Wellness Workshop: How Nature Can Improve Your Health and Happiness

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Or “Why so many people still smile decades later when thinking about their first outdoor experience or even about their first whiff of marigolds?”
Documented Benefits of Being in in Nature
Cognitive Benefits

- Enhanced cognitive functioning
- Improved concentration
- Stimulated memory
- Improved goal achievement
- Improved attention capacity
Psychological Benefits

• Improved quality of life
• Improved sense of well-being and self esteem
• Reduced stress and anxiety
• Improved mood
• Improved personal satisfaction and sense of pride
Psychological Benefits (Con’d)

• Alleviated depression
• Improved sense of personal worth
• Increased feelings of calm and relaxation
• Increased sense of stability
Social Benefits

• Improved social integration

• Increased social interaction/functioning

• Improved group cohesiveness
Physical Benefits

- Improved immune response
- Decreased stress
- Decreased heart rate
- Improved overall physical health
- Improved fine and gross motor skills and eye-hand coordination
Examples of Pioneering Research

Dr. Robert Ulrich (Texas A & M) conducted research on gall bladder patients’ recovery after surgery

- Patients with a landscape view rather than that of a brick wall were released from the hospital sooner and recovered faster
Recent research shows getting your hands dirty in the garden can make you happier!

Contact with a specific soil bacteria (*Mycobacterium vaccae*) triggers the release of serotonin – a gardener’s high!
Another recent study found increased levels of dopamine in the brain that can create a state of bliss when produce is harvested.
Or, in our modern era, when produce from a grocery store is simply touched!
Taking a ‘nature break’ from work helps restore mental fatigue, increasing work efficiency and satisfaction.
*Biophilia* is a hypothesis suggesting an instinctive bond between human beings and other living systems (coined by Edward O. Wilson).
Respondents of numerous surveys indicate that many of their strongest early memories involve being outdoors either alone or with family and friends.
Being outdoors is good for you. So is exercising. Combine them!
Exercise improves cognitive function, learning, and memory and can reduce depression.
Indoor vs Outdoor Exercise
Plants in Classrooms Improve Performance
Join the ‘100 mile a month’ club…it’s free!
Here’s how it equates:

• A 4 mile walk 6 days a week (103 miles)
• A 3.5 mile walk 7 days a week (105 miles)
• A 5 mile bike ride 5 days a week (107 miles)
You can improve overall health and energy and lose 10-15 pounds a year!

Key to success? Start out slowly (perhaps a brisk walk around your block). Build the pace another lap each week until you hit your target.
Healing Gardens
Palm Springs Art Museum in Palm Desert
Desert Holocaust Memorial
(El Paseo)
CANCER SURVIVORS PARK
Richard & Annette Bloch
Healing Gardens are a Growing Trend

- Hospitals
- Rehabilitation Centers
- Schools
- Parks
- Shopping Centers
Horticultural Therapy.....

“the engagement of a client in horticultural activities facilitated by a trained therapist to achieve to receive specific and documented treatment goals.” (ahta.org)

- Physical rehabilitation
- Eating disorders
- Anxiety
- ADD
- Dementia
Therapy gardens can help patients regain mobility after surgery or a stroke and help increase flexibility, hand strength, and eye-hand coordination in older adults.
This Enabling Garden Is Available to Everyone

Universal design seeks to create a space that is attractive and accessible to all people, with and without disabilities. People tend to feel happy, healthy, and rejuvenated when they are immersed in nature. To incorporate universal design into your garden, consider these important elements:

1. **Paving Materials**
   - Choose surface to be safe, level, and slip-resistant. A mix of materials should be used and landscaped with a gradient to retain water. Use plant and foliage designs to create an accessible path.

2. **Levers vs. Knobs**
   - Use large, easy-to-turn handles on doors and windows. Use easy-to-turn levers on doors and windows. Choose levers that are easy to use.

3. **Planting Materials**
   - When filling containers, use a lightweight mix that is easy to pour, such as sand, and decomposed granite to avoid splitting. The soil mix should be rich in organic matter and require regular watering.

4. **Tools**
   - Tools should be designed with easy-to-turn handles. Consider using tools that are lightweight and easy to use.

5. **Height**
   - Consider the use of raised beds or elevated platforms to reduce the need for stepping. Choose plants that require minimal maintenance and easy to reach.

6. **Watering**
   - Plan for easy access to water. Consider using drip irrigation systems or water saving devices to reduce water usage.

7. **Plants**
   - Choose plants that are well suited and easy to maintain. Consider using low-maintenance plants that require minimal care.

Learn more about the Disabled Gardening Centre including its programs.
Loma Linda University Medical Center East Campus Room Includes a Serene Patio Garden
Therapeutic horticulture – in contrast to Horticultural Therapy - is a process that uses plants and plant-related activities through which participants strive to improve their well-being through active or passive involvement.
How to create your own backyard or school therapeutic garden
Key Elements

- Quiet, serene sanctuary
- Sensory in nature
- Comfortable seating
- Low maintenance plants
Other Research Findings:

• Students had faster reflexes and performed higher math more proficiently in a computer lab with plants.

• People spend up to 25% more money in a shopping mall with plants.
Recent Developments

- Interest in Backyard, Community and School Gardens Heightened Past 8 years

- The Smithsonian recreated a Victory Garden based on a 1940s pamphlet

- White House Garden (‘Get Moving’ Theme)
The National Gardening Association reports that growing food is the fastest growing lawn/gardening category since 2009. Participation increased to over 50 million households by 2016.
There are hundreds of school gardens in CA, in which students receive hands-on standards-based lessons in science, math, health, language arts, social studies, etc.
There are Also a Growing Number of ‘Farm to School’ Programs in California
Davis JUSD Provides Local, Seasonal Produce to Schools
Couscous with Dried Apricots, Mandarins and Almonds

Moroccan Orange & Olive Salad
DJUSD Salad Bar

Blood Oranges; Navel Oranges; Kiwis

Mediterranean Pasta Salad
The Team and their Creations
How Do School Gardens Tie Into State-Based Standards?
School Gardens Enhance Academics

Study with 40 schools & 12 states: Environment Ed students out performed control group on standardized tests

(Lieberman & Hoody 1998)
Science and Math Achievement

- Gardening students scored higher on Science & Math Achievement tests
  - (Klemmer, 2005)

Texas study: Higher Math Achievement
4th grade students (Pigg, 2006)
Food System Curriculum Improves Achievement in Related Areas
(Murphy, 2003)

- Students showed significant gains in overall GPA in English, Social Studies, Math and Science vs. control groups

- Students also showed improvement in overall ecoliteracy and health scores
Obesity Among Youth is on the Rise

- Childhood obesity is over 35% in many California Counties
- Less than 25% of children eat 5 servings of fruit & vegetables/day

- Evidence indicates that good eating habits established before 6th grade are important. (Kelder 1994; Kirby 1995; Carter 2002)
Students who Planted and Maintained School Gardens:

• had greater self-esteem and positive attitudes toward school (*University of South Carolina*)

• had improved social skills and behaviors (*Virginia Tech*)
Students Participating in School Gardens Showed:

- Greater pride and ownership
- Enhanced ability to work within groups
- Increased “self-efficacy”
- Increased sense of responsibility

(Robinson 2005; Alexander 1998)
School Garden Resources
Several Free Power Point Presentations on all Aspects of School Gardens

www.healthyschoolenvironment.org

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California School Garden Network

www.csgn.org

• “Let’s Get Growing” Video & Resources

• Gardens for Learning – A Free 100+ page E-Book to Download
http://www.kidsgardening.org/

- School Garden Registry
- Grants
- Research Summaries
- Teacher resources
UC Santa Cruz Life Lab

http://www.lifelab.org/for-educators/schoolgardens/

- Curriculum and online lessons
- Academic content standards
- Outdoor classroom management tips
- YouTube video channel of activities
The Edible Schoolyard

http://edibleschoolyard.org/resources-tools

- Lists school gardens
- Curriculum ideas
- Teaching aides
The History of Community Gardening
PLANT A VICTORY GARDEN
OUR FOOD IS FIGHTING
A GARDEN WILL MAKE YOUR RATIONS GO FURTHER

YOUR VICTORY GARDEN counts more than ever!
Benefits

• Food production/access
• Nutrition
• Exercise
• Mental health
• Community Development
• Education
Desert Hot Springs (new!) and Palm Desert Community Gardens
Out of State Examples
The Claremont Community Gardens Program (Pennsylvania)
Program Partners:

- Claremont Nursing and Rehabilitation Center
- Penn State Cumberland County Cooperative Extension Master Gardeners
- Capital Resource Conservation and Development (RC&D) Area Council
- Carlisle Lions Club & Claremont Auxiliary
- County of Cumberland
New Garden Projects:

• Birds and Butterflies Garden
• Intergenerational Garden
• Sensory Gardens
Birds and Butterflies Project:
Intergenerational Garden Project:

Bring children and seniors together for fun and learning...
Sensory Garden Project
From Famine to Food in Detroit
Taking Back a City
(Detroit)
The Greening of Detroit

Mission Statement: “Inspiring sustainable growth of a healthy urban community through trees, green spaces, food, education, training and job opportunities. We aspire to provide a greener tomorrow for our Detroit.”
Master Gardeners Help Communities Thrive
Master Gardeners are volunteers who give back to their communities after receiving training in all areas of horticulture from land-grant universities throughout the USA.
We have a University of California Cooperative Extension Master Gardener Program right Here in the Coachella Valley.
Stop by their information table during the break to ask a horticulture question or find out how to submit an application for the next training class.
Other Workshop Sponsors

- UCR, Palm Desert
- Friends of the Desert Mountains
- Desert Recreation District
Desert Recreation District

- One of the largest recreation and park districts in the state of California.
- Covers over 1,800 square miles
- Over 30 recreational facilities throughout the Coachella Valley
FUN IS ON IN THE COACHELLA VALLEY!

Activities, programs and special events in your community:

- Palm Desert & Thousand Palms
- Coachella, Mecca, North Shore, Oasis, Thermal
- Bermuda Dunes & La Quinta
- Indio & Indio Hills
SUMMER CAMP
• DRD boundary has expanded to provide service to unincorporated areas and cities not previously served.
• By partnering with cities, equitable services are delivered to every community regardless of economic means
• Serves 380,000 residents of the CV
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