An article in the *Journal of the American Medical Association*, Feb. 25, 2009 reported that the cardiovascular practice guidelines of the American College of Cardiology and the American Heart Association are largely developed from lower levels scientific certainty and expert opinion, and increasingly the proportion is growing for the recommendations for which there is no conclusive evidence. These are the expert panels who recommend to the average doctor how they should treat certain diseases and conditions.

An editorial in the same issue expressed concern about the weaknesses and limitations of these guidelines based on poor scientific evidence and how these guidelines are used to judge physicians performance. My concern is that patients go to their doctor, expecting that the information given to the doctor by current medical science is valid and can be relied upon. This issue casts doubt on this validity, and patients need to ask more questions when they visit the doctor and have some skepticism regarding the latest guidelines for treating high blood pressure, cholesterol, diabetes, etc.

The sphere of influence.

Guidelines are too often focused on single diseases and are not patient focused. Few patients have a single disease, and the guidelines fail to address the complexity of multiple diseases in a single patient. Most guidelines have a one-size-fits-all mentality. Most guidelines editorial explains that all guidelines have to be biased to begin with, because converting data into recommendations is by its very nature, subjective. The main bias is financial. Guidelines often become marketing tools for the device and pharmaceutical manufacturers. Financial ties between guideline panel members and industry are common. In one study of 44 guidelines, 87% of the guideline authors had some form of industry tie. Specialty composition of the panel influences tendencies to enlarge that particular specialty’s become outdated after 5 years, and they often do not have mechanisms for updating the recommendations.

Patients then must encourage their physicians to use their best judgment and flexibility in considering the patient’s overall conditions and not adhere tightly to some dogma that a panel has proclaimed to be the “gold standard.”

I have written a review and commentary on Dr. Angell’s article. These revelations are not surprising, as some of this has been reported before, but this is a very shocking and timely expose.

Drug companies prefer to have their clinical trials on new drugs done at medical schools because it gives them access to highly influential faculty physicians referred to as “key opinion leaders,” (KOLs), who write textbooks, issue treatment guidelines, sit on FDA and other advisory panesl, speak at many meetings, and head professional societies. These KOLs receive millions of dollars in consulting and speaking fees from the pharmaceutical companies.

A few decades ago medical schools did not have extensive financial ties to industry. Now two-thirds of academic medical centers hold equity interest in the companies that sponsor research within the same institution. Two-thirds of chairpersons of departments receive departmental income from drug companies, and three-fifths receive personal income.

Drug companies insist on being intimately involved in all aspects of the research they sponsor as a condition for providing funding. (My comments – Is this quid pro quo not bribery?) Since the 1980’s the drug companies design the studies, perform the analysis, write the papers, and decide whether, and in what form to publish the results. The medical school faculty members are named as the “investigators,” giving the impression to the public that they are in charge, when in fact they are merely hired hands, collecting data according to the instructions from the company. The drug companies can introduce bias in order to make the drugs look safer and more effective than they are, while the public gets the impression that this is objective scientific work done with careful supervision of academic institutions in the public trust as tax-exempt organizations. (My comment – This looks like a massive fraud foisted on the public as the drug companies have essentially bought the research from the medical schools without the public knowing it.)

One example of biased publication: Of 38 positive studies for antidepressant drugs, 37 were published, while 33 of the 36 negative trials were either not published or published in a way that conveyed a positive outcome.
From the clinical trials in the 6 most prescribed antidepressant drugs from 1986 to 1999, on the average, placebos were 80% as effective as the drugs, and the difference was so small to be of clinical significance. This information was buried in the FDA files and was only uncovered when 4 researchers used the Freedom of Information Act to extract the data from the FDA. The suppression of unfavorable results and probable harmful effects has led to fines and settlements of millions of dollars for consumer fraud and criminal and civil charges, but the companies can afford these small fines in comparison to the billions of dollars in sales of just one drug. This amounts to a “slap on the wrist.”

Conflicts of interest affect not just research, but the actual standards of medical practice established by expert panels and boards. An example: A survey of 200 expert panels found that one-third of the panel members acknowledged financial interest in the drugs they considered in their practice guidelines. Eight of the nine panel members writing the cholesterol treatment guidelines in the National Cholesterol Education Program had financial ties to the makers of cholesterol-lowering drugs. Many of the members of committees that advise the FDA for new drug approvals have financial ties to the pharmaceutical industry.

The DSM, the Diagnostic and Statistical Manual for psychiatric disorders has expanded enormously in the last few years with many new disease classifications, yet the DSM is poorly based in scientific evidence, and is supported mostly by ideology, personal ambition, academic politics. Most of the psychiatrists on the panel that produced the DSM have financial ties to the pharmaceutical industry.

Expanding the DSM has opened opportunities for more drugs to be given to children. The numbers of children diagnosed with bipolar disorder has exploded, a 40-fold increase from 1994 to 2003. What parents dare “say no to drugs” when a physician says their child is sick and needs a prescription. (In my opinion, this is massive child abuse by pharmaceutical-psychiatric collusion.)

Dr. Angell faults the medical profession as much as the drug companies for the corruption. When medical schools are given tax-exempt status to do scientific research for the benefit of people’s health, it is reprehensible to enter lucrative alliances with the pharmaceutical industry.

Professional organizations, journals, and medical schools are finally beginning to talk about “potential” conflict of interest and talk about disclosing them and managing them, but not about prohibiting them outright, which needs to be done. The medical profession needs to put an end to the corruption if it doesn’t want the government to step in.

Dr. Angell cites 19 sources for the information she gathered.
FIBROMYALGIA

Fibromyalgia is a complex condition often overlapping with Chronic Fatigue Syndrome, Irritable Bowel Syndrome, and Interstitial Cystitis. Although the main symptoms may be muscle pain and insomnia, dysfunction in many systems may contribute to the problem. These areas may be nutritional imbalances, intestinal dysfunction, endocrine imbalances, oxidative stress, impaired detoxification, and immune imbalances.

Candida or yeast overgrowth in the bowel is common, as well as other imbalances in the intestinal tract. Digestive disturbances can lead to impaired detoxification and immune imbalances. A comprehensive stool exam can detect many of these problems.

Impaired detoxification can be detected by a detoxification test.

Oxidative stress (excess free radicals) diminishes energy production and can cause muscle pain. This can be caused by digestive and detoxification abnormalities. A blood test can check for the severity of oxidative stress.

Thyroid and other blood tests can check for hypothyroidism and other endocrine problems. Often the adrenal glands are exhausted, and it is difficult to pinpoint how much adrenal dysfunction there is with laboratory tests, but symptoms are fatigue, hypoglycemia, and dizziness.

Impaired immune function can result in under-activity in some areas, with increased infections, such as colds, and chronic viral infections such as Epstein-Barr. It also can cause over-reactivity manifested by allergies and autoimmune conditions. Food intolerances are interrelated with digestive disturbances and are difficult to test for or to recognize. The only currently reliable test is the elimination diet.

A symptom questionnaire can help to determine areas of dysfunction on which to focus.

Many of these areas of dysfunction can be improved with dietary measures and with supplements of vitamins, minerals, herbs.

If none of the above tests are done, a long list of supplements can be used to target all of the above systems.

Paramount to treating fibromyalgia is getting good sleep, aiming for 9-10 hrs/night.

Regular physical activity is also vital - vigorous, but not strenuous enough to cause fatigue or weakness on the following day.

Some books that are helpful to read are: From Fatigued to Fantastic, by Jacob Teitelbaum, M.D., who has a website www.endfatigue.com, and What Your Doctor May Not Tell You About Fibromyalgia, by R. Paul St. Amand, M.D.
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OSTEOPOROSIS

EXERCISE:
Do weight-bearing exercise, high impact such as jumping, running, vigorous dancing, etc
Do strength training, especially for legs and thighs to promote hip bone strength.
Do some combination of these 3 or more times per week.
Astronauts lose bone in a matter of days when weightless. All other interventions may not be effective if there is not enough of the right kind of physical activity.

AVOID:
Smoking, alcohol, fluoride, aluminum (baking powder, antacids, aluminum cans), cola drinks.

LIMIT:
Salt, sugar, refined starches such as white flour, white rice, etc., and other high “acid-ash” foods such as meat, prescription and non-prescription drugs, caffeine, sodas, and processed foods. Acid-forming foods require calcium to be pulled from bones to neutralize acid. Sugar increases cortisol, which, when elevated, can de-mineralize bone.
Limit omega-6 fats, such as corn and soybean oil.

MODERATION:
Protein: about 1 gram per kilogram of body weight. Too little protein does not nourish the protein matrix of bone. Too much protein produces too many acid metabolites.
Hydrolyzed, non-denatured whey protein concentrate has lactoferrin and many amino acids important for bone and muscle building. Sardines provide bone-building minerals.

EAT LARGE AMOUNTS:
Vegetables and fruit. They have alkaline metabolites, high mineral content, high antioxidant and anti-inflammatory substances, and Vitamin K.

PRESERVE GOOD INTESTINAL BACTERIA
Avoid antibiotics if not necessary, restore beneficial bacteria with probiotics for optimal Vitamin K production and optimal immune function, decreasing inflammation. Fructo-oligosaccharides provide nutrients for beneficial bacteria to grow. Also eating fermented foods, (raw sauerkraut, pickles, yoghurt, etc. support beneficial bacteria)

TESTING
Homocysteine (High levels result in bone loss)
PH 1st AM urine (Should be close to 7.0)
Stomach acid. Not enough stomach acid will not allow absorption of important bone minerals and other bone nutrients.
Hormone testing for Estradiol, Progesterone, DHEA, and Testosterone.
Urine markers for bone turnover (n-telopeptides, pyridinium, and deoxypyridinium)
Bone densitometry- DEXA scan yearly
Vitamin D blood test
Food allergy elimination diet. Food reactions can cause gut inflammation and decrease absorption of minerals.
Test for Celiac disease (gluten enteropathy) which can cause malabsorption and inflammation. Approx. 30% of unexplained osteoporosis cases have Celiac disease.

MINERAL SUPPLEMENTS:
Calcium 500mg
Magnesium 500mg (Chelated with amino acids preferable, like magnesium glycinate)
Zinc 30mg
Copper 2mg
Manganese 20mg
Strontium 340mg
Silicon 5mg  (Oat straw, nettles, and horsetail whole dry herb have high silicon and other minerals)
Boron 3mg
Bone broth or eggshell broth (from organic sources)

VITAMIN SUPPLEMENTS:
Vitamin D, take according to blood test results
Vitamin K1, 1mg (1000mcg), and K2 (Menaquinone-4 or Menaquinone-7)
Antioxidant formula including OPC’s (grape-seed or pine bark extract)
Essential fatty acids (omega 3’s) EPA 1600mg/DHA 1400mg
Soy isoflavones (non-GMO)

BIOIDENTICAL HORMONE REPLACEMENT
With saliva testing, replacing 4 hormones listed above, with nutritional program to optimize safer estrogen metabolites and urine test to check on metabolites.

BOTANICALS:
Oat straw, nettles, horsetail, and, comfrey tea from dried herbs, or dry herbs in capsules. Herbal adaptogens help to build up stamina and muscle and bone tissue, and they support the endocrine system for anabolic hormones that build tissues, and from a Traditional Chinese Medicine perspective they build kidney Qi. Some of these are Epimedium, Eurycoma, Rhaponticum, Pantocrine (deer antler), Mumie, Royal jelly, Vitex, Green Tea, and Elder berry.