

## Awesome Foursome

(primarily from the book *Metabolic Cardiology: Stephen Sinatra MD*)

If you have a problem with your **heart or with your energy** it may be that the energy production in your cells are not working as well as they could, in short your cells may be very tired.

This problem with “tired cells” can be due to *not getting enough blood supply or poor diet* over many years, or many other factors.

There are some *specific nutrients* that are worth trying to see if they help you feel better and help your heart and other cells to work well. They are very safe, but you do have to pay for them as they are not covered by insurance plans and will cost about \$20-40/month. We generally recommend that people purchase their supplements at [www.Vitacost.com](http://www.Vitacost.com) or [www.lef.org](http://www.lef.org) as they have the best quality for the price that we have found.

*In addition to supplements we recommend a healthy lifestyle* that generally includes: good food, relaxation, healthy movement, good sleep, laughter, fun and having something that you look forward to every day.

### The four supplements are

1. **Magnesium:** the best forms are called chelates, the cheapest are oxides, get the best you can afford, for most this is *Magnesium Citrate*. The main side effect is loose stools.
2. **CoQ10:** there are two forms one is called ubiquinone and the other is called ubiquinol, ubiquinol is a little more powerful (and expensive), but both work.
3. **L-Carnitine:** fatty acid shuttle into mitochondria.
4. **D-Ribose:** building blocks for your cells energy needs.

*The doses are different for different conditions so here is a chart.*

*Your provider will likely circle the one that is right for you.*

***For all: take a good multivitamin and multimineral and 1 gram of fish oil a day***

Conditions/Supplement	Magnesium	CoQ10	L-Carnitine	D-Ribose	other
Age management	400mg	90-150mg	500-1000mg	5 grams	
HTN	400-800mg	180-360mg	500-1000mg	5-10 grams	Add more fish oil (2g)
Angina	400-800 mg	180-360mg	1000-2000mg	10-15 grams	
Arrhythmias	400-800mg	180-360mg	1000-2000mg	5-10 grams	
CHF	400-800mg	300-360mg	2000-2500mg	10-15 grams	
Severe CHF, dilated cardiomyopathy, pre-heart transplant	400-800mg	360-600mg	2500-3500mg	15 grams	
Fibromyalgia, CFS, mitochondriopathy	400-800mg	300-360mg	2000-3000mg	15 grams	
Weekend warrior or world class athlete	800mg	300-360mg	2000-3000mg	15-20 grams	

***Best to split up the total daily dose ( ½ - two times/d or 1/3- three times/d).***