



Adventures in Metabolic Measurement

Let's get measured! Notes here on health-related gadgets.

The Fraser Institute, a Canadian think tank, has the motto: "if it matters, measure it." For public policy, measurement matters. States, Provinces, and countries prosper with policies that reduce barriers to enterprise. When regulations stifle enterprises without improving safety or providing other benefits, they slow economic progress.

The human body is not an economy of course, but it is an enterprise or network of biological systems. And some foods "gum up the works."

Learning what foods, behaviors, and activities maintain or improve our metabolic health can be a fun research adventure. We can measure exercise, heart rate, and sleep quality with a Fitbit, an Apple Watch, or other gadgets.

Electronic scales measure weight plus percentage of body fat, muscle, and water. Scales also measure visceral fat (around out abdomen), which according to studies, matters most. Many foods that taste better are often better for us (who knew?). Healthy fat in butter and whole milk are better than polyunsaturated oils in margarine and corn syrup or sugar added to low or non-fat foods and drink.

Each morning my electronic scales fire a tiny charge of electricity (too small to feel) up one leg and down the other. I've been using and comparing **Eufy** and **FitIndex** scales. Both connect with Android and iPhone apps, but their measures don't always agree. FitIndex seems to better measures visceral fat. (And price war! Each scale is under \$20 on Amazon.)

The **Amazon Halo**, is worn on the wrist but doesn't tell time. It measures sleep quality and body fat (via pictures and AI) For me, the Halo body fat measures matched the Eufy and FitIndex scales. However Eufy has my visceral fat stuck at 16 (not good) and hasn't changed since last April (maybe a later model works better?). The Fitindex scale say my visceral fat 7.

So the most important measure (visceral fat) seems missed by Eufy. Since April my overall body fat dropped from 30% to 21%, as my weight fell from 232 to 191 pounds. My waist size dropped from 40 to 35 which suggests less visceral (abdominal) fat! Since the FitIndex gives me better measures, I've giving it a better rating.

We can see our weight looking in a mirror and finding pants tighter than expected. But new technologies reveal more: from body and visceral fat to water, muscle, and bone percent, to the quality of our sleep.

How accurate are these measures and how helpful for improving health? More measures are likely better, a **Continuous Glucose Monitor (CGI)**, for example.

The food we eat is made of protein, carbohydrates, and fat. Public health agencies have long advocated lower fat in our diet, especially saturated fat. The next *Nutrition Notes* will discuss. Each of us is biochemically individual with unique microbiomes. Links to articles, and videos at **Economic Thinking Nutrition/Public Health**.

See also **DietDoctor Podcast**, **Low Carb Down Under** videos and **Nutrition Coalition**.



SALE

