Bellabeat Case Study

An analysis of FitBit user data

Who uses non-Bellabeat products?
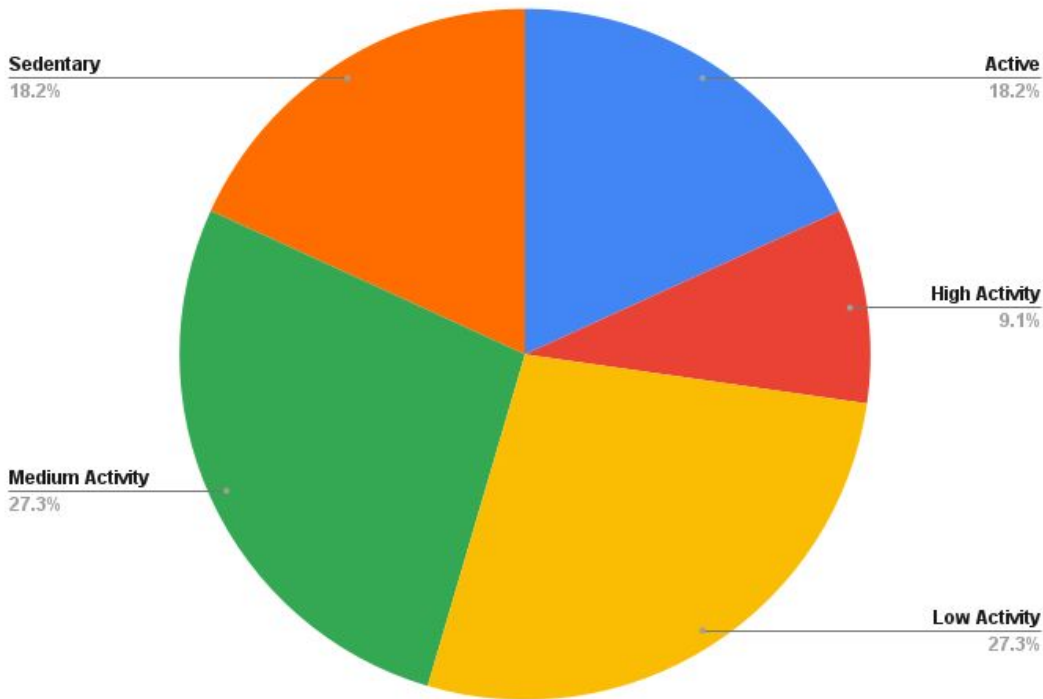
Everyone!

People of all activity levels use Bellabeat

Activity is classified by users average steps

Bellabeat: FitBit User Activity

Sedentary
18.2%

Active
18.2%

High Activity
9.1%

Medium Activity
27.3%

Low Activity
27.3%

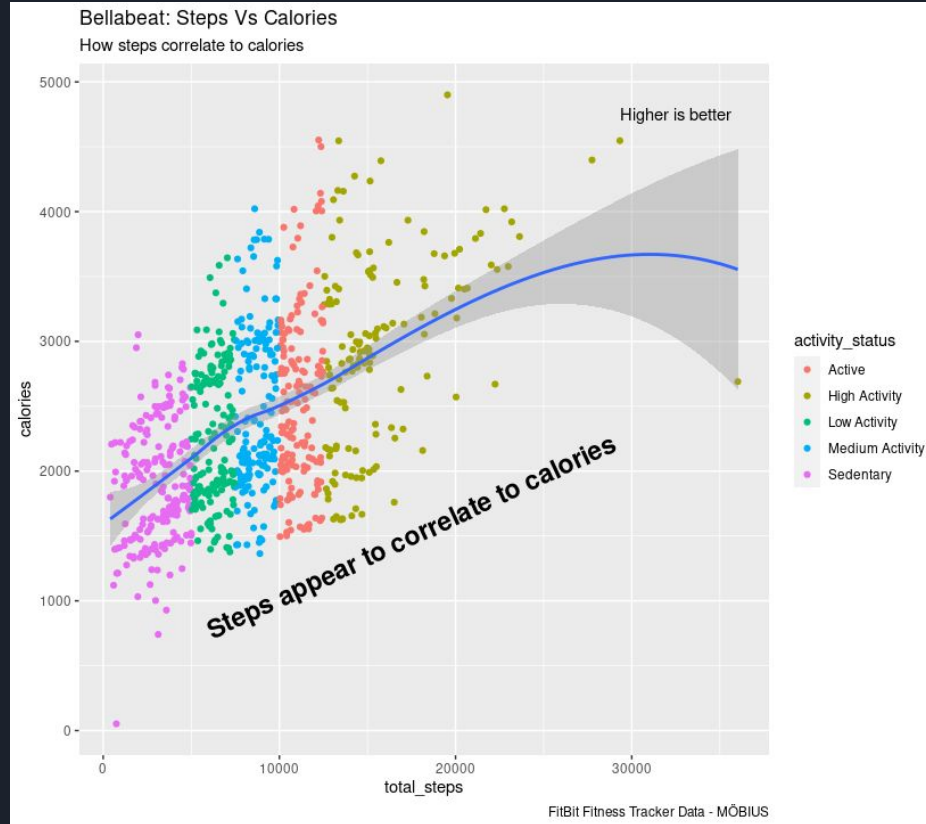Over 50% of people are low-medium activity, and 18% are sedentary

Only 27% of users classify as active or higher

Let's break that down

How do steps relate to calories?

As the steps go up so do calories.

Bellabeat: Steps Vs Calories
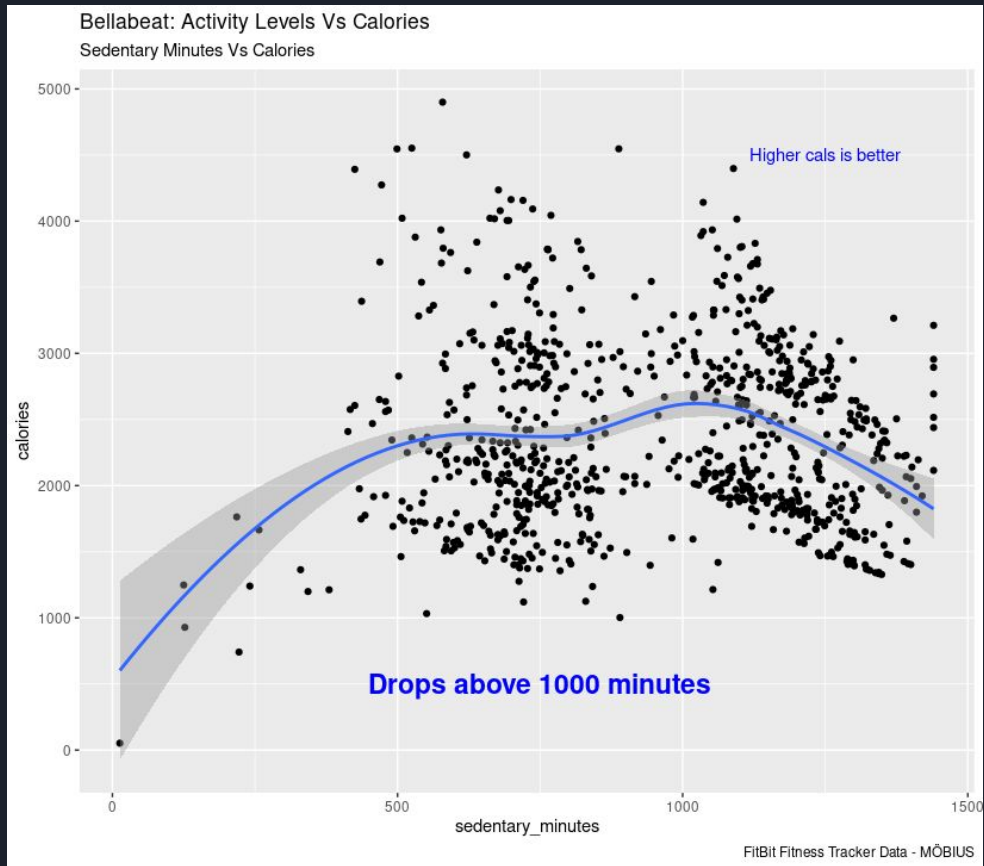How steps correlate to calories

What about other activity?
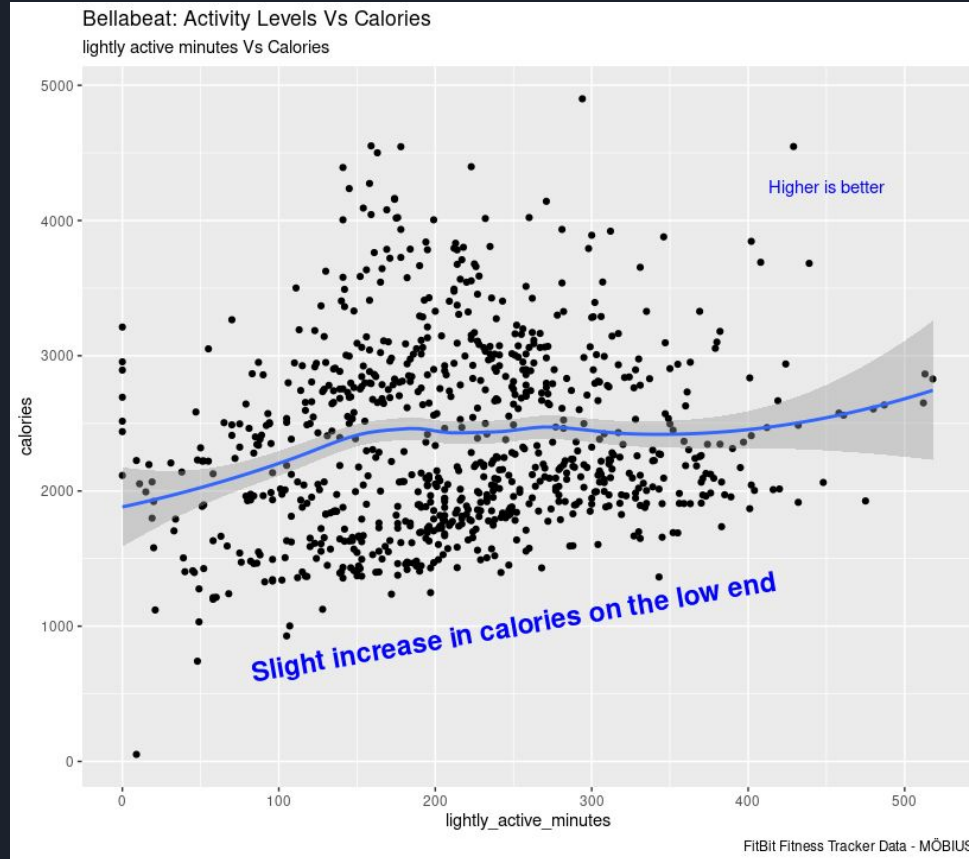
Calories and Sedentary Minutes

Time spent sedentary is pretty even in relation to calories up until 1000 minutes

Fewer people reach the top end of calorie burn as sedentary minutes increase

Bellabeat: Activity Levels Vs Calories
Sedentary Minutes Vs Calories

Higher cals is better

Drops above 1000 minutes

FitBit Fitness Tracker Data - MÖBIUS

Lightly Active Minutes and Calories

As light activity increases the low end of calorie burn also increases

Bellabeat: Activity Levels Vs Calories

lightly active minutes Vs Calories

Higher is better

Slight increase in calories on the low end

FitBit Fitness Tracker Data - MÖBIUS

Fairly Active Minutes and Calories

The Fairly Active category was an unpopular one

Increases slightly in the beginning before leveling out

Bellabeat: Activity Levels Vs Calories
Fairly Active Minutes Vs Calories

Higher is better

Does not impact calories in a meaningful way

fairly_active_minutes

calories

FitBit Fitness Tracker Data - MÖBIUS
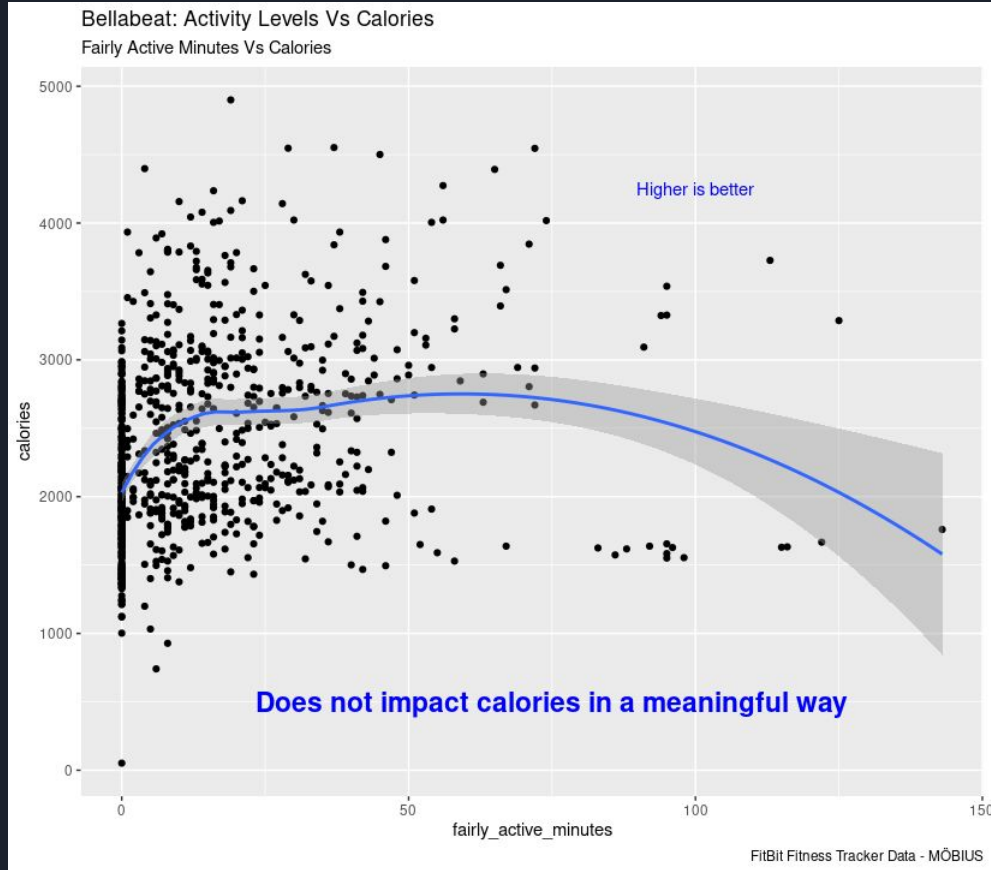
Very Active Minutes and Calories

Very Active minutes has the clearest effect on calories

As people get more Very Active minutes their calories will increase

Bellabeat: Activity Levels Vs Calories
Very Active Minutes Vs Calories

Higher is better

Large impact on calories above 40 minutes

FitBit Fitness Tracker Data - MÖBIUS
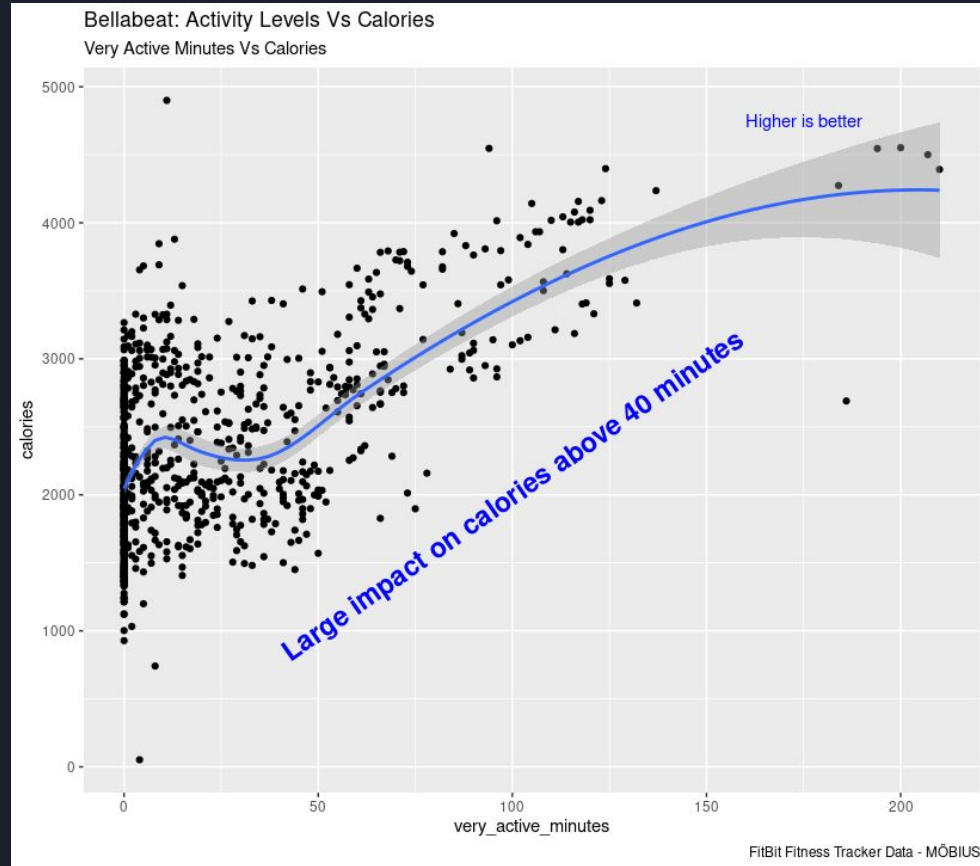
Putting that all together...

Lightly Active and Very Active categories had the most noticeable trends.

The Fairly Active category is by far the most neglected

Sedentary minutes is the most spread out category with a noticeable downward trend it reaches the top end

Bellabeat: Activity Vs Calories
Activity Levels Vs Calories

FitBit Fitness Tracker Data - MÖBIUS
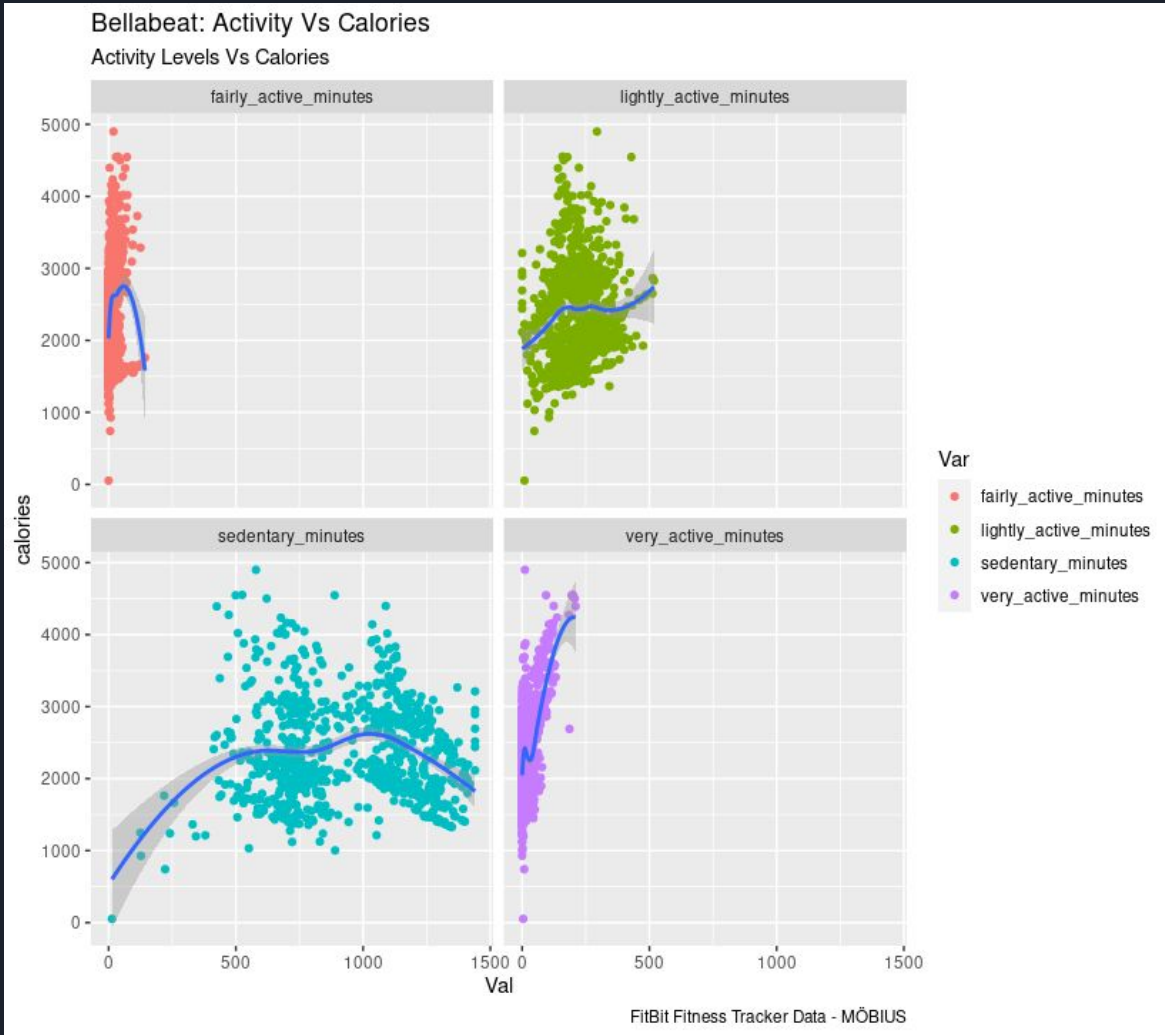
What about sleep?

What kind of sleep do FitBit users get?

50% of users get less than the recommended 7 hours of sleep
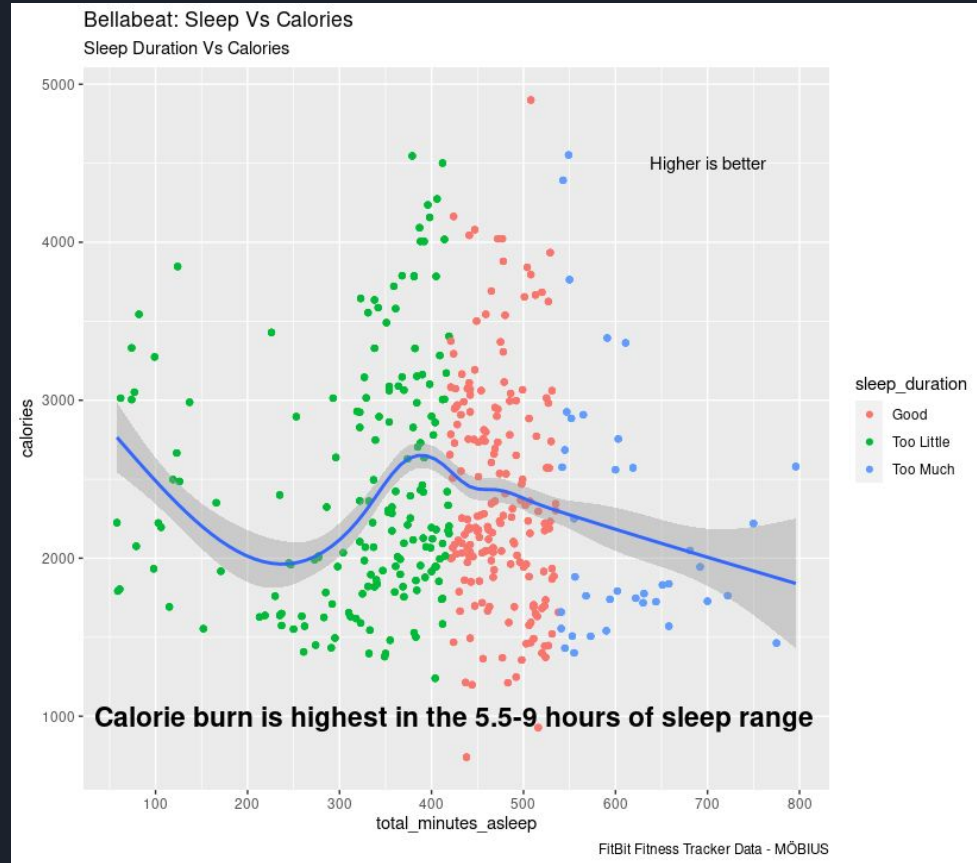

Bellabeat: FitBit User Sleep

Too Much
4.2%

Good
45.8%

Too Little
50.0%
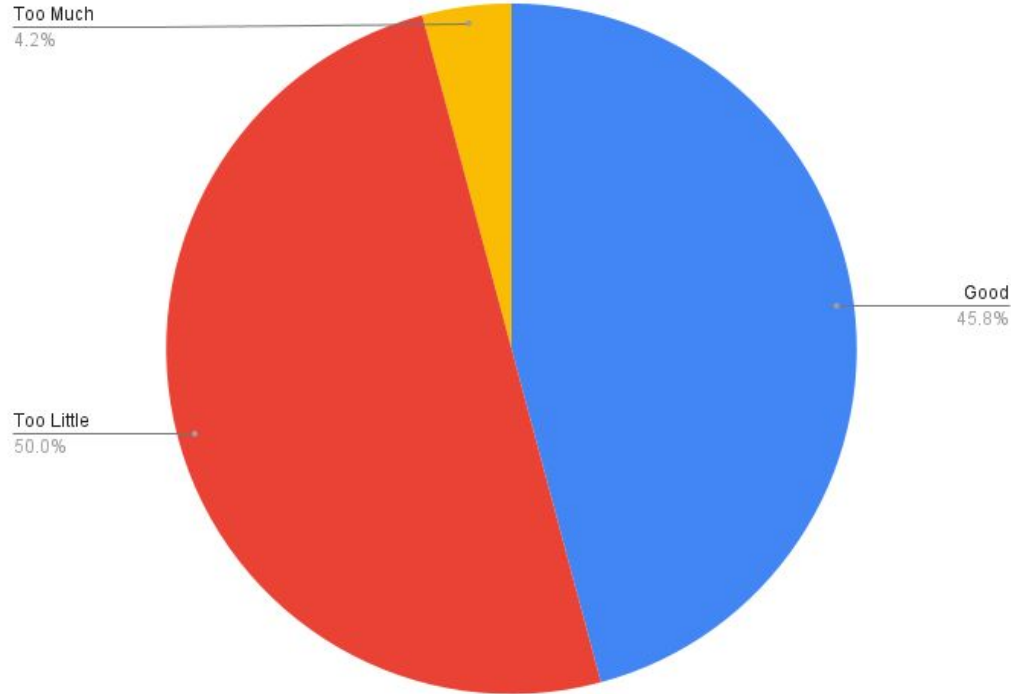
Let's break down sleep

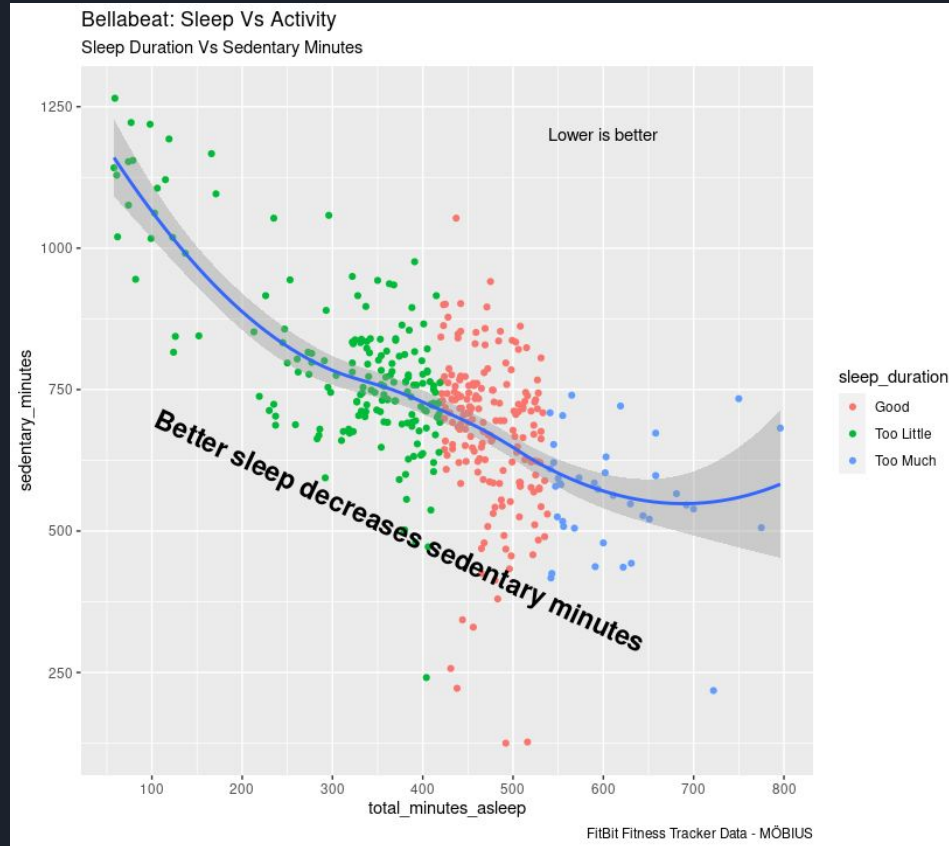# Sleep in relation to calories

Results are best in the
5.5 to 9 hour sleep range

Sleep and Sedentary Minutes

Better sleep decreases sedentary minutes

We again see the 5.5-9 hour range

Sleep and Lightly Active Minutes

Increases slightly as sleep gets into the 7-9 range with a drop as sleep goes over 9 hours

Bellabeat: Sleep Vs Activity
Sleep Duration Vs Lightly Active Minutes

Higher is better

Increases in the 7-9 hour range with a drop after 9 hours

sleep_duration
- Good
- Too Little
- Too Much

lightly_active_minutes

total_minutes_asleep

FitBit Fitness Tracker Data - MÖBIUS

Sleep and Fairly Active Minutes

Fairly Active minutes again does not tell us much

It does tell us that the majority of people who are fairly active get 5.5-9 hours of sleep

Bellabeat: Sleep Vs Activity

Sleep Duration Vs Fairly Active Minutes

higher is better

sleep_duration
- Good
- Too Little
- Too Much

The majority fall into the 5.5-9 hour range

FitBit Fitness Tracker Data - MÖBIUS
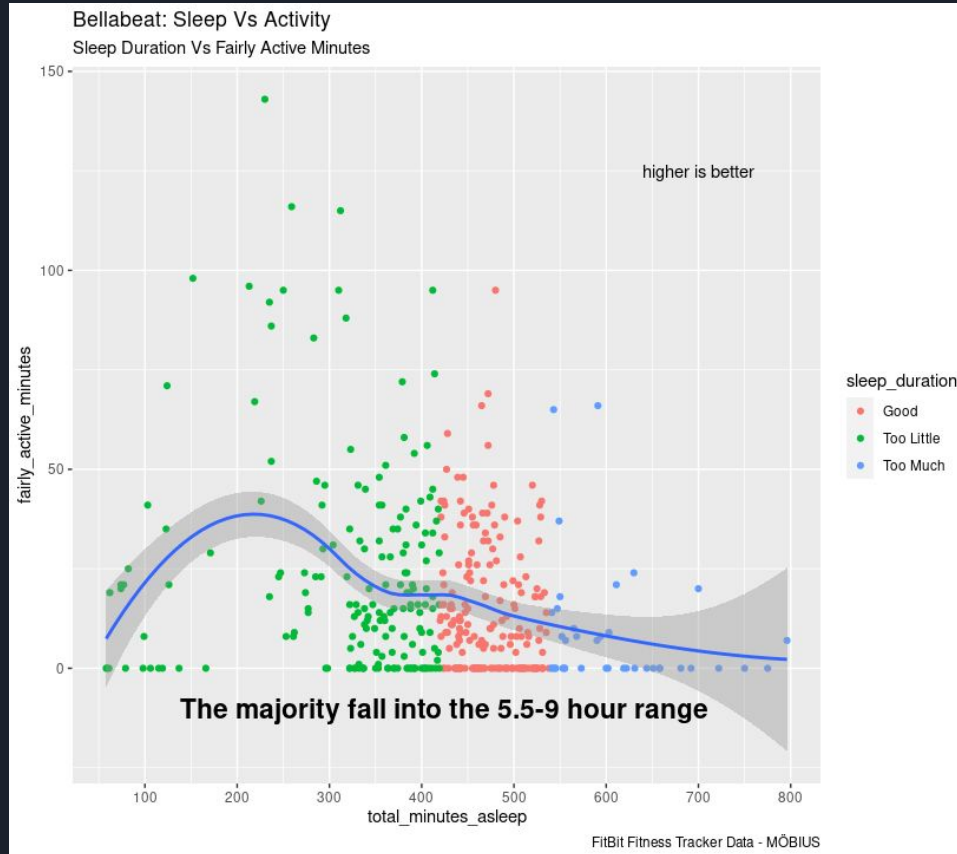
Sleep and Very Active Minutes

The Very Active category again centers around the 5.5-9 hour range.

Very Active minutes increase on the top end directly in line with healthy sleep

Bellabeat: Sleep Vs Activity

Sleep Duration Vs Very Active Minutes

higher is better

Increases with better sleep

sleep_duration
- Good
- Too Little
- Too Much

decreases with too much sleep

very_active_minutes

total_minutes_asleep

FitBit Fitness Tracker Data - MÖBIUS
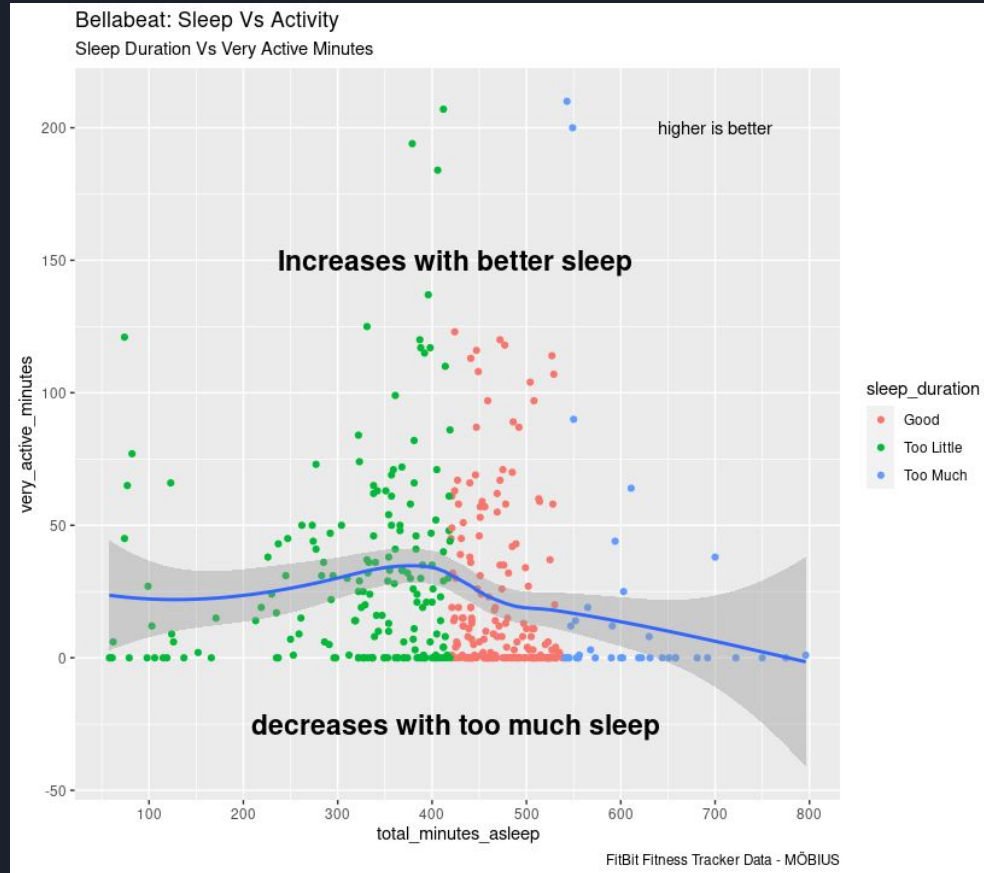
What does this all mean?

1. Steps, sleep, and exercise are the main factors in burning calories

2. Sleep correlates to how active people are

3. Steps, sleep, and exercise are lacking in a large amount of people
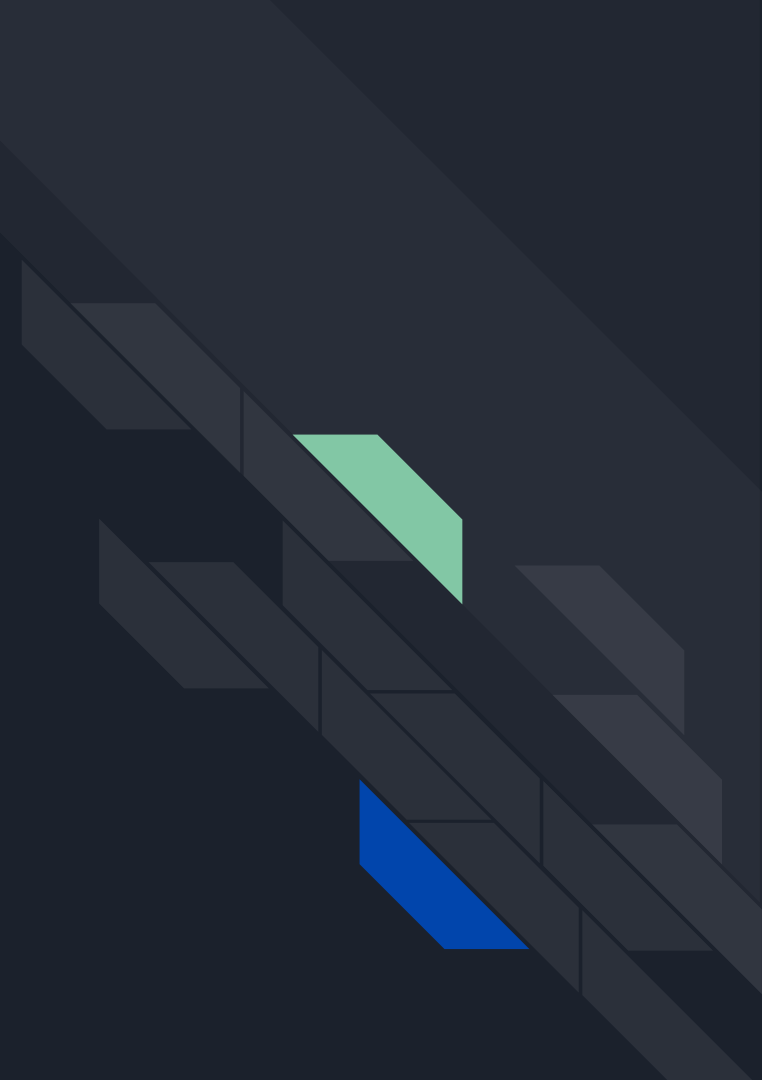
What can Bellabeat do
with this information?

Putting an emphasis on sleep, steps, and exercise would be a great way to correct some of these less than optimal numbers

How can Bellabeat
achieve this?

1. Provide resources on how important getting the recommended amount of sleep, steps, and exercise is

2. Provide an incentive for people to reach the recommended 10,000 steps, get better sleep, or exercise more

3. Include positive notifications about progress towards steps, exercise, and set goals