Calculate dataJ1
and create dataJ1
(over writing)

Piping – ‘and then do something’
- take dataJ1 and do something

```
dataJ1 <- dataJ1 %>% rename(cons_yn = hh_j01)
```

Change variable name (New name = Old name)

Change NONE in pur_quart, prod_quart, gift_quart into NA

```
dataJ1 <- dataJ1 %>%
 mutate(
  pur_quant = na_if(pur_quant, "NONE"),
  prod_quant = na_if(prod_quant, "NONE"),
  gift_quant = na_if(gift_quant, "NONE"),
 )
```

```
mutate(pur_quant=0)
```

‘change column pur_quant into 0’

```
mutate(pur_quant=na_if(pur_quant, “NONE”)
```

‘change NA if pur_quant is NONE’

```
mutate(
  pur_quant=0,
  prod_quant=0,
  gift_quant=0
)
```

```
mutate(pur_quant=0, prod_quant=0, gift_quant=0)
```

```
dataJ1 <- dataJ1 %>%
 mutate(
  itemcode = as.factor(itemcode),
  cons_yn = as.factor(cons_yn),
  cons_unit = as.factor(cons_unit),
  cons_quant = as.numeric(cons_quant),
  pur_unit = as.factor(pur_unit),
  pur_quant = as.numeric(pur_quant),
  prod_unit = as.factor(prod_unit),
  prod_quant = as.numeric(prod_quant),
  gift_unit = as.factor(gift_unit),
  gift_quant = as.numeric(gift_quant)
 )
```

`mutate(itemcode = as.factor(itemcode))`

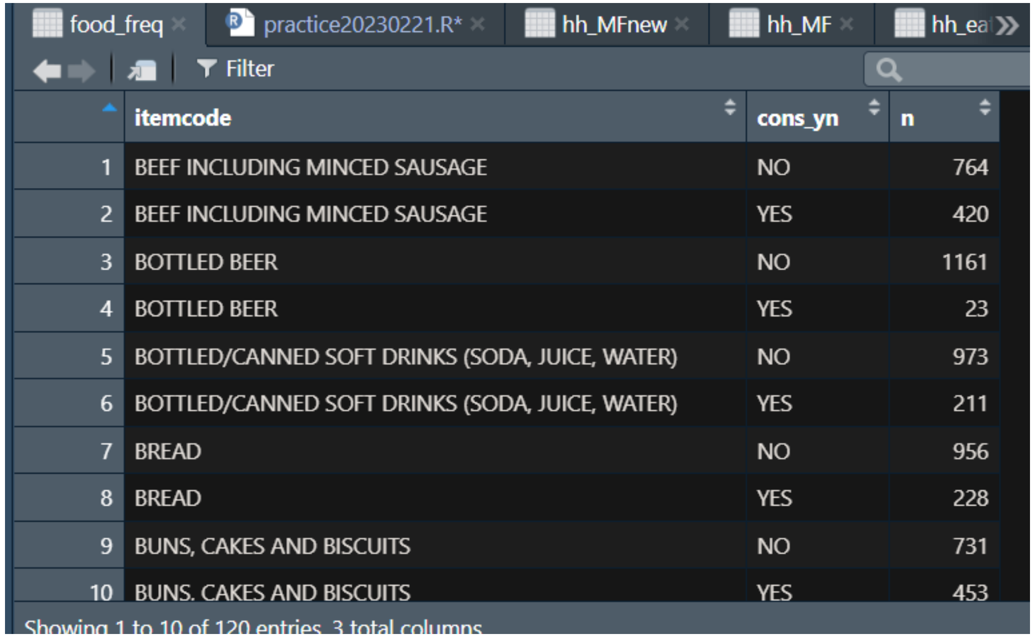
‘change column itemcode; change variable type as factor type’

```
food_freq <- count(dataJ1, itemcode, cons_yn)
```

count cons_yn by itemcode in dataJ1

Use piping:

```
food_freq <- dataJ1 %>% count(itemcode, cons_yn)
```



	itemcode	cons_yn	n
1	BEEF INCLUDING MINCED SAUSAGE	NO	764
2	BEEF INCLUDING MINCED SAUSAGE	YES	420
3	BOTTLED BEER	NO	1161
4	BOTTLED BEER	YES	23
5	BOTTLED/CANNED SOFT DRINKS (SODA, JUICE, WATER)	NO	973
6	BOTTLED/CANNED SOFT DRINKS (SODA, JUICE, WATER)	YES	211
7	BREAD	NO	956
8	BREAD	YES	228
9	BUNS, CAKES AND BISCUITS	NO	731
10	BUNS, CAKES AND BISCUITS	YES	453

Showing 1 to 10 of 120 entries, 3 total columns

One food item 'package/canned fish' was YES=0 and NO=1184, so omitted YES count (total obs. is 119, not 120, i.e. 60 food items with YES and NO counts). To keep YES in the action, use .drop=FALSE (do not drop any categories);

```
food_freq <- count(dataJ1, itemcode, cons_yn, .drop = FALSE)
```

.drop (default is .drop = TRUE) ‘if the group counts 0, omitted the group’
.drop = FALSE ‘if the group counts 0, DO NOT omit it’

(1) Frequency - select only Yes cases in cons_yn

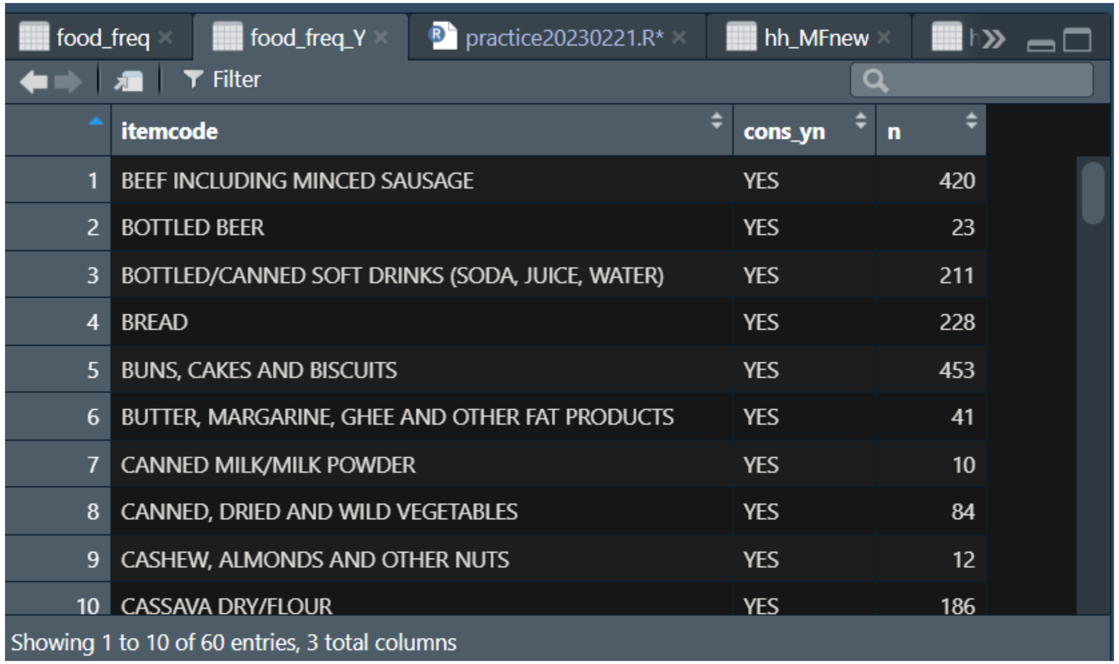
```
food_freq_Y <- filter(food_freq, cons_yn == "YES")
```

New file name

‘In food_freq file, select cons_yn with YES only’

Or using piping %>%,

```
food_freq_Y <- food_freq %>% filter(cons_yn == "YES")
```



	itemcode	cons_yn	n
1	BEEF INCLUDING MINCED SAUSAGE	YES	420
2	BOTTLED BEER	YES	23
3	BOTTLED/CANNED SOFT DRINKS (SODA, JUICE, WATER)	YES	211
4	BREAD	YES	228
5	BUNS, CAKES AND BISCUITS	YES	453
6	BUTTER, MARGARINE, GHEE AND OTHER FAT PRODUCTS	YES	41
7	CANNED MILK/MILK POWDER	YES	10
8	CANNED, DRIED AND WILD VEGETABLES	YES	84
9	CASHEW, ALMONDS AND OTHER NUTS	YES	12
10	CASSAVA DRY/FLOUR	YES	186

Showing 1 to 10 of 60 entries, 3 total columns

(2) Calculate and add percentage in food_freq_Y

```
food_freq_Y <- food_freq_Y %>% mutate(percentage = n / 1184 * 100)
```

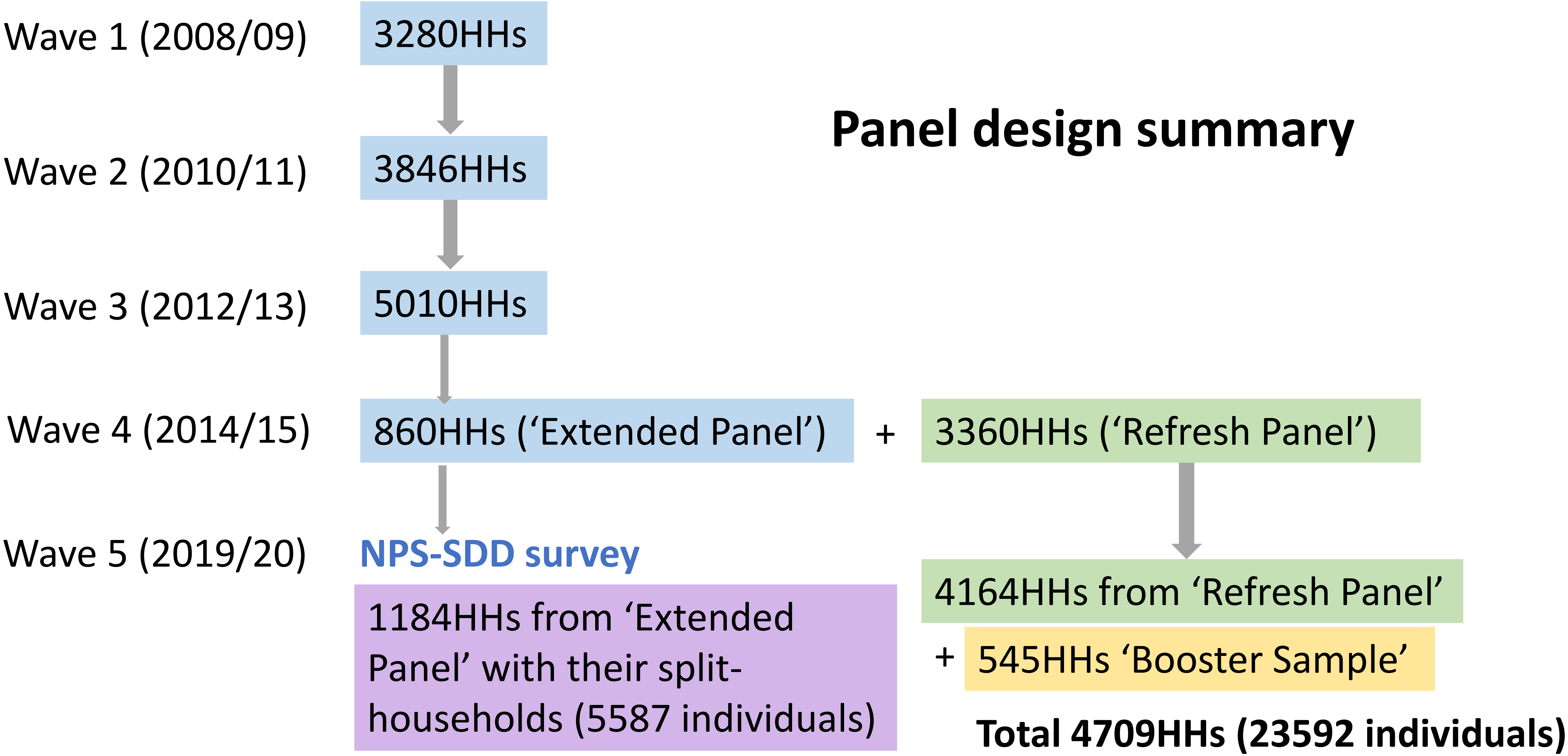
‘Calculate n/1184*100 in a new variable calls percentage’

(3) Adjust decimal places

```
food_freq_Y <- food_freq_Y %>% mutate(percentage = round((n / 1184 * 100), 3))
```

‘Round calculated values (n/1184*100) into 3 decimal places in a new variable calls percentage’

Panel design summary



Wave 1 (2008/09)

3280HHs

Wave 2 (2010/11)

3846HHs

Wave 3 (2012/13)

5010HHs

Wave 4 (2014/15)

860HHs ('Extended Panel') + 3360HHs ('Refresh Panel')

Wave 5 (2019/20)

NPS-SDD survey

1184HHs from 'Extended Panel' with their split-households (5587 individuals)

4164HHs from 'Refresh Panel'

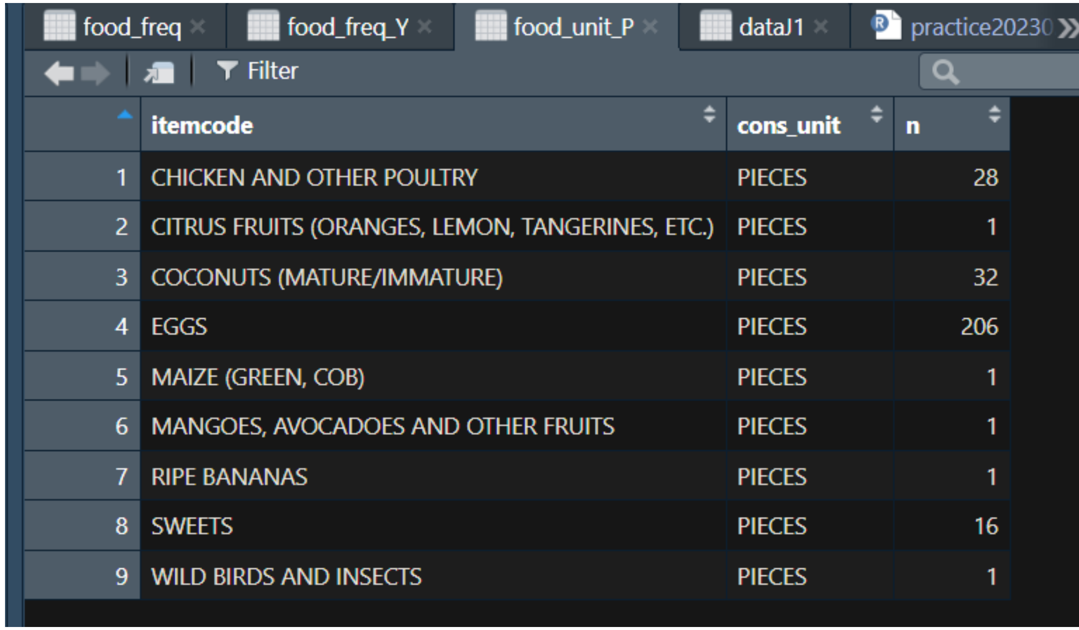
+ 545HHs 'Booster Sample'

Total 4709HHs (23592 individuals)

(1) Select the food items using PIECES, or Litre and Millilitre

```
count(dataJ1, itemcode, cons_unit)

food_unit_P <- count(dataJ1, itemcode, cons_unit)
  %>% filter(cons_unit == "PIECES")
```

Piping – ‘and then do something’



	itemcode	cons_unit	n
1	CHICKEN AND OTHER POULTRY	PIECES	28
2	CITRUS FRUITS (ORANGES, LEMON, TANGERINES, ETC.)	PIECES	1
3	COCONUTS (MATURE/IMMATURE)	PIECES	32
4	EGGS	PIECES	206
5	MAIZE (GREEN, COB)	PIECES	1
6	MANGOES, AVOCADOES AND OTHER FRUITS	PIECES	1
7	RIPE BANANAS	PIECES	1
8	SWEETS	PIECES	16
9	WILD BIRDS AND INSECTS	PIECES	1

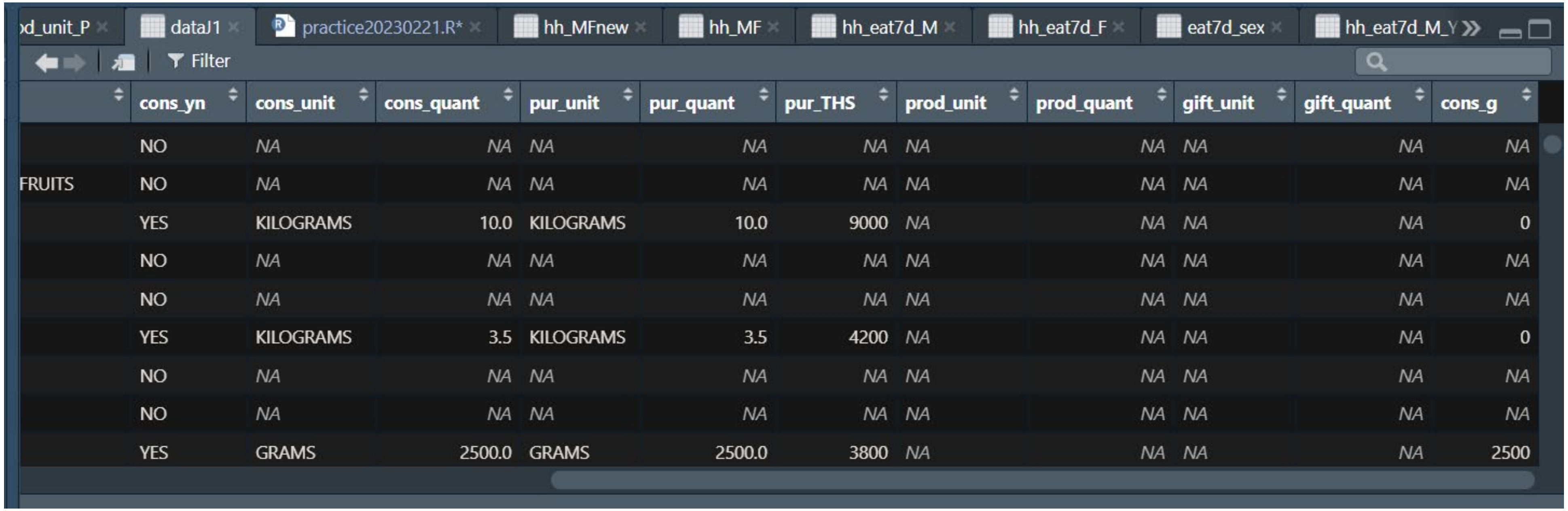
```
food_unit_L <- count(dataJ1, itemcode, cons_unit)
 %>% filter(cons_unit == "LITRE")

food_unit_mL <- count(dataJ1, itemcode, cons_unit)
 %>% filter(cons_unit == "MILLILITRE")
```

(1) Calculate food consumption in grams

```
dataJ1 <- dataJ1 %>% mutate(cons_g=if_else(cons_unit=='GRAMS', cons_quant, 0))
```

if_else(condition, if the case satisfy the condition (i.e. TRUE cases) use the value, if not satisfy (i.e. FALSE cases) use the value)

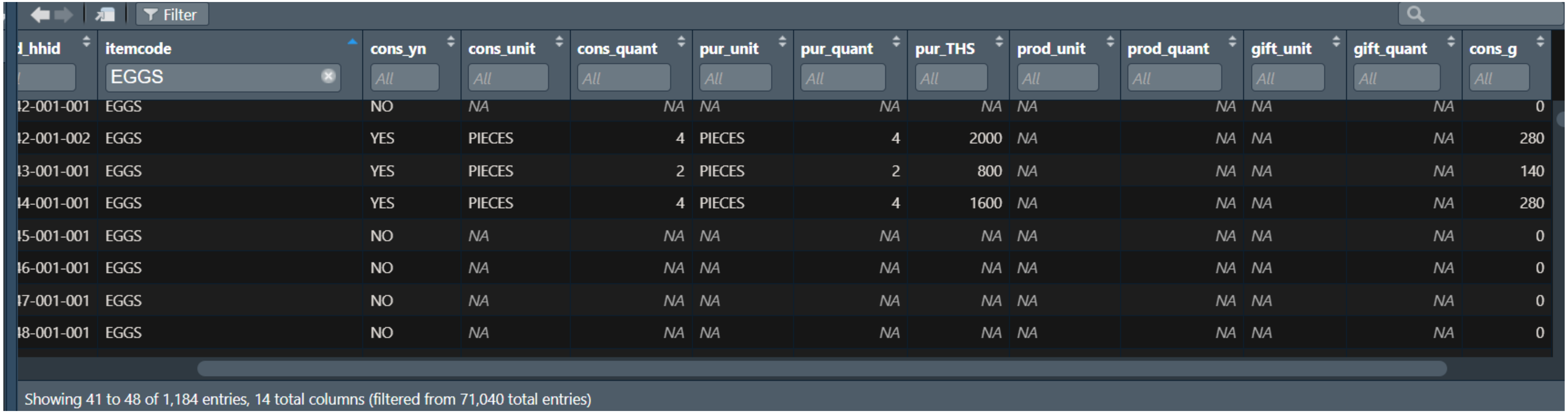
i.e. 'calculate new variable calls cons_g, if cons_unit is 'GRAMS', copy values in cons_quant, and others are 0'



	cons_yn	cons_unit	cons_quant	pur_unit	pur_quant	pur_THS	prod_unit	prod_quant	gift_unit	gift_quant	cons_g
	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
FRUITS	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	YES	KILOGRAMS	10.0	KILOGRAMS	10.0	9000	NA	NA	NA	NA	0
	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	YES	KILOGRAMS	3.5	KILOGRAMS	3.5	4200	NA	NA	NA	NA	0
	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	YES	GRAMS	2500.0	GRAMS	2500.0	3800	NA	NA	NA	NA	2500

When multiple conditions apply, use case_when

```
dataJ1 <- dataJ1 %>%
 mutate(cons_g=
       case_when(cons_unit=="GRAMS"~cons_quant,
                 cons_unit=="KILOGRAMS"~(cons_quant*1000),
                 cons_unit=="PIECES" & itemcode=="EGGS"~(cons_quant*70),
                TRUE~0))
```



_hhid	itemcode	cons_yn	cons_unit	cons_quant	pur_unit	pur_quant	pur_THS	prod_unit	prod_quant	gift_unit	gift_quant	cons_g
	EGGS	All	All	All	All	All	All	All	All	All	All	All
2-001-001	EGGS	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
2-001-002	EGGS	YES	PIECES	4	PIECES	4	2000	NA	NA	NA	NA	280
3-001-001	EGGS	YES	PIECES	2	PIECES	2	800	NA	NA	NA	NA	140
4-001-001	EGGS	YES	PIECES	4	PIECES	4	1600	NA	NA	NA	NA	280
5-001-001	EGGS	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
6-001-001	EGGS	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
7-001-001	EGGS	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
8-001-001	EGGS	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	0

Showing 41 to 48 of 1,184 entries, 14 total columns (filtered from 71,040 total entries)