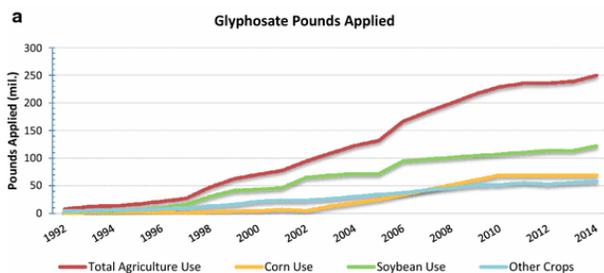
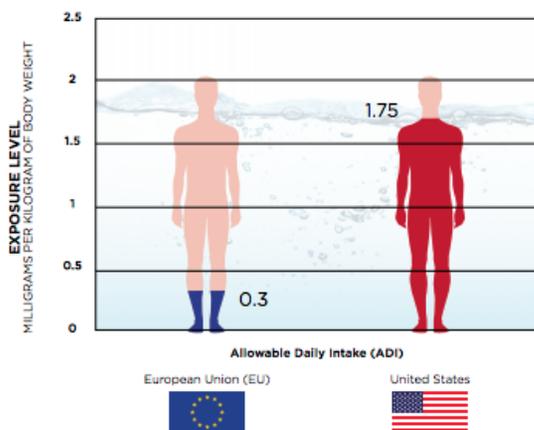


By The Numbers



- America has applied **1.8 million tons** of glyphosate since 1974
- Since 1995, the year when GMO crops started to hit the market, glyphosate use has increased **15-fold**
- Soybeans receive more glyphosate treatment than any other crop. Alone, they account for **1/3** of all glyphosate used in the U.S.
- The daily allowed exposure level in the U.S. is **6x greater** than what is allowed in Europe

U.S. Government Allows Nearly 6 Times More Glyphosate in Our Food than Europe



Source: Food Democracy Now! "Glyphosate: Unsafe On Any Plate"

A Path Forward

Advocacy works! Many citizens and countries refuse to be silent as we learn about the deleterious effects of glyphosate. In 2017, several European countries- including Italy and France- vowed to phase out glyphosate within the next decade, and the European Parliament voted to **phase out all use of glyphosate in Europe by 2022.**

Citizens from all over the U.S., including in towns and cities like South Portland, Chicago, and Warwick, MA, have enacted **ordinances that ban glyphosate** specifically or synthetic pesticides more generally.

Want to learn more about glyphosate's health impacts or how you can move your town away from glyphosate?

Visit www.nofamass.org/policy/glyphosate for the latest research and news

Support NOFA/Mass

Join NOFA/Mass and help us promote consumer knowledge, choice, and the growth of local, organic production.

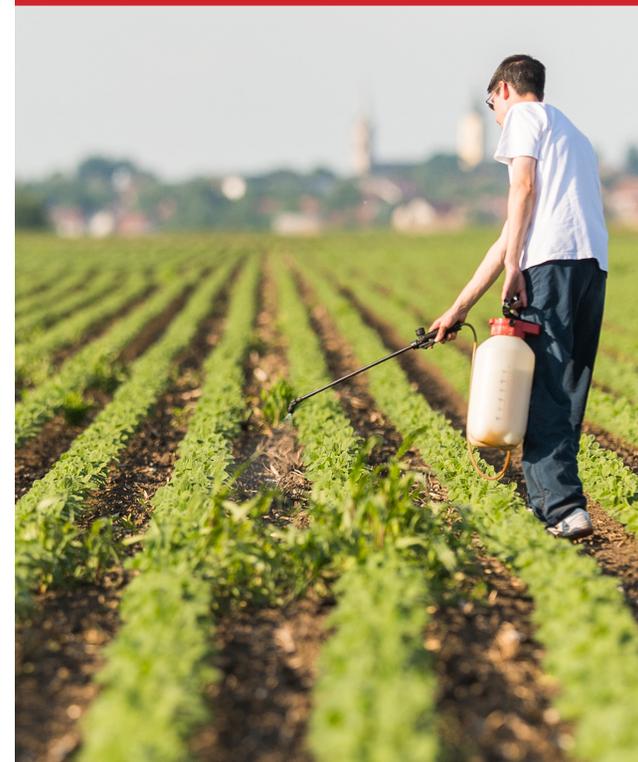
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Northeast Organic Farming Association/
Massachusetts Chapter, Inc.
411 Sheldon Rd.
Barre, MA 01005

Glyphosate

A Closer Look At America's Favorite Pesticide



What is glyphosate?

More commonly referred to as **Roundup**, glyphosate was first patented by Monsanto in 1964 as a pipe cleaner. It is now the most widely used herbicide in the world. Glyphosate is mostly used to kill weeds on genetically engineered crops like soy, corn, and canola. It is also commonly applied to grain and beans just prior to harvest. Numerous studies show that even small doses of glyphosate are responsible for alarming health and environmental impacts.

Glyphosate Is In Your Food

Right now, no government agency regularly tests for glyphosate residues in our food supply. A recent study by The Detox Project comparing over two dozen common processed foods found that all of them had some level of glyphosate residues. The highest foods tended to be those that used cereal crops, presumably because they were treated with glyphosate just before harvest. Some of the foods with alarmingly high residue levels were:



Cheerios:
1,125 PPB
(Parts per Billion)



Stacy's Pita Chips:
812.53 PPB



Doritos Cool Ranch:
481 PPB

Glyphosate Is In Your Body

Contrary to what Monsanto wants us to think, glyphosate does not break down rapidly in the environment. Whether from our food, or from our water supply, most of us are contaminated. Recent tests have found glyphosate residues in lakes, rivers, rain, human urine, and even in breast milk.

"Chronically ill humans showed significantly higher glyphosate residues in urine than healthy populations. The presence of glyphosate residues in both humans and animals could haul the entire population toward numerous health hazards. Global regulations for the use of glyphosate may have to be re-evaluated."

— Kruger & Scheldorn,
Environmental & Analytical Toxicology

Glyphosate's Impact On Your Health

Endocrine Disruptor: Glyphosate interferes with the proper functioning and production of hormones. This can lead to a host of health issues including reproductive problems, miscarriages, early onset of puberty, obesity, diabetes, attention deficit/hyperactivity disorder (ADHD), impaired immune function and certain types of cancers.

Cancer: In 2015, the World Health Organization's International Agency for Research on Cancer (IARC) declared glyphosate to be a "probable carcinogen." Although Monsanto vehemently contests this finding, many scientists, including many at the EPA, have concurred with this assessment. As a result, glyphosate now carries a cancer warning in California.

Gut Biome Disruptor: Miniscule amounts of glyphosate have been found to inhibit certain essential gut microbes that help us maintain healthy digestion. Not nearly enough research has been done in this realm, but even Monsanto has patented glyphosate as an antibiotic, clearly demonstrating that they are well aware of its impacts on bacterial life.

Nutrient Chelator: Glyphosate is known to bind with minerals including zinc and manganese, which are essential for animal and human nutrition and mineral absorption.



Glyphosate/Roundup Damage

0.1 ppb: Roundup (0.05 ppb glyphosate) altered the gene function of over 4,000 genes in the livers and kidneys of rats

0.1 ppb: Roundup (0.05 ppb glyphosate) severe organ damage in rats

0.1 ppb: Permitted level for glyphosate and all other herbicides in EU tap water

10 ppb: Toxic effects on the livers of fish

700 ppb: Alterations of kidneys and livers in rats

700 ppb: Permitted level for glyphosate in U.S. tap water

Source: Food Democracy Now! "Glyphosate: Unsafe On Any Plate"

How Can You Avoid Glyphosate?

Reducing glyphosate exposure is not that hard if you look closely at food labels or buy from trusted producers. The easiest ways to avoid the pesticide are to:



Buy Certified Organic

Since most of us don't have the time or the opportunity to buy most of our food directly from farmers, the easiest way to avoid glyphosate is to look for the "Certified Organic" label when shopping. It's worth noting that Organic food is not guaranteed to be 100% glyphosate-free because foods are only tested on the farm, not after processing.



Certified Glyphosate Residue Free

You can also look for a new label that certifies a food to be glyphosate-free. This label guarantees an even lower glyphosate threshold than the Organic label.



Find Alternatives To Glyphosate On Your Property

There are numerous non-toxic alternatives you can use to control weeds around your home. Consider flame weeding, steaming, spraying organic herbicides, or renting goats before making the decision to use glyphosate. If you work with a landscaper, make sure you ask them about their practices before enlisting their services.