

We are often asked, "What are the pellets we use made of?" The technical answer to that question is, "NDC 17-Beta Estradiol or NDC Testosterone compounded with diosgenin (stearic acid) from the Mexican wild yam plant." But, what does that mean?

First, some definitions:

- 1. The Mexican Wild Yam contains diosgenin, which is a sapogenin chemical very similar to the structure of cholesterol; which is the base material for these human hormones.
- 2. NDC means National Drug Code, which are numeric identifiers assigned to each medication listed under Section 510 of the US Federal Food, Drug, and Cosmetic Act and a list maintained by the FDA and approved for human use.

Now, consider that you want to make a cake. You would need milk, sugar and eggs to mix with flour. In nature, our bodies have a 'recipe' to make hormones. We mix a certain combination of say oxygen molecules, hydrogen molecules and carbon molecules (milk, sugar and eggs) and combine it with cholesterol (flour) to make 17-beta estradiol. In other combinations of oxygen, hydrogen and carbon mixed with cholesterol, we make testosterone.

In compounding hormones, you would obtain NDC 17-beta estradiol and mix it with diosgenin from the yam and make the exact same molecular compound for estradiol as that which is made by nature in the body. The same for obtaining NDC testosterone, compounded with diosgenin to make testosterone in a molecular match to what is made in the body by the body.

When these compounds are complete, a chemist could not tell the molecular difference from the "human" hormone to the molecular structure of the compounded "bio-identical" hormone.

Naturally Compounded versus Synthetic:

You cannot patent what occurs naturally in nature. Therefore you cannot manufacture natural hormones and "own" that recipe for exclusivity. In order to patent a 'unique' form of a hormone, you must adjust the chemical structure so it is different from what occurs in nature. It is in the manipulation of the chemical structure that leads to the difference. An extra carbon molecule here or an extra hydrogen molecule there can make a big difference. A chemist could easily see the difference in the molecular structure of a synthetic hormone to a natural hormone.

Synthetic is defined in Chemistry as - Produced by synthesis, especially not of natural origin. Not natural or genuine; artificial or contrived. Prepared or made artificially.

The pellets we use are bio-natural. Compounded to be exactly as nature intended.