**Hanief.S Yr11 |Exercises that affect heart rate.**

**Introduction:** What is heart rate and bpm? Does it affect our daily life and is it important? Definitely! Our heart rate is the frequency of how much our heart beats per minute. Something just as basic as that is extreme important to keep us alive and moving. The heartbeat gives clues to measure the current health and status of the heart in Beats per minute (Bpm). But what happens to our heart just after we exercise? The beats per minute will be higher than the resting heart rate, but don’t worry, it is not dangerous but in fact good for your heart as it keeps you healthy and active. But why measure the participant’s exercise instead of their sleeping habits and dietary eating habits? It is because exercise is extremely important in our lives, it keeps us fit and well and can increase our life expectancy, happiness and well-being. It reduces health risk and problems; it even strengthens bones and muscles as it keeps it moving and productive, the heart rate is always measured whether you are visiting your local GP to going to the hospital. It is because it is the best way to measure our heart condition.

**Hypothesis:** At least one participant will have a very faint heartbeat or a slight faster heartbeat. All participant has exercised at least once a week and the most will be six days a week. The resting heartbeat measurement that is done three times will all have a similar or exact same result with no major change in beats.

**Instructions/Method:** Place your index finger onto the wrist right under your thumb, this is where you can feel a pulse beat, that is your heartrate without using any equipment. Then leave the index finger there and time it for 15 seconds, then record the number of beats within the timer and times it by 2. After recording the heart rate three times. Write down the Bpm onto the graph then do the average after completing a participant.

**Equipment Recommended:**

* Timer, To time the number of beats per minute (Bpm).
* Pen/pencil, to write down the data of the Bpm.
* Paper, to write the data onto.
* Calculator, to calculate the average and times the data by 2.
* Ruler (Recommended), To neatly right the data graph.
* Laptop (Optional), To save and put all the data into.

**Independent Variable:** The amount of exercise (days per week).

**Dependent Variable:** Heartrate (Bpm) **Controlled Variable:** Timer, person’s heart rate measurement and calculation for the average result in the graph.

**Sources Used (APA Format):**

* Edward R. Laskowski, M. D. (2022, October 8). *2 easy, accurate ways to measure your heart rate*. Mayo Clinic. Retrieved March 13, 2023, from https://www.mayoclinic.org/healthy-lifestyle/fitness/expert-answers/heart-rate/faq-20057979
* Centers for Disease Control and Prevention (2021). *Benefits of physical activity*. [online] CDC.gov. Available at: <https://www.cdc.gov/physicalactivity/basics/pa-health/index.htm>.

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| SUBJECT | EXERCISE | Resting> | Heart> | Rate (B/pm) | AVERAGE | GENDER |
| SUBJECT | EXERCISE | 1 | 2 | 3 | Average | Gender |
| 1.Hanief.S | 6 | 64 Bpm | 72 Bpm | 80 Bpm | 72 Bpm | **M** |
| 2.Kendrick.T | 3 | 80 Bpm | 76 Bpm | 74 Bpm | 76 Bpm | M |
| 3.Sunday.T | 0 | 72 Bpm | 64 Bpm | 74 Bpm | 70 Bpm | F |
| 4.Jayke.M | 2 | 77 Bpm | 76 Bpm | 75 Bpm | 76 Bpm | M |
| 5. Abdullah.H | 5 | 80 Bpm | 88 Bpm | 90 Bpm | 86 Bpm | M |
| 6.Ben.D | 6 | 78 Bpm | 60 Bpm | 70 Bpm | 69 Bpm | M |
| 7. - | 0 | 86 Bpm | 90 Bpm | 84 Bpm | 86 Bpm | F |
| 8. Charmaine | 4 | 77 Bpm | 62 Bpm | 66 Bpm | 78 Bpm | F |
| 9. Danica | 3 | 85 Bpm | 74 Bpm | 77 Bpm | 79 Bpm | F |
| 11. Russell.C | 2 | 76 Bpm | 80 Bpm | 72 Bpm | 76 Bpm | M |
| 12.Armand.H | 6 | 83 Bpm | 79 Bpm | 80 Bpm | 80 Bpm | M |
| 13.Enes.C | 3 | 77 Bpm | 71 Bpm | 79 Bpm | 75 Bpm | M |
| 14. Katie.R | 5 | 88 Bpm | 77 Bpm | 82 Bpm | 82 Bpm | F |
| 15. - | 5 | 82 Bpm | 86 Bpm | 82 Bpm | 83 Bpm | F |
| 16. - | 3 | 75 Bpm | 78 Bpm | 80 Bpm | 77 Bpm | M |
| 17. Hiro | 4 | 86 Bpm | 82 Bpm | 56 Bpm | 75 Bpm | M |
| 18. - | 5 | 82 Bpm | 77 Bpm | 74 Bpm | 78 Bpm | F |
| 19. - | 2 | 80 Bpm | 75 Bpm | 77 Bpm | 77 Bpm | M |
| 20. - | 4 | 78 Bpm | 74 Bpm | 76 Bpm | 76 Bpm | F |

**Resting Heart Rate and Exercise (Days per week) Table**