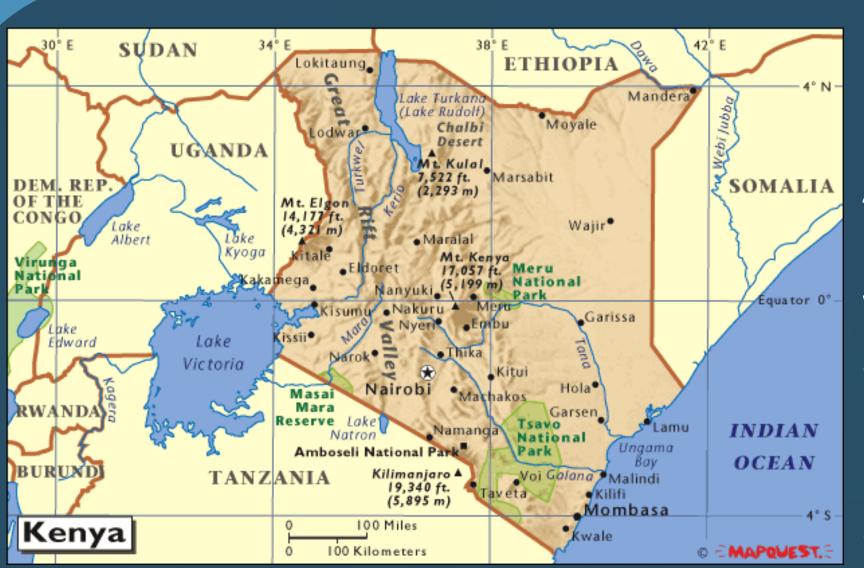
# Run Like a Kenyan:

# How to Be An Elite Athlete the Kenyan Way

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By observation and statistics, research shows that one dominating elite group in running is the Kenyan distance runners, specifically the Kalenjin ethnic group. Many aspects of the Kenyan life were found to contribute to their efficiency and success. Analyzing Kenyan aspects of environment, altitude, society, diet, transportation, motives, and training may reveal possible ways American runners can improve their running.



# Environment and

A mixture of soft soil, which limits injuries, and an equatorial location with low humidity, which causes an adaptation for more heat loss, allow Kenyan runners to train harder and longer without getting hurt, dehydrated, or fatigued.

The high altitude region of the Great Rift Valley, a huge cut in the Earth located 6000-7000 feet above sea level, is where the Kalenjin ethnic group resides.

Living and training at high altitude causes the body to transport oxygen more efficiently:

- \* Blood circulation and red blood cell formation increase.
- Lung capillaries and diameter of pulmonary vessels increase.
- Basal metabolic rate increases so energy and nutrients are transported to muscles faster allowing for more intense training and quicker recovery.

### Diet

A diet rich in complex carbohydrates, starch, vegetables, milk, tea, and minimal protein, along with fruit as snacks, provides the Kenyans with all their nutrient and energy needs and does not weigh them down.

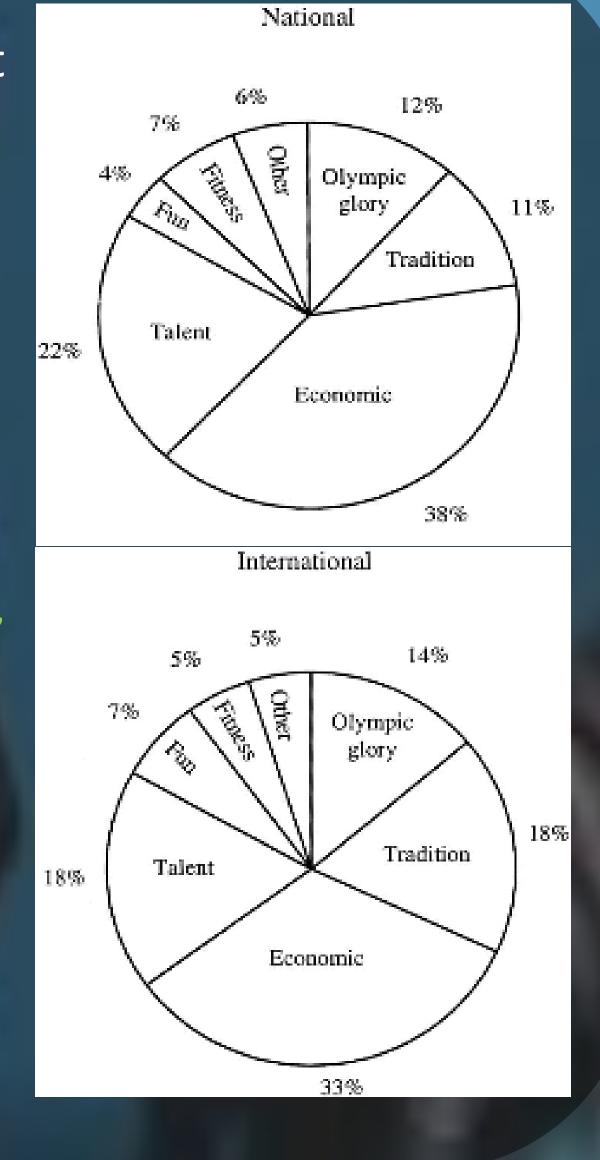
- Most popular food: Ugali (polenta like cornmeal porridge)
- Most popular drink: Chai (half whole milk, half water, tea masala, and sugar)

#### Motives

Kenyans have economic motivation to support their families. Talent and peer pressure from their culture are also contributing factors.

Of 400 international and national Kenyan athletes surveyed, a pie chart was made to show the percentages of motivational factors to become a competitive athlete (Source: "Demographic Characteristics of Elite Kenyan Endurance Runners." *Journal of Sports Sciences*. (2006): 19. Print.)

Money was the highest percentage motivator for both groups, followed by talent and tradition.



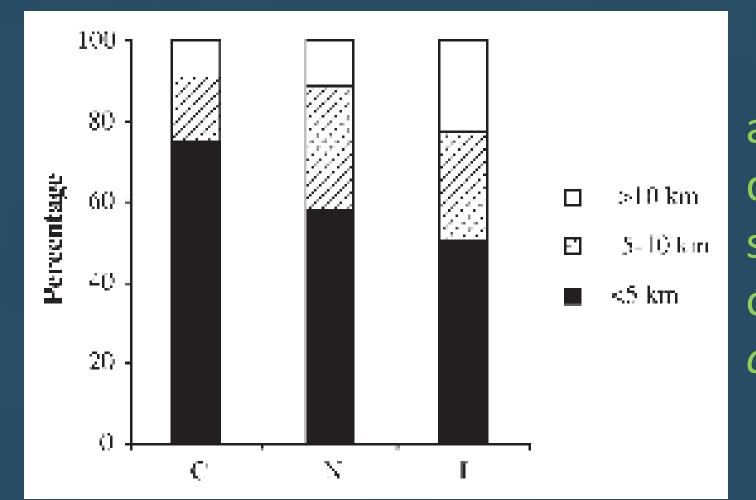
#### Society

Cultural, historical, and genetic factors contribute to Kenyan success.

- \*Physical resilience and responsibility are taught through chores, and boys must go through intense physical tests for their cultural rites of passage.
- \*Kalenjin cattle rustlings (hustling another tribe's cattle from fifty kilometers away back to their own tribe) allowed only the fastest runners to pass on their traits because the slower runners were speared by the foreign tribe.
- \* Genetic factors, like higher aerobic efficiency, higher levels of testosterone and human growth hormones, and more slow twitch fibers (muscles used for aerobic and distance training) may assist in the success of the Kenyans.

### **Transportation**

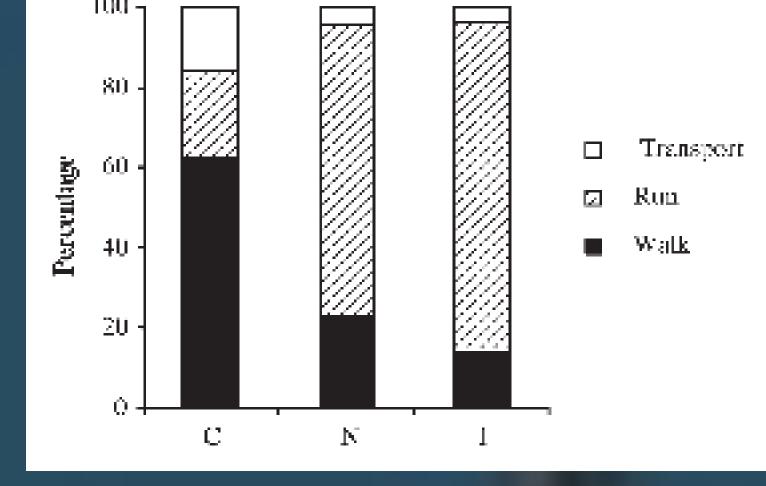
Kenyans walk or run everywhere so their bodies are used to everyday fitness and work.



After surveying 400 Kenyans of different athletic standings, the percentage of their distances traveled to school each day is shown (Source: "Demographic Characteristics of Elite Kenyan Endurance Runners." *Journal of Sports Sciences*. (2006): 19. Print.)

"C" is the common Kenyan, "N" is national athletes, and "I" is international athletes. Within each category, the ranges of less than 5 km, 5-10 km, and more than 10 km is differentiated.

After surveying 400 Kenyans of different athletic standings, the percentage of their ways of travel to school each day is shown. (Source: "Demographic Characteristics of Elite Kenyan Endurance Runners." *Journal of Sports Sciences*. (2006): 19. Print.)



International athletes traveled farther distances to school than the other categories and had the highest percentage running to school. Of all the Kenyans surveyed, very few percent used transport (car, bike, etc.) to school.

#### **Training**

Kenyans train at high mileages and high intensities causing physiological change in cardiovascular, pulmonary, and metabolic systems similar to those at high altitude. VO2 max (maximum oxygen taken in by the body in mL/Kg body weight per minute) increases so they can run faster over longer distances.

### Conclusion

A combination of all these factors give Kenyans, especially the Kalenjin ethnic group, an edge over other runners. By training in a similar environment and altitude, eating a similar diet, using less transportation, and training at higher mileages and intensities, a runner can be on the elite path, and American runners may be more able to compete the Kenyans.

Ways Americans runners can be more like Kenyans:

- Stay off roads and concrete
- Train in places of higher altitude
- Walk instead of ride

- Have a strong reason for running
- Eat natural, not processed, foods
- Do majority of training at lactate threshold

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