FIELD TO FORK:
THE FOOD WE EAT

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What Kind of Gardener Are You?

- Mindful
- Natural, Organic
- Steward of the land
- Positively contributing to an ecosystem
  - Growing Food source
  - Host plants
  - Shelter
- Tread lightly
- No pesticides
- Year-Round Beauty
Alphabet Soup: “Natural” Eating Terms

- **American Grassfed**
  - Fed grass and forage from weening to harvest
  - Pasture raised without confinement
  - No antibiotics or hormones
  - Born and raised on American Family Farms

- **100% Vegan** – no animal ingredients, no FDA regulation

- **Raw Food** - Certified **R.A.W.** is an acronym for Real, Alive and Whole

- **Unregulated Marketing Terms:**
  - Farm Fresh
  - Hand Crafted, Hand Cut
  - Artisanal
  - Natural
  - Local
What Are GMOs?

・Genetically Modified Organisms (GMOs) refers to any organism whose genetic material has been modified.

・GMOs cannot change the genes of people who eat them nor directly affect organ health though the modifications can allow undesirable traits, ex. Toxicity, to be present.

・In agriculture the overall goal of genetic engineering is to add a gene that will express a desirable trait in the plant such as resistance to an herbicide or resistance to pests.

・These crops are developed for both food and feed.
What is Modified? As of 2020:

Crop (and % GMO Grown in U.S.):

- 85% Corn (field and sweet corn)*+
- 91% Soybeans*
- Canola*
- Papaya#
- 88% Cotton+
- Alfalfa*
- Sugar beets*
- 78% Squash#
- Rice@

Reasons for Genetic Modifications:

- *Modified for resistance to Roundup (Roundup Ready) and in some cases, Rely (Liberty Link);
- +Field corn, sweet corn and cotton varieties have been modified to contain and express one or more B.t. (Bacillus thuringiensis) genes to make them resistant to some insect pests
- #papaya and squash have been modified to be resistant to insect vectored viruses (ring spot virus in papaya and squash mosaic virus)
- @Scientists have also developed a genetically modified rice variety (Golden Rice) that is high in vitamin A.
GO ORGANIC FOR PROCESSED FOODS BECAUSE...

- The Non-GMO Project only verifies meats and processed foods commonly found in the center aisles of the grocery store.
- Due to the lack of verification for fresh produce, buying certified organic produce is the only way to avoid GMOs in your fresh foods.
- The U.S. government does not enforce the labeling of GMOs for all food producers.
- The FDA does not require the labelling of GMOs unless a food contains an allergen, a known toxicant that exceeds tolerable limits, or has nutritional properties that have been significantly altered.
- Currently the only food label that ensures absence of GMO is the USDA Certified Organic label. GMOs are prohibited in organic production and in organic products.
- Choosing any product that has been verified by The Non-GMO Project is a safe bet for avoiding GMOs, and it’s the only safeguard against GMOs when not buying organic.
When and why were GMOs first used in commercial agriculture?

- The commercial sale of GMO food began in 1994, when Calgene introduced its Flavr Savr delayed-ripening tomato - genetically modified to slow the ripening process after picking.
- RoundUp Ready Soybean soon followed.
Global Choices

6 companies control almost 70% of the world pesticide market and almost 100% of the GM seed market.

>60 countries require GMO food labeling because of health concerns around consumption.
GMO Food: Good or Bad

Pros
• Used to solve world-wide growing problems like pests and disease
• Allow money-saving techniques
• Solve health problems (rice and Vitamin A deficiency)

Cons
• Research connection to food allergies and changes to gut bacteria
• Possible unintended consequences – scientists looking at relationship between increased food allergies and GMO food
• Put more chemicals in our food and water supply
• Plants self-edit to re-resist the resistance -> Requires farmers to buy new seed on a regular basis -> Unending cycle for farmers and an unaffordable one for small farms
• Long term environmental impact unknown

PUBLIC OPINION OF GMOS

30,000 different GMOs exist in U.S. grocery stores
53% of people would not buy genetically modified food
87% want GMOs labeled
Benefits of Organic Eating:

- Nutrients: Studies have shown small to moderate increases in some nutrients in organic produce.
- Omega-3 fatty acids: Higher omega-3 fatty acids are found in organic meats, dairy and eggs.
- Less Toxic metal: Studies have shown significantly lower cadmium levels in organic grains, but not fruits and vegetables.
- Pesticide residue: Lower detectable levels of pesticide residue.
- Bacteria: Meats produced conventionally may have a higher occurrence of bacteria resistant to antibiotic treatment.

Note that the organic food industry does some wordsmithing in their marketing too!

Drawback of Organic Eating: Co$tl!
Healthy Eating Tips:

• Select a variety of foods from a variety of sources

• Buy fruits and vegetables in season when possible

• Read food labels carefully

• Wash and scrub fresh fruits and vegetables thoroughly under running water

• Eat mindfully

• Fill your plate ½ full with fruits and veggies

• Plan meat-free meals

• Shop with a list
Learn More:

- Practical Summary for Healthy Eating – Shop Like a Nutritionist
- Printable Guide for Healthy, Easy Shopping
- Find a Farm to Visit in Massachusetts
- Rodale Institute
- Organic Productions Cuts Poverty Rates, Boosts Median Household Income, Organic Trade Association
- Movies:
  - Fed Up
  - The Biggest Little Farm
- Books:
  - The New Organic Grower by Eliot Coleman
  - Bringing Nature Home by Doulas Tallamy
  - Silent Spring by Rachel Carson
  - Well by Sandro Galea
  - Last Child in the Woods by Richard Louv
  - Omnivores' Dilemma by Michael Pollan
  - Food Matters by Mark Bittman
- Help Others
  - Greater Boston Food Bank
  - The Daily Table
  - Lovin' Spoonfuls Food Rescue
Healthy Practices of a Home Gardener

1. Select & support native, companion & edible plants
2. Compost
3. Go organic
4. Let your grass clippings fall (& shrink your lawn!)
5. Mulch with your leaves
6. Leave some places undisturbed
7. Be present

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