## Don't Do Drugs

When I say don't do drugs, I'm talking about **weight loss drugs**. Once again we are at the beginning of a new year, and everyone is looking for an easy way to lose weight. And what could be easier than just popping one of those weight loss drugs? In fact in those medically supervised weight loss centers, weight loss drugs might be the first thing that they recommend.

Of course, we've seen lots of weight loss drugs come and go over the years as they **have all been found to have unexpected toxicities**. So are the new weight loss drugs any different? For example, the drug Xenical or Alli was approved for weight loss by the FDA in 1999. In May of 2010 the FDA was forced to announce a consumer warning that Xenical had the potential for liver toxicity. However, at that time they considered it a rare side effect.

But a study published just this month (D Xiao et al, Biochem. Pharmacol., doi: 10.1016/j.bcp.2012.11.026) suggests that the potential dangers of Xenical are much greater than previously supposed. This study showed that Xenical blocks a key enzyme called carboxylesterase-2 which plays an essential role in detoxifying the liver and kidneys and the And the same enzyme is important in the metabolism of many medications. For example, loss of this enzyme activity reduces the effectiveness of cancer treatments and increases the effectiveness of aspirin - raising the possibility of uncontrolled bleeding.

And it's not just Xenical. The FDA has just approved two new weight loss drugs, Belviq and Qysmia, that it initially rejected in 2010 because of safety concerns, including heart risks and birth defects. Belviq has a similar mechanism of action to Fen/Phen, which was taken off the market in 1997 because it damaged heart valves. Qysmia increases the risk of birth defects, and the long-term effects of both of these drugs on the risk of heart attack and stroke is currently unknown.

A physician colleague of mine always told the freshman medical students that "The only safe drug is a new drug". He went on to say that the longer the drug has been on the market the more we know about its side effects.

Don't misunderstand me. If one has a serious medical condition and a drug treatment is called for, the benefits often outweigh the side effects. But the clinical studies show that these weight loss drugs only give about 5% weight loss over a 12 month period. That's very little benefit in relationship to the risks - both known and unknown.

So when it comes to weight control medications, my advice is "Don't do drugs".

To Your Health! Dr. Stephen G Chaney