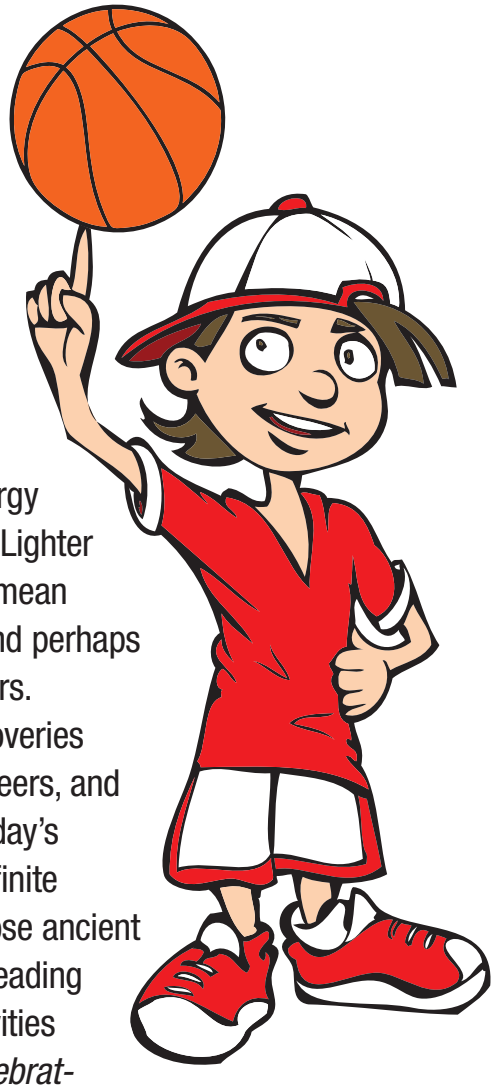
Racing Ahead With Chemistry

from Celebrating Chemistry

Did you know that the first Olympics ever recorded took place in 776 B.C.? Since then, a lot has changed. The study of chemistry has improved the way that athletes train, the sports they play, and the equipment they use.

For example, we now know much more about how our bodies break down foods to provide "power" for our cells. Scientists are able to measure the energy and nutrients that foods contain so that we can make better decisions about what to eat. We also realize that it is essential to stay hydrated—our bodies need water to carry nutrients, to regulate temperature, and to help muscles work properly.

Advances in chemistry have also led to the development of better sports equipment. Chemists have designed synthetic fabrics that help athletes stay drier or swim faster. Bicycles, which were once only made of steel, are now also made of new, lighter materials such as aluminum alloys, titanium, and carbon fiber. They're often stiffer than steel, too, so they turn more peddling energy into rolling energy. Lighter and stiffer frames mean faster bicycles—and perhaps more wins for racers.



Thanks to discoveries by chemists, engineers, and other scientists, today's athletes have a definite advantage over those ancient Olympians. After reading and doing the activities in this issue of *Celebrating Chemistry*, you will realize chemistry's role in the sports you play and watch. Share your knowledge with family members and your teachers!