



Misled by Statistics

The headline on page one of the *Wall Street Journal*, April 4, 2007 Reads: “New Study Reassures Most Users of Hormones.” Please recall several years ago it was reported that hormones (HRT) given to menopausal women was harmful --- causing increased risk of heart attack. Now the current study is saying hormones aren’t harmful. Which study do you believe? This is always the fundamental question because the medical and nutritional communities continually change or completely reverse their recommendations. Here’s my unbiased analysis so that you don’t get misled¹.

- The most recent study is trying to provide evidence, no matter how twisted, that menopausal women starting HRT immediately, are not at increased risk for heart attack.

The problem with this latest position is that the Women’s Health Initiative correctly said these results were not “statistically significant.” What this means is that the result could occur BY CHANCE ALONE. WHI researchers point out “the focus shouldn’t be on the statistical issue but on the actual results of this new analysis.”

The Professor’s NEWSFLASH!

Only in nutrition and pharmaceutical fields does a 75% failure rate seem to be considered excellent. Almost everywhere else this would be considered dismal.

Life-Systems Engineering Science Analysis: All that counts is the “significance issue.” Typically a study is conducted that shows the result would occur in a clearly defined group 95 out of 100 times – which means only 5 times in 100 would that result be due to chance alone. This is the first hurdle that must be overcome. The second is that there is at least a 20% (1 out of 5) improvement in the group. You could have a positive result but if too few in the group experience it, it doesn’t matter. Therefore, a 20% success rate with the therapy improvement is the minimum threshold in order to be considered significant.

What happened in this case is that a 99% level of significance was necessary instead of 95%. This means the therapy’s result due to luck alone is only 1 time out of every 100 times the experiment is done. WHY was this much higher standard called for? Very simple -- the data had already been subject to a number

of statistical analyses. That method INCREASES the likelihood of a FALSE POSITIVE increasing the chances of reporting that a therapy had an effect when the evidence does NOT support this conclusion. We all get misled once again.

Typically you don't change level of significance that is meaningful after the experiment since it makes the study look contrived. The bottom line is that this study is awful because you can NOT typically run a good CAUSE/EFFECT analysis on data that has been manipulated. This never stops them and we keep getting misled. Don't believe them and foolishly risk you health.

If you have any questions or comments about this month's newsletter please e-mail the professor at: info@brianpeskin.com

This Month's Low-Carb Recipe: Marscarpone Veal Cutlets

INGREDIENTS

4-9 oz veal cutlets
1/4 cup butter
1 large onion, sliced
1 apple peeled, cored & sliced
6 oz button mushrooms
1 Tbsp fresh tarragon, chopped
8 black peppercorns
1 Tbsp sesame seeds
1/2 cup organic coconut or peanut oil
1/4 cup marscarpone cheese, broken into small pieces
2 large beef tomatoes, cut in half
leaves of 1 fresh basil sprig
salt and pepper

PREPARATION

1. Fry the veal in a skillet with coconut or peanut oil for 5 minutes then transfer to dish and keep warm.
2. Fry onion and apple in a pan until lightly browned then transfer to dish, place veal on top, and keep warm.
3. Fry mushrooms, tarragon, and peppercorns in remaining oil for 3 minutes then sprinkle with sesame seeds.

4. Melt butter over veal. Spoon mushrooms, peppercorns, and pan juice onto the cutlets, place tomatoes and basil leaves around the edge, and place in preheated oven at 300°F/150°C for 5 minutes. Season with salt and pepper, sprinkle marscarpone cheese and serve immediately.

Enjoy!