milestonepod

DATA 101 – THE METRICS. For runners who want to see the basics.

RUN DETAILS

FOOT STRIKE
Percent of time your foot strikes the ground on your heel, mid-foot or toe.

56% HEEL	44% MID	0% TOE

CADENCE SPM — 166
BEST: 176
Average number of steps per minute.
Tip: 180spm is thought to be ideal for most runners.

GROUND CONTACT MILLISECONDS — 298
BEST: 230
Average amount of time your foot is on the ground.
Tip: Many elites are below 200ms.

RATE OF IMPACT
How quickly force is transferred from the ground to your legs.
Tip: High impact can lead to injury.

37% LOW	26% MID	37% HIGH

Details | Laps | Graphs | Strike

RUN DETAILS

24% LOW	63% MID	13% HIGH

STRIDE LENGTH INCHES — 40
Stride is the length of your step, from heel to heel.

LEG SWING
The distance the ankle is from the ground.
Tip: Higher is considered more efficient.

96% LOW	0% MID	4% HIGH

RUNFICIENCY™ — 65
BEST: 92
Calculated from several of your gait metrics.
Tip: Best possible score is 100.

Details | Laps | Graphs | Strike

Foot strike is where your foot first makes contact with the ground. Sometimes, *heel strike* is considered bad form, but in reality, it's more important where your foot is in relation to your body when your weight is loaded. Focus on landing with your foot under your body and with less leg extension, and you should feel the results of a softer impact.

Cadence is the average number of times your foot hits the ground in one minute. A low cadence (less than 160) is typically seen in runners who over-stride. A high cadence is associated with less force on your hips and knees and can help with injury prevention.

Ground contact is the average amount of time your foot spends on the ground. The less time your foot is on the ground, the more the impact on your body is reduced and the faster you will run.

Rate of impact is the amount of time your body has to deal with the landing force. A *high* rate of impact means your body does not have enough time to spread the force out evenly which can lead to injury. A *low* rate of impact means your body has enough time to spread the force out evenly. A low rate of impact is easier on your body and can help prevent injury.

As your **stride length** increases, your speed increases. However, one of the most common mistakes novice runners make is over-striding. The most efficient stride length is what comes naturally and feels the most comfortable.

Leg swing is how high you get your foot off the ground and towards your butt following push-off. A higher leg swing means you are keeping your body movement closer to your center of gravity. The result is less work and less energy loss.

Runficiency is a quality of run **score** incorporating cadence, stride length, leg angle, ground contact and pace consistency. The global average is 73.
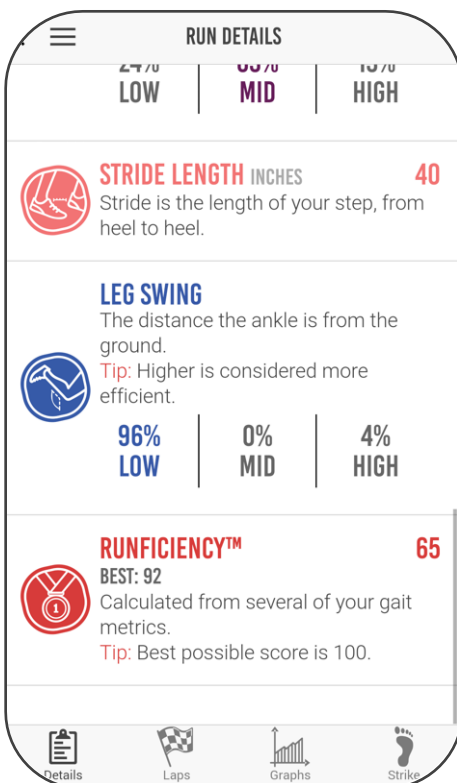
Note: Walking sessions will not include rate of impact, foot strike or leg swing.

DATA 201 - THE GRAPHS. For runners who want to dig a little deeper.

There are two sets of graphs available to show your gait and performance patterns. One set shows **single runs** and one set shows **averages across multiple runs**.
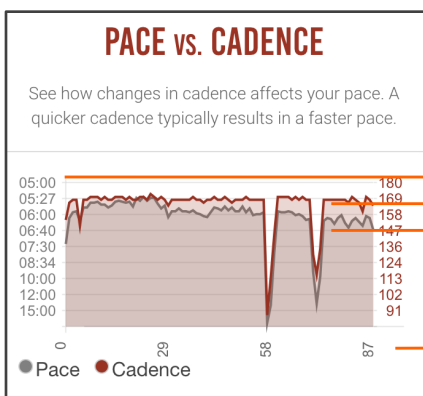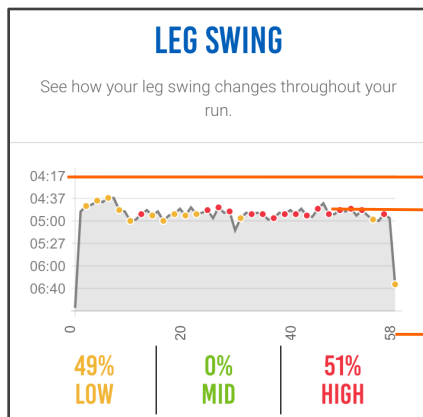
SINGLE RUN GRAPHS

Available metrics:
- foot strike
- rate of impact
- leg swing (example shown)

Available comparisons:
- pace vs. cadence (example shown)
- pace vs. stride length
- pace vs. ground contact
- pace vs. Runficiency Score

Find them on the **RUN DETAILS** screen:

Details | Laps | Graphs | Strike

LEG SWING

See how your leg swing changes throughout your run.

04:17
04:37
05:00
05:27
06:00
06:40

0   20   40   58

| 49% LOW | 0% MID | 51% HIGH |

→ pace of run
→ metric values (here, leg swing)
→ minutes of run

PACE VS. CADENCE

See how changes in cadence affects your pace. A quicker cadence typically results in a faster pace.

05:00   180
05:27   169
06:00   158
06:40   147
07:30   136
08:34   124
10:00   113
12:00   102
15:00   91

0   29   58   87

● Pace ● Cadence

→ pace of run
→ compare metric (here, cadence)
→ pace line (always grey)
→ minutes of run

MULTIPLE RUN GRAPHS

Available metrics:
- foot strike
- rate of impact (example shown)
- leg swing
- pace (example shown)
- cadence
- Runficiency Score

Find them on the **RUN LOG** screen:

Details | Laps | Graphs | Strike

RATE OF IMPACT

Average rate of impact of your last 30 runs, with the most recent run listed as 1.

high

mid

low

30   20   10   1

● Rate of Impact ● Mean

→ metric measure (here, ROI)
→ metric value
→ mean line (central value)
→ number of runs (up to 30)

PACE

Average pace of your last 30 runs, with the most recent run listed as 1.

04:37
04:48
05:00
05:13
05:27
05:43
06:00
06:19

30   20   10   1

● Pace ● Mean