So you want an endocrine disruptor? Look no further than GNC

By ACSH Staff — July 18, 2013

[1] Endocrine-disruptor we at ACSH have been fighting an uphill battle against this pseudo-scientific term for years.

According to radical environmental groups and others with similar anti-chemical agendas, we are being bathed in these things and they are doing serious, chronic harm to all of us.

Nonsense, says ACSH’s Dr. Josh Bloom. Those with a stake in keeping America in a panic (and pushing their own chemical-free agendas) use this term with impunity.

Here’s what it really means: There are multiple chemicals, both endogenous (in the body) and drugs, that bind to hormone receptors in the body and elicit pharmacological effects. Two common examples are hormone replacement therapy (used for menopausal symptoms) and estrogen blockers, such as tamoxifen, which is used to treat certain types of breast cancer. They don’t disrupt anything. They work by a known mechanism and do what they are supposed to do.

Yet, the term is thrown around carelessly to include anything that may bind to a hormone receptor no matter how weakly.

Dr. Bloom explains, Activist groups love to call chemicals like BPA and parabens endocrine disruptors. It’s scary sounding. But if you examine the relative strength of binding of these chemicals to estrogen receptors, they are thousands, or even millions of times weaker binders. In other words, they cannot possibly have any real effect in the presence of of endogenous hormones that are both far more potent and present in much greater amounts.

Case in point: a group at the University of Colorado Cancer Center studied luteolin (a flavonoid one of the current darlings of the supplement world and the results are intriguing to say the least. Luteolin, in cell-based cancer models was shown to promote endometrial cancer, while suppressing breast cancer.

To Dr. Bloom, the irony here is beyond obvious. We have a powerful (but untested) drug being sold in health food stores. It clearly has multiple pharmacological effects. Guess what? This makes it a drug, and possible a dangerous one at that. Yet, through clever marketing based on popular misconceptions and sleazy legislation, companies are allowed to sell this in capsules as a dietary
supplement. If people really understood how they are being manipulated into buying this stuff they would be horrified. But I’d probably be out of a job.

ACSH friend, Dr. David Seres, director of medical nutrition at Columbia University Medical Center has much to say about unregulated supplement drugs. We suggest that you watch today’s interview with Dr. Seres and Dr. Bloom on this subject.