Consumer Awareness Guide for Heart Attack Prevention
5 Accurate Heart Checks to Ask For

I am not Bob Harper’s cardiologist, the celebrity trainer from The Biggest Loser, but he shocked the world when he announced in February, 2017 that at age 51 he had suffered a heart attack and cardiac arrest. Fortunately, he survived and is recovering well. I wish him a full and speedy recovery and a long life.

When a celebrity health expert gets blindsided by a sudden cardiac event, what can we learn about steps you can take to know of your heart status in detail to prevent similar near-fatal and fatal event? What is clear is that celebrity tragedies like Harper, Bill Paxton, Alan Thicke and Carrie Fisher point out that even high profile figures may be missing a more advanced and definitive evaluation to identify early the number one killer of men and women in the Western world. Here are some tests you can ask for and be certain that you either find out about early heart disease or prove there is none. It is neither difficult or expensive to have certainty about the #1 health challenge in the Western world.

1) Ask for a coronary artery calcium scan (CACS)

A CACS, or heart artery CT scan, is by far the most accurate way to determine if your heart arteries are silently suffering. The heart gives no warnings until the arteries are badly blocked, and the first symptom you have may be the day you die. In my community, this widely available CT scan costs around $100, uses no dye, and takes one minute. It’s far more accurate for screening your heart than a stress test. Your score should be zero, and anything higher should prompt you to see a preventive cardiology expert. It is not appropriate if you know you have heart disease from a prior bypass operation, stent, heart attack or cardiac catheterization.

2) Never leave an ER without a complete evaluation

For starters, don’t go to an urgent care clinic with chest pain, pressure, tightness, squeezing, or compression. Go to an emergency room.

That said, ERs have pressure on them to turn over rooms. I’ve reviewed charts from dozens of young people sent home with cursory evaluations, only to die or be maimed by massive heart attacks within days.

Bottom line: DON’T GO HOME without a thorough evaluation. Second, ask for “serial” cardiac enzymes that are repeated two or three times, every four to six hours. Third, ask for a repeat ECG to compare to the one you got initially.

Finally, ask for a definitive test before discharge. This may be a treadmill stress test.
with echocardiography (no radiation) or nuclear imaging (radiation). In some ERs, the CACS or the advanced coronary CT angiogram may be available. If you’re not severely allergic to iodine dye, this is by far the most accurate way to be sure your arteries are clean. If they aren’t clean, a cardiologist will have to evaluate your status, but you’ll know the score and -- most importantly -- be alive.

3) Ask for advanced labs

I’ve had 30-plus years of training and practice, so I can tell you that you’ll probably have the same lab tests at an annual physical now as you would’ve in the 1970s. This isn’t just outdated, it’s unacceptable -- there have been major advances in laboratory testing in the past 40 years, believe it or not. I suggest asking for the following tests:

**Advanced lipid profile:** Rather than giving you an LDL cholesterol level, advanced panels measure LDL particle number and size, which are more predictive of future heart and stroke events. Two people with the same cholesterol levels can have widely different particle and size measurements, making for very different risks.

**Lipoprotein a:** This is a genetic form of cholesterol that’s elevated in about 20% of those tested. It’s rarely drawn, even though hundreds of research studies indicate that if it’s high, the risk of heart attack and stroke skyrocket. There’s even a foundation dedicated to educating the public of the risk.

**Homocysteine:** This amino acid is produced by a process called methylation. It’s important for artery and brain health, and when elevated, it may be due to a genetic defect in the MTHFR gene, which is also easily measured. It can be treated with methylated B complex vitamins, and the level will return to normal.

**Inflammatory markers:** The best known is hs-CRP, but there are at least five others I measure in my practice, like MPO. If there are markers of inflammation in the blood, a hunt is on for insulin resistance, infections, food allergies, skin conditions like psoriasis, a diet rich in processed foods, central obesity, gingivitis, and sleep apnea... among others. Inflammation can be reduced by addressing these root causes.

**TMAO:** This is a newly described marker of heart and kidney health that’s elevated after eating meat- and egg-heavy diets with an altered gut microbiome. It has been shown to cause heart and kidney damage, and is associated with worsened prognosis -- if you have high levels of this, you may want to make a transition to a more plant-based diet.

**ApoE genotype:** This blood test can return indicating you inherited low risk genes for heart disease and Alzheimer’s dementia, such as ApoE 3/3, or very high risk genes for these conditions like ApoE 4/4. Furthermore, carriers of even one ApoE 4 allele are wise to greatly reduce their dietary saturated fat intake such as meats,
cheeses, eggs, and full fat dairy. More advanced genetic testing is also available to dive even deeper.

4) Ask for an ECG

Years ago, a routine physical included an electrocardiogram (ECG or EKG) but it’s often skipped now. I suggest it for one particular reason: the measurement called the QT interval, which is the time between two waves in your heartbeat. A segment of the population has a genetic defect that causes the QT interval to be prolonged, and some people are prescribed drugs that prolong the QT interval.

A long QT can result in death from a cardiac arrhythmia, and a number of medications have been pulled off the market due to this side effect. Knowing if you have a prolonged QT interval before you’re prescribed antibiotics, antidepressants, and other medications is key.

5) Get a vascular screening

Many hospitals offer a vascular-screening program using ultrasounds of the carotid arteries, abdominal aorta, and legs. My hospital does it for $50 out of pocket, a bargain. While they’re rarely definitive, they can offer a good value if you’re a smoker or have a family history of early heart disease or stroke. Arteries should have no plaque, so the presence of “mild” plaque should prompt you to have a complete evaluation by a vascular expert. This is not a substitute for a CACS but gives additional information.

What can Bob Harper do now to improve his outlook? He was referred to a cardiac rehabilitation program to regain confidence and fitness while being monitored for safety. There are 2 insurance covered version, one called the Pritikin Intensive Cardiac Rehabilitation (ICR) program and one called Ornish ICR that take more time to teach plant based diets shown to reverse heart disease. I also hope Mr. Harper returns to the vegan diet he was following in 2010 when he announced that it had lowered his cholesterol by over 100 points.

A prominent cardiologist in the 1950s, Paul Dudley White, MD, said after caring for President Eisenhower, that “a heart attack after age 80 is G-ds will but a heart attack before age 80 is a failure of the medical system”. Dr. White had amazing vision to realize that we can now determine with accuracy the silent aging of the vascular system leading to stroke and heart attack. Demand the best care for your health and be aggressive in receiving it. Another favorite statement of mine is that “a person with health has 1000 dreams but a person with poor health has only 1 dream”. I wish you the 1000 dreams that health can provide.