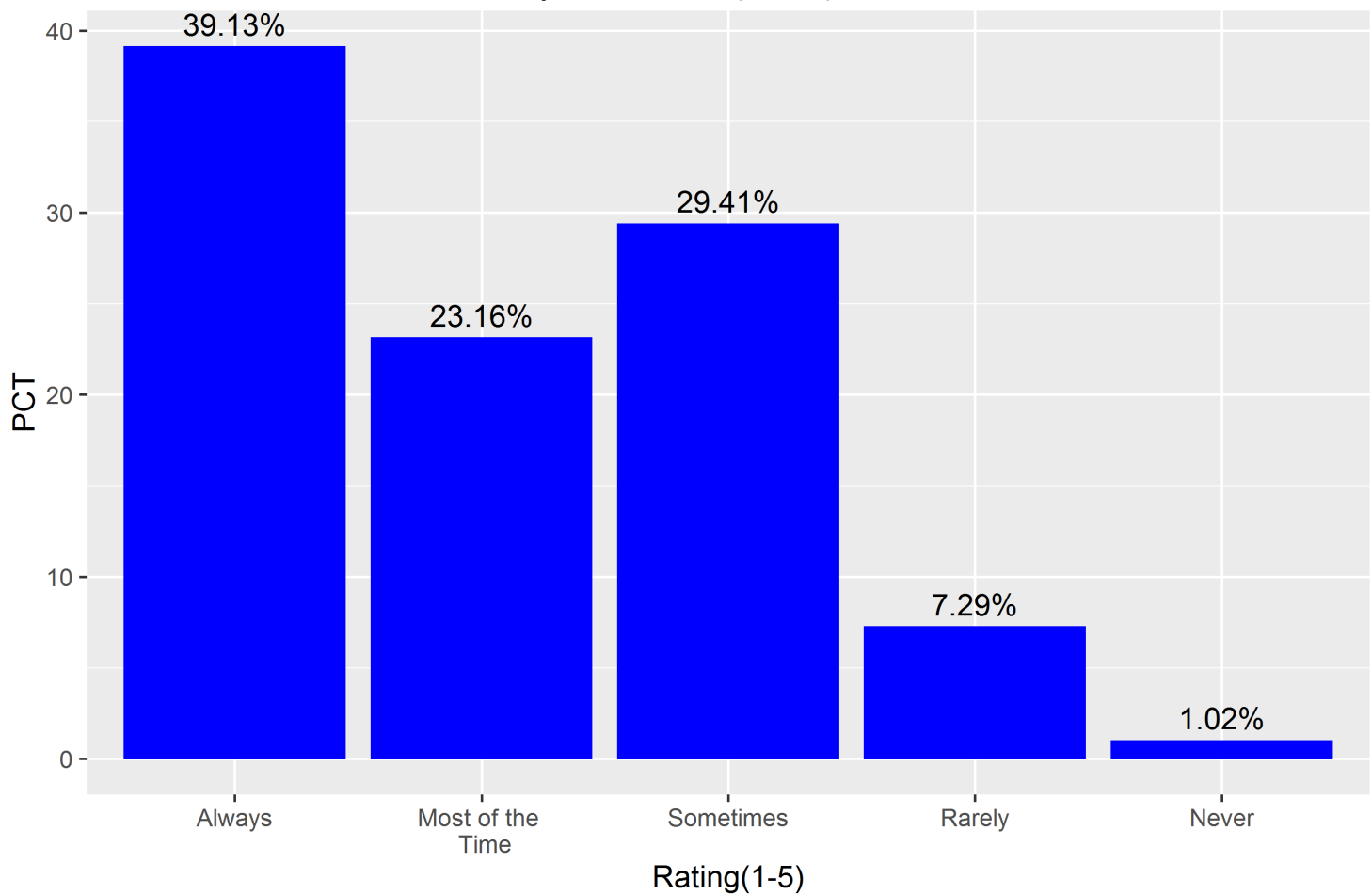
```
saltQ$CBQ040<- c("Always","Most of the \n Time", "Sometimes", "Rarely" , "Never")
saltQ$test <- "Overall(N = 11, 638)"
positions <- c("Always","Most of the \n Time", "Sometimes", "Rarely" , "Never")
ggplot(saltQ, aes(x=CBQ040, y = FREQ)) + geom_bar(stat="identity" , fill = "blue")+
  geom_text(aes(label = sprintf("%.2f%%", FREQ)), vjust = -.5)+ labs(title = "How often do you have salty sn
acks(chips/crackers) \n in your home?(Total) N= 11,638", x = "Rating(1-7)", y = "PCT")+ scale_x_discrete(lim
its = positions)
```

How often do you have salty snacks(chips/crackers) in your home?(Total) N= 11,638



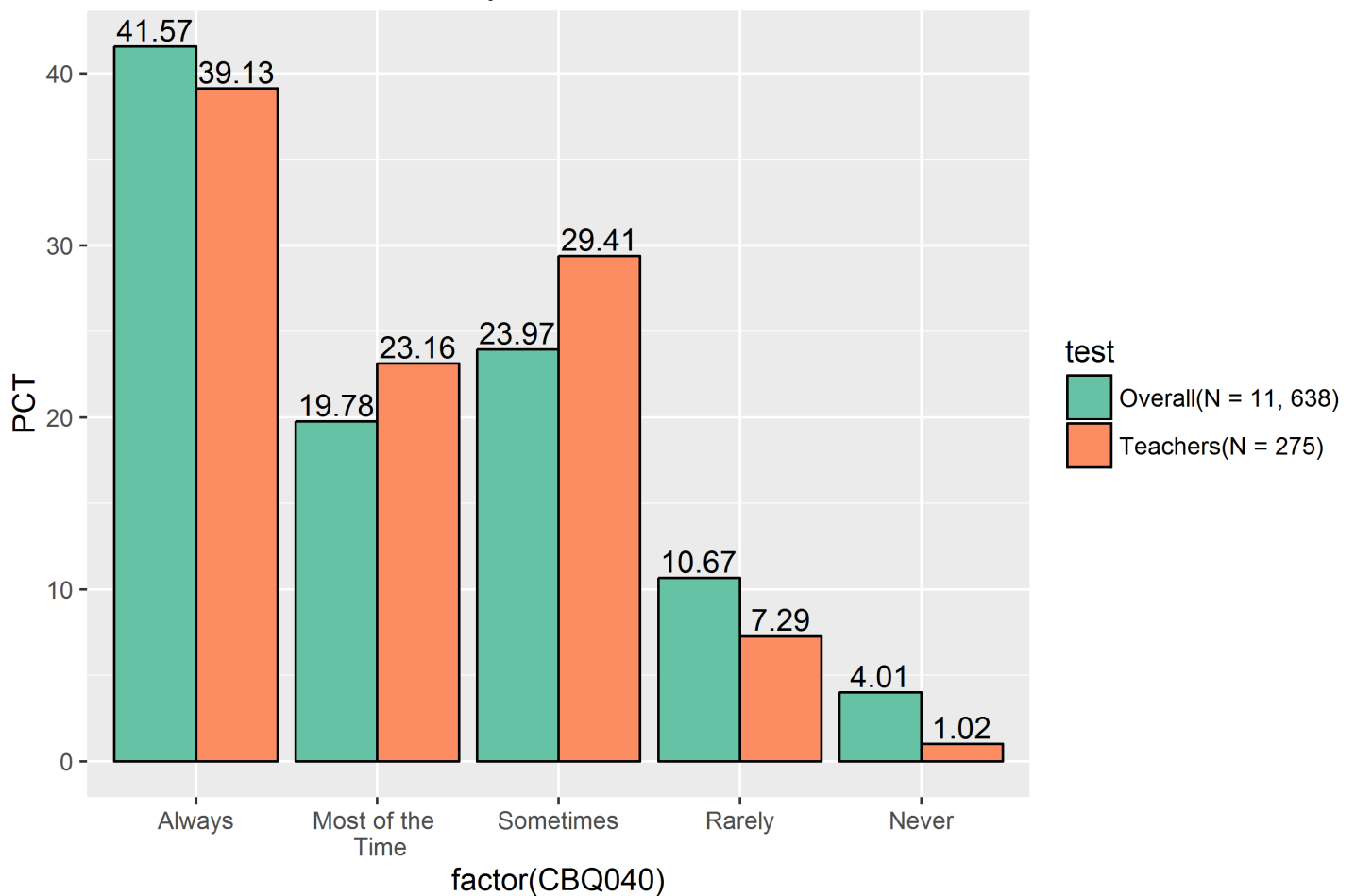
```
teachsaltQ$CBQ040<- c("Always","Most of the \n Time", "Sometimes", "Rarely" , "Never")
teachsaltQ$test <- "Teachers(N = 275)"
positions <- c("Always","Most of the \n Time", "Sometimes", "Rarely" , "Never")
ggplot(teachsaltQ, aes(x=CBQ040, y = FREQ)) + geom_bar(stat="identity" , fill = "blue")+
  geom_text(aes(label = sprintf("%.2f%", FREQ)), vjust = -.5)+ labs(title = "How often do you have salty sn
acks(chips/crackers) \n in your home?(Total) N= 275", x = "Rating(1-5)", y = "PCT")+ scale_x_discrete(limits
= positions)
```

How often do you have salty snacks(chips/crackers) in your home?(Total) N= 275



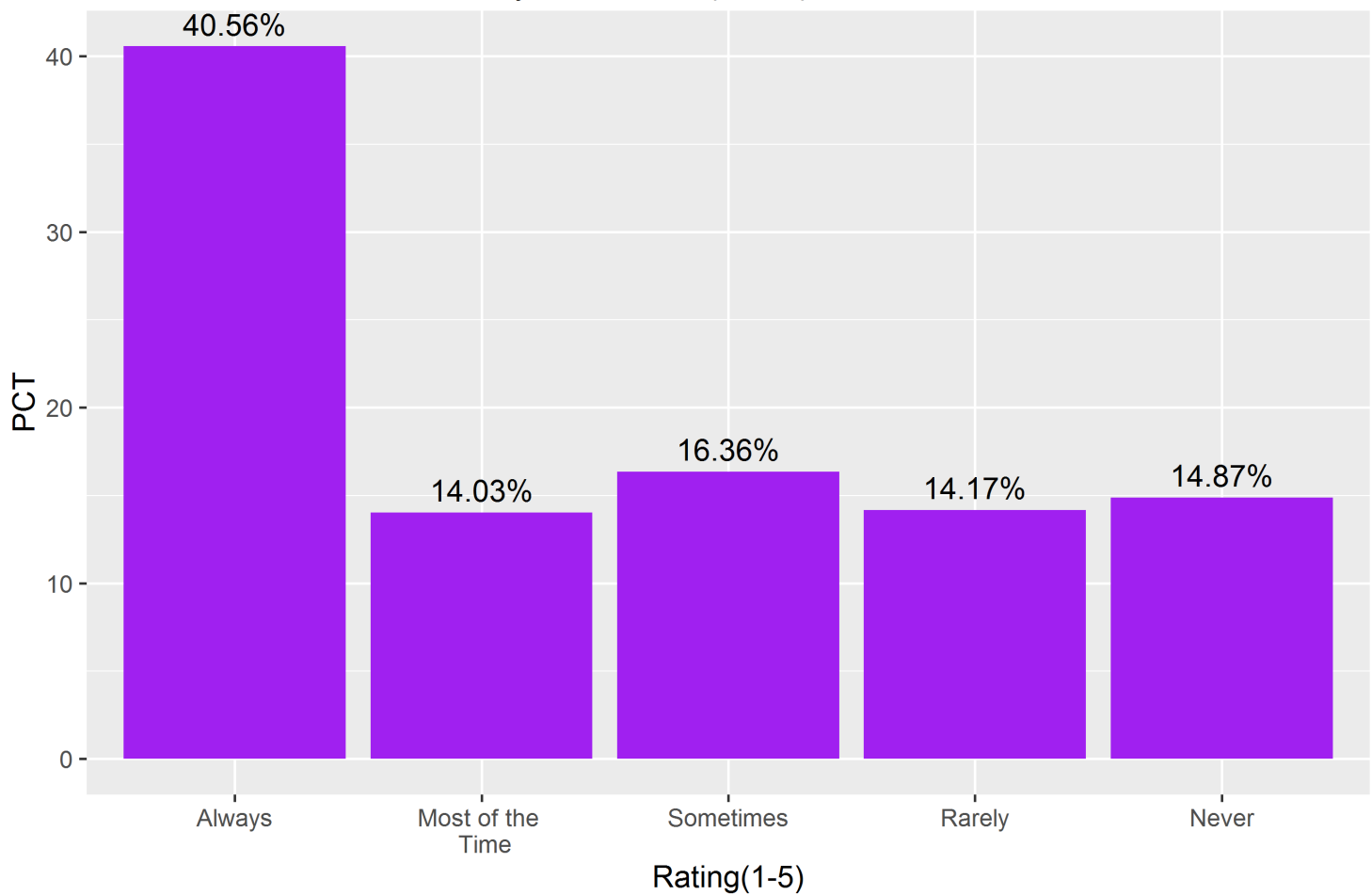
```
graphCombine3 <- rbind(saltQ, teachsaltQ)
positions <- c("Always","Most of the \n Time", "Sometimes", "Rarely" , "Never")
ggplot(graphCombine3, aes(factor(CBQ040), FREQ, fill = test)) +
  geom_bar(stat="identity", position = "dodge", colour = "black") +labs(title = "How often do you have salty
snacks(chips/crackers) \n in your home?", y = "PCT")+ scale_x_discrete(limits = positions) +
geom_text(aes(label=round(FREQ , 2)), position=position_dodge(width=0.9), vjust=-0.25) + scale_fill_brewer(p
alette='Set2')
```

How often do you have salty snacks(chips/crackers) in your home?



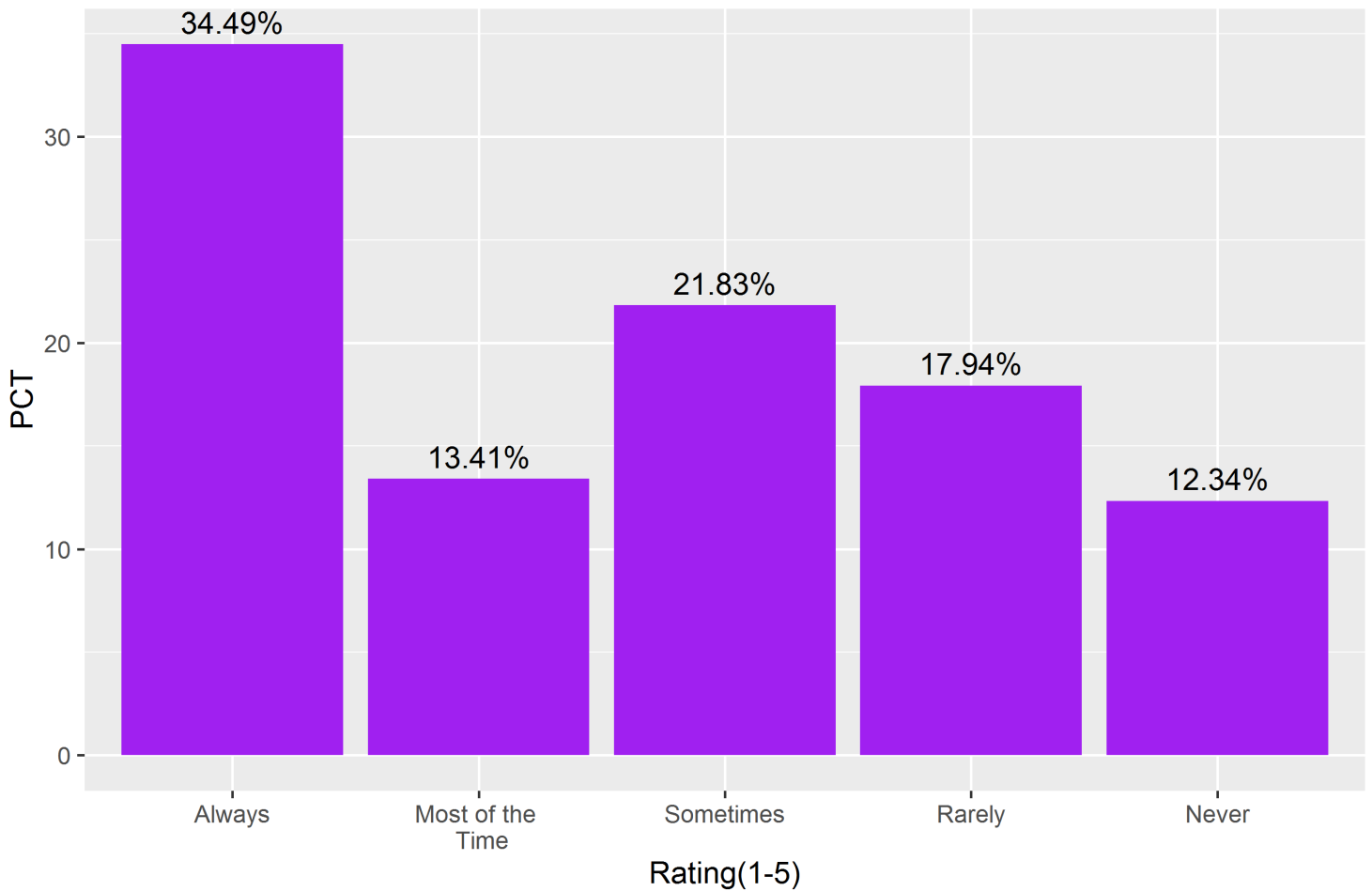
```
softQ$CBQ060<- c("Always","Most of the \n Time", "Sometimes", "Rarely" , "Never")
softQ$test <- "Overall(N = 11, 638)"
positions <- c("Always","Most of the \n Time", "Sometimes", "Rarely" , "Never")
ggplot(softQ, aes(x=CBQ060, y = FREQ)) + geom_bar(stat="identity" , fill = "purple")+
  geom_text(aes(label = sprintf("%.2f%%", FREQ)), vjust = -.5)+ labs(title = "How often do you have soft dri
nks \n in your home?(Total) N= 11,638", x = "Rating(1-5)", y = "PCT")+ scale_x_discrete(limits = positions)
```

How often do you have soft drinks in your home?(Total) N= 11,638



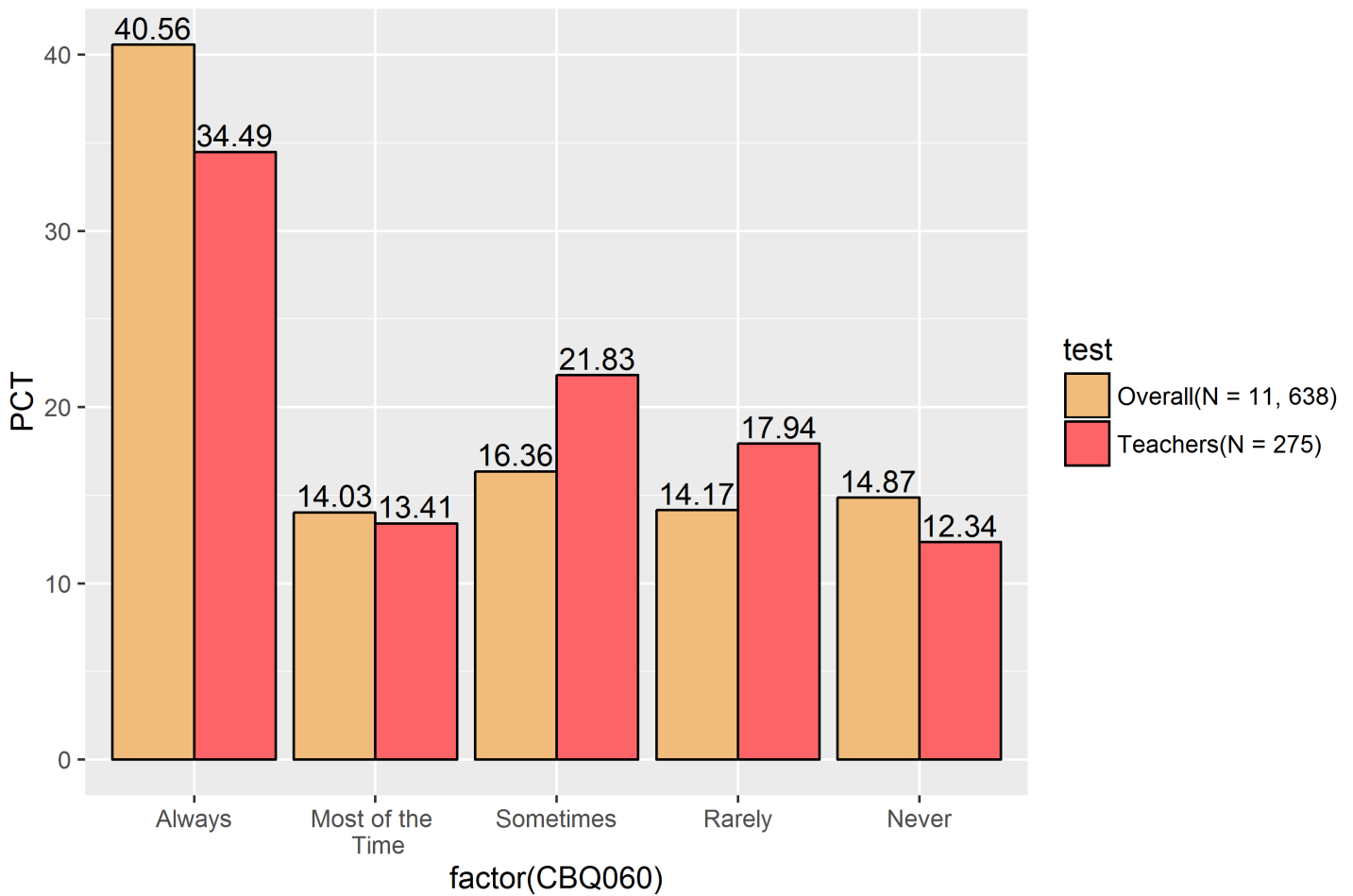
```
teachsoftQ$CBQ060<- c("Always","Most of the \n Time", "Sometimes", "Rarely" , "Never")
teachsoftQ$test <- "Teachers(N = 275)"
positions <- c("Always","Most of the \n Time", "Sometimes", "Rarely" , "Never")
ggplot(teachsoftQ, aes(x=CBQ060, y = FREQ)) + geom_bar(stat="identity" , fill = "purple")+
  geom_text(aes(label = sprintf("%.2f%", FREQ)), vjust = -.5)+ labs(title = "How often do you have soft dri
nks \n in your home?(Total) N= 275", x = "Rating(1-5)", y = "PCT")+ scale_x_discrete(limits = positions)
```

How often do you have soft drinks in your home?(Total) N= 275



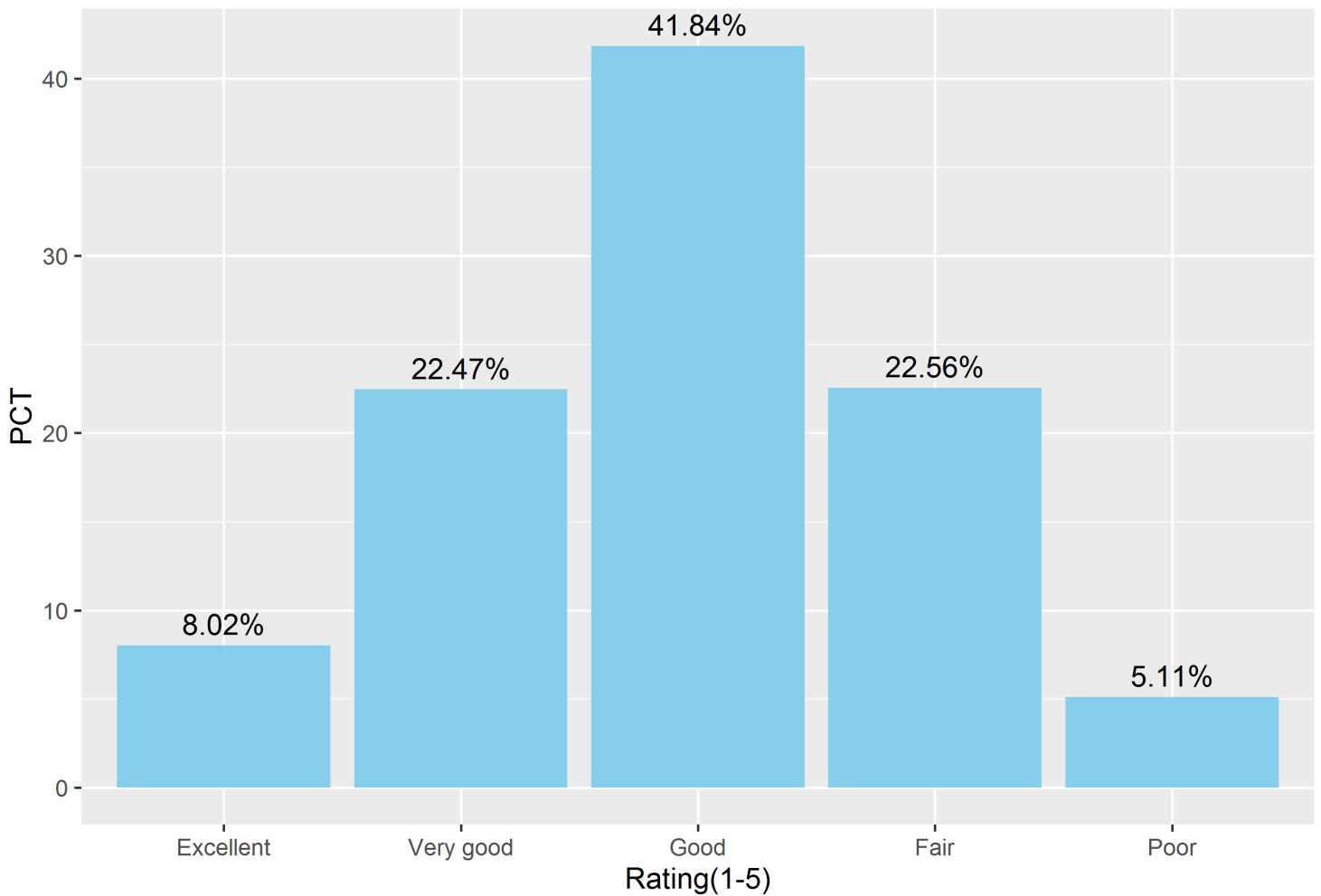
```
graphCombine2 <- rbind(softQ, teachsoftQ)
positions <- c("Always","Most of the \n Time", "Sometimes", "Rarely" , "Never")
ggplot(graphCombine2, aes(factor(CBQ060), FREQ, fill = test)) +
  geom_bar(stat="identity", position = "dodge", colour = "black") +labs(title = "How often do you have soft
drinks \n in your home?", y = "PCT")+ scale_x_discrete(limits = positions) + geom_text(aes(label=round(FREQ
, 2)), position=position_dodge(width=0.9), vjust=-0.25) + scale_fill_manual(values=wes_palette(n=3, name="Gr
andBudapest"))
```

How often do you have soft drinks in your home?



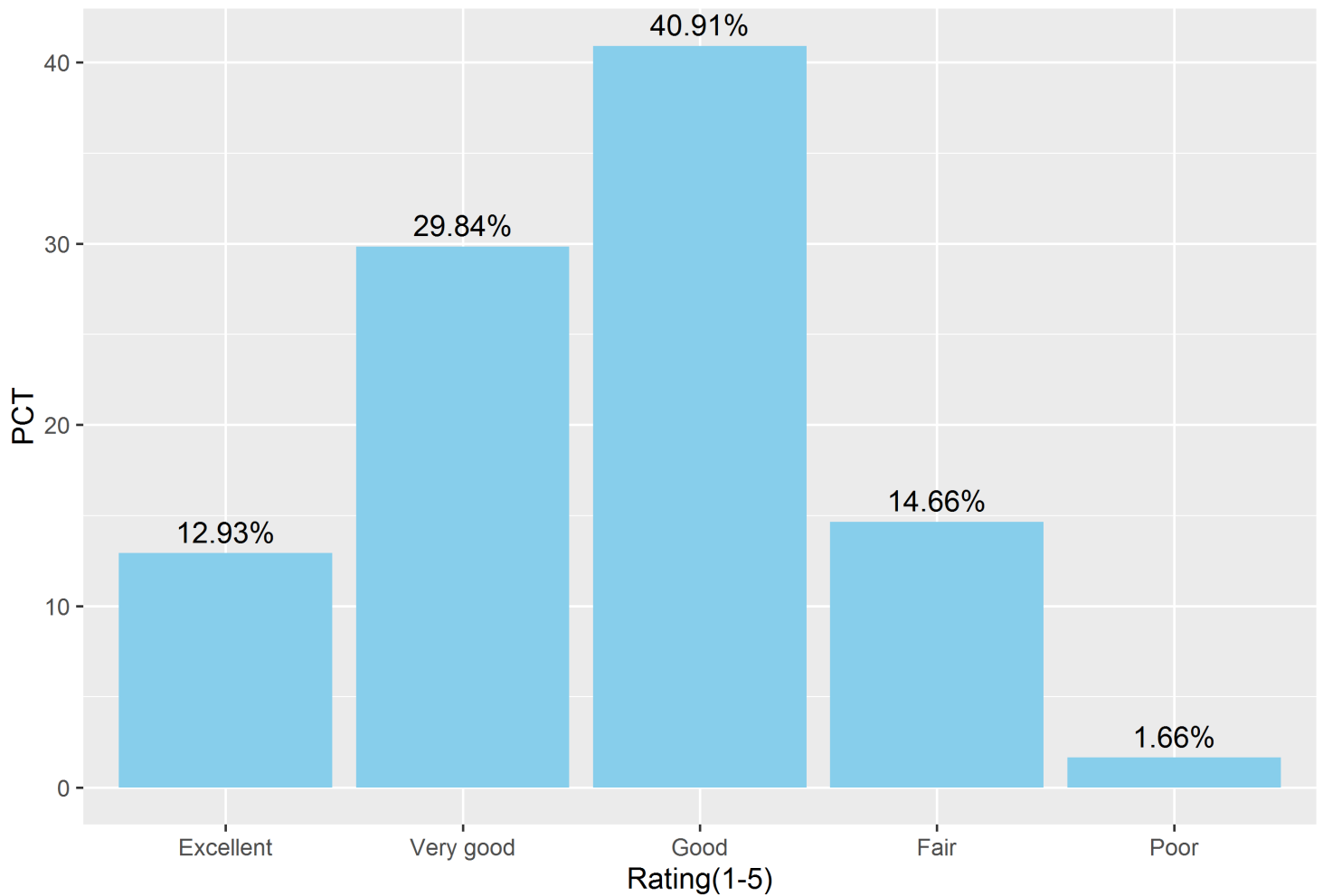
```
DBQ$DBQ700<- c("Excellent","Very good", "Good", "Fair", "Poor")
positions <- c("Excellent","Very good", "Good", "Fair", "Poor")
DBQ$test <- "Overall(N= 11,672)"
ggplot(DBQ, aes(x=DBQ700, y = FREQ)) + geom_bar(stat="identity" , fill = "sky blue")+
  geom_text(aes(label = sprintf("%.2f%%", FREQ)), vjust = -.5)+ labs(title = "How healthy is your diet? N= 1
1,762", x = "Rating(1-5)", y = "PCT")+ scale_x_discrete(limits = positions)
```


How healthy is your diet? N= 11,762



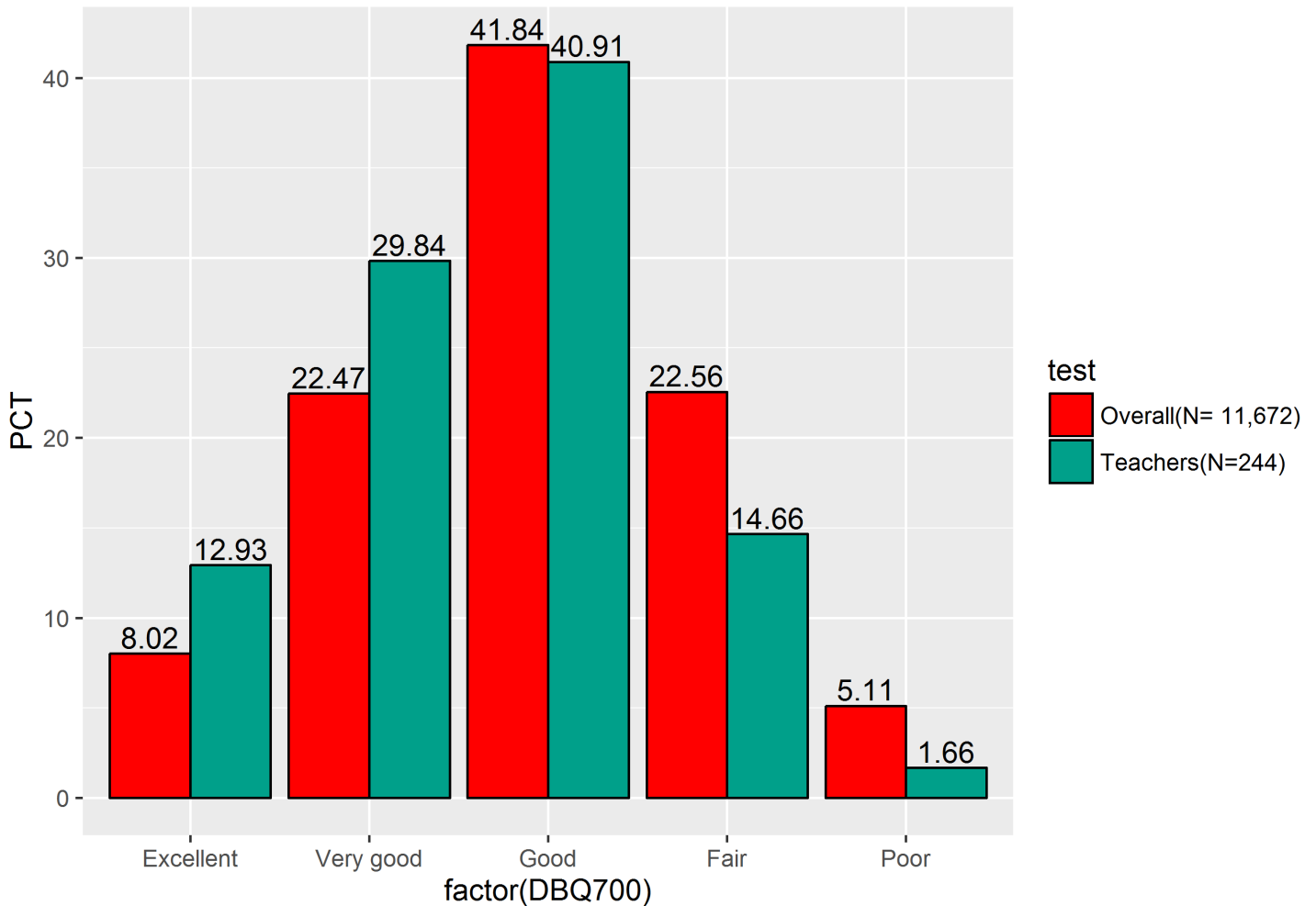
```
teachDBQ$DBQ700<- c("Excellent","Very good", "Good", "Fair", "Poor")
teachDBQ$test <- "Teachers(N=244)"
positions <- c("Excellent","Very good", "Good", "Fair", "Poor")
ggplot(teachDBQ, aes(x=DBQ700, y = FREQ)) + geom_bar(stat="identity" , fill = "sky blue")+
  geom_text(aes(label = sprintf("%.2f%", FREQ)), vjust = -.5)+ labs(title = "How healthy is your diet? N= 2
44", x = "Rating(1-5)", y = "PCT")+ scale_x_discrete(limits = positions)
```

How healthy is your diet? N= 244



```
graphCombine <- rbind(DBQ, teachDBQ)
positions <- c("Excellent","Very good", "Good", "Fair", "Poor")
ggplot(graphCombine, aes(factor(DBQ700), FREQ, fill = test)) +
  geom_bar(stat="identity", position = "dodge", colour = "black") +labs(title = "How healthy is your diet?",
  y = "PCT")+ scale_x_discrete(limits = positions) + geom_text(aes(label=round(FREQ , 2)), position=position_
dodge(width=0.9), vjust=-0.25) + scale_fill_manual(values=wes_palette(n=3, name="Darjeeling"))
```

How healthy is your diet?

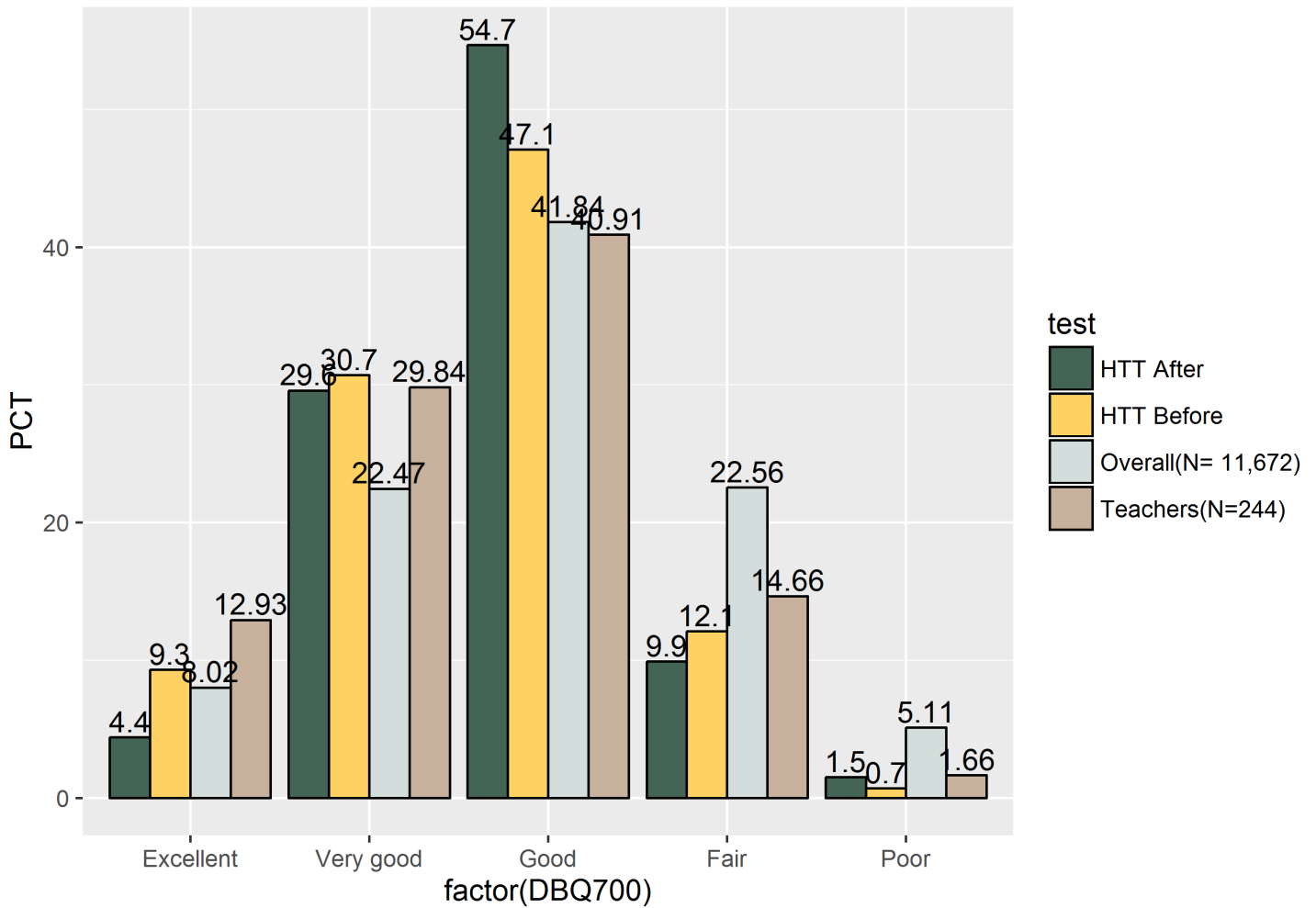


####BUILD HTT DATASET

```
DBQ700 = c("Excellent","Very good", "Good", "Fair", "Poor" ,"Excellent","Very good", "Good", "Fair", "Poor")
FREQ = c(9.3 , 30.7 , 47.1 , 12.1 , 0.7 , 4.4 ,29.6 ,54.7 , 9.9 , 1.5)
test = c("HTT Before", "HTT Before", "HTT Before", "HTT Before", "HTT Before" , "HTT After" , "HTT After" ,
"HTT After" , "HTT After" , "HTT After")
df2 = data.frame(DBQ700, test, FREQ)
df2$se <- NA
df2$weightedTotal <- NA
```

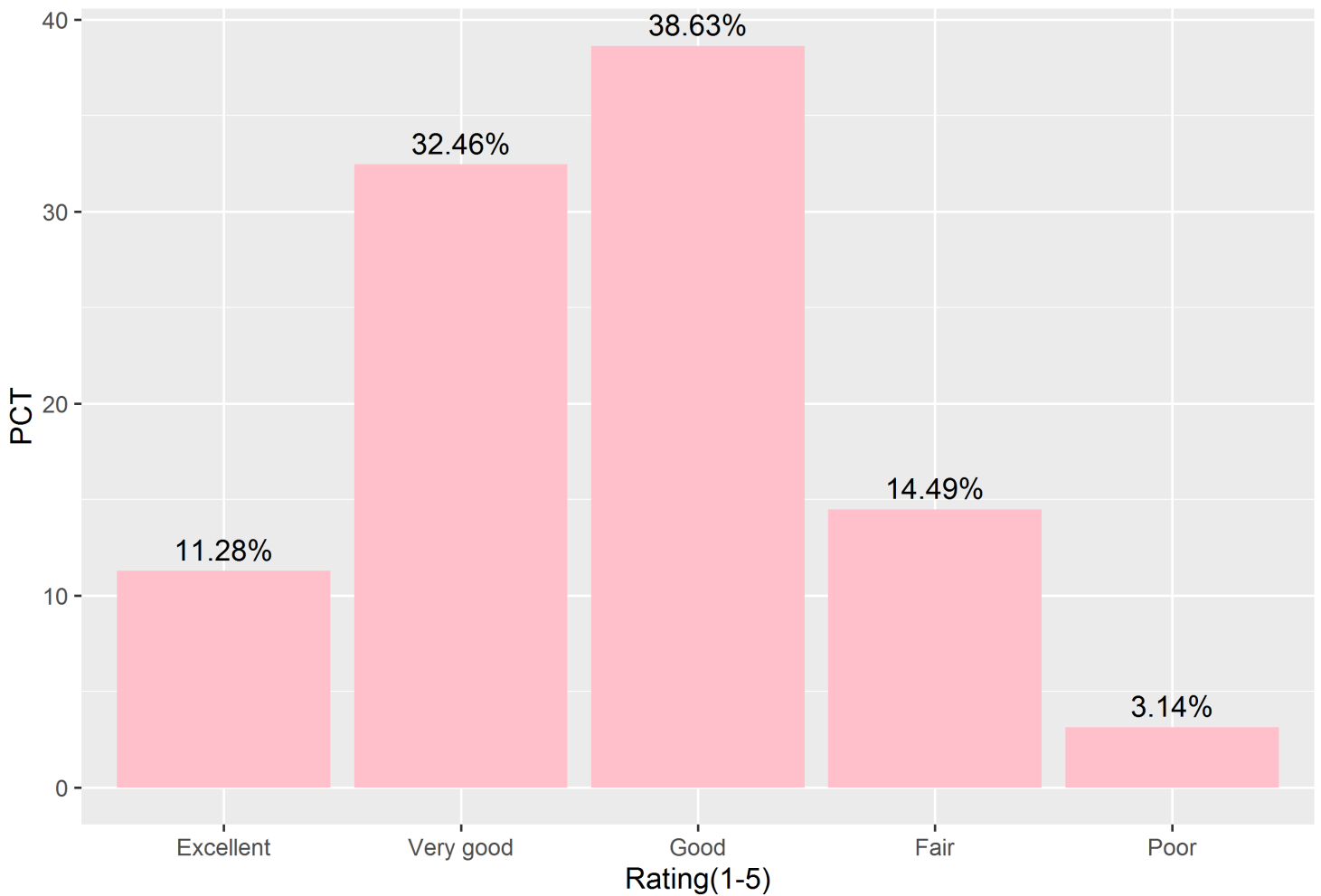
```
newDB2 <- rbind(df2, graphCombine)
positions <- c("Excellent","Very good", "Good", "Fair", "Poor")
ggplot(newDB2, aes(factor(DBQ700), FREQ, fill = test)) +
  geom_bar(stat="identity", position = "dodge", colour = "black") +labs(title = "How healthy is your diet?",
y = "PCT")+ scale_x_discrete(limits = positions) + geom_text(aes(label=round(FREQ , 2)), position=position_
dodge(width=0.9), vjust=-0.25) + scale_fill_manual(values=wes_palette(n=4, name="Chevalier"))
```

How healthy is your diet?



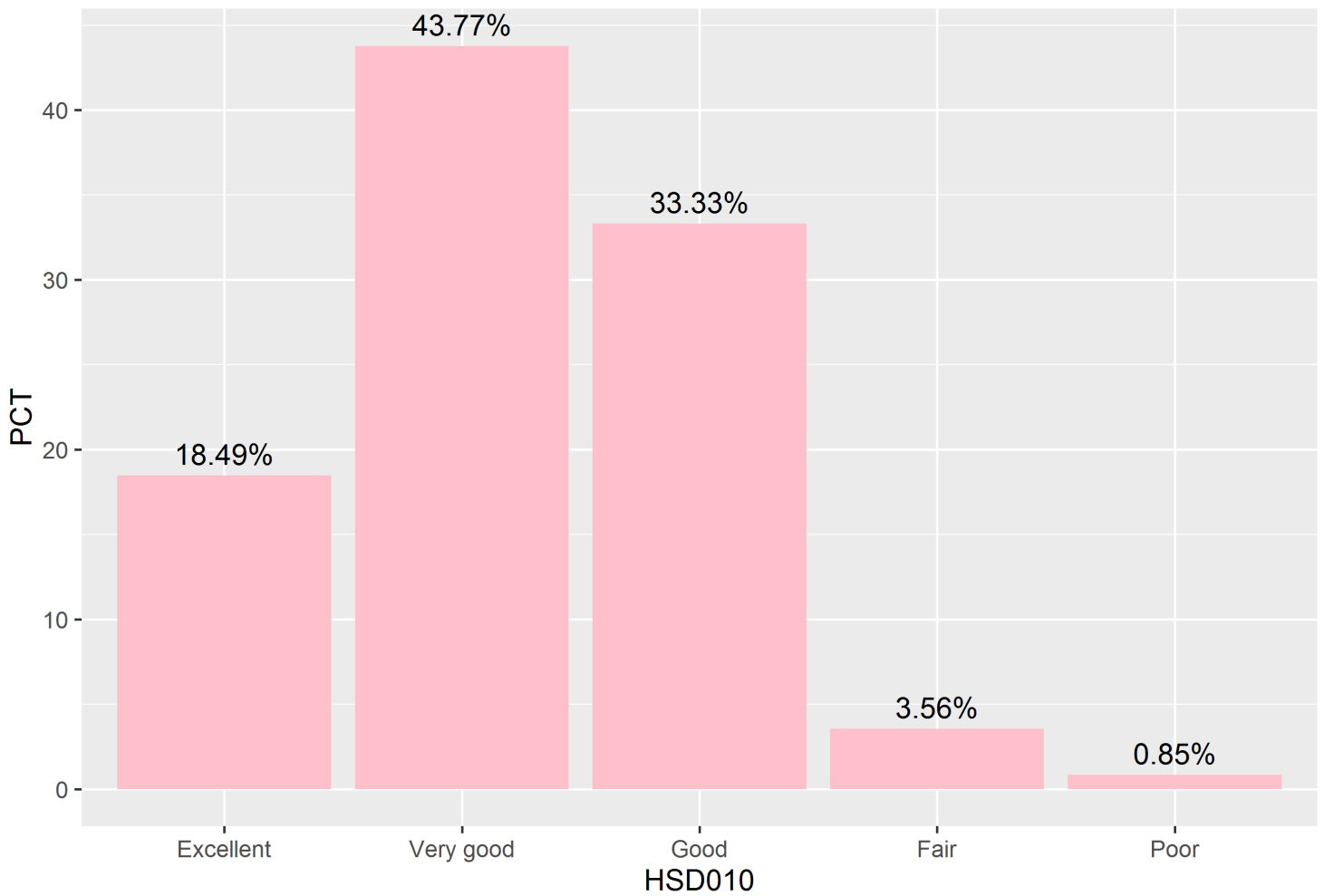
```
genHealth$HSD010<- c("Excellent","Very good", "Good", "Fair", "Poor")
genHealth$test<- 'Overall(N= 10,595)'
positions <- c("Excellent","Very good", "Good", "Fair", "Poor")
ggplot(genHealth, aes(x=HSD010, y = FREQ)) + geom_bar(stat="identity" , fill = "pink")+
  geom_text(aes(label = sprintf("%.2f%%", FREQ)), vjust = -.5)+ labs(title = "How would you rate your overall health? N= 10,595", x = "Rating(1-5)", y = "PCT")+ scale_x_discrete(limits = positions)
```

How would you rate your overall health? N= 10,595



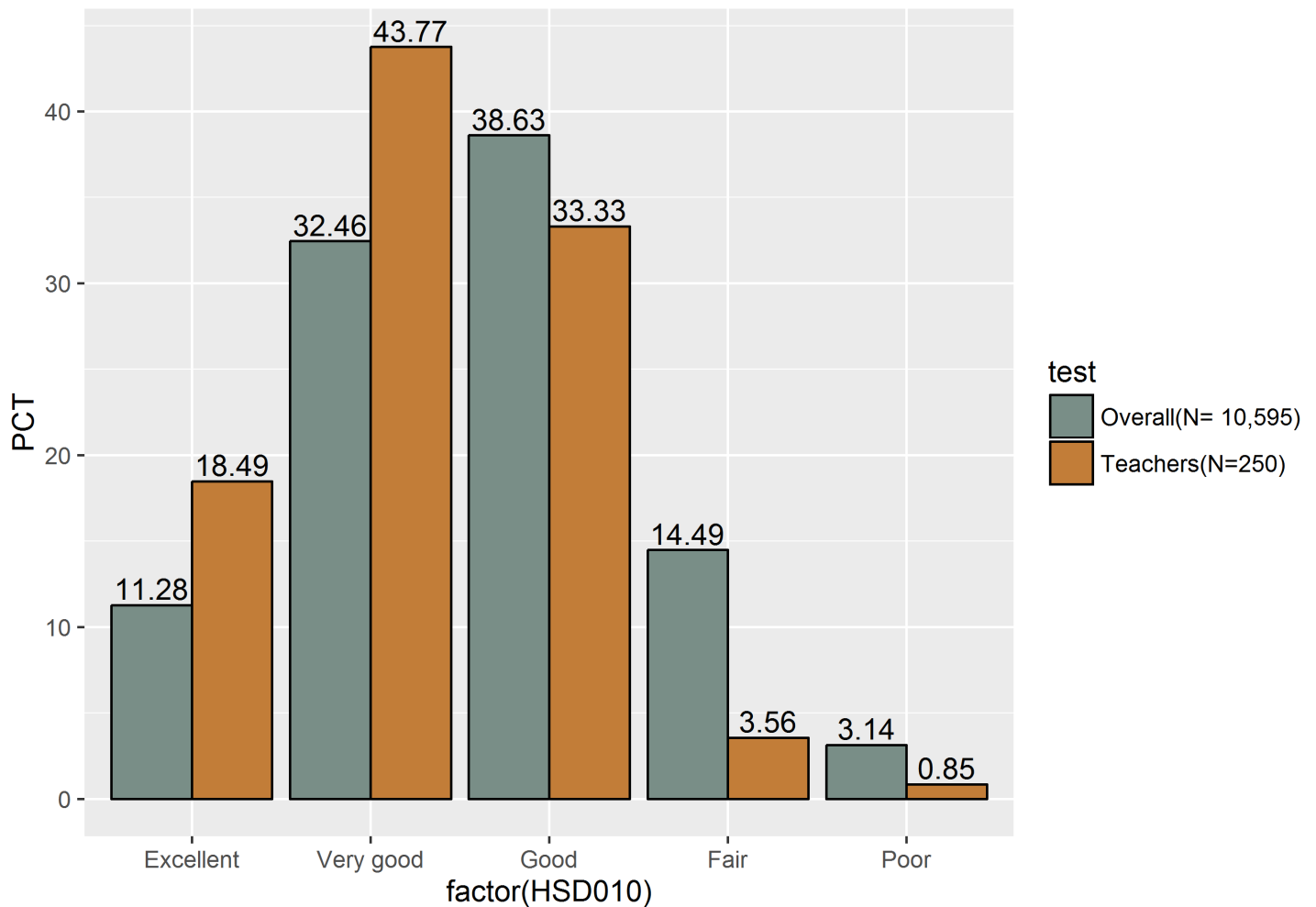
```
teachGenHealth$HSD010<- c("Excellent","Very good", "Good", "Fair", "Poor")
teachGenHealth$test <- "Teachers(N=250)"
positions <- c("Excellent","Very good", "Good", "Fair", "Poor")
ggplot(teachGenHealth, aes(x=HSD010, y = FREQ)) + geom_bar(stat="identity" , fill = "pink")+
  geom_text(aes(label = sprintf("%.2f%", FREQ)), vjust = -.5)+ labs(title = "How would you rate your overall health? N= 250", y = "PCT")+ scale_x_discrete(limits = positions)
```

How would you rate your overall health? N= 250



```
testr <- rbind(genHealth, teachGenHealth)
positions <- c("Excellent", "Very good", "Good", "Fair", "Poor")
ggplot(testr, aes(factor(HSD010), FREQ, fill = test)) +
  geom_bar(stat="identity", position = "dodge", colour = "black") + labs(title = "How would you rate your overall health? ", y = "PCT") + scale_x_discrete(limits = positions) + geom_text(aes(label=round(FREQ, 2)), position=position_dodge(width=0.9), vjust=-0.25) + scale_fill_manual(values=wes_palette(n=3, name="Moonrise2"))
```

How would you rate your overall health?

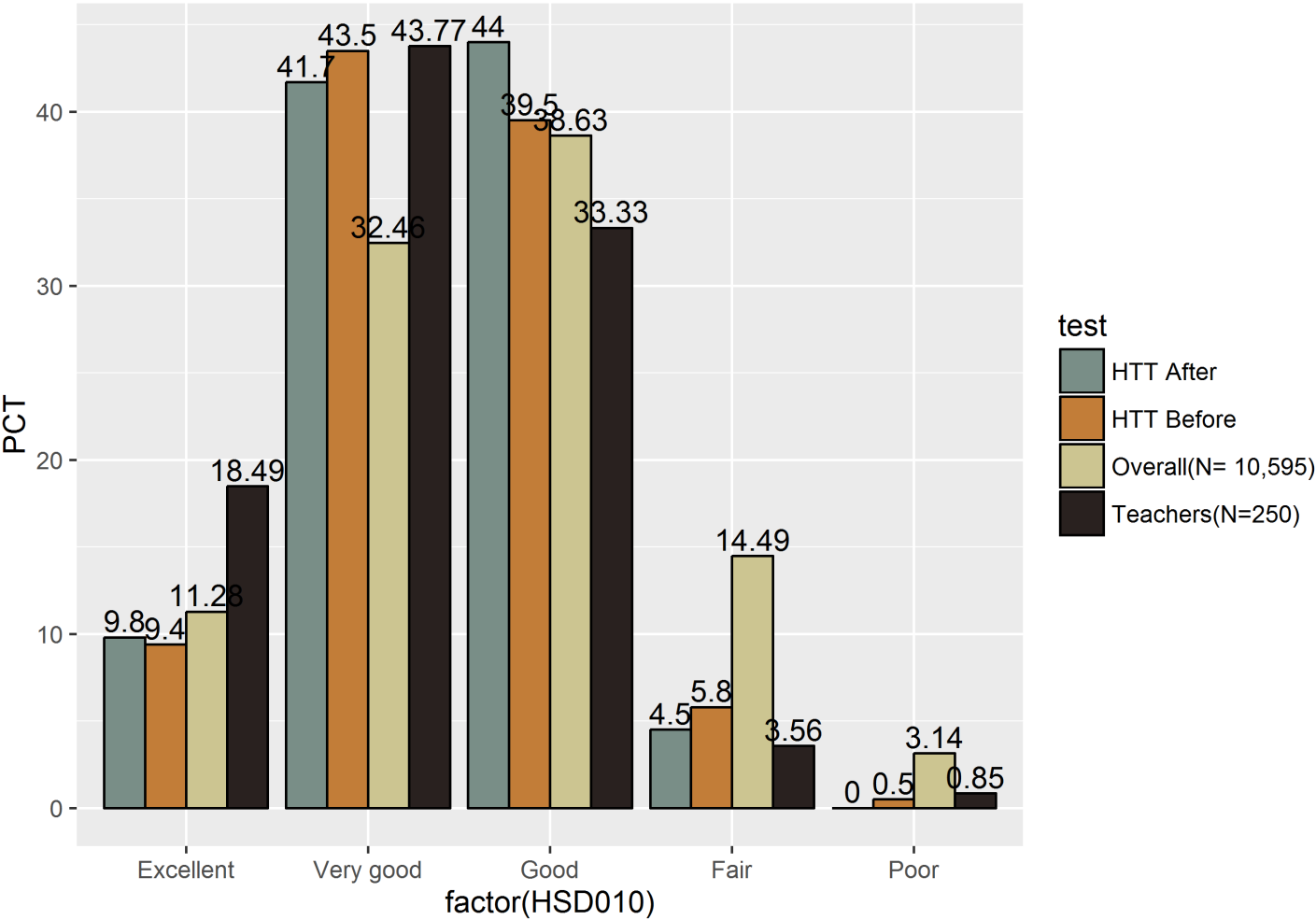


####BUILD HTT DATASET

```
HSD010 = c("Excellent","Very good", "Good", "Fair", "Poor" ,"Excellent","Very good", "Good", "Fair", "Poor")
FREQ = c(9.4 , 43.5 , 39.5 , 5.8 , 0.5 , 9.8, 41.7, 44.0 , 4.5 , 0 )
test = c("HTT Before", "HTT Before", "HTT Before", "HTT Before", "HTT Before" , "HTT After" , "HTT After" ,
"HTT After" , "HTT After" , "HTT After")
df = data.frame(HSD010, test, FREQ)
df$se <- NA
df$weightedTotal <- NA

newDB <- rbind(df , testr)
positions <- c("Excellent","Very good", "Good", "Fair", "Poor")
ggplot(newDB, aes(factor(HSD010), FREQ, fill = test)) +
  geom_bar(stat="identity", position = "dodge" , colour = "black" ) +labs(title = "How would you rate your o
verall health? ", y = "PCT")+ scale_x_discrete(limits = positions) + geom_text(aes(label=round(FREQ , 2)), p
osition=position_dodge(width=0.9), vjust=-0.25) + scale_fill_manual(values=wes_palette(n=4,
name="Moonrise2"))
```

How would you rate your overall health?



NEED TO STACK BARPLOTS, FINISH LAB DATA , TYPE UP METHODS.