Versatile Athletes--Female:

**Lottie Dod GBR**, was the Wimbledon singles tennis champ five times, represented England in field hockey in 1899, won the British Ladies Golf Championship of 1904 and was a silver-medalist in the 1908 Olympics in archery.

**Beate Drabing AUT**, 5'8.5, 162, competed as a heptathlete for nine years with the following PRs: 100H 14.82, SP 45'5, HJ 5'10.5, 200 26.22, LJ 19'4, JT 142'6, 800m 2:12.89. Beate lifted at the 1993 World's Powerlifting Championships and did SQ363, BP 220, DL 422. In 1989, she was 4th in the World’s Weightlifting Championships with SN 203, and CJ 253. Source: *Flex*, 3-99, p. 236.

**Fanny Durack AUS** in the 1910s she held every women's world record in swimming from 50 yards to the mile (*Book of Lists, 90s Edition*).

**Shannon Hartnett 5'8,140, was women's world's champ in the highland games from 1996 to 2004, also national champ from 1990-2004--she set many world records in the sport . Her best squat was 405 for reps, and bench press 225. In 2000, she was seen pushing some bobsled teams to victory on European tv. She swam with the dolphins in the Caribbean, attempted Mt. Everest getting at least as high as the base camp, and also was in one of the World’s Strongest Women contests. She won the 1992 Ms. California bodybuilding title, was an All-American centerfielder in fast-pitch softball, a great two-woman volleyball team player, and an expert kayaker. She has an M.A. in sports physiology and owns a gym in Santa Rosa called Body Central. She also was on "What's My Line" the famous tv program.

**Jackie-Joyner Kersee** was an outstanding heptathlete, setting four world heptathlon records, and winning the Olympic gold twice. She also set a world record in the long jump in 1987, and scored in top 10 lists for the year in at least three individual track & field events. She had won 24 out of 34 hepthalons to the end of 1996, played basketball at UCLA, and pro basketball in 1996.

**Cindy Morrison 5'8, 140, was the first woman to compete in the highland games in Scotland in 1993. In 1994 she tossed a 15' long, 70 lb caber for a perfect 12:00. As a powerlifter she won the USPF Region III in the 148 lb class at Tallahassee, Florida, in 1998 with: squat 280 lb, bench press 170 lb , and dead lift 335 lb.

She has also wrestled alligators, jousted on horseback in Europe and the USA, and has lifted stones in the Basque style. She's also an accomplished magician.

**Anni Thorisdottir ICE**, 5'7, 148, started out in sports as a gymnast, pole vaulter and ballet dancer. She got into Crossfit and won the 2011 and 2012 world championship earning $250,000 each time. She also won the Dubai Fitness contest and $177,000. She lifted in the 2015 World Weightlifting Championship in the 69 kg class and took 35th place overall but she did make official lifts of snatch 194 lb (88kg), clean & jerk 238 lb (108 kg) and total 196 kg. In Crossfit she also squatted 253 lb (115 kg) and deadlifted 363 lb (165 kg). She became very proficient at kipping pullups and even muscle ups. She was so strong that teammates called her Thor’s daughter.

**Babe Zaharias (Didrikson)** won honors in women's softball, made the Olympic team in track & field, and broke a bunch of world records 1930-1932: 80m hurdles 11.7; high jump 5'5 (1.65m) using the scissors jump; javelin throw 133'5 ½ (40.68m)*. She also excelled in pro golf, and competed very well in many other sports, even shooting and boxing. * = unofficial.
SHOULD PRESIDENT BE FAST- OR SLOW-TWITCH?

Presidents and presidential candidates usually are thought of as being Democrats or Republicans, liberals or conservatives, hawks or doves, pragmatic or ideological. In his book, The Presidential Character, Professor James David Barber classifies our past presidents, as active-positive, active-negative, passive-positive and passive-negative.

To heck with all that, I'd like to know whether the man I'm voting for is aerobic or anaerobic, slow-twitch or fast-twitch.

I got to thinking about this recently when a syndicated article appeared in the daily paper about presidential candidate Alan Cranston, the senior senator from California. The article was headlined, "A Runner for President." It occurred to me then that some clarification is required. You see, Cranston is not a runner; he is a sprinter. The two are more opposed than Democrats and Republicans.

Of course, there are all kinds of runners. Anyone "running" for president must be a "runner." There are gun runners, blade-runners, rapids runners, dope-runners, what have you. Even in the more limited sense of the word, sprints are runners. But the connotation is not the same today, and that probably intended in connection with the Cranston article, is that of a distance runner.

Generally, distance runners are slow-twitch and aerobic. Sprinters are fast-twitch and anaerobic.

The "twitch" part of it has to do with how rapidly the muscles contract. Physiologists tell us that we are different in this respect. Some of us have more fast-twitch muscle fibers than slow-twitch, while others have a preponderance of slow-twitch. Carl Lewis and other top sprinters supposedly have a large percentage of the fast-twitch fibers. Billy the Kid and Wyatt Earp must have been loaded with fast-twitch. On the other hand (or leg), world-class marathoners show a high percentage of slow-twitch in lab tests.

Few of us are polarized in this respect. There are people who have about equal amounts of fast-twitch and slow-twitch fibers. You'll probably find them running the mile rather than the 100 meters or the marathon. For the most part, heredity determines the balance of fast-twitch and slow-twitch fibers, the physiologists tell us, although to some extent the fibers can be "re-educated."

Much Oxygen

Anaerobic activity is that which is explosive in nature. It demands much oxygen in a short period of time, as in running 100 meters. Aerobic activity demands oxygen but not to the extent of producing an oxygen-debt, as in running a marathon.

The composition of our muscle fibers and the way we go about utilizing oxygen can carry over into many aspects of our daily lives and dictate behavior and life-styles. A recent Sports Illustrated article touched upon this. It dealt with the success of Jamaicans in the sprints. Glen Mills, a Jamaican national coach, sees the psyche of the sprinter throughout Jamaican society, or the other way around.
"Life here is hectic," Mills told writer Kenny Moore. "Everything's in short supply. It's understood that there aren't enough jobs, schools, housing, transport. Forty-two thousand take the exam to get into any high school. Only 9,300 can make it. You can't stand at the back and wait your turn or you'll get left out. In the city we like to regard ourselves as quiet people, but even a small dispute brings out the aggression. Sprinting is built around that dramatic release."

Dennis Johnson, another Jamaican coach, adds, "And there's the style of the people. Jamaicans talk fast. They write fast. They like action. They're jittery. The temper of the society is kind of like a sprinter's."

**Society Reflects**

We can look back in our own society and observe how we have gone from distance runners to sprinters to milers and back to distance runners. In the latter part of the 19th century, when things were relatively peaceful and leisurely, distance running was popular. Then during the technological era and throughout the war years, we were people in a hurry. Is it coincidental that the 100-yard dash actually was the feature event at track meets during that period? In the 50's and 60's the pace slackened a little and the mile became the glamour event. Now, however, we seem content to cruise along at 10K or marathon pace.

Sprinters seem to be a lot like the Irish and distance runners like the Scotch, at least in the way that President Woodrow Wilson saw those two people. "There are two natures combined in me that every day fight for supremacy and control," Wilson said. "On the one side, there is the Irish in me – quick, generous, impulsive, passionate, anxious always to help and to sympathize with those in distress...and like the Irishman at the Donnybrook Fair, always willin' to raise me shillalah and to hit any head which stands firmist me. Then, on the other side, there is the Scotch – canny, tenacious, cold, and perhaps a little too exclusive. I tell you, that when these two fellows get to quarreling among themselves, it is hard to act as umpire between them."

Wilson must have confused his fibers. He was a miler and didn't know it. You can understand how milers make the most objective presidents, but maybe the most indecisive.

As I see it, the worst combination for a presidential candidate would be a fast-twitch temperament and an anaerobic style – a true sprinter, sort of a Type A behavior individual. This person would be too impulsive, too hasty to decide, too fast on the draw, too quick to push the button. Looking back at some of our recent presidents, Lyndon Johnson seems to come closest to filling this mold.

But I don't think I'd want a slow-twitch, aerobic style person either. He'd be something along the lines of a Calvin Coolidge or Jimmy Carter, content to sort of plod along.

What we need, I believe, is across over type person –someone with a fast-twitch temperament and an aerobic style or a slow-twitch temperament and an anaerobic style. This would provide for some necessary checks and balance within the man (or woman).

Senator Cranston, although a top-ranked competitive masters sprinter, runs five miles a day and seems to have an aerobic style about him. President Reagan appears to be an example of the slow-twitch/anaerobic type.

Forget about the campaign trails. I suggest that we put our candidates on the running trails so we can see what they're really made of.
NO PLACE FOR REAL MEN IN THE MARATHON

Real men don't run the marathon. If they do, you certainly won't find them among the leaders.

All you have to do is look at the guys who win all those marathons to see what I mean. They're all toothpicks, real prisoner of war stuff. Kick sand on them at the beach and you bury them. Congratulate them on winning and you get a wet fish.

The real men – guys like Arnold Schwarzenegger, Clint Eastwood, Herschel Walker, The Incredible Hulk, and Mr. T – don’t have a chance when it comes to the marathon. They're the sand kickers. They don't have to run.

The physiologists tell us that a good marathoner should weigh no more than double his height in inches. Heck, a real man has that much weight in one leg.

It stands to reason that blimps, blobs, and beer bellies don't make good distance runners, but what about the real beef eaters, the guys with 48-inch chests and 30-inch waists? If the weight is all muscle and is distributed symmetrically, it seems as if this type of person should be able to pick 'em up and lay 'em down as well, if not better, than those skinny guys and runts. But it doesn't work that way.

"Big people face several problems," Dr. Jack Daniels, an exercise physiologist with the Nike research team in Eugene, Ore., says. "Granted, a well-built big person has more muscle to move the greater weight, but regardless of what the weight is made of, it must be carried, and carrying more weight demands greater energy expenditure."

Daniels, a 1956 and 1960 Olympian in the Modern Pentathlon, went on to explain that the more energy expended, the more fuel required and the more heat generated. "Heat, of course, is a major problem for distance runners," he explains. "Bigger people are usually denser, so heat is not dissipated as well and overheating is more likely. Water loss then becomes more of a problem, so water replacement is also more crucial.

More Shock

"On top of that, landing shock is greater. Often, bigger and more muscular people are just thicker, and not really bigger, in terms of foot or shoe size, so more weight is landing per area of landing surface. This subjects the body to more shock. If shoe cushioning is not provided for them, leg muscles must absorb more shock and that costs energy that is taken from the energy available for running."

Daniels points out that how the weight is distributed is also important. The runner with especially muscular legs is at even more of a disadvantage because the forward stride movement extracts more energy from him or her. "We've found that just adding 100 grams to each shoe increases the cost of running by about one percent. This may slow a marathoner by over a minute," Daniels says.

Besides being at a competitive disadvantage, the heavy runner may be more susceptible to certain types of running injuries, according to an article in the January 1982 issue of Runner's World. The article indicated that plantar fasciitis, a disorder of the