

Factor plot (catplot)

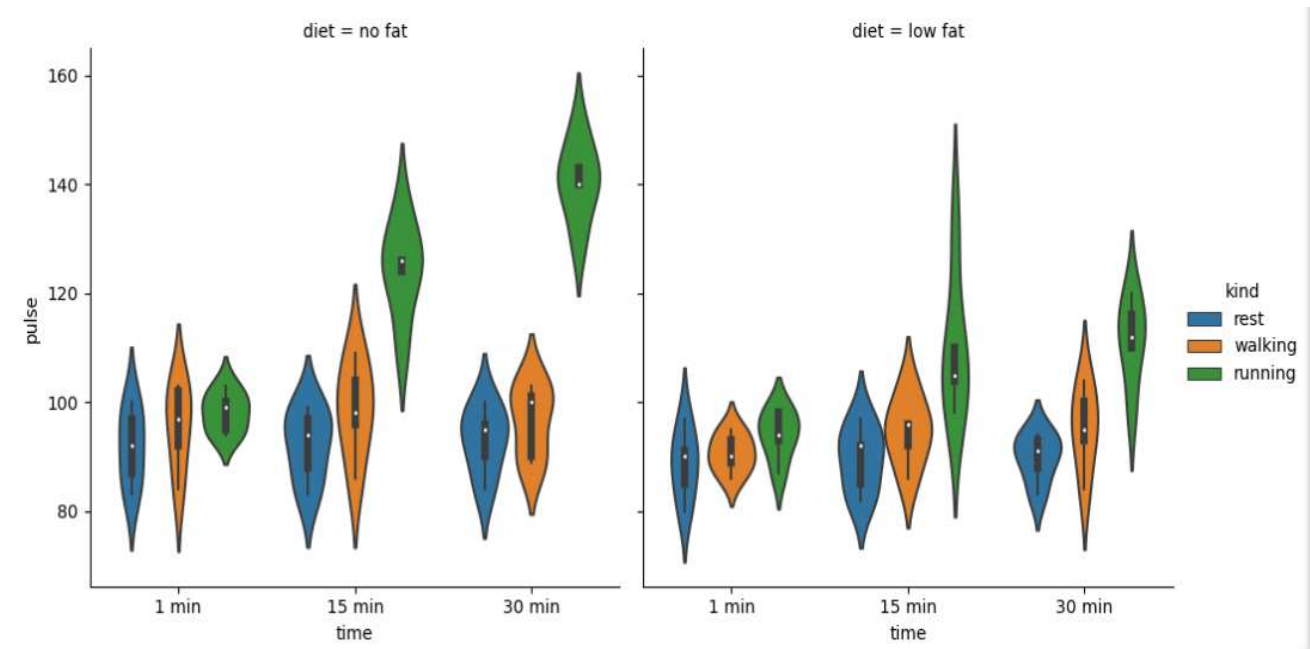
Syntax:

```
sns.factorplot(x = "None ", y = "None ", hue = "kind", kind =  
'violin', col = "diet", data = df)
```

Syntax:

```
sns.catplot(x = "None ", y = "None ", hue = "kind", kind =  
'violin', col = "diet", data = df)
```

- `sns.catplot` is the replacement for `sns.factorplot` in newer versions of Seaborn.
- **Factor Plot** is used to draw a different types of **Categorical plot**
- The default plot that is shown is a point plot, but we can plot other seaborn categorical plots by using of `kind` parameter, like box plots, violin plots, bar plots, or strip plots.



- In the two graphs, one shows diet = "no fat" and the other shows diet = "low fat."
- In this graph, the blue color represents resting, the orange color represents walking, and the green color represents running.

No fat

In 1 minute

- The pulse rate during resting time ranges from 70 to 110.
- THE Most people's resting pulse time between 83 and 100 beats per minute.
- Walking time plus rate is nearly 75-110
- The walking time mostly pulse rate is 83-110
- The running time plus rate range is 86-114.
- Most of the people's running time plus rate is 90-nearly 110.

In 15 minute

- The pulse rate during resting time ranges from 77 to 110.
- THE Most people's resting pulse time between 81 and 98 beats per minute
- Walking time plus rate is 75-125
- The walking time mostly pulse rate is 85-116
- The running time plus rate range is 100-150.
- Most of the people's running time plus rate is 125-130

In 30 minute

- The pulse rate during resting time ranges from 76 to 115.
- THE Most people's resting pulse time between 85 and 100 beats per minute
- Walking time plus rate is 88-110
- The walking time mostly pulse rate is 90-105
- The running time plus rate range is 160- above 160
- Most of the people's running time plus rate is 142-146

low fat

In 1 minute

- The pulse rate during resting time ranges from 80 to 110.
- THE Most people's resting pulse time between 99 and 100 beats per minute.
- Walking time plus rate is nearly 81-110
- The walking time mostly pulse rate is 83-100
- The running time plus rate range is 82-108.
- Most of the people's running time plus rate is 86-nearly 100.

In 15 minute

- The pulse rate during resting time ranges from 77 to 114.
- THE Most people's resting pulse time between 83 and 97 beats per minute
- Walking time plus rate is 80-120
- The walking time mostly pulse rate is 90-96
- The running time plus rate range is 80-155.
- Most of the people's running time plus rate is 100-115

In 30 minute

- The pulse rate during resting time ranges from 78 to 100.
- THE Most people's resting pulse time between 90 and 98 beats per minute
- Walking time plus rate is 83-120
- The walking time mostly pulse rate is 86-110
- The running time plus rate range is 90- 140
- Most of the people's running time plus rate is 118-125

Observations:

- In both diet types, running consistently shows the highest pulse rates across all time intervals.
- Resting has the lowest pulse rates, with minimal change over time.
- The "low fat" diet generally shows slightly higher pulse rates during running than the "no fat" diet, particularly at the 15-minute mark.

