



A GUIDE FOR REPLICATION



GROWING FOOD.
EATING HEALTHY.
LIVING SUSTAINABLY.



MARCH 2024



A grass-roots, nonprofit organization serving greater Grand Rapids, Our Kitchen Table (OKT) promotes social justice and empowers our neighbors to improve their health and environment through information, community organizing and advocacy.

OKT believes that building viable, neighborhood-based, resident-led advocacy is fundamental to achieving this mission. We primarily work in urban neighborhoods located within southeast Grand Rapids, Michigan.

Founded in 2003 as a call to action, OKT mobilizes women with income and health challenges to build capacity by utilizing a community transformation model. Learning begins with an understanding and analysis of the root causes of oppression and its manifestations in our daily lives. Elements of oppression include structural barriers, race and gender bias and disparities in wealth and power.

Group work has been identified as a successful strategy for developing strong social networks among individuals who have suffered from social isolation and alienation. OKT creates a space where women build individual capacity through participation in a self-empowerment model that emphasizes (1) knowledge, (2) purposeful action on individual and collective levels and (3) leadership. This model equips women with the understanding and skills to effectively assess problems and seek solutions.

Launched in 2010, OKT's Food Diversity Project focused on neighborhood residents in the Eastown, Baxter, SECA and Garfield Park neighborhoods of Grand Rapids. The project addressed food and environmental health disparities impacting vulnerable children, families and individuals by sharing educational and food gardening resources. The Food Diversity Project also informed OKT about what works, what doesn't work, and, most importantly, that the people we work with have just as much food and gardening wisdom as we do, if not more. The issue truly is lack of access.

The Program for Growth grew out of OKT's lived experience — and has been our most successful endeavor yet. That's why we assembled this humble Guide. The goal is to share what we have learned with other individuals and organizations. Those profiting from the current industrial food system want us to believe that growing our own food is too much work, cooking from scratch takes too much time, and only fast food and junk food can truly satisfy our cravings. The truth is, it's really not that hard. And, whole foods taste better. We can resurrect our taste buds, cook something from scratch that's quicker than the drive-through, and take back control of our own health. Hopefully this Guide helps you do just that. Together, let's build an alternative that truly and equitably nourishes us all.

GROWING FOOD. EATING HEALTHY. LIVING SUSTAINABLY.

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Part 1

Growing: Community, Justice and Food



GROWING: Community, Justice and Food

Our Kitchen Table (OKT) designed this section to help Grand Rapids residents strengthen garden projects for City of Grand Rapids Neighborhood Match Fund (NMF) consideration. The NMF provides financial contracts to Grand Rapids residents to organize and implement projects and initiatives that advance the following NMF objectives:

- Identify, develop and network Grand Rapids residents.
- Build stronger connections among residents and in their neighborhoods.
- Address and promote social justice.
- Benefit the public.



Get Your Garden Started!

Soil

Whether you grow in the ground, raised beds or containers, healthy, living soil is essential to a productive food garden. If you are going to plant in the ground, have your soil tested—for nutrients, pH and toxins (e.g., lead, arsenic and aluminum).

Soil in Grand Rapids southeast neighborhoods often has high amounts of lead and arsenic, remnants from orchards that once grew there (these chemicals were once used as pesticides). If your soil is contaminated, you can grow in containers or raised beds. Be sure to keep kids away from lead-contaminated soil! If you need to purchase soil, know that commercial soil and compost is not regulated. No matter what it says on the label, you may be buying composted industrial waste or other toxic brews.

Check for recommendations before you purchase. Better yet, make your own soil by composting food and yard waste. Grass clippings (if chemical free) and weeds combined with food scraps—everything except meat and milk products—turns into great soil. Add a few worms and it will be healthier yet!

Plants and seeds

OKT recommends you use organic, heirloom plants and seeds in your food garden. One, your produce will be tastier and more nutrient-rich. Two, you can save some seeds after harvest and start your next year's plants for free. Avoid big-box nurseries that sell genetically modified (GMO) plants.

Some of these plants include bee-killing pesticide as part of their genetic make-up—and we need honeybees to pollinate the plants that provide our food.

Starting seeds

Before you plant, map out your garden. Think about where the sun shines in your space throughout the day. Plant tall crops in the north and smaller crops and root crops to the south.

Look into companion plants that help each other grow, e.g. tomatoes love growing alongside basil. When planting seeds, prepare the soil by turning it over with a spade or cultivating tool and leveling with a garden rake.

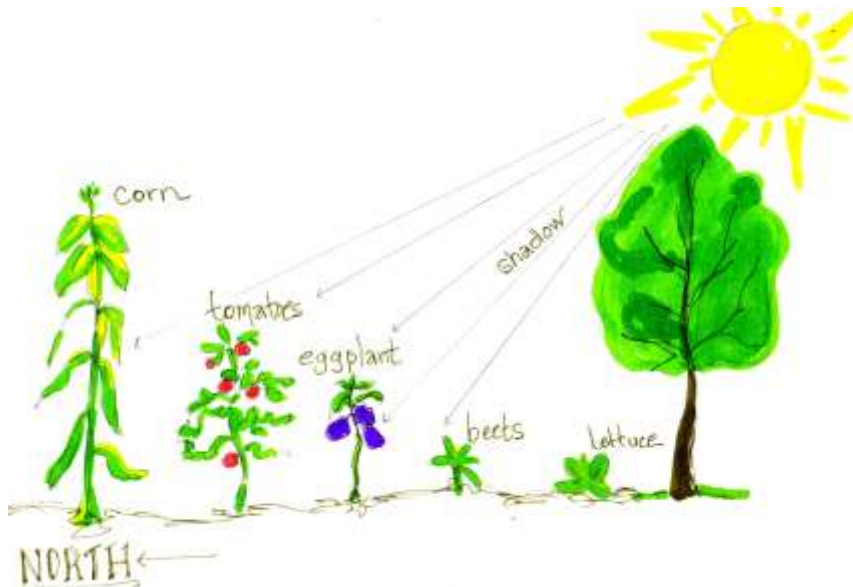
Use your finger to make holes in the soil. Usually you can place one seed per hole. With some greens, herbs and vegetables like cucumbers, you plant multiple seeds together.

Different plant varieties have different space requirements. For example, plant radishes and beets one inch apart. Plant zucchini 8 to 16 inches apart. Most seed packets will give you planting information.

Planting plants

Make sure soil is loose, scoop out enough soil so the root of the plant is lower than the garden surface. For some plants, like broccoli, you can plant deeper, up to the first germination leaves. Push soil around the base of the plant. Push firmly around the plant, so that it stands erect.

Evening is the best time to plant plants in the ground. Then they have all night to adjust to the shock away from direct sun right away. After you have secured the plants in the ground, water them generously.



Sunshine

Always remember to think about sunshine! Watch where the sunlight falls from dawn to dusk. Plant tall crops in the north and smaller crops and root crops to the south.

Shade Tolerant Plants

Kale	Chard	Beets
Turnips	Mustard greens	Carrots
Spinach	Bok Choy	Garlic
Lettuce	Scallions	Potatoes
Arugula		Cilantro

Watering

Water is another essential ingredient! Water your plants thoroughly at the ground. During hot spells, water every day, running the water at the plants' base, count to five. During cooler weather, you may not need to water every day.

The best times to water are 6 to 10 a.m. or 6 to 9 p.m. Avoid watering during the heat of the day. Your plants will tell you when they need water but it's best not to wait until they are droopy or dried out. Feel for moisture in the soil near their stalks. Containers, especially smaller ones, will need more frequent watering. Mulching your plants can help conserve water.

Water left standing in garden hoses can get hot! Let water run until it's cool so you don't scorch your plants. Also, standing hose water can pick up harmful chemicals

like phthalates, BPA and lead, none of which were detected in water directly sampled from the tap. (Learn more at ecocenter.org.)

Weeding

In a way, weeding is how you become intimately involved with your garden. Some claim it can be a meditative experience! Whether you hate it or feel spiritually transformed, it's got to be done. This important chore can become a nightmare if you don't keep up on it. The key is to do some every day — and find a way to be comfortable while you do it. A small camp stool, kneeling mat, or sit-upon can help. If you don't like dirt under your nails, pick up some inexpensive garden gloves.

Weeding removes non-food plants competing for nutrients in your growing space. It also cultivates soil around plants. Packed soil keeps air and water away from roots. Use the pulled weeds as mulch to add nutrients back to soil and slow soil drying. You can also mulch with straw, cut grass or leaves, except oak leaves and pine needles.

You can spend a fortune on weeding tools, but when it comes right down to it, you have to get down and pull the weeds out. Learn to identify your weeds. Common ones like dandelion, purslane and lambs quarters are highly nutritious edibles!

Pest control

Pests happen. Find non-chemical, earth friendly solutions to get rid of them. Not only for the earth, but to help yourself and your family avoid ingesting more dangerous chemicals into your bodies. Sometimes, the easiest ways to get rid of pests like tomato worms is to pull them off by hand. For those too small to catch, boil garlic in water and use the garlic water to spray your plants.

Also, you can use diatomaceous earth at the base of plants to prevent damage from slugs, snails and other pests that attack stalks. For more pest control options, check with OKT or other organic food gardening resources.

Harvesting

Pick your vegetables and fruits when they are ripe and come off the vine more easily. You can determine if they're ripe by size, how it feels and how it tastes. Don't let produce over grow. It can become bitter and tough. The only time you want produce to over-mature is when you want to save some seeds for the next planting season.

If you aren't going to eat your harvest within a few days (or a week at the most), consider canning, drying or freezing it. Don't put tomatoes in the refrigerator! They'll lose flavor.



Your Food Garden Can Help Prevent Lead Poisoning

	Number of Children	Percent	State Ranking - # of Poisoned Children
FLINT *	111	3.3%	
49507	186	14.0%	1 st
49503	97	12.2%	8 th
49504	95	12.2%	9 th

In 2017, reports stated that two out of every three lead poisoned children in Kent County lived in zip codes 49507, 49504 or 49503. Some fresh produce you grow in your garden can help your child's body to absorb and get rid of lead in their systems. Specifically, vegetables containing iron, calcium and vitamin C.

Vegetables high in Iron:

- Dark leafy greens like kale, collards, mustard greens, and spinach.
- Legumes like black-eyed peas, chick peas, lentils, and kidney, white, navy, and lima beans.

Lean meats, fish and breads enriched with iron are other good sources.

Vegetables high in calcium:

- Broccoli, cabbage, and bok choi.
- Greens like kale, collards, and spinach
- White beans (legume)

Milk products, milk alternatives and sardines are other good sources.

Produce high in Vitamin C:

- Watermelon, honeydew and other melons.
- Berries, e.g., strawberries,
- Tomatoes
- Peppers, e.g. bell peppers and chili peppers.
- Cauliflower, kale, cabbage, Brussels sprouts and broccoli.
- Greens, e.g., kale, collards, mustard and spinach.
- Squash.
- Potatoes (if skins are eaten).
- Citrus fruits.

Source: Lifestyles Nutrition Services

Multi-season Planting

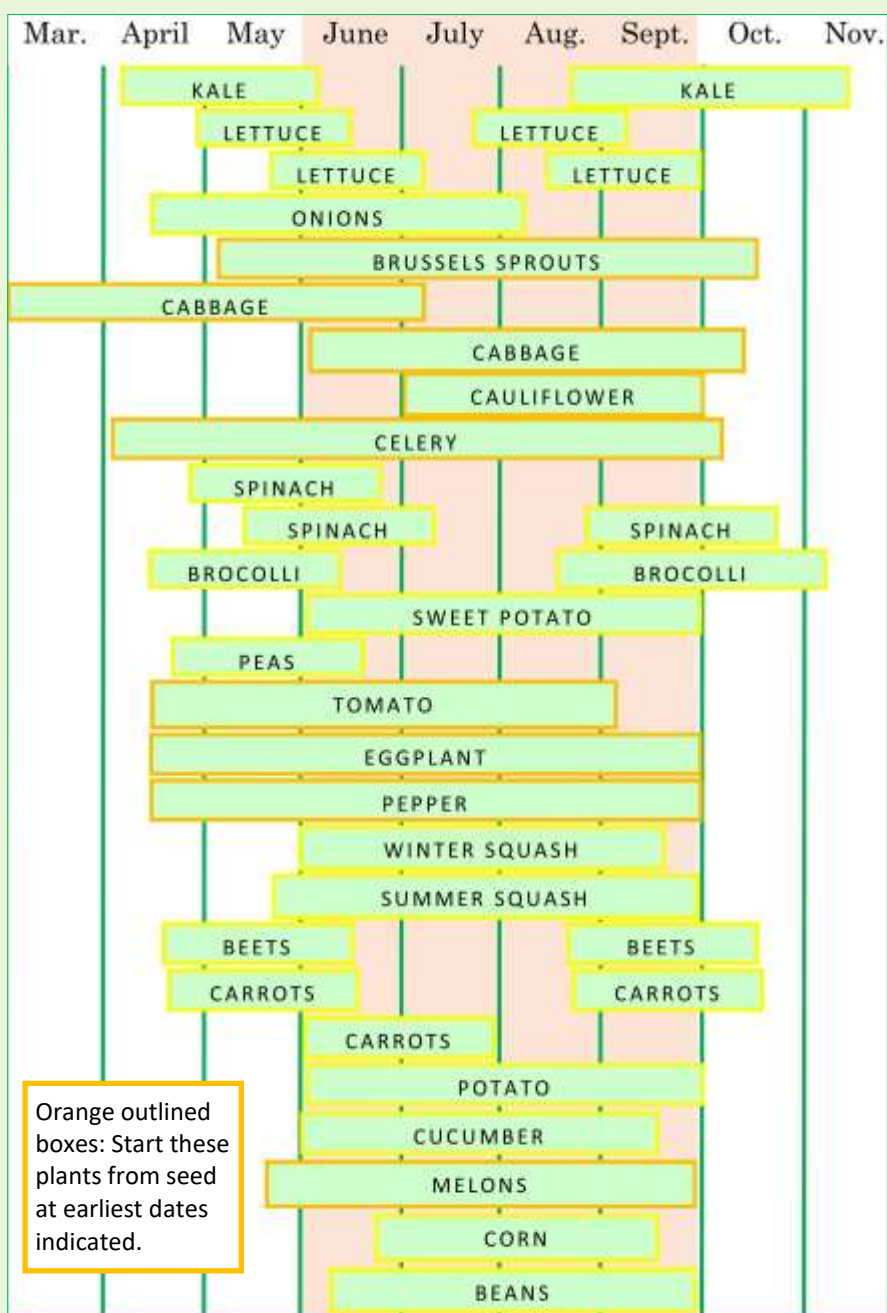
Plan your garden so you have foods to harvest throughout the spring, summer and fall. Early lettuces and peas, mid-summer tomatoes and summer squashes, fall season winter squashes, cabbage and potatoes. If you plant radishes in the spring, you could then plant peppers (or another warm weather crop) in the same space in the summer. Radishes, beets and greens can also be planted directly from seed in late August for harvest in October. Kale and collards can keep producing into December.

Cool Weather Crops 4—6 hrs. sunlight

Radish, Beets
Kale, Spinach
Snow peas
Carrots, Chard
Collards
Turnip greens
Mustard greens
Cauliflower
Broccoli, Cabbage

Warm Weather Crops 6—8 hrs. sunlight

Tomato
Pepper
Okra
Basil
Onion
Green Beans
Watermelon
Cucumber
Squash





Plant	Good Companions	Bad Companions
Tomatoes	Basil, marigolds, asparagus, carrots, celery, onion, lettuce, parsley and spinach	Cabbage, beets, peas, fennel, dill, rosemary, corn
Peppers	Basil, spinach, onion, tomatoes	Beans
Beans	Marigolds, nasturtiums, rosemary, and summer savory broccoli, Brussels sprouts, cabbage family, cucumbers, peas, potatoes, and radishes.	Onions
Cucumbers	Marigolds, nasturtiums, cucumbers, beans, celery, corn, lettuce, dill, peas, radishes	Aromatic herbs such as sage
Onions	Carrots, beets, cabbage, lettuce, parsnips, tomatoes, marjoram, savory, rosemary.	Asparagus, beans, peas
Lettuce	Mint, chives, garlic, beans, beets, broccoli, carrots, corn, peas, radishes, marigolds	Parsley
Zucchini & Summer Squash	Corn, beans, peas, radishes, dill, marigolds.	Potatoes
Carrots	Cucumbers, onions, beets, cabbage, kale, lettuce, spinach, squash	Hyssop
Sweet Corn	Green beans, cucumbers, peas, pumpkins, melons, zucchini	tomatoes

Beans and Collards

- 2 bunches collards, stalks removed and chopped.
- 1 C. dry beans (adzuki, black, or pinto etc.) or 2 cans beans.
- 2 cloves garlic, minced
- One red pepper, diced
- 1 bay leaf
- 1 T. salt

Soak dry beans per directions and cook until tender. Drain. Mix greens and beans. Add garlic, bay leaf, pepper and salt. Simmer in a large sauce pan or crock pot until greens are tender. Serve with cornbread. *Adding legumes (beans) to your greens recipe adds protein and transforms a side dish into a nutrient-rich main dish!*

Tips for Your Community Food Garden

- **Organize a meeting for interested people.** Invite neighbors, tenants, community organizations, landlords, city officials, churches and schools. Invite those who show up to join the planning committee.
- **Identify all your resources.** What skills and resources already exist in the community that can aid in the garden's creation? Contact the City about vacant lots or growing in parkways. Look within your community for people who already grow food.
- **Choose a site.** Consider daily sunshine, availability of water, and soil testing for nutrients and possible pollutants. Find out who owns the land. Can the gardeners get a lease agreement for at least three years? Will public liability insurance be necessary?
- **Prepare the site.** Organize volunteer work crews to clean it, gather materials, design garden layout, build raised beds, till and/or spread new soil. Find a space for storing tools, composting and gathering. Include a weather-resistant bulletin board where you can post rules, gathering times and other information.
- **Organize the garden.** Have the group decide whether they want individual or shared beds. (Sharing beds can be more efficient and build community!) Talk about making food available to neighbors who don't help with the garden. We suggest using your garden to increase healthy food access to all – not only those who do the work.
- **Grow the garden via Facebook or Nextdoor social media applications.** If everyone doesn't have computer access, start a telephone tree, as well.
- **Plan events.** Sponsor garden community weeding times with a potluck and music. Organize a tour of other local community and individual food gardens. Plan freezing or canning events to preserve abundant harvests. Share the harvest with community dinners that also teach how to use the produce in real meals. Keep the group motivated all year by hosting a film screening or arranging transportation to garden education events.



“So You Want to Garden” Checklist

1. Answer the question: Why do you want to grow food? What do you want to grow? (Seasons matter.)
2. Diagram your neighborhood food system. List where healthy foods are available in stores, pantries, gardens, CSA programs, bulk buying programs or farmers markets?
3. Take a basic food growing class and/or read a food growing book.
4. Determine your Need/Supplies/Resources/Tools and Budget
5. Vacation Planning: When you're away from your garden, what's the plan?
6. Select a growing approach: Container, raised-bed, direct/in-ground
7. Soil Testing. Are there enough nutrients? Too many toxins?
8. Diagram your food growing space! Considerations: Soil/composting. Sun: know south facing side, the sun comes up in east, goes down in west. Water source. Seeds and plants (sterile seeds, seed and plant exchanges)
9. What's your plan for harvesting, sharing, and handling excess food or food waste?
10. Consider "In Season" plants to plant your food garden; plant spacing and companion planting; and climate change impact. (Temperatures, more or less rainfall, severe weather.)
11. Watering. How will you water? If you're renting, will your landlord agree? When will you water? The best time to water is 6 to 10 a.m. and/or 6 to 9 p.m. Develop a routine.
12. Considerations: Weeding; fertilizer and pest management (synthetic vs. natural); and other challenges (insects/animals).
13. What will you do with your harvest? Consider meal planning, prep and preserving.
14. Do you want to save money by saving seeds for next year? Learn how!
15. Planning for next year. Will you grow your garden again or remove it? .
16. Other Considerations: Farmers' markets; CSA programs; bulk buying programs.



Heirloom Seeds and Plants Grow Healthier Gardens, Connect Communities and Build Biodiversity

When purchasing seeds for growing your own vegetables and herbs, always ask yourself:

- 1) What kind of seeds they are ?
- 2) Where the seeds are coming from?

When we say, what kind of seeds, we want to ask are the seeds hybrid and non-self producing (terminator seeds) or are they heirloom seeds? The difference is significant.

Human interaction with seeds over the centuries has always led to some form of hybridization, since humans have been cross-pollinating plants for thousands of years. However, there is a significant difference between original seeds or heirloom seeds and the kind of seeds that have been commercially developed by large corporations in recent decades.

Heirloom seeds are self-reproducing, in that the seeds that each plant produces seed that can be saved and used to grow more plants. Saving your own seeds can save you money and it promotes the maintenance of a rich diversity of seed stock.

Saving seeds is also a food justice issue. Saving seeds promotes greater food sovereignty for communities and it

challenges the agribusiness-created policy of the World Trade Organization (WTO), which makes it illegal for farmers/communities to save their own seeds. (www.ifg.org/pdf/int'l_tradeshiva_WTO.pdf_1.pdf)

These kinds of global policies have also been promoted in the US with Senate Bill S510, the Food Safety Modernization Act, which would also make seed saving a criminal act.

(www.naturalnews.com/030418_Food_Safety_Modernization_Act_seeds.html)

In addition, heirloom plants are also more resilient and don't rely on chemical and fossil fuel based additives that hybrid and terminator seeds do. Heirloom seeds yield produce that is more nutritious, tastes better and is less uniformed, meaning it does not ripen all at the same time.

Where the seeds are from is also important in promoting food justice. Most seeds are controlled by a handful of corporations, such as Monsanto, DuPont and Syngenta. These corporations helped craft the WTO policies that outlaw seed saving. The seeds that these corporations sell are not self-reproducing, which means you

have to continue to buy new seeds every year.

Lastly, when you use heirloom seeds, you can save more seeds than you need for your household or community garden. Having extra seeds allows you to participate in seed sharing and seed swapping, which allows people to experiment with seed diversity and build community through seed sharing.

If enough people save seeds, neighborhoods and communities could even start a seed bank so even more people can benefit from heirloom seeds, eat healthier and promote greater food sovereignty. Our Kitchen Table is committed to using heirloom seeds, saving seeds and sharing seed with the community.

Additional Resources on Seed Saving, Seed Sovereignty & Heirloom Seeds:

Navdanya
www.navdanya.org/

Seed Savers
www.seedsavers.org/

Food First
www.foodfirst.org/



Grow Your Own Health with Herbs!

Are you struggling to avoid fast food, convenience foods and junk food simply because you love the tempting taste? These foods are industrially engineered with harmful chemicals and non-food fillers like cellulose—sawdust—to trick your taste buds into craving crap.

You can retrain your taste buds! A good way to help them along is to use fresh culinary herbs when you cook. Fresh herbs flavor your food without adding extra salt, calories, sugar or fat.

OKT gardeners are growing the following herbs. Discover what they provide in addition to great flavor:

- **Arugula**, as an herb or spicy greens, supports brain and bone development.
P Nutrients: Zinc, copper, calcium, iron, magnesium, phosphorus, potassium, manganese, vitamins A, C, K, thiamin, riboflavin, B6, folate, pantothenic acid. A*, T*
- **Basil** has been shown to provide protection against unwanted bacterial growth and inflammatory conditions like arthritis and also aids digestion.
P Nutrients: Vitamin A, B6, K and iron. A*, T*
- **Cilantro** has traditionally been referred to as an “anti-diabetic” plant.
P Nutrients: Thiamin, zinc, calcium, iron, magnesium, phosphorus, potassium, copper and manganese, vitamins A, C, E, K, riboflavin, niacin, B6, folate, pantothenic acid. A*, T*
- **Chives** and garlic may help you maintain good cholesterol levels.
P Nutrients: vitamin C. P*, T*
- **Dill**, an anti-oxidant and anti-inflammatory, also can help neutralize benzopyrenes, carcinogens found in smoke from cigarettes, charcoal grills and trash incinerators.
P Nutrients: calcium, manganese and iron. A*, T*

- **Fennel**, an anti-oxidant and anti-inflammatory, has many healthful phytonutrients including *anethole*, which helps prevent cancer.
P Nutrients: Vitamin C, folate, fiber and potassium. P*, T*
- **Lavender**, brewed as tea, a traditional home remedy for insomnia. Its scent also relieves stress and it is good for the skin. P*, W*
- **Lemon Balm**, used since the Middle Ages to reduce stress and anxiety, promote sleep, improve appetite, and ease indigestion. P*, W*
- **Mint** calms indigestion and helps relieve cold symptoms.
P Nutrients: Calcium, choline, iron, magnesium, manganese, zinc, phosphorus, potassium, selenium, vitamins B1, B2, B3 and E. P*, W*
- **Oregano**, an anti-oxidant, was found more effective against *Giardia* than the commonly used prescription drug.
P Nutrients: Manganese, iron, calcium, vitamins K and E. P*, W*
- **Parsley** is a "chemoprotective" food that can help neutralize particular types of carcinogens and helps lungs, liver and bladder.
P Nutrients: Calcium, iron, magnesium, manganese, selenium, zinc, phosphorus, potassium, vitamins A, B1, folate 2, 3, 5, C and E. A*, T*
- **Rosemary** supports liver and blood health and contains anti-inflammatory compounds that may make it useful for reducing the severity of asthma attacks.
A*, W*
P Nutrients: Calcium, iron, zinc, vitamins B1,2, 3, and C.
- **Sage** is an outstanding memory enhancer. Its smudged smoke is used to cleanse and clear rooms of negative energy.
P Nutrients: Vitamin K, P*, W*
- **Stevia**, a natural sweetener that is not toxic like Splenda, Nutrasweet and other artificial sweeteners. A*, T*
- **Thyme**, long used for chest and respiratory problems, can also help maintain healthy cholesterol.
P Nutrients: Calcium, iron, magnesium, manganese, phosphorus, potassium, selenium, zinc, vitamins B1, B2,

KEY

- *A - Annual . Needs to be planted every year.
- *P - Perennial . Grows back on its own every year.
- *T – Tender stem *W - Woody stem
- Plant like stemmed plants together,
tender with tender and woody with woody.

Diagram Your Food System

Often when we talk about the food system, we speak about global corporations, how they impact the many countries of the world, and the large scale impacts they have on national economies and populations' health. What about you and your family? How is the food system treating you right where you live? You can answer these questions by diagramming your food system. First, list the places where you can get food in your neighborhood: supermarkets, big box stores, liquor stores, fast food restaurants, farmers markets, gas stations, your garden, food pantries and so forth.

Next, list where you actually get your food.

Then ask yourself these questions: Does my neighborhood give me easy access to healthy foods?

Is it easier to buy junk food, fast food and packaged convenience foods that have very little nutritional value?

If you eat a lot of these unhealthy foods, is it because you don't have access to better foods or have advertisers persuaded you into wanting them?

Last, what changes can you make to improve the quality of food that you and your family eat with your food budget?

Growing food might be one way you can supplement your diet. Teaching your kids about how advertising convinces them to eat junk foods is another. Or, you might advocate for healthier foods at the schools in your neighborhood.

When certain neighborhoods only have access to junk food and fast food, it is not an accident. It's food apartheid. Food apartheid is the intentional, systemic marketing and distribution of profitable, nutrient-poor, disease-causing foods to income-challenged neighborhoods, mainly, communities of color (i.e. communities receiving the most food assistance dollars). Demand better from the food system!



Do you have a farmers' market nearby? Try shopping there for local, in-season produce. Food grown locally is fresher and more packed with the vitamins and minerals that help you and your family to be healthy. You may see that some farms are certified organic. Others may not be certified, but may still farm without harmful chemicals or genetically modified (GMO) crops. These may have lower prices and comparable benefits to organic farms.

Many farmers' markets accept SNAP and cooperate with programs like Double Up Food Bucks that stretch your produce dollar even further.



Food Justice & Farmers Markets

According to the US Department of Agriculture, the number of farmers markets in the US increased from 1,700 in 1994 to more than 8,600 in 2019. This increase demonstrates the growing public interest in eating more fresh produce and supporting local growers.

Farmers markets also provide people an opportunity to have regular interaction with local farmers, develop relationships and have a greater appreciation for what it takes to grow food, especially outside of current agribusiness models.

However, having more farmers markets doesn't necessarily result in a more just food system. In some ways, they can perpetuate the current food system's inequalities. For example, a farmers market that is part of a larger urban development plan often benefits those with economic and racial privilege. These markets charge more for produce and other food items, use public dollars without public input, and often contribute to urban gentrification.

When looking at farmers markets through a food justice lens, the market should not contribute to further inequity or perpetuate food insecurity. A farmers market that practices food justice would deliberately make it a priority to serve

the nutritional needs of those most negatively impacted by the current food system. It would target communities of color, working class communities, and communities experiencing poverty.

These communities consist of people receiving government food assistance like SNAP, WIC and the Double Up Food Bucks programs. The food justice movement and public health sectors have been pushing for more food assistance for purchasing fresh produce and even vegetable plants for those who want to grow their own food.

While such programs are subsidized by public money, the dollars spent on government food assistance programs pales in comparison to the public dollars supporting large corporate agribusiness. While neither subsidy is sustainable, Our Kitchen Table supports subsidizing communities experiencing poverty until our food system is truly democratic.

In addition to supporting people experiencing food insecurity, farmers markets that practice food justice should make it a priority to have local growers and vendors who practice ecologically sound growing practices and fair labor practices. A farmers market practicing food justice should be transparent about these dynamics and exhibit signage that makes the practice of food justice highly visible.

Last, farmers markets should not end up being niche markets, but rather venues for both transforming the current food system and creating new food system

models. In addition to providing more fresh food purchasing options, a farmers market that practices food justice should also educate the community about the food system and share resources and skills that empower people to collectively become more food independent, for example, cooking resources, food preservation workshops, seed exchanges, information of food policy challenges and even the development of food cooperatives. In other words, a farmers' market that practices food justice should provide a venue for people to create truly democratic food systems that ultimately lead to food sovereignty.

Our Kitchen Table manages the Southeast Area Farmers Market with the goals of increasing access to fresh produce to Grand Rapids southeast neighborhoods and welcoming food assistance dollars with no stigma attached.

Market events build community and share skills like urban foraging. Community partners bring informational resources to share with the market patrons. And, a no-charge whole bulk foods buying group seeks to provide another way for people shopping with food assistance dollars to stretch their food budgets.



Community Resources

Grand Rapids Neighborhood Match Fund grandrapidsmi.gov/nmf

- Funding for community food justice gardens.

Our Kitchen Table, OKTjustice.org

- Food growing and food justice resources.
- **Southeast Area Farmers' Market**, SNAP, DUF, WIC etc. accepted.

Michigan Farmers' Markets Association (MIFMA) mifma.org

Blandford Nature Center Farm blandfordnaturecenter.org

- CSA shares.

Fresh Beets Urban Farm TheFunkyFreshBeets.com

- Gardening and animal husbandry workshops. Garden installation.
- CSA shares.

New City Farm newcityneighbors.org/farm/

- Farm shares, garden, and bakery.
- Youth programs.
-

Well House, wellhousegr.org

- Community farm
- Plant sale, workshops

Garfield Park Neighborhood Association

- Rent garden plots.

Groundswell Farm groundswellfarm.org

- CSA shares via SNAP.

Urban Roots, urbanroots.com, 1316 Madison SE

- Farm, mobile classroom, supper club.
- Market Wednesdays 12 to 7 p.m.

Baxter Community Ctr. wearebaxter.org, 935 Baxter SE

- Food growing resources.
- Marketplace: Pantry, clothing
- Holistic healthcare and dental clinic
- Childcare and mentoring programs

Gardens for Grand Rapids. On Facebook.

- Free raised garden beds for food insecure families.

Michigan State University Extension

- Soil Testing Kits. Responds with custom fertilization program, <http://www.msusoiltest.com>
- Master Gardener Hotline: Need quick advice? Call 888-678-3464.

Oakdale Neighbors Community Garden oakdaleneighbors.org



11 a.m.—4 p.m. Saturdays
July through mid-November

MLK Jr. Park (July & Aug.)
Joe Taylor Park (Sept.-Nov.)

For information, visit
www.OKTjustice.org/

Do you know of other community resources?

Freezing Vegetables

To freeze most fresh vegetables, simply blanch and bag.

1. Wash and slice into pieces as desired.
2. Drop into boiling water. Blanch for two minutes after water returns to boil.
3. Using a colander with a handle, remove vegetable. Drain well or use a salad spinner.
4. Put in freezer bags, burp bags, label and freeze.

Special cases

- Green beans: After blanching, lay on dish towel to dry; pat dry before bagging.
- Eggplant: Slice. Soak for 15 minutes in salt water. Grill both sides on stovetop griddle or grill. Bag and freeze.
- Zucchini/summer squash for breads: Blanch. Process in blender/food processor. Bag and freeze.
- Herbs. For stir fries, sauces and soups, chop and mix with olive oil. Freeze in muffin pan. Remove to freezer bags.
- Winter squash. Cut in half. Bake flesh-down at 350° 1 hr. or until tender. Scoop flesh out. Mash if desired. Bag and freeze.

Oven Roasted Tomatoes

Too many tomatoes or cherry tomatoes? Here's an easy way to preserve them in the freezer. You can use the oven roasted tomatoes on pastas, pizza or as a base for sauces.

Ingredients:

- Tomatoes, washed.
 - Fresh herbs (basil, oregano, sage, parsley, cilantro, garlic etc.)
 - Olive oil.
1. Slice tomatoes uniformly (cut cherry tomatoes in half). Put in large bowl.
 2. Chop herbs of your choice. Add to tomatoes in bowl.
 3. Toss with enough olive oil to coat well. Salt to taste.
 4. Oil baking sheet with more olive oil. Spread mixture thinly on pan.
 5. Bake at 350° for 1 hour or until slightly caramelized—keep an eye on them so they don't over-bake.
 6. Use a spatula to remove tomatoes to freezer bags.
 7. Burp bags and freeze.



Part Two

Growing Healthy Eating Habits



Eating to Prevent Lead Poisoning

OKT's Program for Growth at Martin Luther King Leadership Academy is growing more than food in the gardens out front of the school. Workshops inspire participants to grow, purchase, and prepare healthier foods for their families. The MLK school neighborhood is in one of Grand Rapids' lead poisoning hot-spots. Lead poisoning especially impacts infants and children's growing bodies and brains, causing developmental delays and behavioral problems, including aggression. Lead comes to the 49503 and 49507 neighborhoods via the soil, housing with lead paint, and possibly via the water supply, when old lead pipes are still in service.

Combating and/or preventing lead poisoning starts with good nutrition.
Ensure your meals contain each of the following :

IRON	CALCIUM	VITAMIN C
Beef, pork (choose lean), and liver (high in cholesterol).	All milk (choose low fat), Lactose-free and lactose-reduced products.	Citrus fruits, e.g., orange, lemon, lime, and grapefruit or juices fortified w/ Vitamin C.
Chicken or turkey.	Fortified milk alternatives (soymilk), tofu.	Melons, kiwi, berries, strawberries, tomatoes.
Fish.	Cheeses except cream.	Bell peppers or red chili peppers.
Beans (legumes) e.g., black-eyed peas, chick peas, kidney, white, navy, lima and lentils.	Sardines and white beans.	Dark green veggies e.g., spinach, greens broccoli, kale, cabbage, Brussels sprouts.
Dark green veggies e.g., spinach.	Kale family: broccoli, cabbage, greens and bok choy.	Cauliflower and squash.
Breads and grains enriched w/ iron.	Dairy desserts like yogurt and frozen yogurt.	Potatoes.

- **Why Vitamin C?** This food source will help you absorb non-meat Iron sources better such as iron-enriched grain.
- **Calcium fact.** Sour cream and cream cheese are not good sources.
- **Iron fact.** When you cook with acidic foods, e.g., tomato sauce, in cast-iron cookware, iron will leach into the foods and increase its iron content.
- **Why lean beef and pork?** Eating lean will keep fat calories off and reduce cholesterol consumption for a healthy heart. Look for "loin or round" cuts like top round, tenderloin, and sirloin Other lean meats include Canadian bacon, boneless ham and tips.

Lead Screening: Food History

OKT's registered dietician, Tracy Booth, developed the form below to help screen families' eating habits as they related to lead poisoning prevention.



	DAILY	WEEKLY	MONTHLY	NOT CONSUMED/RARE
CALCIUM SOURCES				
Milk: Dairy, Rice, Soy, Almond				
OTHER DAIRY: Cheese, Ice Cream, Yogurt				
Green Leafy Veggies				
IRON SOURCES				
Beef, Pork, Liver				
Other Meats, Poultry, Egg				
Fish: Canned, Fresh, Frozen				
Beans, Nuts, Seeds, Protein, Peanut Butter				
Potato, Rice				
CEREAL (Iron Fortified): Hot & Cold				
VITAMIN C SOURCES				
Citrus Fruits: Fresh, Frozen, Canned, Juice (includes tomatoes)				
Orange/Purple/Yellow Veggies				
OTHER FOODS				
Other Fruits: Fresh, Frozen, Canned, Juice				
Corn, Peas, Pasta				
Soups				
Crackers Etc				
Breads/Rolls/Breakfast Breads				
Deli Meats, Hot Dogs, Sausage, Bacon				
Pancakes/Waffles/French Toast				
Coffee/Tea/Pop Water				
Snacks: Sweet Or Savory; Dark Chocolate				
Other Foods Not Mentioned:				

Eating to Prevent Lead Poisoning: Iron

Eating more foods with iron — and foods that help the body to better absorb iron — is one strategy that can help prevent lead poisoning. The following pages share information on animal and plant iron sources as well as how cooking in an iron skillet can increase iron intake.

Red Meats ... What's the Harm?

Red meat gets a bad rap. Yes, eating beef, pork, and lamb has been linked to cancer but mostly because of the quantity we eat, the chemicals, hormones, and antibiotics added, and because factory farmed animals produce a more harmful product. As a country, our red meat portions are over the top. Think about, you can get steak ranging from 8oz, 16oz, 24oz from your favorite steakhouse. That's two to six servings of meat at one meal.

Other countries that eat red meat as a main part of their diet do not have the same cancer morbidity risks. Why? They consume smaller, cleaner portions as a meal. And, their plates have more healthy fruits, vegetables and grains.

Factory farms crowd animals into inhumane, highly stressful, disease-inducing conditions. They alter natural reproduction and infant feeding routines. In addition, we smoke, cure and treat our meats with nitrites. These can be very harmful to our health.

Free-range, grass fed and organic meat are healthier, but with that comes the expense. There is varying data, but much suggests it's not the meat per se but the process e.g. curing or cooking technique e.g. charcoal grilling that's linked to cancer.



A smart way to spend your meat budget is to eat less meat and make sure that meat is from happy animals.

Red meat and heart disease are also linked because of the fat content. This is why we see ground beef listed as 90/10, 85/15, 96/4 etc., which is the ratio of lean meat and fat content. When shopping, aim for loin, shoulder and round (leg) in the title, this is a healthier choice. The Academy of Nutrition and Dietetics suggest you choose lean, trimmed cuts of beef, pork, or lamb a few times per week or less and stay away from processed meats, such as bacon, sausage, and ham.



Greens, Banana and Berry Smoothie

- 1/2 cup (packed) flat-leaf parsley (leaves and stems)
 - 4 kale leaves (center ribs removed)
 - 1 banana (cut into pieces)
 - 1 cup frozen organic berries (such as strawberries or raspberries)
 - 1 teaspoon ground flaxseed
- Purée ingredients with 1 cup water in a blender until smooth (add water if too thick). You can substitute other greens.

Loving Your Cast-iron Skillet!

Cooking in an iron skillet is one of way to get more iron into your diet. When prepared properly, the iron from the skillet is better absorbed than iron from non-animal foods like spinach.

- Iron is a very important part of a healthy diet. You can get it from animal and non-animal foods. Iron deficiency anemia does occur in the US.
- Iron helps build-up your red blood cells and maintain your protein status.
- You can cook anything and everything in an iron skillet. Use it on the stovetop, in the oven, or on your outside grill.
- Newer iron skillets tend to leach more iron into foods cooked in them.
- The longer you cook the foods, the more iron is leached into them.
- Liquid foods, especially acid-based foods, tend to leach more iron into foods. When you use a very old iron skillet, pour a little lemon, orange or tomato juice into it. Let it cook-off before starting your meal. This will help reactivate the iron-leaching qualities of your old skillet.
- Seasoning your skillet with a combination of oil, metal and heat turns it into a black, non-stick skillet.
- The more you cook in your skillet, the more seasoned it becomes. Season a new skillet even though if it says it is pre-seasoned.



Seasoning starts with cleaning.

You can wash your skillet with soap and water. This will not ruin it. You will not wash away the iron. It's a hard metal. Avoid using steel wool pads or any metallic scrubbers. Use a soft brush or scrubby made to clean skillets. You can also use abrasive salts or cornmeal to clean your skillet. After washing, dry with a dish towel, let it air dry, or put it on the lit stove or the hot oven to dry. Do not store your pan wet—it will rust.



Seasoning finale!

After drying your skillet over high heat or in the oven, add a teaspoon of oil. Spread it around with a paper towel or soft cloth so it doesn't pool. The, put your skillet away. When you fry or sauté in your skillet, you build on the seasoning process. Simmering or burning food in your skillet may un-season it. So, you may need to season your skillet again in the future.

Rescuing an old skillet:

1. Preheat your oven to 350 degrees.
2. Clean off any burnt-on debris or rust with steel wool or a metal scrubby.
3. Wash in warm water (soap is not necessary).
4. Dry skillet. If you still see rust, repeat steps 2 through 4.
5. Lather your skillet in oil (no pooling or puddles).
6. Place foil on bottom rack of oven. Place your skillet face down on the middle or top rack so excess oil drips off.
7. Bake for 1 hour.
8. Turn off the oven. Let the skillet cool down with the oven.

If the skillet looks renewed, pat yourself on the back. If not, repeat the process until it does. "My skillet is over 60 years-old," OKT dietitian Tracy Booth says. "When I received it, I knew nothing about seasoning, cleaning or taking care of it. Knowledge is power!"



Let's Differentiate! Heme and Non-heme Iron

The two forms of dietary iron are Heme Iron and Non-Heme Iron: Heme iron is found only in meat, poultry, seafood, and fish, so heme iron is the type of iron that comes from animal proteins in our diet. Non-heme iron, by contrast, is found in plant-based foods like grains, beans, vegetables, fruits, nuts, and seeds.

HEME IRON

NON-HEME IRON

When we eat meat, we consume the blood proteins and hemoglobin from the animal (heme). Your body more easily absorbs heme found predominantly in blood and muscle.	Predominantly in plants, non-heme iron is not absorbed as easily. Your body absorbs it better if you eat a food high in vitamin C when you eat it.
Heme iron is especially important for young children and women who may become pregnant or who are pregnant.	Additional non-heme iron sources include legumes (beans and peas), dark-green vegetables, tofu, dark leafy greens, such as spinach and kale, and foods enriched or fortified with iron, e.g. commercial breads and ready-to-eat cereals.
To improve iron status, women and adolescent girls should consume foods containing heme iron, which their bodies more readily absorb.	As mentioned above, your body absorbs non-heme iron better if you eat a food high in vitamin C when you eat it.
Meats, poultry, and seafood provide heme iron, which is more bioavailable (absorbed more easily).	Non-heme iron is less bioavailable because your body does not absorb it as well.
Depending on how they are produced and prepared, these sources may increase the risk of cancer, stroke, heart disease, and metabolic syndrome	Depending on how they are produced and prepared, these sources may decrease the risk of cancer, stroke, heart disease, and metabolic syndrome.
Heme comes from meat proteins. All meat proteins are absorbed better than vegetable proteins.	Vegetables, soy (a plant), beans, legumes and other plants have protein. However, the proteins they provide need help to be more easily absorbed.

Eating to Prevent Lead Poisoning: Calcium

Calcium is another essential nutrient for helping to prevent lead poisoning. While dairy products such as milk, cheese, yogurt, and cottage cheese are commonly known sources of calcium, other sources exist as well. In addition, many foods, for example orange juice and soy milk, are fortified with calcium. So, if you don't like — or can't tolerate — milk products, you can still get calcium from many other healthy food sources. The following information is provided by the USDA ChooseMyPlate.gov website.

Non-dairy sources of calcium

People who do not consume dairy products can choose calcium sources that are not from dairy products. The amount of calcium that can be absorbed from these foods varies.

- Calcium-fortified juices, cereals, breads, rice milk, or almond milk.
- Canned fish (sardines, salmon with bones)
- Soybeans, soy products (tofu made with calcium sulfate, soy yogurt, tempeh), and some other beans.
- Some leafy greens (collard and turnip greens, kale, bok choy)

For more information, read the 2015-2020 *Dietary Guidelines for Americans Food Sources of Calcium*.



Let's Differentiate! Milk

The words Skim, 1%, 2%, and whole refer to the amount of fat in milk. As fat is removed, calories decrease per serving size. In addition to providing extra calories, fats from homogenized milk can cause plaque build-up on arteries and contribute to heart disease.

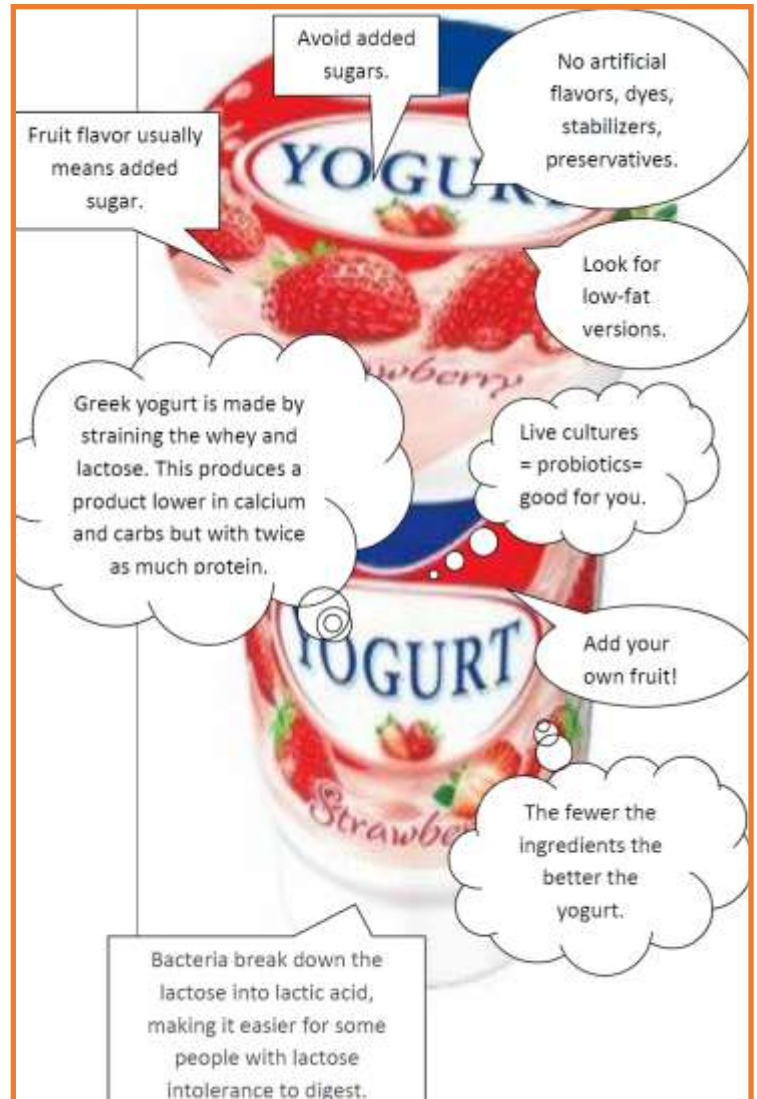
All these milks have the same amount of protein, calcium, vitamins and minerals. Vitamin D is added to all of them. Milk may be your next best source other than the sun. Various fish also provide Vitamin D, especially fish that are caught in sunny states, not necessarily Michigan fish. If you use milk alternatives like almond, rice, or soy, they often are fortified with vitamins, minerals and calcium so they have similar nutrients as cow's milk.

Yogurt Facts

In addition to being a great source of calcium, yogurt gives you protein and potassium. Plus, if it contains live yogurt cultures, it can do wonder for your gut health. (Nondairy yogurt is popular with vegans.) These live, probiotic cultures help the natural intestinal flora to flourish, which keeps your bowels regular and empowers your immune system.

However, not all yogurt is healthy. Beware of added sugars! Avoid yogurt with these label ingredients: Brown sugar, corn sweetener, corn syrup, dextrose, fructose, fruit juice concentrate, glucose, high-fructose corn syrup, honey, invert sugar, maltose, molasses, raw sugar, sucrose, syrup and table sugar, and organic cane sugar. All of these mean sugar.

In other words, choose plain yogurt! Add your own fruit, no-sugar jams, nuts, seeds, or grains. You can also use plain yogurt in place of sour cream, as a topping on soups and spicy dishes, as a base for smoothies, or as a marinade to tenderize meats. For more protein, choose Greek yogurt.



Cheese Cheat Sheet

Paler-colored cheeses are a better choice than yellow—they contain a more natural fat.

- Ricotta, fresh or part-skim mozzarella, feta, Romano, cottage cheese are examples of “white” cheeses. Other pale cheeses include:
- Cabot 50% light Vermont or reduced fat cheddar, fancy blend shredded, part-skim mozzarella, shredded.
- Sargento reduced fat sharp cheddar, deli style sliced Colby and Monterey Jack.
- Laughing Cow Gourmet Cheese Bites and Original Creamy Swiss.
- Shredded parmesan, Athenos crumbled feta, Borden Natural Pepper-jack slices.

Read the cheese label! Look for:

- 3g or less saturated fat per serving
- Light, low-fat, made with skim or 2% milk, 50% less fat or reduced fat.
- Avoid artificial colors. Most orange cheeses have coloring added (cheddar is naturally white).
- Avoid mold inhibitors like natamycin. Many shredded cheeses have this added. These can hurt the good bacteria in your gut.
- Watch out for added cellulose, e.g. in grated parmesan. Shred it yourself. This is saw dust!

Probiotics and Gut Health: Kombucha

Kombucha is a fizzy sweet or sour tea. Although linked to several health claims, little data supports claims that it cures cancer, but some studies suggest that it does improve digestion.

Because it contains B-vitamins and protective antioxidant components, proponents of kombucha have made various health claims. However, the FDA does not approve of health claims being made by foods and supplements, so you will not hear them or other governmental agencies supporting those claims.

Kombucha may help digestion because it contains probiotics. This has led some to say that kombucha rids your body of toxins and boosts your energy. This is based on the premise that probiotics' good bacteria counter the bad bacteria in your gut — and B Vitamins aids in metabolism and energy production.

Like sourdough bread, kombucha is brewed with a "mother," actually a SCOBY

(Symbiotic Culture of Bacteria and Yeast).

To brew it, you place organic tea (black or green) that has brewed with a cup of organic sugar in a gallon jar with the

SCOBY and filtered water to fill. As the SCOBY eats most of the sugar, the tea ferments into kombucha. The brew is ready in about five to seven days. The longer you let it brew, the sourer it becomes. If you let it brew too long, it will turn into vinegar! The finished brew will have a tiny alcohol content – nothing to worry about! Because tea has caffeine, kombucha does, too.

You can pay a lot to buy kombucha—or you can brew it yourself very cheaply!

Another option: Fermented foods

Another way to get probiotics in your diet is by eating fermented foods like sauerkraut and kim chi. Watch out for added chemicals! Better yet, make your own! Try beets, carrots, cauliflower, cucumbers, garlic, kohlrabi, peppers, radishes, snap beans or turnips.



What are probiotics?

Probiotics are live bacteria that are good for you, especially for your digestive system. They are also referred to as "the helpful bacteria."

How do they work?

When you lose "good" bacteria in your body, for example after you take antibiotics, probiotics can help replace them.

Probiotics can help you balance your "good" and "bad" bacteria to keep your body working the way it should (avoid yeast/candida overgrowth, yeast infections and thrush.)

What do they do?

Probiotics help send food through your gut by affecting nerves that control gut movement. Among the many different probiotics, lactobacillus is the most common.

While more research needs to be done, researchers agree that probiotics are beneficial for irritable bowel, diarrhea, skin conditions, urinary tract and vaginal health, allergies and oral health.



Protein

An important component of every cell in your body, protein is the building block of bones, muscles, cartilage, skin, hair, nails, and blood. The average sedentary man needs 56 grams per day. The average sedentary woman needs 46 grams per day. Kids age 4 through 13 need 20 to 35 grams of protein a day, depending on their body weight. **If you are pregnant or breastfeeding, you need 80 to 100 grams of protein a day.** A well-nourished mother's breastmilk contains everything baby needs, including protein, for the first year of life.

Food	Serving Size	Protein (g)	Food	Serving Size	Protein (g)
<i>Beef:</i>			<i>Beans:</i>		
Ground, lean, baked (15% fat)	3 oz	22	Refried	1/2 cup	7
Prime rib, broiled (1/8-in. fat)	3 oz	18	Kidney, red	1/2 cup	7.7
Top sirloin, broiled (1/8-in. fat)	3 oz	23	Black	1/2 cup	7
<i>Poultry:</i>			<i>Nuts:</i>		
Chicken breast, broiled, no skin (bone removed)	1/2 breast	29	Peanuts, dry roasted	1 oz	6.7
Chicken thigh, bone and skin removed	1 thigh	13.5	Peanut butter, creamy	2 tbsp.	8
Turkey breast, roasted, Louis Rich	3 oz	15	Almonds, blanched	1 oz	6
<i>Seafood:</i>			<i>Cereals, Grains, and Breads:</i>		
Cod, cooked	3 oz	19	Oatmeal, quick instant	1 cup	5.4
Salmon, Chinook, baked	3 oz	22	Cheerios	1 cup	3
Shrimp, steamed	3 oz	18	Grape-Nuts	1/2 cup	6
Tuna, in water, drained	3 oz	22	Raisin Bran	1 cup	5
<i>Pork:</i>			Brown rice, cooked		
Pork loin chop, broiled	3 oz	25	Whole-wheat bread	1 slice	2.7
Ham, roasted, lean	3 oz	20	Bagel, 3 1/2 -in.-diameter	1 each	7
<i>Dairy:</i>			<i>Vegetables:</i>		
Whole milk (3.3% fat)	8 fl. oz	7.9	Carrots, raw (7.5 x 1 1/8 in.)	1 each	0.7
1% milk	8 fl. oz	8.5	Broccoli, raw, chopped	1 cup	2.6
Skim milk	8 fl. oz	8.8	Collards, cooked from frozen	1 cup	5
Low-fat, plain yogurt	8 fl. oz	13	Spinach, raw	1 cup	0.9
American cheese, processed	1 oz	6			
Cottage cheese, low-fat (2%)	1 cup	27			
<i>Soy Products:</i>					
Tofu	3.3 oz	7			
Tempeh, cooked	3.3 oz	18			
Soy milk beverage	1 cup	7			

VEGETABLE PROTEIN

ANIMAL PROTEIN



Most vegetables and grains provide 2 to 3g protein per serving. Legumes (e.g. peas, peanuts, navy beans) provide up to 7g per serving.	Meat provides 7g protein per ounce. A serving is usually 3 to 4 ounces. Dairy provides 8g protein per serving.
Your body needs essential amino acids (AA) which you only get by eating protein. Vegetables have fewer AAs, so you need to eat more and balance wisely.	Provide all of the AAs that your body needs.
Typically, lower in fat calories and higher in fiber.	Lower in carbohydrate calories and fiber, higher in cholesterol (unless choosing lean or lower fat).
Incomplete source of protein. Supplements are recommended for Vegetarians.	Complete source of protein.
You miss out on key required nutrients; see next column.	Great sources of Vit B12, Vit D, Heme Iron, Zinc, Omega fatty acids.
Protein powders available: pea, soy.	Protein powders available: Whey, casein, egg.
Your body does not store protein. Your body can't produce essential AAs.	

Fish: An Excellent Protein Source

Unfortunately pollutants and toxins have made their way into our bodies of water including mercury, which can be harmful when ingested. Fish are especially noted for containing mercury.



Toxic mercury and eating fish

- Adults can tolerate a small amount of mercury.
- Infants and young children are at risk for neurological concerns if they eat it. High mercury content is correlated with Low IQ scores and behavioral concerns.
- There is no medical/health requirement of mercury. It is considered a poison.

HIGHEST	HIGH	LOW TO MODERATE
Tilefish	Spanish and Gulf Mackerel	Striped, Black, Saltwater Bass
Shark	Albacore and Yellowfin Tuna	Mahi Mahi
King Mackerel	Sea Bass	Sea Trout, Trout
Marlin	Grouper	Canned Tuna
Swordfish		Cod
Orange Roughy		Halibut
Ahi & Bigeye Tuna		Whitefish
		Fresh water Perch

LOW: *Salmon, *Herring, Haddock, Anchovies, Crab, Crawfish, Catfish, Tilapia, Flounder, *Atlantic Mackerel, *Oysters, *Pollock, Perch, *Rainbow and freshwater trout, *Sardines, Shrimp, Scallops. ***Best for pregnant woman**

Let's Differentiate! Vitamins

WATER SOLUBLE

- B-complex vitamins and vitamin C are water-soluble vitamins that are not stored in the body and must be replaced each day.
 - These vitamins are easily destroyed or washed out during food storage and preparation.
 - The B-complex group is found in a variety of foods: cereal grains, meat, poultry, eggs, fish, milk, legumes and fresh vegetables.
 - Citrus fruits are good sources of vitamin C.
- Using megadoses of multivitamins

FAT SOLUBLE

- Small amounts of vitamin A, vitamin D, vitamin E and vitamin K are needed to maintain good health.
- Fat-soluble vitamins will not be lost when the foods that contain them are cooked.
- The body does not need these vitamins every day and stores them in the liver and adipose (fat) tissue when not used.
- Most people do not need vitamin supplements.
- Megadoses of vitamins A, D, E or K can be toxic and lead to health problems.

ANTIOXIDANTS

A substance that reduces damage due to oxygen, such as that caused by free radicals. Well-known antioxidants include enzymes and other substances, such as vitamin C, vitamin E, and beta carotene, which are capable of counteracting the damaging effects of oxidation. Antioxidants are also commonly added to food products such as vegetable oils and prepared foods to prevent or delay their deterioration from the action of air. Antioxidants may possibly reduce the risks of cancer.

Know Your Oil Facts

MONOUNSATURATED

- Canola, olive, sesame and peanut oil have a high smoke point, i.e. can handle high cooking heat.
- Sources: Peanut butter, nuts, olives, avocados.
- Lowers bad cholesterol and triglycerides.
- Helps maintain good cholesterol (HDL)
- Lean red meats have 50% of this fat, e.g. round or loin
- Is the healthiest type of fat.
- Lowers risk of heart disease

SATURATED

- Sources: Animal foods, also some plants sources such as coconut and palm (although research shows these are not as harmful).
- Should make up ONLY 10% of our total caloric intake
- An exception: Stearic Acid, most abundant fatty acid, found in chocolate and beef raises good cholesterol and does not effect the bad cholesterol.

- **Polyunsaturated:** Omega 6 and Omega 3s; eating in place of saturated decreases LDL cholesterol levels
- **Trans Fatty Acids:** act like saturated fats and raise LDL cholesterol levels. They may also lower HDL cholesterol (good cholesterol), creates inflammation and correlated w/ heart disease, strokes, diabetes and other chronic conditions, contributes to insulin resistance
- **Saturated:** Biggest source of this in American diet is Pizza and cheese, Whole and reduced fat milk, butter and dairy desserts, Meat products (sausage, bacon, beef, hamburger, Cookies and other grain-based desserts, A variety of mixed fast food dishes
- **Palm and Coconut Oils** are high in saturated fat and not considered heart health

Oils that can handle high to moderately high heat are highlighted in red.

Type of Oil	Source: Monounsaturated	Source: Polyunsaturated
Avocado	High	Low
Canola	High	Moderate
Coconut	Low	Low
Grapeseed	Low	High
Extra Virgin Olive	High	Low
Soybean	Moderate	High
Peanut	High	Moderate
Sesame	High	High
Sunflower	Low	High
Palm Oil	High	Low
Cottonseed Oil	Low	High

STEPS TO IMPROVING YOUR HEART HEALTH and PREVENTING STROKE

1. Eat 2 servings of fish a week (4oz each) due to it being high in Omega 3s
2. Add other healthy plant-based Omega 3s to diet: pumpkin seeds, chia seeds, flaxseed oil, walnuts, walnut oils
3. Read labels: Avoid partially hydrogenated oils i.e. trans fat
4. Only 7-10% of calories should come from saturated fat i.e. meat
5. Cutting back on saturated fats is mostly beneficial if you **REPLACE** with Polyunsaturated

POLYUNSATURATED

- Food Sources (form of Omega 3): Salmon, sardines, mackerel, canola, walnut and flax.
- Lowers good and bad cholesterol (you don't want your good cholesterol lowered).
- May decrease risk of heart disease and reduce blood pressure. Choose food sources over the bottled oils for best impact.
- Corn, soybean, cottonseed, sunflower and safflower may promote harmful cell inflammation.

TRANS FAT

- Sources: some margarines, tub margarines, sweet and savory snack foods.
- Raises bad cholesterol.
- Lowers good cholesterol.
- Increases risk of heart disease and stroke.
- Some trans fat are found naturally in meat and dairy products; these trace amounts will be labeled "0" on packaging.
- Hydrogenated oil is a trans fat.

Let's Differentiate! Salt substitutes

Always add salt to taste at the end of the cooking process or at the table, if desired. Sea salt is a great alternative!

HERBS & SPICES	RECIPE IDEAS
Basil, Marjoram, Oregano, Parsley, Rosemary, Sage, Thyme, Garlic, and Onion	<ul style="list-style-type: none"> • Use each alone or mix them together. • These taste great in tomato sauces (use low sodium tomatoes or tomato sauce). Serve the sauce with pasta or rice and your favorite beans. • Try any of these herbs in your steamed vegetables, or in soups. • Mix in hummus, salsa, cream cheese, tuna, salmon/cream cheese mix. • Try garlic and onion in both the fresh or powder form.
Chives, Dill, Parsley, Tarragon	<ul style="list-style-type: none"> • Steam any one of these with your vegetables or with fish. • Tarragon is great in soup. • Dill is great in rice with vegetables and kidney beans, or in dips with yogurt and low fat sour cream. • Chives and parsley are great on top of salad, soup, or baked potato. They are also good in dips with yogurt and sour cream.
Allspice, Garlic, Marjoram, Parsley, Thyme	<ul style="list-style-type: none"> • Mix these herbs and spices together for a terrific meatloaf, pot roast or other red meat dish. • Let your pot roast cook on low in Crockpot overnight w/ these and cubed potatoes.
Marjoram, Rosemary, Tarragon	<ul style="list-style-type: none"> • Mix these together, rub on your chicken or turkey (with the skin taken off) and steam it— try them when stuffing a Cornish hen.
Curry powder, Turmeric, Garlic, Onion	<ul style="list-style-type: none"> • Mix these together with tomatoes (tomato sauce), rice, black beans, and corn for a delicious Spanish flavor. • If you don't like curry, try the same recipe without the curry powder.

Healthy Eating: Vegetables and Fruits

Eating fruit and vegetables provides many health benefits . People who eat more vegetables and fruits as part of an overall healthy diet are likely to have a reduced risk of some chronic diseases. Vegetables especially provide nutrients vital for health and maintenance of your body. *Source www.ChooseMyPlate.gov*

Fresh fruit and vegetables, especially if grown locally, offer even more nutrients. Organic or chemical-free produce is better yet. It might seem expensive, but do the math. How much do we pay per pound for potato chips or junk food? How much will be paying in medical bills and lost work if we eat junky foods?

Michigan-grown Fruit and Vegetable Availability

First Quarter of Year:

Broccoli, celery, collard/
mustard greens, fennel,
kale, leeks, rutabaga,
spinach, winter squash.

Second Quarter of Year:

Artichokes, asparagus,
broccoli, leeks, peas, sorrel,
spinach, collard/mustard/
dandelion greens,
watercress.

Third Quarter of Year:

Arugula, beets, chard, corn,
cucumbers, eggplant, garlic,
green/lima beans, okra,
peppers, radishes, sorrel,
yellow squash, zucchini.

Fourth Quarter of Year:

Arugula, beets, broccoli,
Brussels sprouts,
cauliflower, celery, chard,
fennel, kale, leeks, parsley,
peppers, mustard greens,
snow peas, potatoes,
pumpkin, rutabaga, sweet
potatoes, yams, winter
squash.



How to Build Delicious, Nutritious Salads

For a great salad, try to combine at least one ingredient from each of the five flavors: sweet, sour, salty, spicy and bitter. If the salad has greens that can count as the bitter. Making your own salad dressing is as easy as shaking a bottle. You can skip the harmful preservatives and extra salt and sugar in store-bought dressing and enjoy a tastier version with endless options to mix it up. Combine proteins and fats to make a salad into a meal.

BITTER

- Lettuce
- Finely chopped kale
- Bok Choy
- Tatsoi
- Cabbage
- Cucumber (skin is bitter)

SOUR

- Lemon juice
- Rice vinegar
- Apple cider vinegar
- Balsamic vinegar
- Lime juice

SPICY

- Dijon mustard
- Garlic
- Cayenne pepper
- Herbs
- Onion

SALTY

- Salt
- Soy sauce
- Brags amino liquids

PROTEIN &

HEALTHY FATS

- Hard boiled egg
- Tahini
- Olive oil
- Pecans
- Walnuts
- Sunflower seeds
- Avocado
- Feta cheese
- Parmesan
- Bacon
- Mayonnaise
- Yogurt
- Chicken
- Tuna

SWEET

- Maple syrup
- Honey
- Sugar
- Raisins
- Dried cherries
- Strawberries
- Raspberry jam
- Apples
- Shredded carrot
- Shredded beet
- Tomatoes

Let's Differentiate! Vegetables

Allium: Onions (red, yellow, white, Vidalia, Spanish, pearl), shallots, leeks, chives, scallions, garlic

These are great sources of organosulfur compounds found to inhibit blood platelet clumping, reduce cholesterol and lower risk of certain cancers. Also contain Vitamin C, potassium and trace minerals.

Cruciferous: Broccoli, cauliflower, red and green cabbage, Napa, Brussel sprouts, radishes, rutabagas, turnips, collard and mustard greens, kale, arugula

These provide sulfur compounds which may lower cholesterol and protect against cancer, especially breast cancer. The deep green and red varieties are high in cancer-preventive carotenoids and are great sources of vitamins C and K, calcium, magnesium, potassium and fiber as vitamin k and excellent source of fiber.

Peppers: Green, red, yellow, orange, and purple bell peppers, Anaheim, ancho, poblano, habaneros, chipotles, and serrano chili peppers, Hungarian and banana peppers

Peppers are a great source of vitamin C, minerals and fiber. Red and green Peppers contain carotenoids. Hot peppers contain capsaicin, which may help with treating pulmonary disorders, lowering cholesterol and blocking pain. The riper varieties (redder) are higher in nutrients than the less ripe (greener).

Source: Food Smart: A biomed publication

Choosing Juice

- Juice that includes puree or pulp has more fiber and less effect on blood sugar.
- Fruit cocktails, concentrates (based on processing), punch, and fruit drinks ARE NOT juices.
- Concentrates introduce enough mold to be banned on certain allergy diets.
- Colors and dyes are linked to cancer and hyperactivity.
- The words "drink," "cocktail," "beverage," or (in the United States) "nectar" anywhere on the label means that it could contain as little as 1% fruit juice.
- Avoid artificial sweeteners: Acesulfame potassium, Aspartame, Neotame, Saccharin, Sucralose.
- Avoid additives: honey, high fructose, sugar, cane and agave. A good juice will not need sweeteners.
- Avoid artificial flavors.
- The more processed the fruit, the fewer the benefits. Eating an apple is better than eating applesauce. Either are better than drinking apple juice.
- Juice lacks fiber. To get fiber, eat fruit in its whole form not in juice form.
- Juice servings are ½ cup. Drinking anything more is not beneficial, adds unnecessary calories, and water-soluble vitamins will be excreted.



Eating the Fresh Produce Alphabet

A-Avocado, Apricot

Avocado Toast: 1 ripe avocado, ½ lime, 4 slices of thick bread, olive oil, sea salt, Asian Seasoning Blend-Togarashi (aka Shichimi Togarashi or 7 spice blend);
DIRECTIONS: Preheat grill; cut avocado in half; remove pit. Scoop avocado in bowl, mash with fork,. Squeeze lime, mix. Heat grill. Brush both sides of bread and with olive oil. Grill both sides of bread until golden brown. Spread avocado, sprinkle with sea salt and Togarashi.

Apricots: Cut up and add to yogurt and make a parfait

B-Beets

Baked Beet Chips: 4 medium beets (rinsed and scrubbed), 2tsp extra virgin olive oil, salt and pepper, 4 sprigs rosemary, 4 sprigs thyme. **DIRECTIONS:** Preheat oven to 350 degrees. Peel beets and thinly slice. Place in large bowl; toss w/ olive oil. Place in single layer on baking sheets. Sprinkle w/ salt and pepper. Finely chop thyme and rosemary and sprinkle over beets. Bake 14-18 minutes, remove and let cool. They will become crisp (try in air fryer).

C-Currant, Cabbage, Collards

Milk w/ black currants: 1-3/4c milk, 5Tbsp black currant juice, 5oz black currant, ¾ cup mineral water (chilled), 1Tbsp honey;
DIRECTIONS: Rinse currants, remove stems. In saucepan, bring currants, currant juice and honey to a boil; simmer over medium heat until thickened, approximately 8-9 minutes, let cool. Mix milk and currants until smooth and pour into glasses. Top with chilled mineral water.

Cabbage for medicinal uses: Whole cabbage leaves can reduce swelling especially in breastfeeding women; relieve stomach pain and reduce stomach acid; treat asthma and morning sickness.

Brazilian Collards: 1 large bunch collards, thinly sliced, 3Tbsp extra-virgin olive oil, 5 garlic cloves finely chopped, kosher salt, fresh ground pepper. **DIRECTIONS:** In large skillet over medium heat, add oil, garlic



and ½ tsp each of salt and pepper. Cook garlic until golden brown, stir in collards, turning and stirring with tongs until they are tender and bright green, 4-5 minutes. Season w/ salt and pepper and serve.

D-Dandelion

Dandelion Pesto: Lemon juice to taste, 4 garlic cloves, 1/8 tsp black pepper, 3oz walnuts, 1lb dandelion greens, 1/2tsp salt 1/2c olive oil. **DIRECTIONS:** Sort leaves to remove wilting or bruised leaves, wash and dry leaves. Add all ingredients to food processor, pulse for 30 seconds. Serve over pasta. Add grated parmesan if desired.

E-Eggplant

Easy Eggplant Crisps: 1 eggplant (peel), 1/2c pasta sauce, 1c panko breadcrumbs (season with basil, thyme, marjoram, garlic and onion powder), 1/2c grated parmesan cheese (or mozzarella), 2Tbsp shredded Italian cheese, 2 eggs, fresh basil. **DIRECTIONS:** Preheat oven to 375 degrees. Spray baking sheet w/ cooking spray, set aside. Break eggs in bowl and beat. In 2nd bowl, add bread crumbs and cheese. Slice eggplant in ¼ inch slices; dip slice in egg mix then in bread crumbs, coat well. Place on baking sheet and bake for

15 minutes, remove, turn slices over, bake again for 15 minutes. Remove and top each slice with 1Tbsp of sauce and pinch of shredded cheese. Place back into oven long enough to melt cheese and see sauce bubbling (10-15 min). Remove and top with fresh basil.

F-Fig, Fennel

Roasted Figs: 1lb figs (wash, rinse, remove or trim stems), 1Tbsp fresh lemon juice, 3Tbsp honey, 2 sage leaves, 1 whole lemon for zest, 1Tbsp Red Wine. **DIRECTIONS:** Preheat oven to 400 degrees. Cut figs in half. In bowl, combine honey, wine, juice and juice from lemon, zest and sage. Add figs to mix, toss and coat. Spray baking dish with cooking spray; lay figs side down in baking dish. If you prefer a wet fig, add remaining mixture to baking dish. If you prefer dry, do not add the mixture. Roast for 15-20 minutes or until figs are soft or to your desired texture.

Fennel or Fennel seed: Use seeds in rye bread, rolls, baked goods, beans and lentil soup. **Roasted Fennel:** 1Tbsp olive oil, ground pepper, 2 fennel bulbs, coarse salt. **DIRECTIONS:** Preheat oven to 425 degrees. Trim fennel bulbs, cut lengthwise

in ½ inch pieces, toss with oil, season with salt and pepper. Roast, turn once after 10-15 minutes and finish roasting for 10-15 minutes.

G-Guava

Guava Jam: 1 guava (8oz), 1Tbsp brown sugar, 1 tsp vanilla, 1Tbsp white sugar, ¼ tsp ground cinnamon. DIRECTIONS: Cut guavas into quarters and place in a small sauce pan. Add sugars, cinnamon and vanilla. Let it cook over medium heat until it breaks down completely. Turn off stove, let cool for about 10 minutes, strain to remove seeds. Put back on stove and cook until desired consistency for 10-20 minutes. Remove from heat, let cool, place in small jar to reserve. Serve with crackers bread and cheese.

H-Huckleberry

Huckleberry Crisp: 1/4cup butter (or 1/8c canola and 1/4c butter), 1/2c flour, 4c huckleberries, 2c granola, 1c sugar. DIRECTIONS: Preheat oven 350 degrees. Mix berries, sugar and 1/4c flour together then pour into baking dish (sprayed with cooking spray). In 2nd bowl, mix granola, butter, 1/4c flour. Pour granola mixture over berries. Bake for 40 minutes or when it starts to bubble.

Iceberg Lettuce, Idaho Potatoes

Iceberg Wedge Salad: 1 head iceberg lettuce (cut in quarters), 4 slices bacon (crumbled), 1/4c crumbled blue cheese, plum tomatoes, 3/4c mayonnaise, 2Tbsp red wine vinegar. DIRECTIONS: Mix mayo, vinegar and whisk. Fold in cheese, tomato and bacon. Season w/ salt and pepper. Drizzle dressing over wedge. Iceberg lettuce has very little nutritional value consider adding or using mixed greens (romaine, spinach, leaf lettuce).

Idaho Potatoes: Potatoes are an excellent source of Vitamin C! Parmesan Potatoes: 1Tbsp olive oil, 2tsp dried oregano, 2Tbsp chives, ½ cup parmesan cheese, 2 garlic cloves, 4 cups of sliced or diced potatoes w/ skin (1/4" thick). DIRECTIONS: Heat oil in skillet over medium heat, add potatoes and garlic, sauté until potatoes begin to soften, sprinkle in cheese and oregano and continue to cook until potatoes begin to brown on all sides. Remove from heat, garnish with chives.

J-Jicama

Jicama Fries: 1 Jicama, 1 tsp paprika (use smoked if available), ½ tsp olive oil, ½ tsp onion powder, 1 pinch salt. DIRECTIONS: Preheat oven to 400 degrees. Slice and season Jicama with remaining ingredients, drizzle with olive oil, place in oven and bake for 25 minutes.

K-Kale

Garlic Kale AKA Sautéed Greens: 2 bunches of kale, ½ tsp each of red pepper flakes and kosher salt, 4 garlic cloves, 2Tbsp olive oil. DIRECTIONS: Heat oil in large sauté pan over medium heat, add garlic and red pepper flakes, cook until fragrant. Turn pan up to medium high and add kale, use tongs to turn and coat with oil, continue until deep green, approximately 7 minutes. Season w/ salt and serve. Modifications: add cranberries, bleu cheese crumbles, grilled chicken.

L-Leek

Baked Leek, Potato, Spinach Frittata: 2 leeks (about ½ pound, white and pale green parts only), 1c water, ½ tsp olive oil, ½ pound of Yukon gold potatoes cut in ½ inch cubes, salt and pepper to taste, 4 large eggs 1c chopped Spinach, 3Tbsp Parmesan cheese. DIRECTIONS: Preheat oven to 375 degrees. Brush a small baking dish with oil. Add water to medium pot, add salt and bring water to simmer, reduce heat to medium low add potatoes. Cover and cook 8-10 minutes-set aside to cool. In bowl, whisk eggs, spinach, sprinkle salt if desired. Fold in potatoes, then pour into baking dish, sprinkle with cheese. Bake until edges are set, about 12 minutes, reduce oven heat to 325 degrees and continue cooking for 20-25 minutes until set in middle, then cool for 10 minutes, cut and serve.

M-Mango

Creamy Spicy Mango Salsa: 1/4c red pasta sauce, ½ tsp chili powder, 2Tbsp mayonnaise, 1 red bell pepper sliced, 1 mango. DIRECTIONS: Combine ingredients, stir in mango and pepper last. Serve w/ tortilla chips.

N-Nectarine, Nuts

Grilled Nectarines: Nectarines, honey. DIRECTIONS: Preheat grill/griddle. Cut nectarines in half and remove pits. Place on grill; flip once when grill marks appear. Grill on other side and remove from heat once grill marks appear. Drizzle with honey.

Spiced Nuts: 1/2tsp cayenne pepper, 1tsp salt-free seasoning, 1Tbsp water, 4c mixed nuts, 4Tbsp unsalted butter, ½tsp each of cumin and cinnamon, 6Tbsp brown sugar. DIRECTIONS: Mix spices and seasoning and put aside. Heat nuts in dry skillet and cook, stir frequently to begin to toast (4 minutes). Add butter, cook and stir until nuts are darker (1 minute). Add spice mix, sugar, water, stir and cook until sauce thickens and nuts are glazed (5 minutes). Remove from heat, transfer to baking sheet lined w/ foil, separate w/ fork. Let nuts cool while sugar is hardening. Store in airtight container.

O-Okra and Onions

Okra Rice: 1 onion, 3c frozen sliced okra, 1 -1/2c water, 1lb bacon (try turkey bacon or smoked turkey sausage), 1 can of chicken broth, 1c uncooked rice. DIRECTIONS: Cook meat over medium high heat until evenly brown, drain grease and set aside. Crumble bacon (or dice sausage), sauté onion in same pan add grease back in, cook 3 minutes. Add bacon, okra, chicken broth. Reduce heat, simmer until okra is tender (15 minutes). Stir in rice and water, cover and simmer for 20 minutes.

Onions' medicinal uses include treating asthma, bronchitis, upset stomach, fever, colds, cough, wounds, loss of appetite, and hardening of arteries.

P-Parsnip, Paprika, Parsley

Simple Roasted Parsnip: Chopped parsley (for garnish), 1tsp kosher salt, 1 tsp paprika, 1-1/2tsp of garden herbs or Italian seasoning, 2lbs parsnips, 1Tbsp olive oil. DIRECTIONS: Preheat oven to 400 degrees. Peel parsnips, cut into 1 inch chunks. In mixing bowl, add oil, herbs, paprika, salt, then parsnips. Toss until coated. Pour on baking sheet in single layer, place in oven and roast until tender

in center (25 minutes). Transfer to serving dish and garnish with parsley.

Q-Quinoa, Quince

Quince Jam: 4c sugar, 1Tbsp lemon zest, 1/4c lemon juice, 6c quince (rinse, grate w/ peel on, discard cores), 4-1/2c water; DIRECTIONS: Grate quince with a cheese grater. Boil water in a large saucepan, add quince, lemon juice and zest. Reduce heat. Simmer until quince is soft, 10 minutes. Add sugar, bring back to boil, stir until sugar dissolves. Lower heat to medium high, cook uncovered, stirring occasionally until jam turns pink and thickens (30-50 minutes) to desired consistency. Ladle into sterilized canning jars. Quick canning tip: place jars in oven and heat to sterilize. Sterilize lids by boiling in hot water, pull out with tongs. Let dry.

Quinoa: 1tsp extra virgin olive oil, 1-1/2c water, 1c quinoa, 1 garlic clove, ½ tsp sea salt; DIRECTIONS: Commercial Quinoa is prewashed. If you use fresh quinoa, you must wash it: Place quinoa in fine sieve and rinse in cold water, rubbing seeds between fingers, strain, discard water, repeat 2 more times. If water is clear, it is ready. Boil water in pot, add quinoa, oil, garlic and salt. Reduce heat to medium low, cover and slow simmer 15 min until tender and water is absorbed. Turn off heat, remove garlic, and discard. Stir; let stand for 15 min.; transfer to bowl and serve.

R-Radicchio

Roasted Balsamic Radicchio: 3T olive oil, 2 heads of Radicchio, 1T chopped thyme, Balsamic Vinegar, salt and pepper to taste (optional); DIRECTIONS: Preheat oven to 450 degrees. Cut Radicchio in halves, then cut halves into wedges. Rinse Radicchio wedges in cold water, shake off excess water, no need to dry. Place in large bowl, drizzle with oil, sprinkle with thyme, salt and pepper. Toss to coat. Arrange wedges on bake sheet with cut side up. Toast until wilted (12 minutes), turn over and roast until tender (8 minutes). Place on serving dish and drizzle with balsamic vinegar.

S-Stuffed....

Stuffed Tomatoes: 2T extra virgin olive oil, 1/4c bread crumbs (try panko), 4 tomatoes, 2 garlic cloves, 1T fresh

oregano, 2T capers or green onions or both, kosher salt to taste, 3T flat leaf parsley leaves, 2T balsamic vinegar, 4oz feta cheese. DIRECTIONS: Preheat oven to 500 degrees. Cut off top of tomato, remove seeds, pour vinegar (can use sherry or vermouth) in baking dish, place tomatoes on top with open side facing up; season tomato w/ salt. Combine remaining ingredients in bowl and place evenly in tomatoes; drizzle oil over mixture; bake until soft, and filling is golden brown (10-15 minutes); can be served hot or at room temperature.

T-Turnips

Glazed Turnips: 1T light brown sugar, 1-1/2c water, 1/2T chopped sage, 2T butter (cut into pieces), 2 turnips (large ~1.5lbs). DIRECTIONS: Peel turnip and dice into 1" chunks. Arrange in single layer in nonstick pan or cast iron and place over medium heat. Add water. Scatter butter, sugar over top of turnips. Cover and cook for 10 minutes stir occasionally. Remove cover, continue to cook until liquid has evaporated. Continue to stir to keep from sticking. Salt to taste and place on serving dish. Sprinkle sage over top.

U-Udon

Sesame Ginger Udon Noodles: 1T each of soy sauce, honey, rice vinegar, ½ inch ginger (grated) or use ginger powder, 1 green onion, 1 package Udon noodles; DIRECTIONS: Cook noodles according to package. Slice green onion. Mix other ingredients in bowl. Drain noodles and combine all ingredients.

V-Vinegar (Balsamic Substitute)

Don't have balsamic for a recipe? For every tablespoon of apple cider vinegar or red wine vinegar you need 1/2T of brown sugar or honey; mix the ingredients; there are 16T in a cup therefore 8T in 1/2c and 4T in 1/4c; if you need a 1/4c mix 4T of vinegar w/ 2T of brown sugar or honey.

W-Wheat

Wheat Thins: 1/4tsp paprika, 1-1/4c whole wheat flour, 4Tbsp butter (use light version), 1/4tsp vanilla, 1/4c water, 1/2tsp salt, 1-1/2T sugar, salt for topping (optional). DIRECTIONS: Preheat oven 400 degrees. Dough: combine flour, sugar, salt and paprika in bowl, cut butter into small

pieces and mix in thoroughly using a blender, mixer or food processor. In other bowl combine water and vanilla, mix, then add to flour mix. Mix until smooth. Lightly grease baking sheets. Divide dough into 4 pieces, only work with 1 piece at a time, keep other dough covered. Lightly flour your workspace and rolling pin. Roll dough into a rectangle (about 12 inch square), very thin, about 1/16th, cut off excess. Use pizza cutter or sharp knife to cut into small squares; transfer to prepared baking dish. Repeat 3 more times. It's okay to overcrowd dish, but you will need more than 1 dish. Lightly salt top if desired. Save scraps to roll out at end and make more squares. Bake one sheet at a time 5-7 minutes. Remove and let cool. Store in airtight container.

X-Xigua (pronounced she-gwah aka Watermelon)

Watermelon Sorbet: Raw honey to taste, 1/4c warm water, 2tsp lime juice, 3-1/2c seedless watermelon (about half of medium size watermelon, cut in chunks). DIRECTIONS: Freeze watermelon overnight. Remove from freezer and place in blender/processor, add lime juice and honey, allow to sit 5 minutes for thawing to start. Blend until smooth, add warm water to help process along. Eat immediately. If you prefer softer texture, freeze for 3-4 hours.

Y-Yams

Yams and sweet potatoes are used interchangeably but are very different vegetables — 95% of yam crops are found in Africa. They are starchier and drier. Skin colors range from white, red, purple or brown and the flesh is white, yellow, orange-red, or orange. In the US, sweet potatoes are mistaken for yams. Grocers are not allowed to label sweet potatoes as yams. Needless to say, we can stuff yams, cut them into fries or even make chips out of them (see Zucchini). **Roasted Sweet Potato Soup:** 1 pound garnet sweet potatoes, peeled, cut into 1 1/2-inch cubes, 2 large shallots, peeled and cut in half lengthwise, 2 Tbsp olive oil, 1/2 teaspoon kosher salt, 1 teaspoon ground thyme, 1/4 teaspoon of cumin seeds (or ground cumin), 3 cups chicken stock, 1/8 teaspoon black pepper, 2 Tbsp sour cream or plain yogurt (Greek or regular, omit for



paleo version); DIRECTIONS: Preheat oven to 450°F. Place sweet potato cubes and shallots in a large bowl. Drizzle with oil. Sprinkle with salt, thyme, and cumin. Toss so all pieces are well coated with olive oil and seasonings. Spread the sweet potatoes and shallots out on a foil or silicone lined baking sheet. Roast for 25 minutes or until cooked through and nicely caramelized and browned around the edges. Remove from oven. While the sweet potatoes are roasting, heat chicken stock in a saucepan on the stovetop until steamy; Place the cooked sweet potatoes and shallots in a blender and add the hot chicken stock. Purée until smooth.

NOTE, when blending hot liquids, fill the blender bowl no more than a third full, and start with short pulses. Depending on the size of your blender, you may need to work in batches. Taste for seasoning, add more salt and pepper to taste. Serve in bowls with a dollop of sour cream (if using).

Z-Zucchini

Zucchini Chips: 2tsp smoked paprika, ¼ tsp salt, 1Tbsp olive oil; 1 zucchini; DIRECTIONS: Slice zucchini thinly (use a mandolin if possible). Preheat oven 450 degrees. Mix paprika, oil and salt in bowl. Place zucchini in bowl and coat. Place on cookie sheet and bake until crisp about 45 minutes. Or, cut your time in half and use an air fryer. Another idea: Dice zucchini, sauté in oil w/ your favorite Italian seasoning as a salad topper.

Vegetables, Fruits and Fiber

Fresh fruits and vegetables are a great source of fiber. Typically, women need about 25 grams of fiber a day, men 30. Other good sources of fiber include whole grains, legumes, nuts, and seeds.

	Serving Size	Total Fiber (g)
FRUITS		
Raspberries	1c	8
Pear, with skin	1 medium	5.5
Apple, with skin	1 medium	4.4
Banana	1 medium	3.1
Orange	1 medium	3.1
Strawberries (halves)	1c	3
GRAINS, CEREALS, PASTA		
Whole Wheat Pasta	1c	6.3
Cooked Barley	1c	6
Bran Flakes, Kashi cereals	3/4c	6
Oat bran muffin	1 medium	5.2
Oatmeal, instant	1c	4
Popcorn	3c	3.6
Brown Rice	1c	3.5
Whole Grain Bread (100%)	1 slice	3
LEGUMES, NUTS, SEEDS		
Split Peas	1c	16.3
Lentils	1c	15.6
Black Beans	1c	15
Lima Beans	1c	13.2
Baked Beans	1c	10.4
Almonds	1oz (23 nuts)	3.5
Pistachios	1oz (49 nuts)	2.9
VEGETABLES		
Artichoke	1 medium	10.3
Green Peas	1c	8.8
Broccoli	1c	5.1
Turnip Greens (most greens)	1c	5
Brussel Sprouts	1c	4.1
Sweet Corn, boiled	1c	3.6
Potato w/ skin	1 small	2.9



Food Justice & Brain Equity

When considering intellect, intelligence, IQ or mental health, we seldom make a connection with food. However, a very distinct and strong connection exists – from the womb to the meals we prepare for our elders. Because people of color are more likely to lack access to the foods that build healthy brains and maintain well-functioning psyches, intelligence levels and mental health are another facet of food justice. OKT calls this lack of access “food apartheid.” Since environmental toxins play a part in diminishing intellect and mental health, these are facets of the larger environmental justice conversation.

In the Womb

Studies have shown that pregnant moms need to eat 80 to 100 grams of protein as part of a well-balanced diet to ensure healthy infant outcomes. That well-balanced diet includes foods rich in calcium, healthy fats, fresh fruits and vegetables and 100% whole grains. The Standard American Diet will not satisfy this requirement. The junk food, fast foods and convenience foods prevalent in most income-challenged neighborhoods are even worse. Healthy brain growth especially depends on protein.

Infant mortality rates are double for black infants, compared to white/Hispanic infants. Native Americans have a higher rate than Whites/Hispanics, as well. While the stress of racism plays a huge part in these numbers, under-nutrition during



pregnancy is a factor, especially when babies born at term are underweight.

At the Breast ... or Bottle

Breastfeeding is the very best food for infants. Among its many benefits, breast milk boosts baby’s intelligence. When the CDC investigated why fewer black women breastfed than white and Hispanic women, they found that the hospitals serving black women during childbirth were less likely to encourage and support breastfeeding. In addition, women in poverty, working one or more low-wage jobs, may not be able to pump milk when they are away from their babies.

Because breastfeeding moms need to continue the same healthy diet they ate during pregnancy, lack of access to healthy foods continues to be a barrier to infants reaching their full intelligence potential after birth.

The human brain grows the most during pregnancy and the first three years of life. Diets high in fat, sugar, and processed foods during the first three years of life permanently lower children’s IQ. Wilder Research reports, “... nutrition affects students’ thinking skills, behavior, and health, all factors that impact academic performance. Research suggests that diets high in trans and saturated fats can negatively impact learning and memory, nutritional deficiencies

early in life can affect the cognitive development of school-aged children, and access to nutrition improves students' cognition, concentration, and energy levels."

Babies can thrive exclusively on breastmilk for the first year of life. Introducing solid foods earlier than six months of age can lead to obesity, allergies, asthma and digestive difficulties. Breastfeeding until age three or longer is common in many cultures and can help support healthy brain growth. Whatever age babies wean from the breast, it's important that parents introduce a healthy, whole foods diet. The commercial-baby-food diet (we are brainwashed to believe in) does not meet these needs. Mothers who choose to formula-feed should compare labels among formulas to ensure the healthiest choice—not simply choose a brand based on cost or advertising hype.

For School-aged Children

Research has also established a link between nutrition and behavior. "Access to nutrition, particularly breakfast, can enhance a student's psychosocial well-being, reduce aggression and school suspensions, and decrease discipline problems "

Harvard studies agree. "Diets high in refined sugars ... are harmful to the brain. In addition to worsening your body's regulation of insulin, they also promote inflammation and oxidative stress. Multiple studies have found a correlation between a diet high in refined sugars and impaired brain function — and even a worsening of symptoms of mood disorders, such as depression."

As an Adult

"Food is like a pharmaceutical compound that affects the brain," says UCLA food-brain expert, Fernando Gómez-Pinilla. He reports that junk food and fast food negatively affect the brain's synapses. This can result in loss of cognitive function (memory loss, brain fog, dementia) and mental illness (depression, schizophrenia, ADD and bi-polar) Gomez-Pinilla goes as far to say, "Evidence indicates that what you eat can affect your grandchildren's brain molecules and synapses."

In other words, when an unjust food system prevents a generation from having access to healthy, whole foods, its children and grandchildren have increased risks for lowered cognitive function and mental illness.

Our Elders, Forgetting and Forgotten

Food apartheid inexcusably impacts our elders. When it's too difficult to prepare meals, junk and convenience foods are too easy an answer. Fixed incomes can result in choosing the least nutritious options available. The food charity that elders access mostly consists of highly processed foods and white grain products. Some are making strides in offering elders healthier meals, for example Meals on Wheels, but what is needed is a food system that makes whole foods accessible to everyone, no matter their income, age or neighborhood.

Only Food Justice can ensure brain equity. When all people have access to healthy whole foods, from cradle to grave, only then can they reach their potentials for intellect and mental health.

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Kale Chips

A great alternative to chips or junk food snacks!

Ingredients

- Fresh kale or collard greens, from your garden, farmers' market or grocery store produce section.

Instructions

1. Harvest or purchase as much kale or collard greens as you feel you need to feed everyone you are intending to serve.
2. Wash the greens well and place aside to dry. Cut it into chip size pieces.
3. When thoroughly dry, spread a thin layer of greens on a cookie sheet. A thick layer may not get crisp enough.
4. Spray or toss the kale with olive oil. Sprinkle with salt, pepper or herbal seasoning blend, if desired.
5. Bake at 375° until crisp, about 10 to 15 minutes. Serve and enjoy!

Read the Label First!

When we buy food, we don't often take time to read the small print ingredient list. The words are so small, so technical and sometimes, there are so many! However, this part of the label provides the most important information of all.

On food products, the list of ingredients lists things in order of how much of them is in the item. The first two or three ingredients are the ones that matter most. Ingredients at the bottom of the list may appear in only very tiny amounts. However, if they are harmful preservatives or colors, even tiny amounts can cause problems. While the first ingredient should be the main ingredient, read on.

Hidden sugar. To hide the amount of sugar, producers will use different types of sugar so they can list them separately as "lesser" ingredients. Look for the last three letters o-s-e. Ingredients ending with these letters are usually sugar (lactose, fructose, glucose etc.) These sweeten the taste and boost your blood sugar — and your waistline. Look for foods with less than 30g Carbohydrates. If sugar makes up the majority of those carbs, it's not a healthy product. Food producers can hide other ingredients this way, too.

Labels can legally deceive you. For example, "white" bread and "wheat" bread. Most wheat bread is white bread with coloring added. Only 100% whole wheat bread is truly "wheat bread." A lot of people are spending extra money for fake wheat bread.



Ingredients: Corn, Vegetable Oil (Sunflower, Corn, and/or Canola Oil), Maltodextrin (Made From Corn), Salt, Whey, Monosodium Glutamate, Buttermilk, Romano Cheese (Cow's Milk, Cheese Cultures, Salt, Enzymes), Cheddar Cheese (Milk, Cheese Cultures, Salt, Enzymes), Corn Starch, Onion Powder, Garlic Powder, Dextrose, Natural and Artificial Flavor, Spices, Lactose, Sodium Caseinate, Artificial Color (Including Yellow 6 Lake, Red 40 Lake, Yellow 6, Red 40, Yellow 5, Blue 1), Citric Acid, Sugar, Lactic Acid, Skim Milk, Disodium Inosinate, and Disodium Guanylate.
CONTAINS MILK INGREDIENTS.

Whole Grains. If you are looking for fiber, natural nutrients and protein, look for whole grains — 100% whole grains. If the big label raves about "whole grains," doublecheck to make sure they are listed first. True whole grain foods will give you 3g fiber or more per serving. As a carbohydrate component, the higher the amount of fiber, the less negative impact on blood sugar. Whole grains also have more protein and vitamins.

Artificial sweeteners
Fake sweeteners like aspartame, sucralose (Splenda) and saccharin cause a host of health problems, everything from brain fog and bladder issues to diabetes and cancer. Also, they stimulate the appetite so you may end up eating more instead of less. Sucralose, Saccharin, Aspartame, Acesulfame are dangerous, especially in large quantities. One study after another have found its harmful no matter the amount ingested.

MSG: Monosodium Glutamate, neurotoxin and flavor enhancer, has been considered a health risk and also contributes to salt intake. The Mayo Clinic reports anecdotal evidence linking MSG to a syndrome that includes headache, flushing, sweating, numbness, tingling or burning in the face, neck and other areas, heart palpitations, chest pain, nausea and weakness.

Artificial colorings. Many cereals, candies and snack foods have artificial colorings like yellow 6, red 40, etc. These can be harmful, especially to children.

Sodium Nitrite and Nitrate. These preservatives, typically found in meats and wine, are linked to cancer and contribute to salt intake. Look for nitrite/nitrate-free products.

"No trans-fat claims. If the front label says "no trans fats" while the ingredient label lists hydrogenated oil, the food does have trans-fats! A little here and a little there adds up!

Preservatives. Mold, air, bacteria, fungi and yeast can cause products to spoil. Preservatives maintaining food quality and extend shelf life—but they are not necessarily good for preserving your

health. Check cheeses for natamycin, a mold inhibitor, and cellulose (saw dust).

The big words. You may see gases for aerosol sprays; fat replacers that reduce fat calories; emulsifiers that add smoothness and hold products together; stabilizers, thickeners, binders, and texturizers for texture. PH Control Agents and acidulants prevent spoilage; leavening agents help bread rise; anti-caking agents prevent moisture absorption and humectants-retain moisture. Yeast nutrients promote yeast growth; dough strengtheners and conditioners produce more stable dough. Firming agents maintain crispness and firmness. Enzyme preparation modify protein and fats. **In most cases, the list with the fewest ingredients is the healthiest food!**

By the way, these phrases on labels mean absolutely *nothing*:

- "All natural ingredients" or "100 percent natural"
- "No artificial preservatives" (are there *real* preservatives?)
- "Real fruit." If a package shows a picture of something, it doesn't mean it has it in it.

The best advice is to not eat any processed foods. But if you must, a short list of potentially harmful ingredients and phrases to avoid includes:

- Artificial colors
- Artificial flavorings
- Artificial sweeteners
- High fructose corn syrup
- Sodium nitrates or nitrites
- Monosodium glutamate (MSG)

A general rule of thumb: **Choose the product with the shortest list of ingredients!**

What to eat?

Fruits, vegetables, whole grains!
Lean meats, eggs, nuts and seeds,
legumes (beans and peas)!
Real cheese, unsweetened
dairy products
(milk and yogurt)!

Shop the Terms

- FAT AND/OR OIL INGREDIENTS:** These ingredients are usually listed by their specific common or usual name (e.g., beef fat, cottonseed oil) in descending order by weight. An FDA regulation states that fat and/or oil ingredients must be listed if the fat sometimes contains one or more of the following: soybean oil, sesame oil, cottonseed oil and/ or palm oil.
- FAT-FREE:** Less than 0.5 grams of fat per serving, with no added fat or oil.
- LOW FAT:** 3 grams or less of fat per serving.
- LESS FAT:** 25% or less fat than the comparison food.
- SATURATED FAT FREE:** Less than 0.5 grams of saturated fat and 0.5 grams of trans-fatty acids per serving.
- CHOLESTEROL-FREE:** Less than 2mg cholesterol per serving, and 2 grams or less saturated fat per serving.
- LOW CHOLESTEROL:** 20mg or less cholesterol per serving and 2 grams or less saturated fat per serving.
- REDUCED CALORIE:** At least 25% fewer calories per serving than the comparison food.
- LOW CALORIE:** 40 calories or less per serving.
- EXTRA LEAN:** Less than 5 grams or fat, 2 grams of saturated fat, and 95mg of cholesterol per (100 gr) serving of meat, poultry or seafood.
- LEAN:** Less than 10 grams or fat, 4.5 grams of saturated fat, and 95mg of cholesterol per (100 gr) serving of meat, poultry or seafood.
- LIGHT/LITE/LIGHTLY:** Used when there is 1/3 fewer calories from the comparison food; 50 percent less fat per serving than comparison food; if calories or fat are reduced but still more than 50% of calories are from fat OR 50% or more of fat is still present.
- HIGH FIBER:** 5 grams or more fiber per serving.
- SUGAR-FREE:** Less than 0.5gr of sugar per serving.
- SODIUM/SALT-FREE:** Less than 5mg of sodium per serving.
- LOW SODIUM:** 140mg or less per serving.
- VERY LOW SODIUM:** 35mg or less per serving.
- HEALTHY:** A food low in fat, saturated fat, cholesterol and sodium, and contains at least 10% of the daily values for Vitamin A/C Iron, Calcium, protein, fiber.
- HIGH, RICH IN OR EXCELLENT SOURCE:** 20% or more of the daily value for a given nutrient per serving.
- "LESS, FEWER, OR REDUCED:** At least 25% less or a given nutrient or calories than the comparison food.
- LOW, LITTLE, FEW, LOW SOURCE OF:** An amount that would allow frequent consumption of the food without exceeding the daily value of the nutrient but can only make the claim as it applies to all similar foods.
- "GOOD SOURCE OF, MORE, ADDED:** The food provides 10% more of the daily values for a given nutrient than the comparison food.

Nutrition Facts			
Serving Size 2/3 cup (55g)			
Servings Per Container About 8			
Amount Per Serving			
Calories 230		Calories from Fat 72	
		% Daily Value*	
Total Fat 8g			12%
Saturated Fat 1g			5%
Trans Fat 0g			
Cholesterol 0mg			0%
Sodium 160mg			7%
Total Carbohydrate 37g			12%
Dietary Fiber 4g			16%
Sugars 1g			
Protein 3g			
Vitamin A			10%
Vitamin C			8%
Calcium			20%
Iron			45%
* Percent Daily Values are based on a diet of other people's secrets.			
Your daily value may be higher or lower depending on your calorie needs.			
	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Recommendations

- Carbohydrates: Less than 30g if diabetic.
 - Fiber: 5g or more.
 - Saturated fat: Less than 1/2 of total fat.
 - Saturated fat: Less than 1/3*.
 - Sodium: Less than 500mg .
 - Sodium: Less than 300 mg* .
 - Sugar: Avoid added sugars.
 - Trans fat: Avoid, just as bad as saturated.
 - Other: Check to see if servings are ideally what you would eat.
 - Calories from fat is going away! Every gram of fat is 9 calories.
- *Strive for this if diagnosed w/ medical concerns.



Nutrition Facts on labels give you good information, but don't stop there. Read the ingredients list, too.

For example, real whole-grain wheat bread lists **Whole Wheat Flour** as the first and only wheat ingredient.

What Words on Labels Really Mean

Natural	(FDA), responsible for regulating and supervising food production, does not define or regulate use of the label “natural” on food products; the agency has not objected to the use of the term if the food does not contain added color, artificial flavors, or
Cage free	The unhappy animals aren't in cages but are probably packed painfully and tightly
Free range	The happy animals run around the farm, enjoying life and they are healthier.
Grass-fed	When cows eat grass, their meat is healthier for us.
Fairtrade Certified	The workers who grew and processed the foods have been treated humanely.
NonGMO	The ingredients not genetically modified but are from nature's plants and animals that scientists haven't done weird things to. GMO foods have been linked to food, disease, cancer and cause environmental damage.
No antibiotics or raised without antibiotics	The animals were raised without the use of antibiotics so you won't be ingesting a
Humane Certified	The animals have lived happy lives before becoming/producing your food.
Made with Organic	At least 70% of the food has organic ingredients.
100% Organic	Ingredients are grown without chemicals that can harm you or the workers grow-
Organic	At least 95% of the food has organic ingredients.
Low/Less/Reduced*	In comparison to original product, it has less of what is considered the offending ingredient. Each terminology has varying definition as one may be more restrictive than the other.
Lite/Light/Lightly	In comparison to original product, it has less of what is considered the offending ingredient. Each terminology has varying definition as one may be more restrictive than the other.
Free	Does not mean zero. Typically a trace amount is present.
Healthy	A food low in fat, saturated fat, cholesterol and sodium that contains at least 10%
Low Source of Vs. More Source of *	Refers to RDA
**More detailed educational tool is available	

Servings: larger, bolder type

Nutrition Facts
8 servings per container
Serving size 2/3 cup (55g)

Amount per serving
Calories 230

% Daily Value*

Total Fat	1g	10%
Saturated Fat	1g	5%
Trans Fat	0g	
Cholesterol	0mg	0%
Sodium	160mg	7%
Total Carbohydrate	37g	13%
Dietary Fiber	4g	14%
Total Sugars	12g	
Includes 10g Added Sugars		20%
Protein	3g	
Vitamin D	2mcg	10%
Calcium	260mg	20%
Iron	6mg	45%
Potassium	235mg	6%

*** The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.**

Serving sizes updated

Calories: larger type

Updated daily values

Actual amounts declared

New footnote

New: added sugars

Change in nutrients required

Did You Know?

- Americans get about 13 percent of their total calories from added sugars, with the major sources being sugar-sweetened beverages (including soft drinks, fruit drinks, coffee and tea, sport and energy drinks, and alcoholic beverages) and snacks and sweets (including grain-based desserts, dairy desserts, candies, sugars, jams, syrups, and sweet toppings).
- Trans fat is present naturally in food from some animals, mainly ruminants such as cows and goats. Also, industry can currently use some oils that are approved as food additives and can still petition FDA for certain uses.
- Serving sizes must be based on the amounts of food and drink that people typically consume, not on how much they should consume.



Natural vs. Organic

Natural: According to the USDA's definition, does not contain artificial ingredients or preservatives and the ingredients are minimally processed. However, they may contain antibiotics, growth hormones, and other similar chemicals. Regulations are fairly lenient for foods labeled "natural."

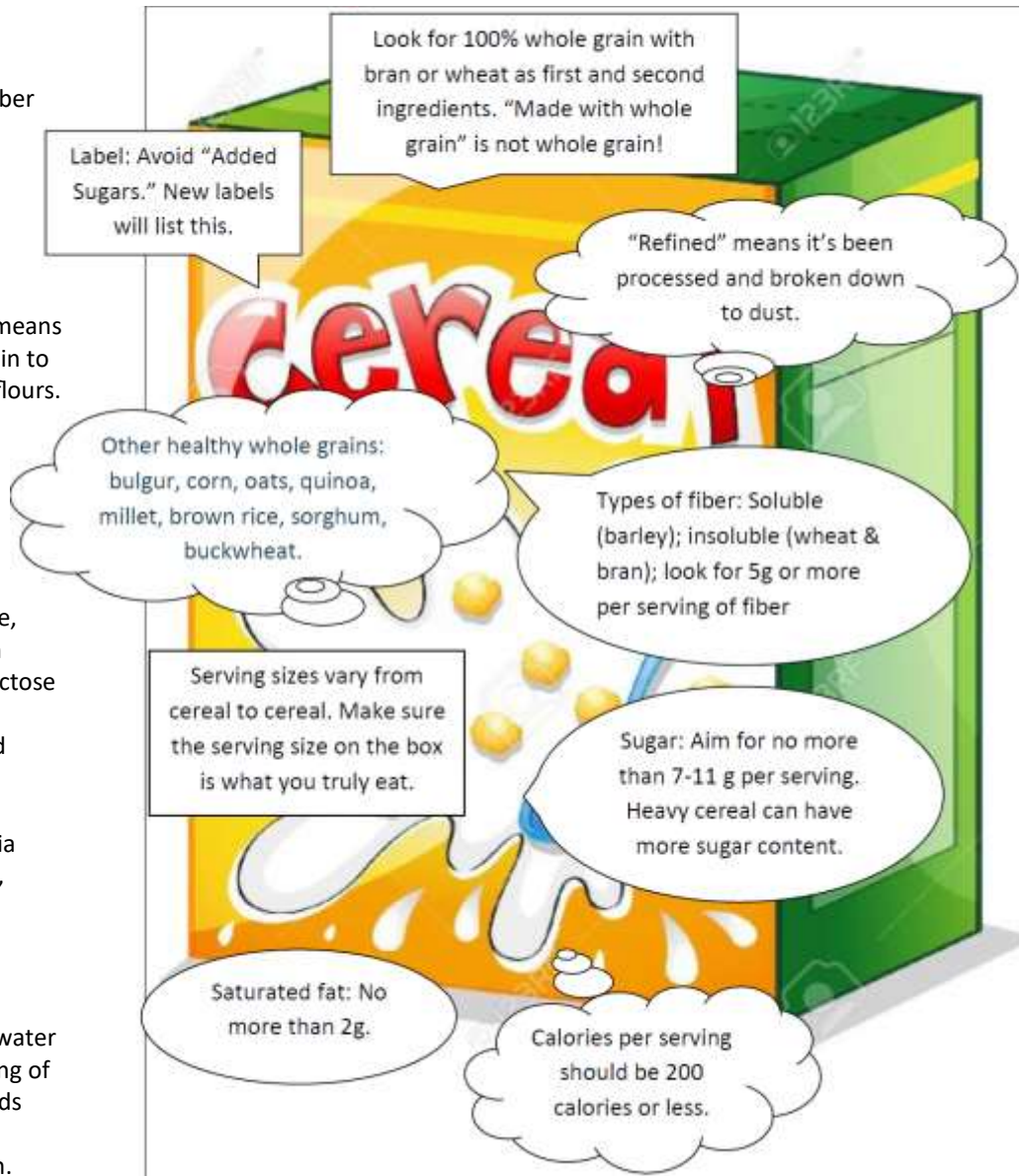
Four categories of certified organic food products:

- 1) 100% Organic, 2) Organic, 3) Made with organic, and 4) specific organic ingredients.

Organic	100% Organic	Made with Organic
95% has been certified by United States Dept Agriculture (USDA).	ALL ingredients must be certified.	70% has been certified by United States Dept Agriculture (USDA).
All agricultural ingredients must be certified organic, except where specified on National List.	ANY processing aids must be organic.	Information Panel must identify organic ingredients or via asterisk or other mark.
Non-organic ingredients allowed per National List may be used, up to a combined total of five percent of non-organic content (excluding salt and water).		
COMMONALITIES		
Produced without excluded methods, e.g., genetic engineering), ionizing radiation, or sewage sludge.		
Produced per the National List of Allowed and Prohibited Substances (National List)- SEE USDA SITE.		
Soil quality, animal raising practices, pest and weed control, and use of additives MUST meet USDA guidelines.		
Organic producers rely on natural substances and physical, mechanical, or biologically based farming methods to the fullest extent possible		
Produce must have grown on soil that had no prohibited substances applied for three years prior to harvest.		
Prohibited substances: most synthetic fertilizers and pesticides (may be exceptions in instances when a grower must use a synthetic substance to achieve a specific purpose).		
Meat animals are raised in living conditions accommodating their natural behaviors (like the ability to graze on pasture); fed 100% organic feed and forage; and not administered antibiotics or hormones.		
USDA National Organic Program's authorized certifying agent oversees USDA organic regulations.		

Choosing Cereal

- Refined grains are not a good fiber source. White rice is a refined grain found in many cereals.
- Bran is not a whole grain but its outer layer is fiber-rich.
- “Made with whole grain” only means they’ve added a little whole grain to a lot of white flour or refined flours.
- Sources of saturated fat: Coconut or chocolate from granola.
- Avoid added sugars: dried cane syrup, organic cane sugar, agave, honey, molasses, fructose, corn sweetener, corn syrup, high fructose corn syrup, and fruit juice concentrate, as well as plain old sucrose or sugar.
- Soluble: It is digested by bacteria and helps gut health, blocks fat, lowers cholesterol, slows down carbohydrate absorption, helps you feel full.
- Insoluble: Does not dissolve in water in your gut. Speeds up processing of waste and doesn’t give bad foods time to turn into fat and hang around. Helps with constipation.



Oatmeal is an easy, nutritious, whole-grain way to start the day. It helps your heart, keeps you regular, and provides protein. You can cook quick-oats on the stove, like your Granny did, in about 5 minutes. You can microwave them, too—no need to buy the more expensive “instant” brands. In fact, it’s better not to eat those—most are packed with sugar or artificial flavors and sweeteners. You can even cook oatmeal overnight in your crockpot. Instead of adding sugar or brown sugar, opt for raisins, dried or fresh berries, nuts, and seeds as toppings. If you have to sweeten, use a wee bit of stevia, honey or real maple syrup.

Baked Oatmeal from DBC, Natural Holistic Health Center

Ingredients:

- 2 cups rolled oats
- 1-2 Tbs brown sugar
- 1 tsp baking powder
- 3 TBS roasted sunflower seeds
- 3 TBS crushed walnuts
- 3 TBS unsweetened, shredded coconut
- ½ tsp cinnamon
- ¼ tsp nutmeg
- 1 cup milk or milk substitute
- ½ cup unsweetened applesauce
- 2 TBS neutral oil
- 1 tsp vanilla extract
- 1 egg, beaten

Instructions:

- 1) Preheat oven to 375 degrees F. In a large bowl, combine all the dry ingredients and mix well.
- 2) In separate, smaller bowl, combine wet ingredients. Pour wet ingredients in with dry ones. Mix well.
- 3) Pour into an oiled 9-inch pie pan. Bake 30 minutes until bottom begins to brown and top looks lightly crispy. Let cool. Serve with milk and fresh fruit or applesauce.

Food Safety Tips

Cooking temperatures, refrigerator shelf life and freezing suggestions

FOOD	TEMP	MINIMAL TIME
READY TO EAT (RTE)	NA	NA
FRUITS, VEGGIES, GRAINS & BEANS	135°	NA
SEAFOOD	145°	15 seconds
WHOLE MUSCLE	145°	4 minutes
GROUND MEAT/FISH	155°	15 seconds
POULTRY	165°	15 seconds
STORAGE RULES: BASED ON REFRIGERATOR BEING 40° OR LESS		
FOOD	TIME	NOTES
Raw Meats, Poultry & Fish	3-5 days	Store on bottom shelf then discard, cook or freeze.
Ground raw meats	1-2 days	Store on bottom shelf then discard, cook or freeze.
Deli Meats (sliced)	3-5 days	Unopened/unsliced 2 weeks.
Bacon, Sausage	7 days	Use or freeze.
Hot Dogs, after opening	Consume in 7-10 days	Discard or freeze before use-by date.
Eggs in shell	3-5 weeks	Discard.
Egg whites or substitutes after opening	10 days	Freeze.
Salads made w/ protein	3-5 days	Do not freeze well.
Cheese (opened)	2-6 weeks	This varies w/ hardness and if it's been sliced.
Leftovers	3-4 days	Discard or freeze.

The Government's Role in Food Oversight

Food and Drug Administration (FDA)

- Inspects all food except meat, poultry, and eggs.
- Regulates food transported across state lines.
- Provides technical support and training.
- Issues the Food Code.

The FDA Food Code:

- Provides recommendations for food safety regulations.
 - Created for city, county, state, and tribal agencies.
- Provides recommendations not law.



U.S. Department of Agriculture (USDA)

- Regulates and inspects meat, poultry, and eggs.
- Regulates food involving more than one state.

The Centers for Disease Control and Prevention (CDC)

The Public Health Service (PHS):

- Assists the FDA, USDA, and state and local health departments.
- Conducts research into causes of foodborne-illness outbreaks.
- Assists in investigating outbreaks.

When a foodborne illness is considered an outbreak? When two or more people have the same symptoms after eating the same food and/or involves food transported across state lines.

Natural Oral Care: Supports for Consideration

Is oral health a food justice issue? OKT says yes. People without access to nutritious food experience more oral health problems. As these people usually also have income challenges, if they can access oral health care, extractions are the norm. As a result, they suffer unease in social situations and are often unable to present themselves as candidates for better employment opportunities. The following information aims to support those without access to good oral healthcare maintain their oral health.



Drink More Water!

Nothing hydrates you as well, is cheaper, or better for your teeth.

Or, Drink Unsweetened Tea

Research suggests that polyphenols in tea may slow the growth of bacteria. They may also undermine the ability of bacteria to clump together and stick to teeth in the form of plaque

Eat Crunchy Foods

Almonds, apples, carrots, celery not only have healthy nutrients but also their calcium and vitamins help promote healthy bones and gum tissues. Also, almonds are a good source of protein without sugar.

Crunchy foods are also good snacks because they scrape plaque away from teeth and stimulate saliva to flow. The increased flow of saliva helps flush away some plaque, neutralize acids, and turn the pH in the mouth toward a level that restores mineral into the surface of dental enamel.

Snack on Hard Cheese

It neutralizes acid, stimulates saliva, doesn't have processed sugar, and can be a very satisfying snack.

Eat More Produce

Apples, celery, carrots, cucumbers, pears, lettuce and the like clean teeth, help remove dental plaque, and clear away bacteria. Crunchy fruits and vegetables also increase the flow of saliva, massage the gums, and clean between teeth to help prevent gum disease. Greens (such as collards and kale) are high in calcium.

Get rid of sweetened beverages!

They are bad for blood sugar and especially bad for teeth! Any drinks that contain sugar "feed" the bacteria in the mouth, which produce acids that can slowly erode the surface of teeth and promote decay.

If you absolutely love a favorite sweet tea, sweetened coffee, etc., it's better to drink it quickly or with a meal than to sip over a longer period of time. The pH of the mouth to drop with every sip and

doesn't allow saliva enough opportunity to neutralize the change in pH and return to normal. Artificially sweetened beverages are often acidic, which can directly erode the mineral of enamel and promote softening of the teeth and decay.

Food and Digestion

A balanced, healthy diet is one of our main lines of defense. Fresh produce, nuts and seeds, legumes, lean meats and whole grains help the body fight against inflammation and bad bacteria. There is good bacteria in the mouth, as in the digestive system. We want the good bacteria to be on the lookout for bad bacteria so they can alert the right processes.

Breastfeeding for Oral Health

Breastfeeding helps to create a good fit between the upper and lower teeth by exercising the mouth structure, facial and oral muscles. It promotes healthy palate formation, helps position the tongue properly and increases the flow of saliva.

Homemade Toothpaste

A simple and effective tooth cleaning paste can be made from coconut oil, a little baking soda, and a drop or two of peppermint, lemon, or other favorite essential oil. Baking soda by itself is good, but watch for sensitivity.

Don't brush too hard or use for everyday cleaning.

Natural Supports

Oil Pulling or Swishing

Oil pulling originated some 3,000 to 5,000 years ago in India as part of natural healing practices. It is believed to strengthen gums, whiten teeth, reduce plaque, and remove toxins from the mouth. It also helps with saliva production and is good exercise for the mouth muscles. Popular oils used for this practice are coconut, sunflower, and sesame.

To try this natural support, once a day take a teaspoon of oil and place it in the mouth. Swish it back and forth through the teeth for 5 minutes then spit it out. NOTE: Do not swallow oil or gargle with oil. Over the course of several weeks, work your way up to a tablespoon of oil for 15 -20 minutes. *Not a substitute for teeth brushing.*

Toothbrush Alternatives

Teeth cleaning sticks are twigs of certain trees, chewed to create a frayed end for tooth cleaning. Dating back to Babylonia in 3500 BC and Egypt in 3000 BC, they are made from sassafras, licorice, and other healthy, tasty trees and are available today at health food stores.

If you are working to avoid plastics in your life, teeth cleaning twigs may be an option!

Simple Treatment for Toothache

To get you through the night until a dentist appointment or for cutting wisdom teeth. Bite down on a clove in the painful area. Cloves are a natural anesthetic. A moistened peppermint tea bag can also help with tooth pain.

Please note: The information provided is for educational purposes and is not intended to replace professional dental care. Nor is the information to be taken as a cure or prescription for dental issues.

Herbs for Oral Health

Many herbs support oral health! Some stimulate blood flow to the gums and are anti-bacterial such as peppermint, spearmint, fennel, cinnamon, sage, and thyme. Brew these herbs like tea and use as a gargle and mouthwash. Echinacea can be used as a gargle or rinse for immune boosting and healing.

Read the label!

Soda, water, mouthwash, toothpaste, gum, snack foods, processed foods and treats can all contain ingredients that are harmful to oral health. The number one culprit is sugar. And not just white, refined sugar. Be on the lookout for all the "oses" (sucrose, fructose, high fructose corn syrup, dextrose). This includes raw sugar, agave, and honey. White flour (in starchy foods such as crackers and bread) turns into simple sugars in your mouth. Phosphoric acid and citric acid are two other tooth eroding ingredients commonly found in soda and soft drinks.

A few of the chemicals to watch for in toothpaste are triclosan, aspartame, saccharin, sorbitol, sodium lauryl sulfate, dyes, and fluoride.

Natural Oral Health Supports

Can Be Affordable!

Use food subsidies such as EBT, WIC-Project Fresh, and DUFB to increase the amount of fresh, healthy produce in your family's diet and to purchase items such as coconut oil.

Homemade Mouthwash

A simple mouthwash can be made by adding a cinnamon stick and a few cloves to a cup of boiling water. Let steep until cool. Add 5 drops of peppermint oil. Store in a glass bottle and shake well to mix before using. Plain hydrogen peroxide can be used as a mouthwash as well.

Links and resources for further reading:

- American Dental Association - Diet and Dental Health
- *What to Eat to Keep Your Teeth* - Delta Dental
- *Sugar Blues* by William Dufty
- *Dentistry For Babies*
- Center for Science in the Public Interest
- Environmental Working Group
- *The Earthwise Herbal, Vol. I and II*, by Matthew Wood, Herbalist
- *20,000 Secrets of Tea*, by Victoria Zak

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What Is Food Justice?

Food Justice is an idea, a set of principles and something we should all strive to practice. More importantly, Food Justice is a movement and, like most social justice movements, it was born out of the lived experience of people experiencing oppression. Food Justice grew out of the Environmental Justice movement, where communities of color and poor working class people began to realize that their lack of access to healthy and affordable food was not the result of their own behavior, but of a food system that was motivated by profit.

People often classify some neighborhoods as “food deserts.” What they generally mean is that residents don’t live close to a grocery store. Using the term “food desert” is problematic. A desert is a vibrant eco-system and not a barren wasteland, as is often associated with the term. And, identifying neighborhoods as food deserts ignores history and fails to acknowledge that most of these neighborhoods had small grocery stores, farmers markets, fruit and vegetable stands and lots of backyard gardens.

However, economic and political decisions driven by the current industrial food system resulted in local neighborhood food systems being abandoned and undermined, resulting in food insecurity.

It’s more accurate to say that, like the Apartheid imposed on Black South Africans, Food Apartheid is the intentional, systemic marketing and distribution of profitable, nutrient-poor, disease-causing foods to income-challenged neighborhoods, mainly, communities of color (i.e. communities receiving the most food assistance dollars).

The movement for Food Justice is changing Food Apartheid. Armed with the notion that everyone has the right to eat healthy, food justice advocates engage in locally grown food projects, sharing skills on how to grow, prepare



- L is for Liberation - A. Guerra

and preserve food, while exposing the current food system’s unjust nature.

The Food Justice Movement is an international movement that is ultimately fighting for Food Sovereignty, where everyone has say in the kind of food system(s) they want. Food Sovereignty is Food Democracy, where healthy food is a right for everyone, not just for those who can afford it.

OKT promotes and supports these Food Justice principles :

- Food Justice recognizes that the causes of food disparity are the result of multiple systems of oppression. To practice food justice we must do the work through an intersectional lens.
- Food Justice advocates must focus on working with the most marginalized and vulnerable

populations: communities of color, communities in poverty, immigrants, children, our elders, women, those with disabilities and people experiencing homelessness.

- Food Justice require us to work towards the elimination of exploitation in our food system, both exploitation of humans and animals.
- Food Justice demands that we grow food in such a way that preserves ecological biodiversity and promotes sustainability in all aspects.
- Food Justice means we provide resources and skill sharing so that people can be collectively more food self-sufficient.

Healthy Food Is Your Right!

Part Three:
Growing Sustainability
in Our Shared Urban Environment



The Air We Breathe

According to the 2018 *Neighborhood Environmental Action Report: Health, Environment and Race in Grand Rapids*, “Kent County has the highest average particulate air pollution in the state of Michigan outside of greater



Foods that Soothe Asthma

The American Lung Association states that foods you eat can affect how well you breathe. And, foods high in Vitamins D and E can be helpful in improving breathing and reducing symptoms of asthma, allergies, and COPD.

Vitamin D boosts immune system response and helps reduce airway inflammation. Low levels of vitamin D have been linked to increased risk of asthma attacks in children and adults. Food sources of vitamin D include fortified milks, salmon, orange juice, eggs and mushrooms.

Vitamin E may help decrease coughing or



Detroit ... the disproportionate impact of poor air quality on low-income residents.” Like most US cities, the neighborhoods experiencing the most air pollution here are populated by people of color. That’s why air pollution is not just a public health concern but also an environmental justice issue.

Monitoring air quality

The Grand Rapids Air Quality (GRAQ) Initiative, a collaboration among the City of Grand Rapids, Seamless, Start Garden, and Breezometer, is seeking to collect high-resolution air quality data in Grand Rapids’ neighborhoods. Thirty wi-fi connected sensors are being located throughout the City. The Environmental Protection Agency has only one site in the City so its reports on air quality do not

provide a full picture.

The Initiative reports, “GRAQ sensors will measure four pollutants: ground level ozone (O3), airborne particulate matter (PM2.5 and smaller), nitrogen dioxide (NO2), and sulfur dioxide (SO2). These pollutants have different effects on human health and, in combination, give a useful snapshot of air pollution levels at a given time and location. Especially exciting about this system’s design is the ability to take samples every 15 minutes. The City should be able to develop a much more sophisticated understanding of air quality with this level of data .”



wheezing. Find it in collard greens, Swiss chard, mustard greens, kale, broccoli, almonds, raw seeds and hazelnuts.

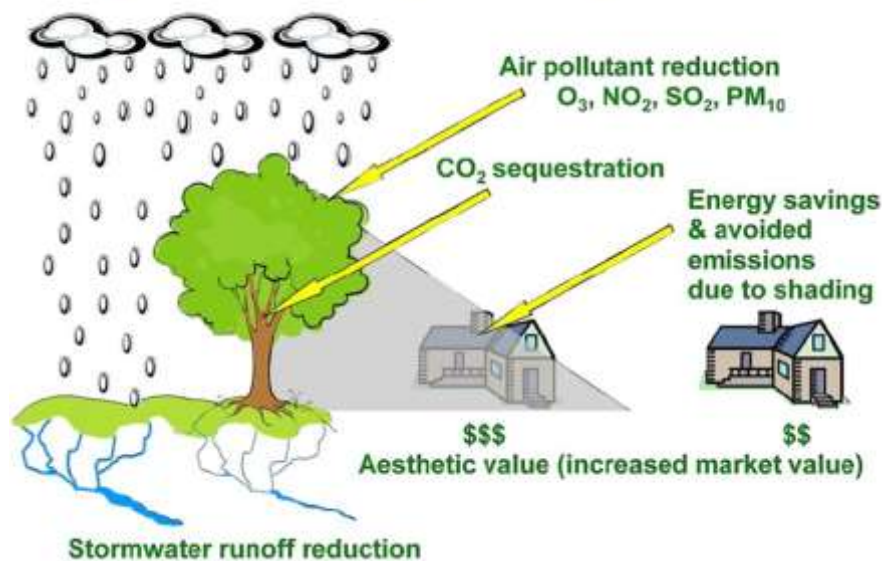
Other studies have found these foods to be helpful:

- **Beans** (legumes) like black eyed peas, pinto beans, adzuki beans, garbanzos, kidney beans etc. are prebiotics that help your gut support immune response.
- **Berries** like blueberries, cherries, strawberries, blackberries, and raspberries help fight inflammation.
- **Leafy greens** like collards, turnip greens, Swiss chard, mustard greens, kale and spinach contain folate (a B vitamin). One study found that kids who don’t get enough folate and vitamin D are about eight times more likely to have severe asthma attacks than kids who ate enough of both nutrients.
- **Tomatoes**, specifically tomato juice, might help relax airways.
- **Ginger root and turmeric** may also

help relax the airways. Add ginger to stir-fry, soup, or brew tea from grated fresh ginger, simmered for 20 minutes. This is why folks buy ginger ale when they are sick. Too bad the soft drinks at the grocery store no longer have any real ginger in them! Turmeric is a great addition when you cook rice or middle eastern dishes—or add it some warm milk or hot cocoa.

The good news is that these foods don’t cost a lot and many of them you can grow in your own garden!

Your Daily Dose of Vitamin Tree



Trees clean the air we breathe—they literally store pollution in their wood! Because they take up ozone, nitrogen oxide, and particulate matter from the atmosphere, they make the air we breathe cleaner and help reduce allergies and asthma. Do you have allergies to certain flowering tree pollens? When an area has plenty of trees—hence less carbon dioxide in the air around them—they release less pollen from their flowers.



Friends of Grand Rapids Parks takes improved air quality into account as a benefit for increasing the number of trees planted in any given area. Trees provide a host of environmental, social, and economic benefits in urban areas. Science has proven that trees reduce pollution, improve mental health, and lower energy costs.

FGRP adds that air quality is only one of many benefits that trees create. The sheer presence of green infrastructure has been

found to improve both physical and mental health and well-being.

The City of Grand Rapids is planting roughly 5,000 trees annually—and between 750-1,000 in areas that lack in overall tree canopy, especially in the City's southeast and southwest neighborhoods. Because of traffic volume and industries located nearby and within, these neighborhoods have more pollution. Planting trees can directly reduce the negative health impacts that these cause.

Trees as a valuable infrastructure

Did you know that a single street tree returns over \$90,000 of direct benefits during its lifetime? Here are some more benefits our trees provide:

- **Living near trees can reduce blood pressure and improve psychological health.**
- Trees reduce storm water run-off and flooding. They absorb the first 30% of most precipitation through their leaf system—this moisture never hits the ground. and another 30% more through their roots.
- **Trees have a calming and healing effect on ADHD adults and teens.**
- Realtors estimated that neighborhoods with street trees see a \$15-25,000 increase in home value.

- **Urban street trees create safer walking environments.**
- Trees extend the life of pavement they shade by 40-60%.
- **Trees increase security by creating more pleasant walking environments, increasing care of place and actual ownership and surveillance of homes and blocks.**
- Trees protect you from rain, sun and heat. A healthy tree canopy reduces temperatures on hot summer days by five to fifteen degrees.
- **Trees reduce road rage.**
- Trees can reduce annual energy bills for a household from 15-35%. In winter, evergreens can reduce wind and home heat loss by 10 to 50%.
- **Trees absorb and block noise by up to 40% and reduce glare.**
- Trees provide a canopy, root structure and setting for important insect and bacterial life below the surface and lofty environments for birds and squirrels.
- **One large tree can supply a day's supply of oxygen for four people.**

Sources:

iTree, <https://www.itreetools.org/>
<https://www.bluezones.com/2018/09/22-reasons-trees-in-cities-keep-us-healthy-and-save-us-money/>



Grow Soil not Waste! Composting

What is compost? The term “compost” is overused and not clearly defined by those using it. Commercial industries, backyard gardeners and community gardens say that they are composting but that’s not always the case. Commercial compost you buy at the garden shop or big box store is not regulated—and can even contain toxic industrial wastes.

True composting results in fluffy humus that’s rich in carbon. While similar to potting soil in texture and color, it is much healthier for your garden.

Why is compost important? Food apartheid is alive and well in Grand Rapids. Income challenged neighborhoods, most often neighborhoods of color, have limited access to healthy, affordable foods. Growing food is one way these neighbors can introduce more healthy foods into their diets. Because many of these same neighborhoods have toxic levels of lead in the soil, growing food should be done in containers or raised beds with new soil brought in. Healthy, living, chemical-free soil that can support food plants is expensive. Composting soil is an easy and sustainable way to reduce this expense.

The City of Grand Rapids allowed residents to legally compost soil in 2013. However, OKT believes the rules are too strict. Many residents, can not afford the required commercial compost bin, especially those in food insecure neighborhoods where composting and food growing would have the greatest impact. And, while private firms have been allowed to do curbside composting for residents, OKT would like to see these for-profit ventures return composted soil to those neighbors needing it most.

What should go into your compost pile and what shouldn't

YES	No
<ul style="list-style-type: none">• Fruits• Vegetables• Ground egg shells• Cereal• Bread and grains• Coffee grounds and filters• Paper• Leaves (except oak)• Grass	<ul style="list-style-type: none">• Excess citrus• Meat or fish• Oils or oily scraps• Dairy• Feces• Fats

Composting with worms

Vermicomposting, composting with worms, uses live worms to break down food scraps. The worms eat the scraps and excrete them as worm castings, creating a very nutrient-rich, living soil. Mother Earth has been using vermicomposting for eons!

To build your worm bin, you will need:

- One, 8- to 10-gallon clean plastic bin (not see through)
- Newspapers, 50 pages (no colored print) for bedding
- 2 to 4 cups of potting soil
- 1 lb. red wiggler worms
- Drill and bits, ¼ “ and 1/16”
- Fruit and vegetable scraps

Drill 20 to 30 ¼’ holes on the bottom of the bin for drainage and migration. Drill 30 to 40, 1/6” holes one-inch apart along the top edge of the bin and another 30, 1/6” holes on the lid for ventilation.

Fill your bin and add the worms!

- Add water to newspaper strips until they feel like a damp sponge.
- Fill ¾ of the bin with wet newspaper strips, making sure bedding is fluffy.
- Sprinkle potting soil in bin.



Lead Poisoning: Beyond Paint and Individual Behavior

Did you know that high levels of toxic lead and arsenic are prevalent in Grand Rapids' Baxter, SECA/Southtown, Garfield Park and Eastown neighborhoods? Their presence is a legacy issue. These areas once were home to fruit orchards. In those days, farmers sprayed their fruit trees with the pesticide lead arsenate.

In addition, older housing stock was painted with lead based paints and, prior to the mandate for lead-free gasoline, vehicle emissions settling on the ground compounded the problem.

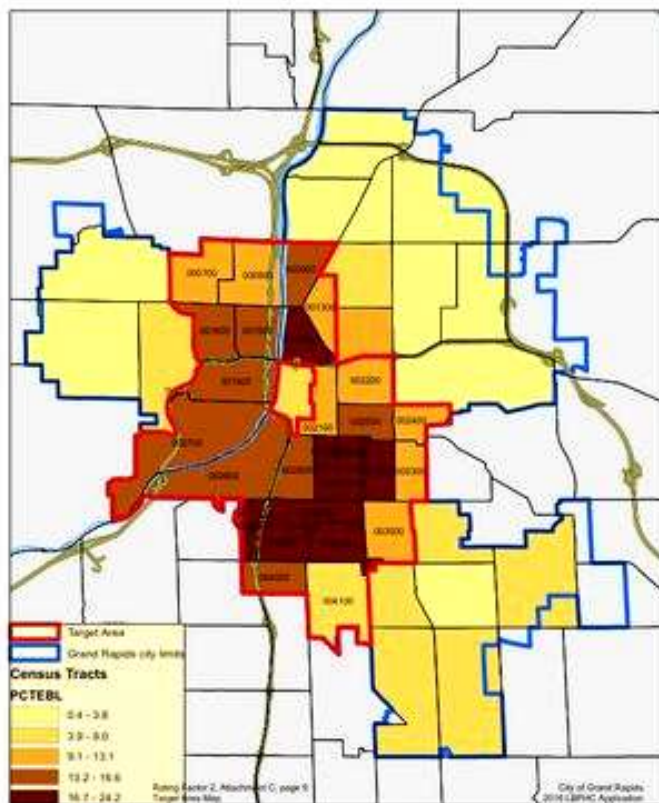
Because lead paint is most often considered the cause of lead poisoning, when a child screens positive, their parents or caregivers are held accountable and instructed on how to minimize exposure indoors. However, more attention needs to be paid to exposure in the soil.

Soil testing and covering lead-contaminated soil with wood chips to keep lead out of children's bodies are important steps in lowering lead poisoning.

Biochemist Clinton Boyd PhD performed soil testing for Our Kitchen Table's farmers market vendors and yard gardeners involved in its Food Diversity Project. Boyd sees contaminated soil as particularly dangerous to families with young children who are gardening. Digging in the dirt puts the hands in contact with the toxins.

Even when container gardens are used, kneeling in or walking through the contaminated soil can track it back into the home where it may be ingested.

Grand Rapids Children Tested for Lead Poisoning 2011-2015, Percentage of Children with Elevated Blood Lead Levels (≥ 5 ug/dL) by Census Tract



and more. Before you or your children dig or play in the dirt, consider having your yard professionally tested for lead and arsenic.

While agencies like Healthy Home Coalition and initiatives like Lead Free Kids GR provide resources for residents of lead contaminated homes to clean up their indoor environments, not much is available to clean up lead and arsenic based soils found in yards.



Keep Killer Chemicals Out of Your Yard and Garden

Lead poisoning causes a wide range of neurological problems especially in children: seizures, learning disabilities, behavior problems

Chemicals like the glyphosates in RoundUp and 2,4D in Scott's Weed and Feed are linked to cancers and neurological disorders.

The Organic Consumers Association reports: "An analysis of the most popular lawn and garden pesticides shows more than half of the products include ingredients classified by the EPA or the



“Michigan, like most states, lacks a public safety net for those unable to afford water and sanitation service. From families sacrificing food and medical care to pay unaffordable water bills to water shut-offs, this creates widespread suffering.”

University of Michigan
SEAS Program

Water Justice

As the media hype around the Flint Water Crisis wound down, the focus shifted to the safety of public drinking water throughout Michigan and lauding charities for collecting and distributing bottled water to Flint residents. A lot of effort is being put into band-aid approaches that do not solve the root cause of the problem. Meanwhile, Flint’s children continue to be poisoned every time they drink, bathe or brush their teeth with tap water.

Although a better alternative than drinking poisoned tap water, flooding the City of Flint with bottled water has caused other problems. For one, the city is now awash with millions of empty plastic bottles. For another, bottled water is a product. Charities and individuals are purchasing this product from corporations like Nestle, which takes water from Michigan’s ground water stores.

According to a Democracy Now broadcast, “Nestlé, the largest water bottling company in the world, (is allowed) to pump up to 400 gallons of water per minute from aquifers that feed Lake Michigan ... in Mecosta County, Nestlé is not required to pay anything to extract the water, besides a

small permitting fee to the state and the cost of leases to a private landowner. In fact, the company received \$13 million in tax breaks from the state to locate the plant in Michigan.”

While our state and city governments cannot find money to repair our failing water infrastructures, they can afford to give away millions, if not billions, of dollars to private corporations that have convinced us to buy bottled water.

Many communities across the country and around the world have sold their municipal water works to private corporations – with disastrous results.

In 2011, the City of Grand Rapids considered privatizing its water. Thankfully, Mayor Heartwell declined.

According to Food and Water Watch, water privatization “undermines the human right to water ... When private corporations buy or operate public water utilities – is often suggested as a solution to municipal budget problems and aging water systems. Unfortunately, this more often backfires, leaving communities with higher rates, worse service, job losses, and more.”

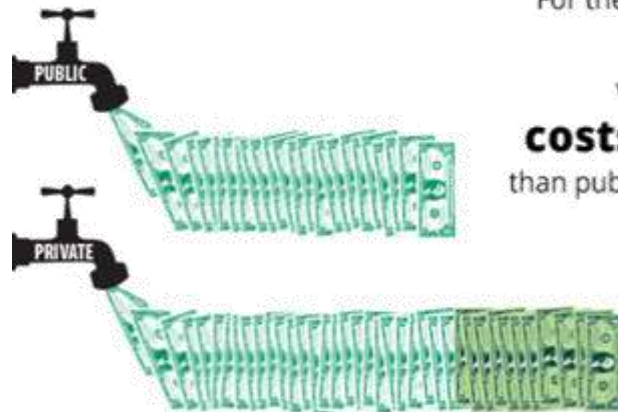


Food & Water Watch has documented these, among other, problems with privatizing water:

- Loss of Control. Local government officials abdicate control over a vital public resource.
- Loss of public input. Citizens don't vote in the corporate boardroom.
- Loss of transparency. Private operators usually restrict public access to information.
- The objectives of a profit-extracting water company can conflict with the public interest.
- Cherry picking service areas. Private water companies are prone to cherry-picking service areas to avoid serving low-income communities.
- Rate Increases. Investor owned utilities typically charge 63 percent more for sewer service than local government utilities.
- Higher Operating Costs. Private operation is not more efficient and can increase the cost of financing a water project by 50 to 150 %.
- Service Problems. This is the primary reason that local governments reverse the decision to privatize.
- Jobs. Privatization typically leads to a loss of one in three water jobs.
- Privatization can allow systems to deteriorate.

Clean, harmless water is your family's right.

Please join with OKT in demanding that the City of Grand Rapids, City of



For the typical household, privately owned water utility service **costs 59% more** than public water service — **about \$185 each year.**

Wyoming, City of Kentwood and all Michigan municipalities:

1. Ensure that our tap water is safe to drink and bathe in. This includes employing more reliable testing measures for lead content.
2. Reconsider fluoridating our water supply as fluoride has been associated with health risks. Let people choose for themselves whether or not to ingest fluoride.
3. Decline from considering privatizing our municipal water supplies.
4. Call for the end of giving Michigan's water away to Nestle and other bottled water corporations.
5. Stop cutting off water service to households with delinquent water bills and cease from using liens from unpaid water bills as a means of seizing property from homeowners.
6. Last of all, advocate for state laws that ensure all residents have access to clean, safe water for drinking and sanitation.

Advocate for Water Affordability!

For a person to have access to water, service charges must be affordable. The United Nations indicates that for water charges to be considered affordable, they should not exceed 3 percent of a household's income. An income-based billing program would adjust a low-income household's water bill down to a level that they can afford to pay.

Urge your Congressional Representative to co-sponsor the WATER Act and support our public water and sewer systems.

To Your Health!

Water is as important to your health as good food—drink half your body weight in ounces of water every day. For example, if you weight 200 pounds, drink 100 ounces of water. if you drink caffeinated beverages, you may need more as they drive water from your body.

If your tap water has high lead content or you do not tolerate fluoride, opt for distilled or osmosis filtered water. Many grocery stores have water machines that filter tap water this way and you can refill your own jugs inexpensively.

Be a consumer activist and boycott bottled spring water!

"From the international to the local, the law provides no enforceable right to water access for those who cannot afford it ... Michigan law explicitly authorizes local units of government to shut off water services to residents delinquent in paying their bills, regardless of poverty or other hardships."



Grand Rapids Public Schools has made a strong commitment to pursue sustainability in both district operations and in the classroom. District leadership understand that sustainability initiatives both reduce the District's impact on the environment and frequently result in significant cost savings. These initiatives transform buildings into models that teach sustainability practices to students.

The GRPS Board of Education district sustainability policies demonstrate a commitment to sustainability and supports staff efforts to green district operations. The Center for Green Schools at the U.S. Green Building Council selected GRPS as the fifth district nationwide to host a Green Schools Fellow.

Green Cleaning.

A district-wide inventory found that schools were using a total of 65 cleaning chemicals, many of them toxic. That number has been reduced to six safe products that are equally effective.

Grand Rapids Public Schools: A Leader in Sustainability

Hydrogen-peroxide based cleaners kill just as many germs as bleach—and without the dangerous side effects. Did you know that exposure to bleach impacts the respiratory system? It can bring on more asthma attacks or prolong respiratory illness.

In 2015, the Green Cleaning Team eliminated disposable wipes and white rags, replacing them with reusable microfiber cleaning cloths, eliminating a significant portion of daily cleaning waste and saving over \$100,000 annually. The Team identifies green replacements for common classroom chemicals and educates students and staff on healthier alternatives.

Sustainable Sites

The Mayor's Urban Forestry Committee (UFC) discusses the overall status and health of Grand Rapids' trees, expand the City's tree canopy, promote best practices of tree management, and educate residents on trees' value and care. To date, GRPS students have planted over 220 trees at 18 schools.

In addition to tree plantings and the green schoolyards initiative, the GRPS community has installed rain and pollinator gardens at six schools.

Overall, GRPS does not use toxic pesticides or herbicides and is switching over to organic lawn management. Kristen noted that they only use toxic herbicides or pesticides in urgent situations, e.g. with invasive species like poison ivy. When they are used, notices are posted on the school's front doors and elsewhere.

Green Schoolyards and Gardens

In spring 2018, the Wege Foundation generously awarded GRPS and its the City of Grand Rapids a \$700,000 grant to

support the design, construction, and activation of green schoolyard spaces at five schools.

An inventory of all gardens at Grand Rapids Public schools is noting whether they are food gardens, pollinator gardens, or other kinds of gardens. This information will help the district see what goes into a successful garden and to better communicate with grounds staff, who sometimes inadvertently damage gardens during routine maintenance.

Energy

Utility Benchmarking During 18-19, GRPS continued to partner with WegoWise to simplify and expedite utility data management for the District. Utilizing cloud-based software, WegoWise automatically imports gas, water, and electricity data for each of the District's buildings and accounts. This support greatly reduces staff time spent reviewing and entering utility bill data.

GRPS staff use WegoWise to evaluate historical utility usage and trends by building and across the District, as well as, track and verify expected energy savings from completed retrofits.

Community Initiatives

GRPS participates in and supports key community sustainability initiatives. As a founding member of the Grand Rapids 2030 District, the District has committed to a shared goal of reducing energy and water usage by 2030. In addition, GRPS has signed on to participate in the Michigan Battle of the Buildings, a regional contest to reduce energy consumption in commercial and institutional buildings. Tracking progress in these initiatives is facilitated with the implementation of the District's utility benchmarking software.



Green Revolving Fund

With the amendment of Board Policy #4060, the Board of Education established the district’s Green Revolving Fund (GRF) in the spring of 2018. A GRF is an internal fund that finances energy efficiency, renewable energy, and other sustainability projects that generate cost savings. A GRF provides the initial funding for the project and the project’s savings revolve back into the fund. In this way, a GRF is continually replenished and able to fund future projects. Typical GRF projects include lighting retrofits, boiler replacements, and the installation of water efficiency measures.

Initial seed funding for the GRF was provided by an interest-free loan from the Michigan Saves program. In addition, Consumers Energy, through their GRF Pilot Program, partnered with GRPS to make the first 12 payments on the loan. For the first project, the GRF funded an LED lighting upgrade at Mulick Elementary.

Recycling

In 2016, Facilities rolled out a district-wide, single-stream recycling program in every classroom, office, and workroom across the district. To ensure long-term success of the program, the district partnered with Kent County to design clear, replicable signage that reflects recycling signage commonly seen throughout public spaces in West Michigan.

Field trips were arranged to the Kent County Recycling Center and the district hosted guest speakers at several schools, as well as, held recycling-themed assemblies to teach students about waste disposal steps. Composting In addition to recycling, composting takes place at seven schools across the District, an initiative that Facilities and Nutrition Services staff implemented in 2014. Students and staff at Innovation Central High School, City Middle/High School, CA Frost Elementary, CA Frost High/Middle, GR Montessori, Congress Elementary and Coit Creative Arts Academy have made a significant change in how they dispose of lunchtime trash. Students are now able to compost or recycle nearly all their lunch waste.

As part of this initiative, the district has switched the school’s lunch trays from polystyrene to compostable trays, removed unnecessary side dish and a la carte containers, and changed to compostable garbage bags.

80% of GRPS waste is generated in the lunchrooms. Four or five schools are composting a little bit of that waste in the classroom with the help of local Grand Rapids’ compost company, Wormies, and some resident red worms. Eight schools are composting food waste, compostable lunch trays and napkins via a commercial company located in Zeeland. GRPS has to pay to have waste hauled to Zeeland. They are looking into introducing reusable trays at schools with dishwashers, but

most schools are not set up for these. To date, GRPS has composted over 780 tons of organic waste and diverted over 1.29 million trays from the landfill. Through the composting program, GRPS has diverted 1,578,600 lbs. of lunchroom waste from the landfill and incinerator over four years. Through a partnership with West Michigan Environmental Action Council (WMEAC) and Kent County Recycling Center, interested teachers are able to choose from a menu of offerings designed to connect the district’s recycling initiative with student learning.

Teachers interested in providing their students a project-based learning in waste audits can show students the quantity of trash that is actually recyclable, how much waste is diverted through recycling efforts, and what contaminants (nonrecyclables) are common in the recycling stream.

Photos courtesy GRPS

As an advocate for environmental justice, OKT is proud to partner with GRPS in our Program for Growth at Martin Luther King Jr. Leadership Academy!

ACKNOWLEDGEMENTS

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2018 Neighborhood Environmental Action Report:

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