



KEEP IT SACRED

NATIONAL NATIVE NETWORK



Technical Assistance Webinar

Restoring Health Through Sustainable Food Systems

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Faculty Disclosure Statement

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- No commercial interest support was used to fund this activity.



CE Certificate will not be offered
for this presentation.

Description

If you live in a low-income community, in a rural location, or where grocery stores and supermarkets are hard to come by, then you live in a food desert. Food deserts are in areas where obesity is just one of the many serious health issues. Many American Indians and Alaska Natives have limited or no access to healthy or affordable food, so their chances of getting diabetes, heart disease, and certain types of cancers are much higher and increasing. Access to healthy and affordable foods is possible, no matter where you live. In the webinar, the speakers will share practical strategies to increase sustainable access to healthy foods, and some of the health benefits of gardening and harvesting plant foods.

LEARNING OBJECTIVES

At the end of the presentation, the participants will be able to:

1. Identify at least two strategies to increase access to healthy food.
2. Define what is a sustainable food supply.
3. Discuss health benefits of gardening and harvesting plant foods.

INDIGENOUS FOODS

Oklahoma City Area Office

Indian Health Service

DO YOU LIVE IN A FOOD DESERT?

more than a mile from good food

WHERE ARE THE FOOD DESERTS

Do you live more than five miles from good food?

TRADITIONAL GARDEN



When most of us think of a garden, this is what we expect to see.

SEMINOLE ELDERS GARDEN



The garden of an 80 year old elder who has diabetes and has been able to control his disease with oral medication due to his garden activities and nutrition.

EMPLOYEE WELLNESS GARDEN AT CLINTON IHS CLINIC



Traditional wooden beds built with
2 x 12's and hammer together.

EMPLOYEE WELLNESS GARDEN



Big bag beds, manufactured in Oklahoma City and available all over the world. This garden was built in a hard to mow area between two sets of stairs only 20 feet apart.



NO PARKING

URBAN GARDEN



Bucket garden from the grocery garden program.

FIVE GALLON BUCKET WILL HOLD ONE PLANT.



COMBINATION GARDEN



Buckets and big bag beds used in combination.

TOMATO CROP



“Fruits of Labor”

TOMATOES WILL STILL NEED TO HAVE A CAGE



TOMATOES FROM SEEDS SAVED FROM LAST YEAR.



IF IT CAN HOLD DIRT AND DRAIN WATER, IT'S A GARDEN



ANY OLD VEHICLES NEAR YOUR HOME?



OLD DRAWER WITH A NEW PURPOSE



WHAT IS BEING DONE IN DENMARK TO SUPPLY FRESH PRODUCE



STRAWBERRIES IN A PORTABLE GARDEN



I SAW THIS IN DOWNTOWN DENVER AND IT IS WATERED AT THE CAR WASH



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Alaska Native Health Campus



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OUR VISION:

Alaska Native people are the healthiest people in the world.

Restoring Health Through Sustainable Food Systems

Alaska Native Tribal Health Consortium
Health Promotion Program

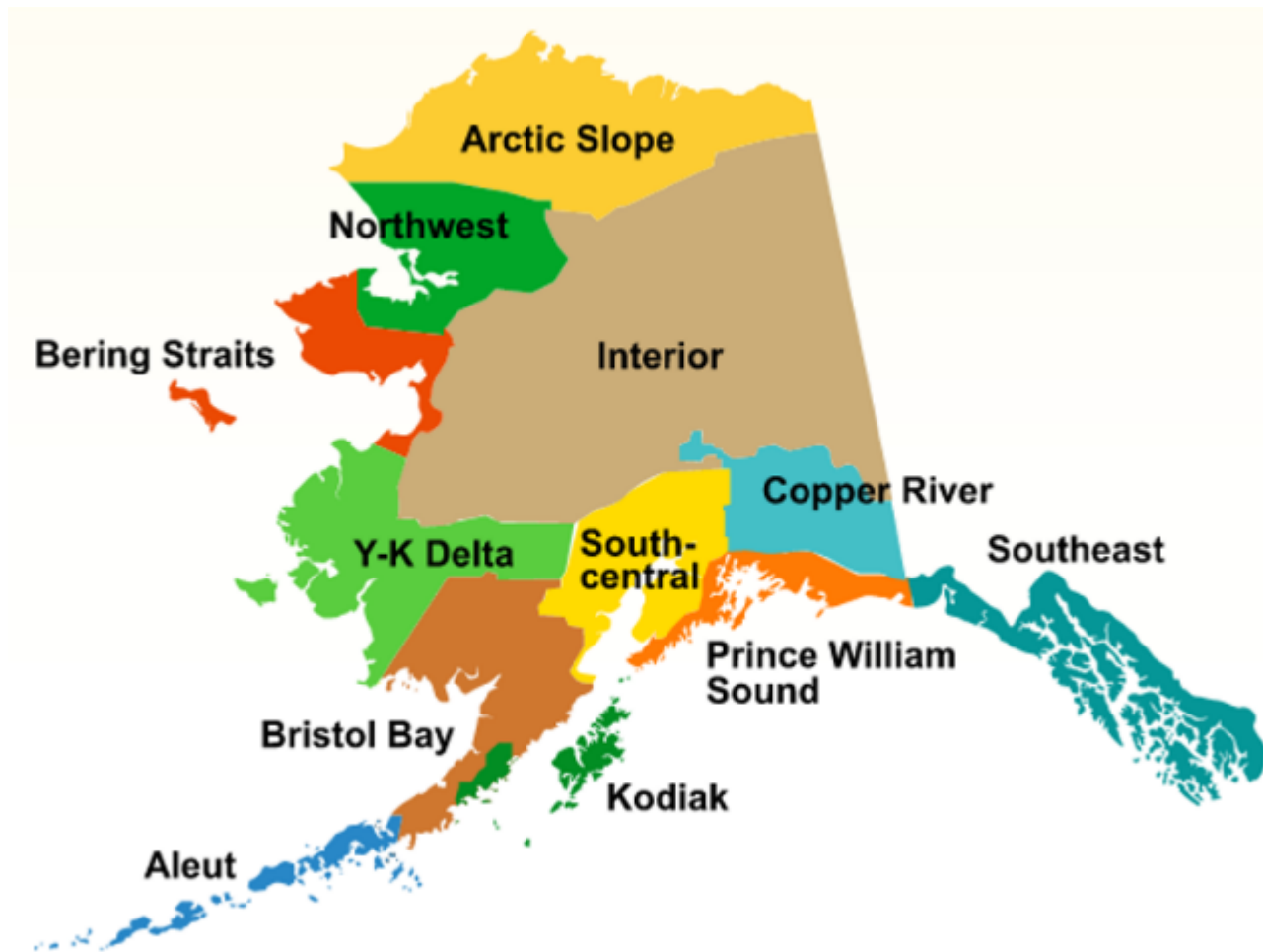
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<http://www.nativefederation.org/about-afn/board-of-directors/#map>



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Sustainable Food Supply

Food security for everyone!

Access to healthy foods

Access to traditional foods

Access to store bought foods

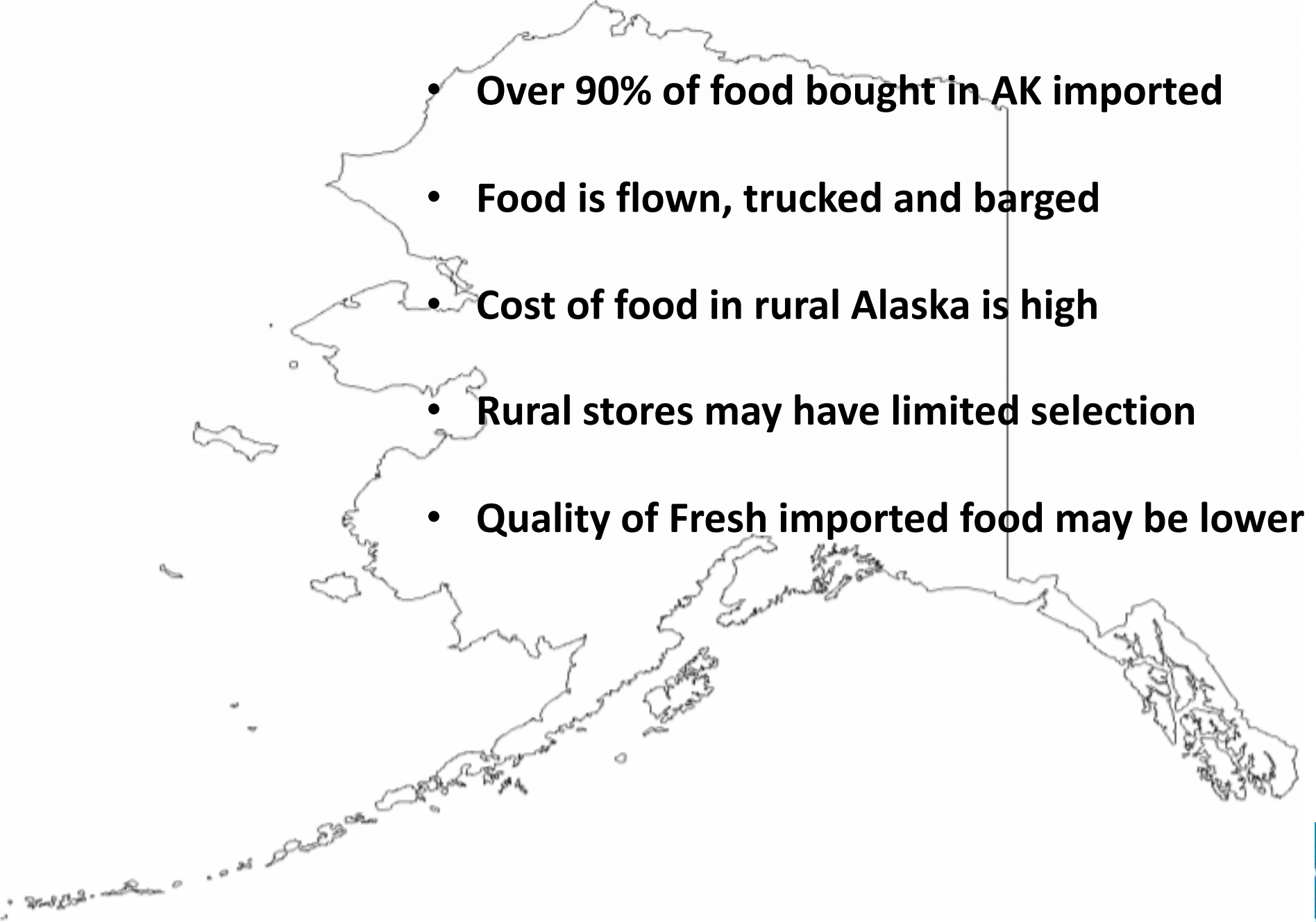
Access to garden or farmed foods

Ethical harvesting and Conservation

Agriculture/Economics/Forestry/Soil Science



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- 
- An outline map of the state of Alaska, showing its coastline and major islands. The map is positioned in the background of the slide, with a list of bullet points overlaid on it. A thin vertical line extends from the top of the map down to the first bullet point.
- **Over 90% of food bought in AK imported**
 - **Food is flown, trucked and barged**
 - **Cost of food in rural Alaska is high**
 - **Rural stores may have limited selection**
 - **Quality of Fresh imported food may be lower**

Health Promotion

Provide and support cultural-based initiatives that reduce risk of developing chronic disease

- Physical activity
- Nutrition
- Alaska Native traditional foods and plants
- Tobacco cessation

Traditional Plants and Chronic Disease Prevention



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Alaska Native Value Systems

- Cooperation
- Hard Work
- Humility
- Hunter Success
- Respect
- Sharing
- Spirituality



Benefits of utilizing Traditional Alaska Native Plants

- Nutrient dense
- Medicinal values
- Encourage physical and mental wellness
- Connect us with our ancestral knowledge
- Encourages outdoor activities
- **Prevention is Culture!**



Wild Alaskan Blueberry



- ↑ Fiber
- ↑ Vitamin C
- ↑ Iron

<i>Nutrients</i>	Wild Blueberry ^{1, 2} 1 cup
Calories	88 kcal
Carbohydrate	18 g
Protein	2 g
Fat	1 g
Fiber	4 g
Vitamin A	167 IU
Vitamin C	27 mg
Iron	1 mg
Calcium	18.85 mg
Potassium	108.75 mg





Fireweed

<i>Nutrients</i>	Fireweed-young leaves ^{4, 5} 1 cup
Calories	24 kcal
Carbohydrate	3 g
Protein	2 g
Fat	0 g
Fiber	3 g
Vitamin A	3146 IU
Vitamin C	54 mg
Iron	1 mg
Calcium	19 mg
Potassium	138 mg

- ↑ Fiber
- ↑ Vitamin A
- ↑ Vitamin C
- ↑ Iron



Willow Leaves



"Hiking through willows" by Bering Land Bridge National Preserve is licensed under CC BY 2.0 <https://ccsearch.creativecommons.org/photos/84189d7c-b2e5-494c-b716-5190adb19e8c>

- ↑ Vitamin A
- ↑ Vitamin C
- ↑ Iron

<i>Nutrients</i>	Young Willow Leaves ^{1, 8} 1 cup, chopped
Calories	67 kcal
Carbohydrate	11 g
Protein	3 g
Fat	1 g
Fiber	--
Vitamin A	10285 IU
Vitamin C	105 mg
Iron	1 g
Calcium	72 mg
Potassium	--



Rose Hips

<i>Nutrients</i>	Rose Hips ^{1, 6} 1 cup
Calories	206 kcal
Carbohydrate	48.5 g
Protein	2.03 g
Fat	0.432 g
Fiber	30.6 g
Vitamin A	5520 IU
Vitamin C	541 mg
Iron	1.35 mg
Calcium	215 mg
Potassium	545 mg

- ↑ Fiber
- ↑ Vitamin A
- ↑ Vitamin C
- ↑ Iron
- ↑ Calcium
- ↑ Potassium



Seaweeds, Root Vegetables, Trees



Fiber in Traditional Plants

- Blueberry 4 g
- Crowberry 5 g
- Raspberry 8 g
- Fiddlehead 6 g
- Fireweed 3 g
- Salmonberry 3 g
- Seaweed 5 g
- Goose tongue 3 gm
- Wild celery 1 gm
- Stinging Nettle 6 gm
- Chocolate lily bulb 2 gm

1 cup servings
(unless otherwise stated)



(3.5 oz)







Tips for eating more traditional plants

- Learn how to harvest plants safely and ethically from Elders
- Introduce a variety of traditional foods to kids early to create a lifelong love for them
- Share knowledge about harvesting techniques and traditions
- Combine traditional foods with healthy store-bought foods
- Bring traditional food dishes to gatherings and events
- Preserve berries and greens by freezing, canning or drying
- Learn to grow a garden



Tips for eating more traditional plants



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Harvest Traditional Foods and Plants

Encourages physical activity

- movements in harvesting: walking, climbing, bending, balancing
- Processing foods burns energy: lifting, bending, turning, walking, standing, reaching.
- Shopping, preparing and serving foods engages the body in movement.





Traditional Garden

Traditional garden blooms in ANMC courtyard



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Traditional Garden



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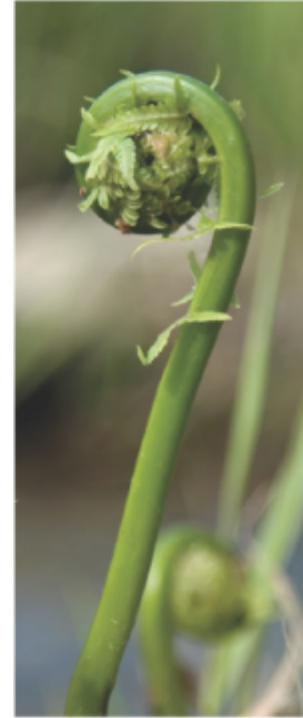


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ALASKAN PLANTS

AS FOOD & MEDICINE SYMPOSIUM





APFM Symposiums



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APFM Symposiums



STORE
OUTSIDE YOUR DOOR

HUNT
FISH
GATHER
GROW



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APU COURSE OFFERING

<https://ssl.alaskapacific.edu/CourseOffering/CourseDetails.aspx?SROfferID=27347>

Course Details - Alaska Native Plants and Traditional Uses

Provides an overview of Southcentral Alaska Native Plants and their traditional uses. Topics include food and medicinal uses, nutrient values, current research, harvesting and processing methods, and cultural perspectives. Students will gain basic knowledge of the Alaska food system and how Alaska plants and Traditional uses promote food sustainability, healthy lifestyles, and holistic health. Class will discuss past and present Alaska Native diet patterns and identify the most common Traditional plants used for food and medicine in the Southcentral region. This course incorporates active hands-on learning in a mix of field and classroom time.

Course ID OS 10500 B01
Outdoor Studies
Undergraduate
2020 Fall Block





Reducing Your Risk of Chronic Disease

Through Gardening and Harvesting



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The Research

“Household gardening is associated with high-EWB (emotional wellbeing).”²

“Vegetable gardening is associated with higher EWB than ornamental gardening.”²

“Human-nature interaction provide(s)an opportunity to develop connectedness with nature that satisfies physical, psychological and spiritual needs.”³

“There is a positive association between access to green space and mental well-being of children.”⁴

Benefits for Children who Spend Time with Nature

Improving children's overall mental health.⁴

Helping children be more resilient and have better self-esteem.⁵

Improve stress and help children focus better.⁶

Improve behaviors related to ADHD.⁶



Benefits of Interacting with Plants

Reduces anxiety and depression, improving mood (1)

Associated with a better quality of life, helps one feel more connected to community¹

Feeling inspired and more connected to a “broader reality.”²

Increases satisfaction and promotes a connection to nature.³



Take-Away!

“A regular dose of gardening can improve public health.”⁵



Changes in Traditional Foods Diet

- Social factors
- Economic
- Time
- Climate change
- Pollutants
- Regulations and restrictions.



Solutions

Motivate your families and communities to spend time with plants

Learn about climate change and how to work within its impact

Learn about agriculture

Encourage more traditional hunting and harvesting practices: teach, learn, listen, implement.

Build personal capacities in agriculture

Expand agriculture and gardening

Build infrastructure that supports local food production

Adopt state policy that supports local food production

Create your own local Food Council

Partner with local Cooperative Extension, Universities, Tribal Health Advisory Councils.

In Summary



- Encourage traditions
- Physical activity
- Healthy food to eat
- Sense of community
- Increased sense of well-being
- Enhance education
- Include Elders and Youth



Resources

Alaska Native Tribal Health Consortium. (2015). *Traditional Food Guide for the Alaska Native People*. 2nd Ed. Anchorage, Alaska: Clinical and Research Services, Cancer Program.

U.S. Department of Agriculture, Agricultural Research Service. FoodData Central, 2019.

Academy of Nutrition and Dietetics. Nutrition Care Manual. <https://www.nutritioncaremanual.org/>. Accessed November 13, 2019.

Unger S. Qaqamiigux: Traditional foods and recipes from the Aleutian and Pribilof Islands nourishing our mind, body and spirit for generations. Anchorage, AK: Aleutian Pribilof Islands Association, 2014.

About Chronic Diseases. Centers for Disease Control and Prevention. <https://www.cdc.gov/chronicdisease/about/index.htm>. Published October 7, 2020. Accessed October 22, 2020.

Ambrose G, Das K, Fan Y, Ramaswami A. Is gardening associated with greater happiness of urban residents? A multi-activity, dynamic assessment in the Twin-Cities region, USA. *Landscape and urban planning*. 2020;198:103776.

Gagliardi C, Piccinini F. The use of nature – based activities for the well-being of older people: An integrative literature review. *Arch Gerontol Geriatr*. 2019;83:315-327.

McCormick R. Does access to green space impact the mental well-being of children: A systematic review. *J Pediatr Nurs*. 2017;37:3-7.

Kelly M. Research Shows Gardening Boosts Mood as Much as Exercise. Blue Zones. <https://www.bluezones.com/2020/05/research-shows-gardening-at-home-improves-well-being-and-overall-happiness/>. Published May 18, 2020. Accessed October 20, 2020.

Resources

References

1. Webber CB, Sarjahani A. Fitting sustainable food systems into dietetic internships-A growing trend. *Journal of Hunger & Environmental Nutrition*. 2011;6(4):477-489.
2. Tagtow A, Robien K, Bergquits E, Bruening M, Dierks L, Hartman BE, Robinson-O'Brien R, Steinitz T, Tahsin B, Underwood T, Wilkins J. Academy of Nutrition and Dietetics: Standards of professional performance for registered dietitian nutritionists (competent, proficient, and expert) in sustainable, resilient, and healthy food and water systems. *J Acad Nutr Diet*. 2014;114:475-488.

Building Food Security in Alaska By Ken Meter and Megan Phillips Goldenberg Crossroads Resource Center Minneapolis July 28, 2014 Commissioned by the Alaska Department of Health and Social Services, with collaboration from the Alaska Food Policy Council

Kelly M. Research Shows Gardening Boosts Mood as Much as Exercise. Blue Zones.
<https://www.bluezones.com/2020/>

Food Security in Alaska — Ken Meter and Megan Phillips Goldenberg — July, 2014

Krauss, Michael, Gary Holton, Jim Kerr, and Colin T. West. 2011. Indigenous Peoples and Languages of Alaska. Fairbanks and Anchorage: Alaska Native Language Center and UAA Institute of Social and Economic Research. Online: <https://www.uaf.edu/anla/map>



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