CADENCE & STRIDE LENGTH

EXAMPLE (Excel created by Coach Zee, Link available at the bottom of document)

Input / Output	Mins	Secs	Calculated Value	Notes
Pace (Mins: Secs) / Km	7	26	7.433333333	Convert Mins:Sec into Minutes
SPM	158		158	Steps per minute
Speed (in m/min)			134.529148	Speed in meter / min :: [1000/Pace in mins]
Stride Length =			0.851450304	Speed(in m) / Cadence
Stride Length			**0.85 meter**	**Stride length / Stride**

SOME GENERAL GUIDELINES:

Runners Height	Jogging Stride (m)	Running Stride (m)
5'5" (1.65 m)	0.68 m	1.20–1.40 m
6'0" (1.83 m)	0.75 m	1.40–1.80 m

For **jogging**, a stride length of =**41% of height** is common.
For **running/sprinting**, it can be **100%–120% of height**.
Example: A **6-foot** runner might have:
Jogging stride: =**0.75 m**
Fast running: **1.5–2.2 m**

Level	Typical Cadence (SPM)
Casual joggers	140–160
Efficient runners	165–180
Elite runners	180–200+

170–180 spm is considered **ideal for efficient distance running**.
Lower cadence (<160) may mean **overstriding**, which can increase injury risk.
Higher cadence reduces ground contact time and improves rhythm/form.

WHAT'S CONSIDERED "GOOD"?

Metric	Good Range	Notes
Stride Length	1.2–1.5 m for runners	Depends on height and pace
Cadence	170–180+ spm	Efficient, reduces injury risk
Stride/Height Ratio	0.9–1.1 (running)	>1.0 for sprinting; =0.4–0.5 for jogging

IDEAL COMBINATION FOR MOST DISTANCE RUNNERS:

Cadence: 170–180 spm
Stride length: Adjusted so you're not overstriding or heel-striking
Form: Upright posture, slight forward lean from ankles, midfoot strike

Link to download excel to calculate Stride Length:
https://tinyurl.com/StrideCalculator