

What does a distance runner need?

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There are many answers to this question, but I'll stick to those related to actual running. To be a competitive distance runner you need:

- an enjoyment of strenuous and sustained training to develop stamina and speed
- the ability to set realistic (but demanding), measurable, short and long term goals
- mental toughness
- an efficient running style
- a sound sense of pace
- race tactics that maximise your strengths.

Just churning out the kilometres doesn't usually work for most people, particularly as the body ages. That activity alone doesn't challenge all of the skeletal muscle fibres you need to maintain to run well and doesn't necessarily maintain strong bones. Every impact force that the body experiences has a consequence and hence it makes sense to get the maximum return from the training that you do while minimising the risk of injury. All body tissues have a failure or yield level for applied forces. With high impact activities like jumping and hopping, the leg and foot muscles act to reduce the impulsive force on the long leg bones. With excessive long running, muscles become fatigued and the large number of impact forces that are generated impact on bones with less mediating effect from those muscles, increasing the possibility of accumulating small stress fractures. Overuse injuries such as Achilles tendonitis may also result from excessive weekly distances. High impact activities (but below the failure level) help to develop stronger bones and connective tissue. Including plyometric activities such as bounding, hopping and skipping, done explosively, as if your feet were landing on a hotplate, helps to develop and maintain strong bones, connective tissue and muscle. Of course, if you have joint or other physical problems this type of activity may not be a safe option.

I am not advocating eliminating all long training runs. To develop and maintain cardiovascular fitness and endurance you need to include a range of distances and running speeds in your training program, including long runs. If you want to be able to compete in a number of events over a short period of time (either through running heats, semis and finals in shorter events or running several longer races over consecutive days) you also need Specific High Intensity Training. Those who train with me claim that I give them this regularly. This is what is more politely referred to as speed or interval training and consists of repetitions of various distances run at set speeds, usually with specified recovery times. Much of this training is anaerobic, that is, done at speeds above your fastest aerobic pace (ie faster than your best 3000m race pace). The aim is to develop aerobic and anaerobic capacity and power, to improve the ability of your muscles to function with increased concentrations of the products of anaerobic energy production, to improve your ability to tolerate the discomfort/pain that results from sustained demand on the anaerobic energy system, and to develop good pace judgement.

There is no one 'magic' training program that will achieve improvement in cardiovascular capacity, aerobic and anaerobic capacities, maximum speed, speed

endurance, etc. There are many approaches that have been used by coaches who have coached elite athletes in the past. All involve building a base of endurance and stamina and then developing strength, power and speed from that base. Copying a set of sessions from the training programs of elite runners and assuming that because it works for them, it will work as well for you isn't a good way to go. You may not have had the childhood running experiences or the genetic attributes of the average elite Kenyan runner. The differences between young, developing runners and bodies past their physical prime that have to cope with the effects of aging also have training implications.

The training that you do doesn't have to consist only of running. You can mix in some swimming and cycling to add variety to training. Some of your sessions can be done alone, others may be easier done with a partner or as part of a group. Recovery must always be a part of any training program - time for the body to rebuild and be refreshed to meet the next training or race challenge. Celebrating the achievement of goals, modest or otherwise, is also important to refresh your mental approach and to maintain the motivation that supports continuing with demanding training.

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