Measuring Your Percentage Heart Rate Output to Optimize Training and Reduce Injuries

1. Use Heart Rate Monitor: Increased accuracy and reliability the more its used
    - Doesn't need to be elaborate, just consistent.
    - Some devices will calculate percentages and target heart rate for you. If not then here are two easy formulas:
        1) Karvonen Formula (in beats per minute or bpm)
            - 220 – Age = Max HR
            - Max HR – Resting HR = HR Reserve
            - (HR Reserve X Training % as Rx'ed) + Resting HR = Target HR in bpm
              *EXAMPLE for a 25 year old with a 60 Resting HR and prescribed to train at 75%:
              220 – 25 = 195
              195 – 60 = 135
              (135 X .75) + 60 = 161.25 → Train at 158-164 bpm
        2) Miller's Formula (in bpm)
            - 217 – (0.85 X Age) = Max HR
            - Max HR X Training % as Rx'ed = Target HR in bpm
              *EXAMPLE for a 28 year old prescribed to train at 90%:
              .85 X 28 = 23.8
              217-23.8 = 193.2
              193.2 X .90 = 173.88 → Train at 171-177 bpm
    - Drop a line, if you need any advice in selecting a monitor

2. Talk Test: Reliable at the extremes (<60% or >90%), but better than nothing
    - ~60% = Easy to talk while performing
    - ~70% = Slight difficulty talking while performing
    - ~80% = Difficulty talking while performing
    - ~90% = No talking while performing