



Holistic Gardening

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Why do we garden?

- Food
 - Nutrition
 - Pleasure
- Aesthetics
- Economics
- Health
 - Physical
 - Mental

Beyond Plant Production

- Horticultural Therapy
 - Stress relief
 - Physical Engagement
 - Viewing
 - Individual growth
 - Social opportunities
 - Creative inspiration
 - Connection to nature
 - Refuge and Personal Restoration
 - Spiritual fulfillment
 - Biophilia



Table 1

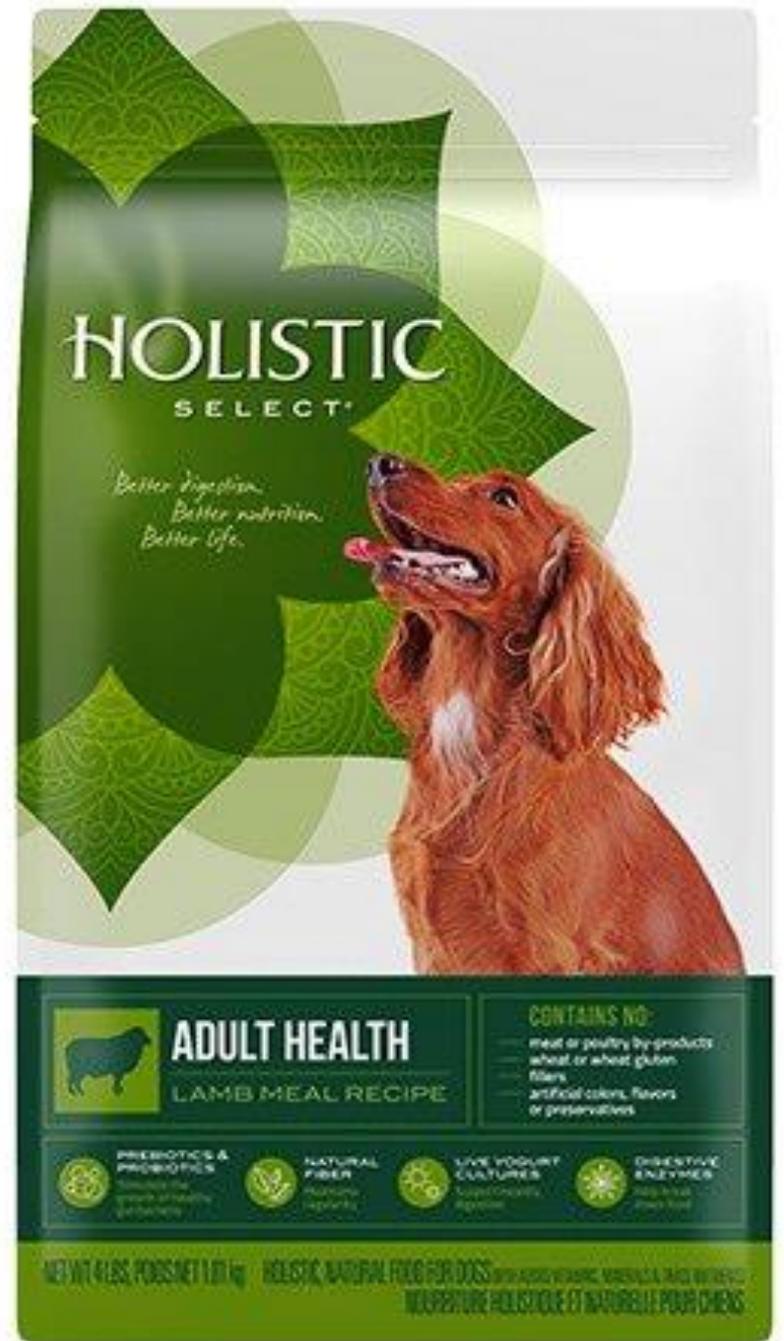
The Water Content Range for Selected Foods

Percentage	Food Item
100%	Water
90–99%	Fat-free milk, cantaloupe, strawberries, watermelon, lettuce, cabbage, celery, spinach, pickles, squash (cooked)
80–89%	Fruit juice, yogurt, apples, grapes, oranges, carrots, broccoli (cooked), pears, pineapple
70–79%	Bananas, avocados, cottage cheese, ricotta cheese, potato (baked), corn (cooked), shrimp
60–69%	Pasta, legumes, salmon, ice cream, chicken breast
50–59%	Ground beef, hot dogs, feta cheese, tenderloin steak (cooked)
40–49%	Pizza
30–39%	Cheddar cheese, bagels, bread
20–29%	Pepperoni sausage, cake, biscuits
10–19%	Butter, margarine, raisins
1–9%	Walnuts, peanuts (dry roasted), chocolate chip cookies, crackers, cereals, pretzels, taco shells, peanut butter
0%	Oils, sugars

Source: The USDA National Nutrient Database for Standard Reference, Release 21 provided in Altman.¹²⁷

Need Fulfillment

Maslow's Hierarchy of Human
Needs



Holism in Gardening

- Systematic Construction
 - Plants, Animals, People, Environment
- Increased production
- Optimizes benefit offered
 - Sustainable practices
 - Repurposing
 - Earth care
 - Community involvement
 - Creature sanctuary
 - Individual opportunities



Physical Benefits

- Gardening as Exercise
 - Movement variety
 - Reaching
 - Bending
 - Squatting
 - Lifting
 - Moving
 - Pulling
 - Scooping
 - Positive Health Outcomes
 - Flexibility
 - Lessened incidence of cardiac altercations
 - Lowered risk for development of diabetes and other chronic conditions
 - Increased bone strength and density
 - Improvements in overall strength and stamina



A photograph of a well-maintained garden. A stone path leads through various plants, including hostas and lilies. A wooden bench is positioned near a brick-lined circular area. The background shows a wooden fence and a house with windows.

Cognitive and Mental Benefits

- Restorative Value
 - Lessened mental fatigue
 - Facilitates relaxation
- Mental Health
 - Combats depression
 - Strengthens brain activity
- Stress Relief
 - Provides sanctuary and escape
 - Source of fascination and point of focus
 - Physical exertion

Sustenance and Nutrition

- Produce production
 - Edible fare
 - Fruits, vegetables, nuts, herbs
- Benefits
 - Improved Taste
 - Fresher
 - Nutrient Density
 - Micronutrients: Vitamins, Minerals, Phytochemicals, Antioxidants
 - Lessened Pesticide Exposure





Community Improvement and Engagement

- Resident Interaction and Involvement
 - Increased community unity
 - Increased resident pride and accountability
 - Reductions in littering, vandalism, and other crime
- Improved Neighborhood Aesthetics
 - Nearby Nature
 - Contrived ecosystem
 - Increased satisfaction and quality of life

Patients as Gardeners

- Gardens in Health Care Facilities
- Novel resident opportunities
 - Contact with nature
 - Restoration
 - Activities structured to individual abilities
 - Physical activity
 - Social opportunity



Children as Gardeners

- Beneficial for Children with Special Needs
 - Intellectual Disabilities
 - ADHD
 - Autism
- At-Risk Youth
 - Horticultural Therapy
 - Novel Environment
 - Problem Solving
 - Skill Acquisition
 - Creative License
 - Action Gratification



Economic Value

- US Popularity
 - 36,000,000 households
 - \$70 average Garden Investment
 - \$2,469,000 total US investment
 - \$530 produce return



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