

The soil is the belly of the farm. If we feed the soil properly, our plants and animals grow well and stay healthy. If we don't, not only do the plants and animals suffer, but our own health declines as well. "Happiness is a matter of digestion," Jim used to quote. This doesn't mean much when you feel good, but it makes all the sense in the world when you have a stomach ache. It's hard to even smile when you have poor digestion. You feel like you've been poisoned.

Digestion in the soil requires the activity of microbes, and they live in humus. By returning animal wastes and crop residue into compost, and then returning this to the land, we can build up our soil's humus content. This insures that the helpful microbes are present in the belly of the farm.

The same is true in our own bellies. When the proper microbes are there, our food digests without us paying any attention to it. If not, and we feel our food trying to be digested, we feel really bad. We don't want to feel this way, and we don't want our soils to, either.

Air is mighty important, too. The microbes have to breathe. So we stir the compost and crop residues in with a chisel plow, which aerates the ground. Then the magic happens.

Tough corn stalks disappear. Last year's weeds and mulches melt away. In a matter of weeks the change takes place, the old, dead materials decompose and are incorporated into the soil humus. Plants are going to love this.

Digestion is hindered by soil compaction, lack of microbes, and the continual use of agricultural chemicals. Corn stalks are still visible a year later, the soil forms clods when it's worked, it is sticky when wet and hard when it dries. Plants don't like this. Luckily Mother Nature knows how to build humus, so in come the bugs and diseases to turn what's trying to grow here back into humus.

Land grant colleges are funded by agricultural companies. When UT recommends fertilizer and herbicides, they are insuring you will buy insecticides and fungicides later. I recently visited one of their farms and saw soils that were not digesting well. The master gardeners there were plant lovers, but were following advice that plants don't love.

My recommendation is to find organic materials, make compost, and foster a healthy population of beneficial soil microbes. It's a lot cheaper, and the humus-rich soil won't attract insect and disease problems. You can tell if the soil is digesting properly. When the belly of the farm is happy, then the plants and animals will be happy, too.