

The Chemistry of Marathon Running

1. From what biomolecule does the body receive the bulk of its energy from during a marathon?
2. During aerobic respiration, what does glucose combine with to convert it to usable energy?
3. What is the most efficient source of glucose for runners?
4. During a race, does energy come from aerobic respiration, anaerobic respiration, or both?
5. What is the formula for anaerobic respiration?
6. What does the body burn when it runs low on glycogen? What mile of the race might this happen? What does the runner do to keep going?
7. What does burning fat require?