What are Genetically Modified Organisms (GMOs)?

• A genetically modified organism (GMO) is created when the genetic material from one species, such as a bacteria, virus, plant, or animal, is inserted into the DNA of another species in an attempt to introduce a new trait or characteristic. Manipulation of DNA in this manner would never occur in nature, and has the potential to produce many unintended consequences.

• GMOs are widespread in our food supply. According to the USDA, 89% of corn, 94% of soybeans, 90% of canola, 92% of cottonseed and 100% of sugar beets are genetically modified.

• Genetically modified salmon that grows at twice the normal rate, apples that do not brown when sliced, and potatoes that do not produce black spots when peeled or bruised have recently gained FDA approval. And dozens of new GMO crops are in the pipeline, with more than 30 of them currently being tested in field trials.

What are the Health Concerns Associated with Genetically Modified Foods?

• In 1992, the Food and Drug Administration (FDA) announced that GM foods were safe to eat, citing the lack of any evidence to the contrary. Today, however, there is a robust and growing body of peer-reviewed independent science linking GMOs and numerous health issues, yet the FDA has not rescinded their assurance of safety. Inexplicably, some of the FDA's own scientists have repeatedly warned that consuming GM foods could have serious, multiple long-term health effects, including potentially life-threatening allergic reactions in sensitive individuals.

• One emerging health concern is the ability of pesticide residues from GMO crops to disrupt the balance and function of human gut microbes, possibly resulting in a loss of critical gut/brain communication and brain related disorders, such as autism and other neurobehavioral problems.

• According to the American Academy of Environmental Medicine (AAEM), health risks from consumption of GMOs could include cancer, infertility, immune and digestive system problems, accelerated aging, faulty insulin regulation and organ dysfunction. The AAEM has advised its members to recommend that their patients avoid GM foods.

How Does Pesticide Use Relate to GMOs and Our Health?

• GMO crops are engineered to survive lethal doses of pesticides—amounts that would likely kill any other kind of plant. According to the USDA, most of our major commodity crops are now genetically engineered to withstand weed-killing pesticides (herbicides).
• GMO crops used for human consumption are thus contaminated with higher pesticide residues than non-GMO varieties. The most commonly used pesticide for GM crops is RoundUp, an herbicide whose active chemical ingredient is glyphosate. The World Health Organization (WHO) recently classified glyphosate as a probable human carcinogen.

• The widespread use of GM crops has resulted in the development of so-called “superweeds” that have become resistant to RoundUp. To address this problem, the FDA has now approved the use of a new breed of GM crops engineered to withstand even stronger, more toxic herbicides, including 2,4-D, an herbicide best known as a component of Agent Orange. 2,4-D has been linked to Parkinson’s disease, immune system problems, hypothyroidism and was recently classified by the World Health Organization as a possible human carcinogen.

Are There Special Concerns for Children and GMOs?

• The potential impact of GMOs on our youngest, most vulnerable population is raising serious concerns among pediatricians and parents alike. Fetuses and breast fed infants are exposed via their mother’s diet, which is likely to contain GMOS, and the three largest manufacturers of baby formula, representing 90% of the supply, are using GM corn, sugar beets and soy in their products. Infants and young children are uniquely vulnerable to environmental insults due to their immature and rapidly developing bodies and their inability to break down poisons.

• Children also eat a greater percentage of corn and soy in their diets than adults. It is estimated that more than 80% of all processed foods (including institutional and restaurant foods) contain GMOs and our children are the biggest consumers of processed foods.

• Today’s children are also prone to food allergies, and studies have shown that GMOs contribute to this phenomenon. Data shows that soy allergies in children living in the UK skyrocketed after GMO soy was introduced.

The Public Has a Right To Know!

• More than ever before, the public is demanding full disclosure and transparency of ingredients and additives in our food supply. Since 2001, nationwide polls have consistently shown that over 90% of Americans want GM foods labeled.

• 64 countries around the world already require labeling of GM foods, representing over half the global population. Connecticut, Maine and Vermont have passed legislation to require labeling of GM food products, and over two dozen other states are considering GMO labeling laws.

• Giving the public the information they need to make educated choices about protecting the health and safety of their families is the mandate of responsible government.