Download these slides! people.csail.mit.edu/seneff

••••

Weston Price Fondation Wise Traditions Presentations

- Powerpoint Presentations at the Weston A. Price Wise Traditions 15th Annual Conference Indianapolis November 7-10, 2014. Pesticides, Antibiotics, Vaccines and Pharmaceuticals: Are They the Cause of our Current Health Crisis?
 - 1. Nutrition (Powerpoint Slides) (PDF Version)
 - 2. Pesticides: Focus on Roundup (Powerpoint Slides) (PDF Version)
 - 3. Vaccines, Antibiotics, and Microbes (Powerpoint Slides) (PDF Version)
 - 4. Pharmaceutical Drugs: Focus on Statins (Powerpoint Slides) (PDF Version)

...

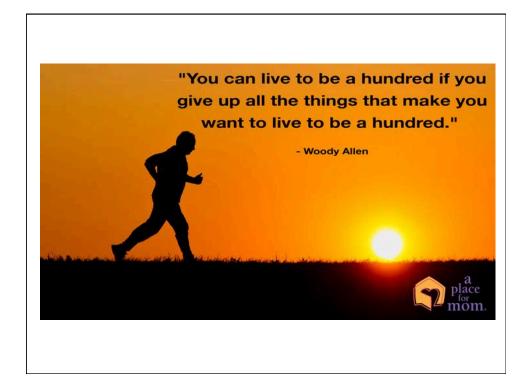
Download individual files from these links: people.csail.mit.edu/seneff/Indianapolis/

Drugs.pdf Nutrition.pdf antibiotics_vaccines.pdf glyphosate_new.pdf Drugs.pptx Nutrition.pptx antibiotics_vaccines.pptx glyphosate_new.pptx

Outline

- Very brief overview
- · Nutrition and health
- Pesticides: focus on Roundup
- Vaccines, antibiotics and microbes
- Pharmaceutical drugs: focus on statins





A substance that interferes with normal system function is a drug.
A substance that restores normal system function is a nutrient.

Marty Hinz, MD

"The maxim, 'He who has the gold makes the rules' needs revising:

'He who has the gold makes the rules and gets more gold.'"

David Moyer, Beyond Mental Illness, Chapter 5: March of the Corporations, p. 71 "Dr. Tejal Gandhi, president of the National Patient Safety Foundation, said studies show that medication errors, adverse drug events and injuries due to drugs occur in up to 25% of patients within 30 days of being prescribed a drug."*

*http://easyhealthoptions.com/still-tracking-patient-harm/

Drugs Kill*

- Pharmaceuticals are among the leading causes of death in the US
- Some medicines have killed tens of thousands of people
 - Vioxx killed over 60,000 before being pulled
 - Avandia diabetes drug pulled from European market in 2010
 - 800,000 people in Europe were killed from inappropriate use of beta-blockers in non-cardiac surgery patients
- Deaths attributed to cannabis barely register in comparison.

*Dr. Merola, The Benefits of Medical Cannabis. March09,2014



Outline

- Corruption
- Statin Backlash
- Statin Drugs
 - How Statins Really Work
 - Statin Drug Side Effects
 - No Benefit for the Sick and Elderly
- Other Drugs
- Obesity Paradox

Corruption

Recent Episode on Jon Stewart*

Michael Che: Oxycontin pain killer is as bad as heroin

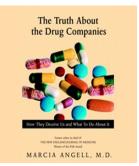


*thedailyshow.cc.com/videos/qrq3eo/the-pharmaceutical-drug-epidemic

The Truth about Drug Companies

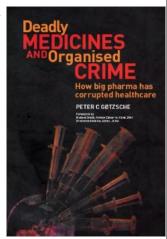
- ".. This [pharmaceutical] industry uses its wealth and power to co-opt every institution that might stand in its way, including the US Congress, the Food and Drug Administration, academic medical centers and the medical profession itself."
- -- Dr. Marcia Angell, former editor of the New England Journal of Medicine From her book:

The Truth about the Drug Companies: How They Deceive Us and What to Do about It.



Deadly Medicines and Organised Crime: How big pharma has corrupted healthcare*

"The main reason we take so many drugs is that drug companies don t sell drugs, they sell lies about drugs. This is what makes drugs so different from anything else in life... Virtually everything we know about drugs is what the companies have chosen to tell us and our doctors... If you don t think the system is out of control, please email me and explain"



-- Peter C Gotzsche

*PC Gotzsche, Radcliffe Publishing, 2013

How to Make a Drug a Blockbuster*

- Pharmaceutical companies paid at least 1,644 local health care professionals in Palm Beach County \$2.8 million in fees for speaking, traveling and consulting from 2009 through the first half of 2011.
 - Often, the companies give them the slides and the key talking points.
- 10 health care providers in Palm Beach received nearly \$1.1 million from drug companies for speaking, traveling and consulting in a span of just over two years
 - Charles H Hennekins was one of those doctors

*The Palm Beach Post, Thursday, Nov. 22, 2012

How to Make a Drug a Blockbuster*

- Pharmaceutical companies paid at least 1,644 local health care professionals in Palm Beach County \$2.8 million in fees for speaking, traveling and consulting from 2009 through the first half of 2011.
 - Often, the companies give them the slides and the key talking points.
- 10 health care providers in Palm Beach received nearly \$1.1 million from drug companies for speaking, traveling and consulting in a span of just over two years
 - Charles H Hennekins was one of those doctors

*The Palm Beach Post, Thursday, Nov. 22, 2012

Last sentence in the conclusions:

"Thus, one of the major clinical and public health challenges in the United States today is to *increase the use of statins* as an adjunct to lifestyle changes to treat and prevent CVD."

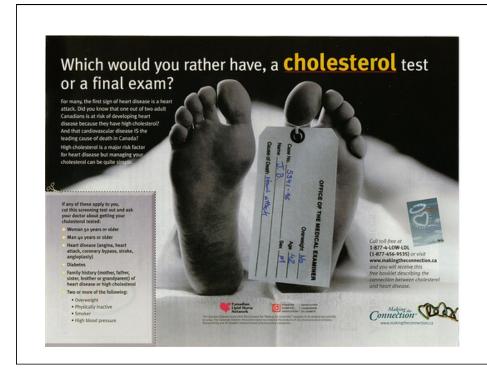
Charles H Hennekins, MD Clin Cardiol. Vol. 24 (Suppl. II), 11-2-11-5 (2001)

- Statins are already the most-prescribed drug category in the US
- Their use has climbed recently by 17% to more than 214 million monthly prescriptions annually

Statins: The Good, the Bad, and the Unknown*

"In an editorial in the Journal of the American Medical Association (JAMA), Dr John Ioannidis estimated that the total sales of statins may approach \$1 trillion worldwide by 2020; the most commercially successful drug in history, atorvastatin (Lipitor®), had sales exceeding \$120 billion between 1996 and 2011."

*http://www.medscape.com/viewarticle/832841



Communicating the risk reduction achieved by cholesterol reducing drugs*

"200 men without any prior heart disease have to swallow 357,700 tablets over five years to save one of them from dying from coronary heart disease." p. 1957

*John-Arne Skolbekken, BMJ 316, 27 JUNE, 1998; 1956-1958.

<u>Pfizer's new chewable Lipitor for children receives</u> <u>European Commission approval</u>



Published on July 7, 2010 at 12:50 AM · No Comments

Pfizer Inc. (NYSE: PFE) announced it has received European Commission approval of a new chewable form of Lipitor (atorvastatin calcium) suitable for use in children aged 10 or older with high levels of LDL ("bad") cholesterol and high triglycerides due to the inherited disorder familial hypercholesterolemia and other primary causes, which can increase the risk of heart disease and premature death. This pediatric indication has also been approved for the currently available tablet form of Lipitor.



Statin Drugs: Should Healthy People Take Them?

Newest recommendations from NICE, the National Institute for Health Care Excellence (in UK), would lead to millions more apparently healthy people in mid-life being offered the drugs by their GP.

... to be taken for the rest of their lives.

NICE: Health Watchdog in UK

"The Sunday Express revealed eight out of 12 members of the NICE panel which drew up the guidance have financial ties to companies that make statins or the next generation of cholesterol-lowering drugs."*

*express.co.uk/news/health/485510/ Statins-scandal-Health-watchdog-Nice-told-to-clean-up-its-act

Corruption in the FDA*

- Drug companies purchased special access onto FDA Advisory panels where they were "given the keys to the kingdom in swaying decision-makers about official drug policy."
- Companies gladly pay upwards of \$25,000 per meeting
- These panels are instrumental in shaping how drugs are safety tested and approved
- One consequence is a flood of dangerous analgesic drugs to the market, approved following questionable safety studies.



*Drug Companies Bought their Way onto FDA Advisory Panels March 20, 2014 by Ethan Huff

Scientific panel funded by pharmaceutical companies: They pay for the chance to affect FDA's thinking*

"20k is small change, and they can justify it easily if they want to be at the table." "Everybody has been very happy with [the meetings] and they are getting a huge amount for very little money (impact on FDA thinking, exposure to FDA thinking, exposure to academic opinion leaders and their expertise, journal article authorship, etc.) and they know it."

Robert Dworkin, organizer

*Peter Whoriskey, The Washington Post, October 6, 2013 at 9:07 PM.

Muscle Aches and Statins: Case Challenge*

A 60-year-old man with coronary artery disease comes in today for a follow-up appointment. At his last visit, you had initiated pravastatin after he complained of myalgia with both simvastatin and lovastatin. He reports to you that he stopped taking the pravastatin a few weeks ago, again because of myalgia. He tells you that before discontinuing the pravastatin, he tried taking coenzyme Q10 without benefit. He is wary of trying another statin because of myalgia.

What do you recommend?

- Restart pravastatin and advise him to take naproxen daily
- Initiate red yeast rice 1800 mg twice a day
- Start rosuvastatin 10 mg twice a week
- Start ezetimibe 10 mg a day

Save and Proceed

*medscape.com/viewarticle/827967?src=emailthis

BMJ Withdraws Statement on Statin-Related Adverse Events, but Papers Stand, Pending Review.

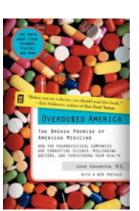
-- Medscape. May 15, 2014.

The Paper:

Abramson JD, Rosenberg HG, Jewell N, Wright JM. Should people at low risk of cardiovascular disease take a statin? BMJ; 2013;

The Issue:

The claim that statins cause side effects in 18-20% of people taking them



Review Result

The panel were unanimous in their decision that the two papers do not meet any of the criteria for retraction. The error did not compromise the principal arguments being made in either of the papers. These arguments involve interpretations of available evidence and were deemed to be within the range of reasonable opinion among those who are debating the appropriate use of statins

The Real Scandal*

"The real scandal is that a research body holds data, which could provide vital information for patients and doctors about the serious adverse effects for the most widely prescribed drugs in the Western world and the body will not release the data."

*zoeharcombe.com/2014/08/ctsu-funding-from-drug-companies

Statin Backlash

Michel de Lorgeril, M.D.





De Lorgeril's Book

- Scathing indictment of pharmaceutical industry for lies and disinformation regarding statins
 - Oversell benefit
 - Downplay side effects
- Distinguishes pre- and post- Vioxx scandal (2004)
 - No studies after Vioxx scandal have shown benefit
- He maintains that statin drugs are a poison and should be banned.

Growing doubt on statin drugs — the problem of drug-lifestyle interaction*

"When statins are used in low-risk patients without heart disease (primary prevention) there is no mortality benefit. That's right. Your chance of dying are *the same* on or off the drug, regardless of how much the statin lowers the cholesterol level."

*Dr. John Mandrola, DrJohn.org, June 16, 2014

One in Four Adults in UK on Statins?*

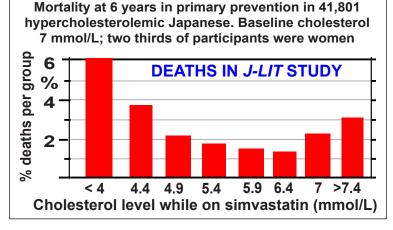
"I have just stopped taking statins and I am much more agile than I was when I was on them. I want to know why, what is the evidence for it. I am not going back on statins unless I have the evidence."

"You imagine all this creaking and aching is a matter of aging, and it might not be."

Prof McPherson Chair, UK Health Forum

> *telegraph.co.uk/health/healthnews/10900296/ Evidence-for-NHS-statins-advice-wholly-inadequate-says-expert.html





Graph provided by Eddie Vos, with permission *M Matsuzaki et al., Circ J 2002; 66: 1087-1095

Low Cholesterol Associated with Violent Behavior and Early Death*

- · Finnish study of 250 criminal offenders
- Average cholesterol level was below national average
- Violent criminal offenders who had lower than average cholesterol levels were
 - 7 times more likely to die before the average age of death
 - 8 times more likely to die of unnatural causes
- Low cholesterol levels are associated with conduct disorder in childhood

E Repo-Tiihonen et al., European Archives of Psychiatry and Clinical Neuroscience 252(1), 8-11.

Low Cholesterol during Childhood Promotes "Cycle of Violence"*

"In summary, we found a significant correlation between exposure to violence as a child and expression of violence as an adult (i.e. cycle of violence), only in the group with cholesterol levels below the median."



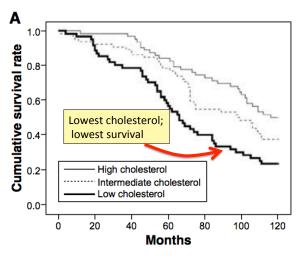
*P Asellus et al., Psychiatry Research 215 (2014) 646–650

Low Serum Cholesterol and Suicide*

- Primary prevention trials involving lowering serum cholesterol report increase in deaths due to suicide or violence
- Number of serotonin receptors in mouse brain synaptosomal membrane depends on cholesterol concentration
- Decrease in serotonin leads to aggressive behavior

^{*}H Engelberg, Lancet 1992 Mar 21;339(8795):727-9.





*Figure 1A, Y. Takata et al., Clinical Interventions in Aging 2014:9 293-300

The statin-low cholesterolcancer conundrum*

"Matsuzaki et al. followed 47,294 hyper-cholesterolemic Japanese patients on low dose (5–10mg) simvastatin per day for 6 years, and found that the number of cancer deaths was more than three times higher in patients whose total cholesterol was <160 mg/dl at follow-up compared with those whose cholesterol was normal or high (P<0.001)."

*U Ravnskov, KS McCully and PJ Rosch, QJ Med 2012 Apr;105(4):383-8

Low Cholesterol Increases Death Rate in Kidney Cancer*

- 867 kidney cancer patients studied
- Low cholesterol before surgery associated with more advanced cancer and greater cancer spread after surgery
- High cholesterol → 43% less likely to die after surgery



* M de Martino et al., BJUI, 23 July, 2014 [Epub ahead of print]

Low Cholesterol High Mortality in Heart Failure*

Conclusion:

"Low LDL-c levels are associated with a reduced survival in elderly patients with clinically controlled moderate and severe HF. Statins were independently and significantly associated with a higher risk of mortality."

Cholesterol Loss in Hippocampus with Aging Impairs Cognition in Mice*

- Loss of cholesterol induces PI3K/Akt signaling
 - Theory: Increased calcium permeability due to cholesterol loss in membrane
 - Impaired NMDA signaling and long-term potentiation (learning)
- Cholesterol depletion in neurons in vitro demonstrates same effect
- Cholesterol perfusion into lateral ventricle rescues learning and memory in old rats

*MG Martin et al., EMBO Mol Med. 2014 May 30. pii: e201303711.

How Statins Really Work

Bilirubin is Protective in Heart Disease

- Bilirubin is the breakdown product of heme in red blood cells
- Bilirubin is a potent antioxidant that reduces the risk to heart attacks
- But: it's an indicator that red blood cells are not healthy

Statins Induce Bilirubin Synthesis*

- Antioxidant effects of statins are likely the real reason why they protect from heart attacks
- "We demonstrate that the generation of biliverdin and ferritin, following HO-1 [heme oxygenase 1] activation, accounts for the antioxidant effect of statins"
- · Biliverdin rapidly reduces to bilirubin
- → Statins cause red blood cells to die, releasing hemoglobin into the blood stream?

^{*}F Ali et al., Journal of Thrombosis and Haemostasis, 5: 2537-2546

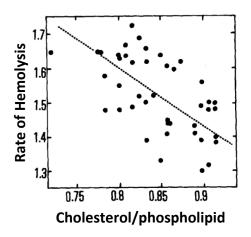
I believe statin drugs are a cholesterol sulfate mimetic: they promise the delivery of cholesterol and sulfate but they can deliver neither!

Red blood cells die due to insufficient cholesterol sulfate in their membranes

ווכוווטקוטטווו ווונט נווב טוטטע אנו במווו:

*F Ali et al., Journal of Thrombosis and Haemostasis, 5: 2537–2546

Inverse Relationship between Cholesterol in RBCs and Hemolysis Rate *



*Figure 2, K Araki and JM Rifkind, Life Sciences 1980 Jun 30;26(26):2223-30

Trickery in Statin Trials*

"Exclusion criteria included ..., bilirubin values >1.5 times the upper limit of normal during the dietary lead-in period."

"Serum bilirubin is a *potent antioxidant* within the serum and thus may decrease the rate of oxidation of low density lipoproteins which are necessary for the formation of atherosclerosis."**

*P H Jones et al., Am J Cardiol 2003;93:152–160

**LJ Horsfall et al., Circulation. 2012;126:2556-2564

Statin Side Effects



"I am haunted by an image drawn from the many experiences of readers related to me over the last few years. It is of a woman in her midseventies whose physical aches and pains, progressive immobility and deteriorating memory are, her family doctor has advised her, only to be expected at her age. That evening before retiring to bed she takes a daily dose of the most commonly prescribed drug in Britain."

Dr. James Le Fanu, The Spectator, May 31, 2014

Statins are Not Worth the Risk of Side Effects*

- Side effects include muscle pain, fatigue, increased risk for new-onset diabetes, insomnia, increased cancer risk, memory problems, and cognitive deficits
- These are most likely a function of CoQ10 depletion coupled with dose-dependent lowering of the essential nutrient in both the body and the brain—cholesterol
- Are statins neurotoxic?
 - The short answer is, yes.
 - Both cholesterol and CoQ10 are neuroprotective and essential for healthy neuronal function and repair processes

*TM Marshall, J Amer Physicians and Surgeons 19(2), 2014, 43-46

Analysis of Case Reports*

Side effects of statins include peripheral neuropathy, sexual dysfunction, gynecomastia, irritability, aggression, behaviour change, memory loss, depression, psychosis, interstitial lung disease, heart failure, Parkinson syndrome, lupus-like syndrome, dermatomyositis, other autoimmune syndromes, pancreatitis and others.

*BA Golomb and MA Evans, Am J Cardiovasc Drugs 2008; 8:373-418

Doctors Deny Patient Side Effects*

- 650 adult patients taking statins completed extensive survey
- 87% of patients spoke to their physician about potential link of health deterioration to statins
- Doctors were more likely to deny than affirm the statin connection
 - Even for symptoms with strong literature support
- Targeting patients rather than doctors will boost yield on adverse drug reaction reporting systems

*BA Golomb et al., Drug Saf. 2007;30(8):669-75

Livalo, 55-64 Female on Treatment for 1 to 6 months

"Started 2 mg Livalo in mid-Feb. 2014 and in 2 weeks my cholesterol dropped dramatically from 317 to 213; LDL from 224 to 99; HDL went from 69 to 80. Even though every day I had *flu like symptoms* I vowed to stay on it until I couldn't stand it any longer. ... I had *headaches* all day and night, my *body aches never stopped*, queasy/ nauseated, and extremely tired all the time. Three days after stopping my headaches went away, then my body aches, tiredness and queasiness."

Statins, Lactate and Diabetes

- Statins increase serum lactate levels, suggesting mitochondrial dysfunction*
- Lactate predicts incident diabetes independent of many other risk factors**
- Lactate is associated with atherosclerosis***
 - Likely linked to insulin resistance

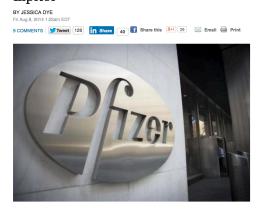


*G. de Pinieux et al., Br J Clin Pharmacol 1996; 42: 333-337

- **SP Juraschek et al., PLOS ONE 2013 8(1), e55113.
- ***GPS Shantha et al., Atherosclerosis 228 (2013) 249-255

Reuters Press – Women Suing Pfizers for Diabetes*

Pfizer confronts surge of lawsuits over Lipitor



*By Jessica Dye, Fri Aug 8, 2014 1:22am EDT

Statins and Diabetes*

- Statins suppress electron transport and ATP generation
- Statins inhibit selenoprotein synthesis and dolichol-mediated glycation of insulin receptor
 →insulin resistance and heart failure
- Statins decrease blood ketone bodies and enhance glucose intolerance

"We urgently propose that statins are contraindicated in diabetes"

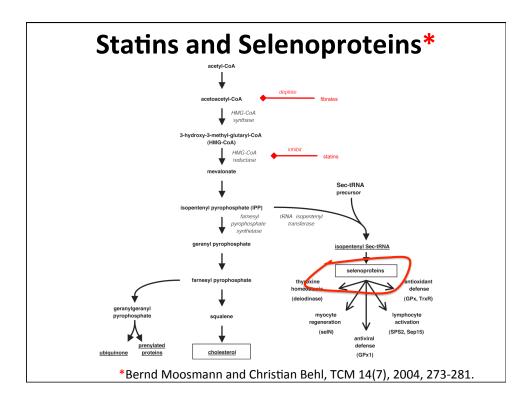
*H Okuyama et al., Journal of Lipid Nutrition 22(2), 173-186, 2013

Statins and Diabetes*

- Statins suppress electron transport and ATP generation
- Statins inhibit selenoprotein synthesis and dolichol-mediated glycation of insulin receptor
 →insulin resistance and heart failure
- Statins decrease blood ketone bodies and enhance glucose intolerance

"We urgently propose that statins are contraindicated in diabetes"

*H Okuyama et al., Journal of Lipid Nutrition 22(2), 173-186, 2013



Selenium Inhibition and Statins*

"The clinical picture of statin induced myopathies include a non-uniform pattern of muscle aches and pains, weakness and tenderness with easy fatigability. It can vary from mild to very severe, even disabling. This pattern of signs and symptoms is very similar clinically and pathologically to those induced by severe selenium (selenoprotein) deficiency."

Duane Graveline, MD

*http://www.spacedoc.com/selenium statins.html

Statins and Selenium*

"Statin induced myopathy shares with selenium induced myopathy a microscopic picture of myofibril disorganization, loss of mitochondrial function and the common observation that muscle pain follows muscle activity."

-- Duane Graveline, MD

*http://www.spacedoc.com/selenium_statins.html

Benefits of Activity*

"Benefits of activity and fitness extend beyond metabolic and cardiovascular outcomes, to mood, cognition, behavior, sleep, bone, respiration, functional preservation, resilience in settings of injury, illness, or surgery, as well as death from all causes."

*BA Golomb, JAMA Internal Medicine Published online June 9, 2014

Statins and Exercise*

"Exercise has worsened muscle injury with statins, and statins have worsened pain and injury with exercise.[4]"

"Women older than 65 years have shown significant weakness with statin use, with the magnitude of effect increasing with still older age.[7]"

*BA Golomb, JAMA Internal Medicine Published online June 9, 2014

Results from My Studies on Consumer Side Effect Reports: Muscle Issues*

Table 6: Muscle frailty and pathology pain (sorted by p-value).

Side effect	k ₁	k ₂	L_1-L_2	<i>p</i> -value
muscle cramps	678	193	850.12	0.00005
general weakness	687	210	834.24	0.00006
muscle weakness	302	45	448.73	0.00023
difficulty walking	419	128	508.96	0.00044
loss of muscle mass	54	5	84.75	0.01332
general numbness	293	166	203.34	0.01552
muscle spasms	136	57	135.03	0.01849
rhabdomyolysis	31	0	51.52	0.02177
tendonitis	42	8	59.68	0.03193
balance problems	71	32	65.91	0.05371

^{*}J. Liu et al. Proc. IMMM}, Barcelona, Spain, Oct. 2011.

Statins and Cancer*

- Low cholesterol predisposes to cancer.
 - 9 cohort studies involving more than 140,000 people found that cancer was inversely associated with cholesterol measured 10–30 years earlier
- Increase in non-melanoma skin cancer in two early statin trials is statistically significant when they are combined
- A study showed increasing prostate cancer risk with increasing cumulative statin dose (p=0.007).

*U. Ravnskov et al., BMJ, February 3, 2014

Statins and Breast Cancer*

"Twelve out of 286 women in the statin group but only one out of 290 in the placebo group had BC at follow-up [39].** After that, most statin investigators took care not to include high-risk women in their trials [37]"

(**double blind placebo-controlled CARE trial)

*de Lorgeril and Salen BMC Medicine 2014, 12:94

Statins increase breast cancer in women by over 200%*

Why do one in seven women in the U.S. have breast cancer?

"Among women diagnosed with hyper-cholesterolemia, current users of statins for ten years or longer had a 204% increased risk of invasive ductal carcinoma and a 243% increased risk of invasive lobular carcinoma."

*Dr. Brownstein, blog.drbrownstein.com/statins-increase-breast-cancer-by-over-200/

"Recently a trial in women 55–75 years of age on a ten year or more statin treatment had more than double risk of lobular and ductal breast carcinoma [35]."

*ST Sinatra et al., Journal of the American College of Nutrition, Vol. 33, No. 1, 79–88 (2014)

Statins and Fatty Acids*

- Concurrent statin therapy annihilates the benefit of omega-3 fatty acid supplements
- Statins increase serum levels of omega-6 FAs compared to omega-3 FAs
- Omega-6 FAs are precursors to arachidonic acid which induces an inflammatory response
- Omega-3's are essential for neuronal health



*greenmedinfo.com/blog/cholesterol-lowering-statins-may-kill-omega-3-heart-benefits

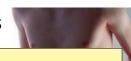
Statins Increase Risk to Pancreatitis*

- Observational studies identify odds ratio of 1.41 for risk of acute pancreatitis in patients who have taken statins.
- 20 published case reports and 33 spontaneous reports from the Canadian Adverse Drug Event Monitoring System database
- Very uncommon early on but occurs after many months of therapy (insidious)

*S Singh and YK Loke. Drug Saf. 2006;29(12):1123-32.

Statins Increase Risk to Pancreatitis*

Observational studies identify odds
 ratio of 1.41 for risk of acute



"Conclusions: The risk of pancreatic cancer is significantly elevated in subjects with chronic pancreatitis and appears to be independent of sex, country, and type of pancreatitis."**

many months of therapy (insidious)

*S Singh and YK Loke. Drug Saf. 2006;29(12):1123-32.

**AB Lowenfels et al., New England Journal of Medicine, 328(20), 199

Effect of statin drugs on sperm*

- Total sperm count down 31%
- Morphology abnormalities
- Impaired acrosome reaction
 - Release of enzymes from the acrosome that promote fusion and fertilization
- Reduced levels of seminal concentrations of several enzymes critical for fertilization

"Such data indicate clearly that atorvastatin therapy affects testicular, epididymal and prostatic functions."

*H Pons-Rejraji et al., Reproductive Biology and Endocrinology 2014, 12:65

Duane Graveline ("Spacedoc") on Cholesterol, Statins, and the Brain

- The prevalence of Lou Gehrig's disease, Parkinsonism, Alzheimer's disease and Multiple Sclerosis has increased nearly 50% compared to 1982.
- 40 million people in the US take statin drugs

Is there a connection?

 Statins inhibit the mevalonate pathway and this leads to the production of tau protein --> tauopathies.

Duane Graveline ("Spacedoc") on Cholesterol, Statins, and the Brain

"If I know the above to be true, you can be certain our drug companies also know this to be true and are no doubt busy with damage control as they decide what to do. One thing they have not done as yet is to inform our practicing physicians with at least a black box warning.

Statin sales have never been higher."

Teads to the production of tau protein—
tauopathies.

Dolichol and Parkinson's Disease*

- Substantia nigra in the brain stem is the seat of Parkinson's disease pathology
- Neuromelanin is a dark brown pigment found in high concentrations in dopaminergic neurons in the substantia nigra
- Neuromelanin contains significant concentration of dolichol
- Dolichol is a product of the mevalonate pathway that statin drugs disrupt

*H Fedorow et al., J Neurochem. 2005 Feb;92(4):990-5.

Over 9,000 cases of statin associated transient global amnesia have been reported to Medwatch since statins were first marketed.

"Statin-Related Cognitive Impairment in the Real World: You'll Live Longer, but You Might Not Like It"

Patient's account of how he was suffering from many memory and cognitive problems until he finally recognized the link to statin drugs and decided that any protection from a heart attack was not worth the risk to his brain health

*Jonathan McDonagh, JAMA Internal Medicine, Published online October 27, 2014, p. e1.

Statins Cause Memory Problems via Changes in Hippocampus*

- Mice treated with atorvastatin for 7 months
- Behavioral deficits in:
 - basic exploration
 - cognitive function
- Significant changes in membrane lipid raft proteins in hippocampus





*JM Schilling et al., Behavioural Brain Research 267 (2014) 6-11.

Results from My Studies on Consumer Side Effect Reports: Brain Issues*

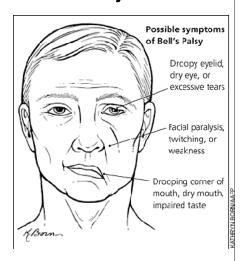
Table 7: Issues related to brain and nervous system.

Side effect	k ₁	k ₂	L_1-L_2	<i>p</i> -value
ALS	71	7	110.75	0.00819
memory problems	545	353	286.76	0.01118
Parkinson's disease	53	3	85.38	0.01135
neuropathy	133	73	97.03	0.04333
dementia	41	13	48.80	0.05598

*J. Liu et al. Proc. IMMM}, Barcelona, Spain, Oct. 2011.

Statins and Bell's Palsy*

- Bell's palsy is the most common cause of acute facial nerve paralysis (>80%)
- Study in Taiwan: case/ matched control model
- Odds ratio of 1.47 for prior regular statin use



*SH Hung et al., Drug Saf. 2014 Jul 31. [Epub ahead of print]

Statins and Shingles*

- Shingles is caused by the virus, Herpes zoster (HZ)
- It's the same virus that causes chicken pox, and it produces a painful infection of nerve axons, often in the face, many years after the initial infection



Quote from study:

"We found that prior statin use was significantly associated with HZ occurrence across all age and gender groups in the present study"

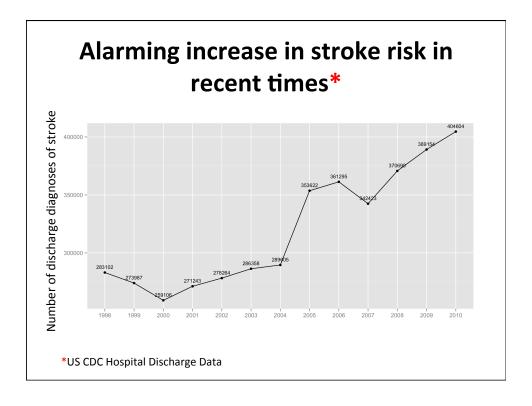
*S-D Chung et al., PLOS ONE 2014, 9(10):e111268.

Statins Increase Risk to Suicide*

 "The prevalence of suicide ideation was more than 2.5 times in those taking statins"

"The association between statins and suicidal ideation seems biologically plausible given that statins lower blood cholesterol, which can lead to altered cholesterol—serotonin impulsivity"

*K. M. Davison & B. J. Kaplan *Crisis* 2014; Vol. 35(4):278–282



"Regarding long-term statin therapy: Are we trading stronger hearts for weaker brains?"*

- Statin drugs
 - Decrease cellular geranylgeranyl pyrophosphate, leading to an increase in Aβ40 within neurons
 - Increase the risk of hyperglycemia, hyperinsulinemia, prediabetes and diabetes
- Both of these lead to cerebral microbleeds
 - Spontaneous intracerebral hemorrhages
 - Present in 36% of people over 80 years old

^{*}MR Goldstein and L Mascitelli, Medical Hypotheses 2014 [Epub ahead of print]

"Regarding long-term statin therapy: Are we trading stronger hearts for weaker brains?"*

It's not even stronger hearts because the heart suffers from increased risk to heart failure following chronic exposure to toxic statin drugs

nyperinsulinemia, prediabetes and diabetes

- Both of these lead to cerebral microbleeds
 - Spontaneous intracerebral hemorrhages
 - Present in 36% of people over 80 years old

*MR Goldstein and L Mascitelli, Medical Hypotheses 2014 [Epub ahead of print]

Review Paper on Heart Failure (HF)*

"HF poses an especially large public health burden. It represents a new epidemic of cardiovascular disease, affecting nearly 5.8 million people in the United States, and over 23 million worldwide."

*L Liu and HJ Eisen, Cardiol Clin 2014 Feb;32(1):1-8,

CoQ10 Protects Heart Failure Patients*

- 10 year study on patients with heart failure
- 100 mg of CoQ10 three times daily, compared with control subjects were:
 - Significantly less likely to die from heart failure,
 - Less than half as likely to die from any cause at all
 - Half as likely to have a major adverse cardiac event during the study period
- Statin drugs interfere with CoQ10 synthesis (mevalonate pathway)

*S Mortensen et al., European Journal of Heart Failure. 2013;15(S1):S20.

"When a statin reduces synthesis of cholesterol by 40%, it is, at the same time, reducing our synthesis of CoQ10, dolichols, selenoproteins, Rho, glutathione and normal phosphorylation by similar substantial amounts. This is the cause of our thousands of side effect reports. It has taken us years to discover this, a simple bit of biochemical detective work that drug company researchers and, no doubt, management knew from the beginning."

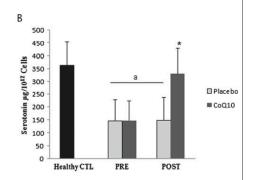
Dr. Duane Graveline "Spacedoc"

"When a statin reduces synthesis of cholesterol by 40%, it is, at the same time, reducing our synthesis of *CoQ10*, dolichols, selenoproteins, Rho, glutathione and normal phosphorylation by similar substantial amounts. This is the cause of our thousands of side effect reports. It has taken us years to discover this, a simple bit of biochemical detective work that drug company researchers and, no doubt, management knew from the beginning."

Dr. Duane Graveline "Spacedoc"

Relationship Between Coenzyme Q10 and Serotonin*

- Platelets of patients with fibromyalgia are low in both serotonin and Coenzyme Q10
- Platelet levels track levels in cerebrospinal fluid
- Co Q10 supplements alleviate depression and restore platelet levels



^{*}E. Alcocer-Go mez et al., ournal of Clinical Psychopharmacology 34(2), April 2014,

Phlebotomy Just as Effective as Statin Therapy?*

Conclusions: "There are commonalities between the clinical benefits of statins and the maintenance of physiologic iron levels. Iron reduction may be a safe and low-cost alternative to statins."



*LR Zacharski et al., American Journal of Public Health, 2014 [Epub ahead of print]

No Benefit for the Sick and the Elderly

Statins and Sepsis/COPD*

"The ARDS trial was stopped for futility after 745 of the planned 1,000 patients had been enrolled at 44 participating hospitals."

- Compared statin vs placebo following hospital admission
- Mortality:
 - In shock at baseline:36% statins; 32% placebo
 - Used statin before critical illness:
 31% statins; 20% placebo.

*http://www.medpagetoday.com/MeetingCoverage/ATS/45826

Prior Statin Use & Traumatic Injury*

- Pre-injury statin use is associated with an 80% increase in the risk of multiple organ failure following traumatic injury cases
- This was one of the strongest independent risk factors for this outcome.

* MD Neal et al., J. Trauma 2009 67(3), 476-82.

"Stopping statins may benefit terminally ill patients"*

"Statin withdrawal produced a significantly improved quality of life and a non-significant increase in survival and reduction of symptoms"

*Sciencecodex.com/stopping_statins_may_benefit_terminally_ill_patients-134678

"Questioning the Benefits of Statin Therapy in Older People without Established Cardiovascular Disease"*

- "The only two randomized trials designed to recruit only elderly people [4, 6] have shown a trend of an *increased* mortality from all causes in primary prevention"
- Inverse relationship between mortality and LDL cholesterol in the elderly [10].

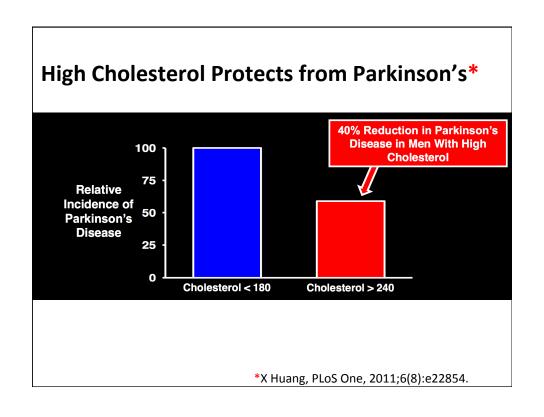
*A Battaglio et al., Heart, Lung and Circulation (2014)

Aggressive Lipid Management in Very Elderly Adults: Less Is More*

Michael W. Rich, MD

- "The findings of these studies suggest that, in very elderly adults, higher cholesterol levels are associated with better survival."
- "This phenomenon, referred to as 'reverse epidemiology,' has also been observed with other CV risk factors, including hypertension and obesity, in older adults."

^{*} NJ Stone et al., Statins in Very Elderly Adults (Debate) JAGS 2014, 3-5



Other Drugs

Drug deaths outnumber traffic fatalities in U.S.*

• US CDC data from 2009

"Fueling the surge are prescription pain and anxiety drugs that are potent, highly addictive and especially dangerous when combined with one another or with other drugs or alcohol."



*LA Times, September 17, 2011 | By Lisa Girion, Scott Glover and Doug Smith

The Epidemic in Pain Killer Abuse*

- Morphine use in US increased 600% from 1997 to 2007
- Prescription drugs account for 75% of all drug overdose deaths
 - Deaths from prescription drugs increased 400% among women and 265% among men from 1999 to 2010
 - Opioids, amphetamines and benzodiazepines are the worst offenders

*articles.mercola.com/sites/articles/archive/2014/08/06/hydrocodone-medication.aspx

Heroin Deaths Jumped 44% in One Year*

- From 2010 to 2011 –
 latest data available from CDC
- Deaths from prescription opiates have been rising by 2% per year for the past decade



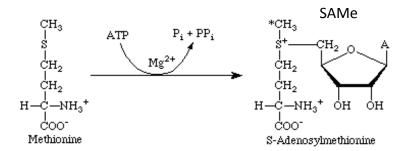
Hypothesis: People are in much greater pain due to health issues

*medpagetoday.com/PublicHealthPolicy/PublicHealth/46594

"The popular current model of drug management for so-called chronic inflammatory disorders is highly inefficacious, expensive, inefficient, wrought with adverse effects, and it promotes dependence on the part of doctors and patients to rely almost exclusively on the pharmaceutical industry."

--Alex Vasquez, clinician, lecturer, and author in functional medicine

SAMe vs Celebrex for Arthritis Pain*



- SAMe worked just as well as celebrex in a head-to-head experiment
- Celebrex is a COX inhibitor and has side effects

*WI Najm et al., BMC Musculoskeletal Disorders 2004:5.

Androgen Deprivation Therapy for Prostate Cancer Doesn't Work*

- People who decided to adopt a "wait and see" attitude towards prostate cancer
 - Some took anti-androgen therapy (ADT group)
- Analysis of > 15,000 men showed no benefit
- The ADT group had higher mortality associated with other types of cancer and with cardiovascular disease

*Charles Bankhead, Staff Writer, MedPage Today, Mar. 17, 2014

Androgen Deprivation Therapy for Prostate Cancer Doesn't Work*

I have spoken in previous WAPF meetings about the fact that prostate cancer cells produce cholesterol sulfate

• The ADT group had higher mortality associated with other types of cancer and with cardiovascular disease

*Charles Bankhead, Staff Writer, MedPage Today, Mar. 17, 2014

Pancreatic Cancer*

- Pancreatic cancer will be the second leading cause of cancer death by 2030
 - Cachexia (muscle wasting) is usually associated with pancreatic cancer and is often the cause of death
 - 5-year survival rate is 6%!
- Tumor maintains stiff and impenetrable stroma (extracellular matrix complex)
 - Idea: develop drugs to attack the stroma so that other drugs can more easily gain access

*J Gore and M Korc, Cancer Cell 25, June 16, 2014, 711-712.

Cancer Treatments Fail* A Inflammatory Cytokines & Growth Factors Cancer Cells Endo Cells Cancer Cells Cance

- When you use drugs that attack the stroma (extracellular matrix), other drugs have easier access to the tumor
- However, this leads to increased risk to metastasis and cachexia

^{*}Figure 1 in J Gore and M Korc, Cancer Cell 25, June 16, 2014, 711-712.

Fake!

Vioxx

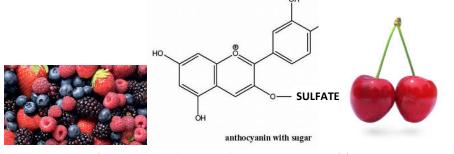
Ibuprofin inhibits COX Enzymes*

- COX inhibitors cause COX-1 to digest the stomach lining
 - Death from internal bleeding from stomach wall – 1 in 1200 who take the drug for at least two months will die!
- Vioxx COX-2 only! BUT killed tens of thousands of people (heart failure)
 - Manufacturer responded by neutralizing doctors who tried to warn people
 - If that didn't work: discredit them
- Cherries: suppress COX-2 without suppressing COX-1.
 - Anthocyanins and phytonutrients transport sulfate

*youtube.com/watch?feature=player embedded&v=pkPhH1RSkds#t=3

Anthocyanin*

- Found in high concentrations in fruits: especially berries
- "Glucuronidation, methylation and *sulfation* are the most typical metabolic reactions"



*A Cisowska et al., Nat Prod Commun. 2011 Jan;6(1):149-56.

Managing Diabetes with Insulin*

 Study weighed reduction in risk to complications of diabetes against overall "quality-adjusted" life years"



- Conclusion:
 - Practice of broadly advocating insulin treatment for increased glycemic control should be reconsidered
 - Most patients older than 50 years with an HbA1c level less than 9% experience little gain
 - Low blood sugar can result in coma
 - Adverse effects result in net harm in older patients

*S. Vijan et al., JAMA Intern Med, June 30, 2014 [Epub ahead of print]

GMO Insulin Causes Type 1 Diabetes in Type 2 Diabetics*

"Giving genetically susceptible type 2 diabetes patients recombinant insulin can trigger their bodies to target their own insulin producing cells for autoimmune destruction, effectively producing 'double diabetes': type 1 and type 2, as a result."

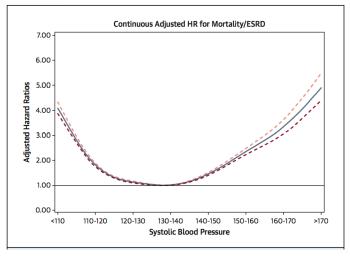


*Sayer Ji , GreenMedInfo.com, Saturday, June 28th 2014, 7:00 am greenmedinfo.com/blog/gmo-insulin-causes-type-1-diabetes-type-2-diabetics-study-finds

Blood Pressure Control: A U Curve*

- Overly aggressive BP lowering can lead to orthostatic hypotension and hypoperfusion of vital organs (11)
- Patients assigned to intensive treatment (<120 mm Hg) had greater declines in total brain volume compared to those treated to more modest goal (<140 mm HG)

Hazard Ratio for Mortality or End Stage Renal Disease*



*Figure 2 in JJ Sim et al., J Am College Cardiol 64(6), 2014, 588-597

Blood Pressure Medicine Linked to Increased Risk of Falling in Elderly*

- Falls account for 10% of emergency department visits and 6% of hospitalizations among those over age 65
- Medications to control blood pressure increase risk of serious fall injuries by 30-40% in the elderly.
- These falls have a similar effect on mortality and functional loss as the strokes and heart attacks that the drugs are meant to prevent
 - e.g., head injuries and hip fractures



*ME Tinetti et al., JAMA Internal Medicine, Feb 24, 2014, 588-595.

High Blood Pressure Protects from Dementia in Very Elderly*

- Almost perfectly linear line connecting the estimates for relative dementia risk in four categories of blood pressure (P-value = 0.05).
- This potential benefit of high blood pressure should be taken into account when clinicians consider the treatment options for new-onset hypertension in the very elderly.

^{*}medpagetoday.com/MeetingCoverage/AAIC/46770

Are β Blockers Overprescribed?*

"We did not see an association with reduced CV events, even in the prior-MI (myocardial infarction) group. And for some of the outcomes, being on a beta blocker was associated with worse outcomes; for example, there was an increased risk of the primary composite end point--CV death, nonfatal MI, or nonfatal stroke--in patients with just risk factors but no CAD,"

Dr Sripal Bangalore, New York University School of Medicine

*S. Bangalore et al., JAMA 2012; 308:1340-1349

β-blockers After Heart Attack*

"In contemporary treatment of MI [myocardial infarction, i.e., heart attack], β-blockers have no mortality benefit but reduce myocardial infarction and angina (short-term) with *increase in heart failure, cardiogenic shock and drug discontinuation.*"

^{*}S Bangalore et al.m The American Journal of Medicine (2014), Epub ahead of print

Beta-Blockers Post-Operation*

"Perioperative initiation of a course of β-blockers appears to increase postoperative mortality by 27%."

This practice emerged due to fraud:

- Don Poldermans, a Dutch cardiovascular medicine researcher, had published a series of DECREASE studies claiming peri-operative benefit of beta blockers.
- It was later found that these studies were fraught with fraud

*Bouri S, et al. Heart 2014;100:456-464.

"Acetaminophen Overdose Is Far Easier Than You Might Think"*

- Acetaminophen poisoning is responsible for nearly half of all acute liver failure cases in the US.
- Acetaminophen is the leading cause of calls to Poison Control Centers

"Acetaminophen, which includes Tylenol and other generic brands, causes more than 80,000 emergency room visits each year because people often aren't aware they're taking too much."

Time Magazine, July 31, 2014

*articles.mercola.com/sites/articles/archive/2014/08/14/tylenol-opioid-acetaminophen-overdose.aspx

Taking Acetaminophen During Pregnancy May Increase Your Child's Risk of ADHD*

- More than half of all mothers reported acetaminophen use during pregnancy
- Children of these mothers
 were at higher risk to hyperkinetic disorders, use
 of ADHD medications, or having ADHD-like
 behaviors at age 7.
- Stronger association with more frequent use (P < 0.001)
- Potential confounders were taken into account

*Mercola.com, March 23, 2014 Z. Liew et al., JAMA Pediatrics Feb 24, 2014, Epub ahead of print

Taking Acetaminophen During Pregnancy May Increase Your Child's Risk of ADHD*

More than half of all mothers
 reported acetaminophen use



Acetaminophen is sulfated for export through the kidneys:

This depletes serum sulfate levels

· Potential confounders were taken into account

*Mercola.com, March 23, 2014 Z. Liew et al., JAMA Pediatrics Feb 24, 2014, Epub ahead of print

"Does Psychostimulant Use Increase Cardiovascular Risk in Children with ADHD?"*

- 60% of 8300 ADHD children in Denmark were taking drugs (e.g., Ritalin)
- Those taking drugs had over twice the risk of cardiovascular disease
 - Discontinuation of treatment may shorten the QTc interval or cause heart rate variability
 - Short QTc interval is associated with AFIB, loss of consciousness, and sudden cardiac arrest
 - Reduced heart rate variability is a known risk factor of heart disease

*S Dalsgaard et al., Journal of Child and Adolescent Psychopharmacology. [Epub ahead of print]

Toxicity of Ursodeoxycholic Acid*

- Used to treat impaired bile flow
- Off-label use in children was disastrous:
 - 60% of 734 infants with neonatal hepatitis received drug

 Failure rate: 59% in treatment group compared to 30% in control

 Drug improved all kinds of parameters but caused the liver to fail!

OH H OH

*MA Kotb, Int. J. Mol. Sci. 2012, 13, 8882-8914

Toxicity of Ursodeoxycholic Acid*

- · Used to treat impaired bile flow
- "Lithocholic acid (breakdown product) causes cholestatic liver injury and can cause death from liver failure in patients with *compromised sulfation*.

 Lithocholic acid induces DNA strand breakage, is uniquely co-mutagenic, promotes cell
- transformation, leads to segmental bile duct injury, liver cell failure and death"

liver to fail!

но Н Н Н Н

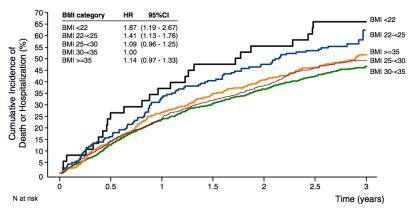
*MA Kotb, Int. J. Mol. Sci. 2012, 13, 8882-8914

Drug Induced Oxidative Stress* Cell membrane Detoxification React with DNA Antioxidants (e.g., ascorbic ■Oxidised protein, and other macromolecules cid, vitamin E, glutathione) and lipids (e.g., MDA, HNE) enzymes (e.g., SOD, catalase) ROS Lipid damage MAP kinases (e.g., p38, JNK) Kinase activation Lipid peroxidation Protein damage Pleiotropic cellular Removal of damage by responses Nucleus Mitochondria degradation (e.g., proteasomes) (e.g., 8-oxoGua) Protein oxidation Protein aggregation (of nondegraded Loss of cellular (e.g., BER) p53 Impaired carbonyls) structure/function (e.g., cytochrome c release) *DG Deavall et al. Journal of Toxicology Volume 2012, Article ID 645460

Obesity Paradox

Obesity Paradox*

For patients with diabetes and concurrent heart disease, obesity is protective!



*Figure 3, W.. Doehner et al., International Journal of Cardiology 162 (2012) 20–26

Another Study: Same Results*

"Participants with normal-weight diabetes experienced a significantly elevated total mortality (HR, 2.08; 95% CI, 1.52-2.85) and noncardiovascular mortality (HR, 2.32; 95% CI, 1.55- 3.48)."

They also experienced higher cardiovascular mortality risk but the results were not significant

*MR Carnethon et al., JAMA, August 8, 2012; 308(6), 581-590.

Clinicians are Puzzled!*

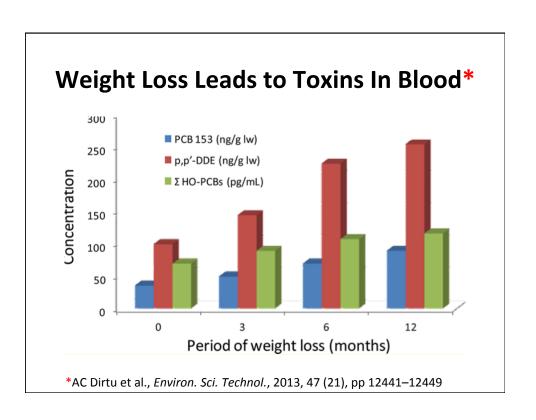
"How can the very risk factors that lead to the development of coronary artery disease suddenly become protective once the coronary artery disease event has occurred?"

 This includes obesity, hypertension, dyslipidemia, and diabetes

^{*} Kamyar Kalantar-Zadeh, Mayo Clin Proc. August 2014;89(8):1033-1035

My Answer

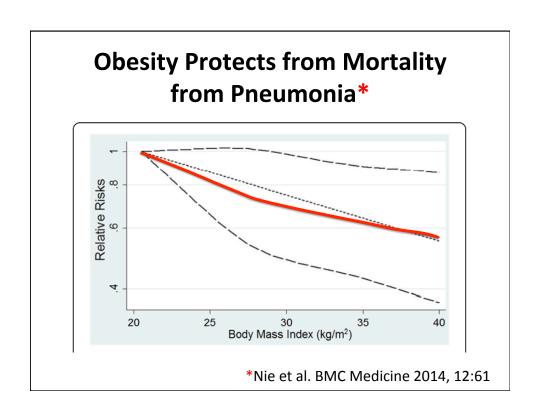
- These "risk factors" are actually protective measures that are initiated by the body following exposure to toxic environmental chemicals
- They are an indicator of toxic chemical exposure, and that is why they appear to be risk factors
- The corollary is that the only important risk factors are the environmental chemicals
- Treating the biological risk factors through drugs is a dangerous proposition



Weight Loss Increases Mortality*

"Paradoxically, weight loss was related to higher mortality and weight gain was related to lower mortality when compared with stable weight over 7 years. Approximately 60% of the deaths in the weight loss group were attributable to conditions associated with muscle wasting."

*J Myers et al., The American Journal of Medicine 124(10), October 2011, 920-930



Summary

- Prescription drugs come with many risks, including death
 - They act by disrupting crucial biological pathways
- Statin drugs are among the worst offenders
 - They essentially make you grow older faster
- The best way to treat illness is through healthy nutrition and reducing exposure to environmental toxins
- Obesity is protective in many diseases likely due to fat tissue's ability to sequester toxins