**This chart is a Violin Plot that shows how pulse rates change for two groups — Diet and No Diet. The pulse was measured at 1, 15, and 30 minutes after three activities: Rest, Walking, and Running.**

**On the X-axis, we have the time intervals, and on the Y-axis, we see the pulse rate in beats per minute. The colors show the activities — 🟦 Rest, 🟧 Walking, 🟩 Running. The chart is split into two parts on top: one for No Fat Diet and one for Low Fat Diet.**

* **The lowest pulse rate across all activities is around 50–60 bpm, and the average pulse is about 80 bpm.**
* **At the 1-minute mark, the averages look steady for both groups — meaning everyone’s heart reacted in a similar way right after the activity.**
* **By 15 and 30 minutes, the differences show up: pulse rates climb higher during Running, especially for the No Diet group, while the Diet group looks more controlled.**

**The shape of the violin tells us how data is spread:**

* **Wider sections → more people fall in that pulse range.**
* **Narrow sections → fewer people.**

**During Running, the violins are much wider, meaning pulse rates varied a lot between people.**

**There are no extreme outliers here. The key differences come from activity intensity and diet effect. Overall, people with No Diet had higher and more scattered pulse rates, while the Diet group showed steadier and more consistent heart responses over time.**