

Professional Services





Professional Services

- **Sustainable Innovation and Integration for the Success of Your Business**
 - **Sustainable** – able to be **Maintained** at a **Certain Rate** or **Level**
 - **Innovation** – a **new Method, Idea, Product**
 - **Integration** – to **Put Elements Together** into a **Functional System**
- **“Sustainovative” – Sustainable Innovation**
- **Micro Carbon Technology® is a Sustainovative Technology**
- **BHN – Brand Integrator of Micro Carbon Technology®**
 - **Huma Gro®, Fertilgold® Organics, Probiotic Solutions®, Huma Gro® Turf, Mesa Verde Humates®, Ultra Precision™**
- **Integrity through the Power of Sustainovative Integration!**



- Responsible Ag[®]
- Huma Gro[®] App
- BHN-University and Professional Certifications
- Process Mapping
- Fertilgold[®] Organics
- Ag 4.0 – Future: Sustainovative Technologies and Services
 - Ultra-Precision[™]
 - Fertilgold[®] App
 - Autonomous Product Application
 - Vertical Farming
 - Block Chain
 - Animal and Human Health

Responsible Ag



ResponsibleAG

Let it be known this business has satisfactorily fulfilled the requirements
established by ResponsibleAg, Inc. and is now
recognized under the

ResponsibleAg Certification Program

and is, therefore, CERTIFIED by ResponsibleAg, Inc.



An achievement awarded only to those businesses
that demonstrate a strong commitment to
providing a safe and secure environment for their
employees, their community and the fertilizer industry.

Bio Huma Netics, Inc.
1331 West Houston Avenue
Gilbert AZ 85233

OUR
PURPOSE
Listen · Develop · Implement

OUR
MISSION
Driven to enhance the quality of life





Feedback welcome (app@bhn.us)

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☰ Current News

ENGLISH

SPANISH



Hats Off to Farmers, Today and Every Day



Agriculture is one of the world's oldest industries. In fact, many countries' economies still depend on the agricultural industry. Today,

October 12, 2018

[READ MORE](#)



Huma Gro® App Released for iOS Smart Phones



THE WAIT IS OVER!
GET THE HUMA GRO® APP TODAY



+ BHN WORLD CONFERENCE 2018

Why Are Ag Industry Certifications Needed?


1. **Demonstrate Professional Competence**
2. **Prove Knowledge and Skills**
3. **Gain a Competitive Advantage**
4. **Increase Your Earning Potential**

Preparing for the 2019

International

CCertified
CAdviser

Exam



BHN-University


- **Interactive Cloud-Based Learning Management System (LMS)**
 - Anytime, Anywhere (Computer, Tablet, Smartphone)
- **Certified Crop Adviser® – CCA**
- **Certified Huma Gro® Adviser – CHGA**
 - Selling Huma Gro®
 - Micro Carbon Technology®
 - Soil Fertility
 - Carbon Rich Organic Acids
 - (21 additional modules – coming)





Welcome to
BHN UNIVERSITY

Enrolled



**Becoming a
Certified
Huma Gro[®] Adviser**

See more...

Enrolled



**Preparing for the
International
CCA Exam**

See more...

The IPNI CCA Study Course Is Ready

by Larry Cooper | Sep 19, 2018 |
BHN-U News

With permission from the International Plant Nutrition Institute (IPNI), BHN has converted the Preparing for the 2018 Int'l Certified Crop Adviser Exam study manual into 14 online lessons for the exclusive use of BHN staff. If this course has been assigned to you,...

by Larry Cooper | Jun 26, 2018 | Uncategorized |



Preparing for the International CCA Exam



Course Status: Not Started

This course is based on the “Preparing for the 2018 International Certified Crop Adviser” manual (21st Edition), prepared by John T. Gilmour, PhD, CCA, on behalf of the International Plant Nutrition Institute (IPNI). The content adapted here is used with IPNI permission.

If you have feedback you would like to provide about the course, please send it to learn@bhn.us.

Before beginning the lessons, please watch the following 8-minute video on how to use the BHN-U Learning Management System for this course:

Course Navigation

- ▶ CCA1. Plant & Soil Basics
- ▶ CCA2. Soil Testing & Plant Tissue Analysis
- ▶ CCA3. Nutrient Sources
- ▶ CCA4. Nutrient Placement & Timing
- ▶ CCA5. Soil & Water Management (A)
- ▶ CCA6. Soil & Water Management (B)
- ▶ CCA7. Soil & Water Management (C)
- ▶ CCA8. Soil & Water Management (D)
- ▶ CCA9. Pest Management (A)
- ▶ CCA10. Pest Management (B)
- ▶ CCA11. Pest Management (C)
- ▶ CCA12. Crop Management (A)
- ▶ CCA13. Crop Management (B)
- ▶ CCA14. Crop Management (C)
- CCA Final Exam



**PREPARING FOR THE INTERNATIONAL CCA EXAM:
PLANT AND SOIL BASICS**

Presented by:

BIO HUMA NETICS®

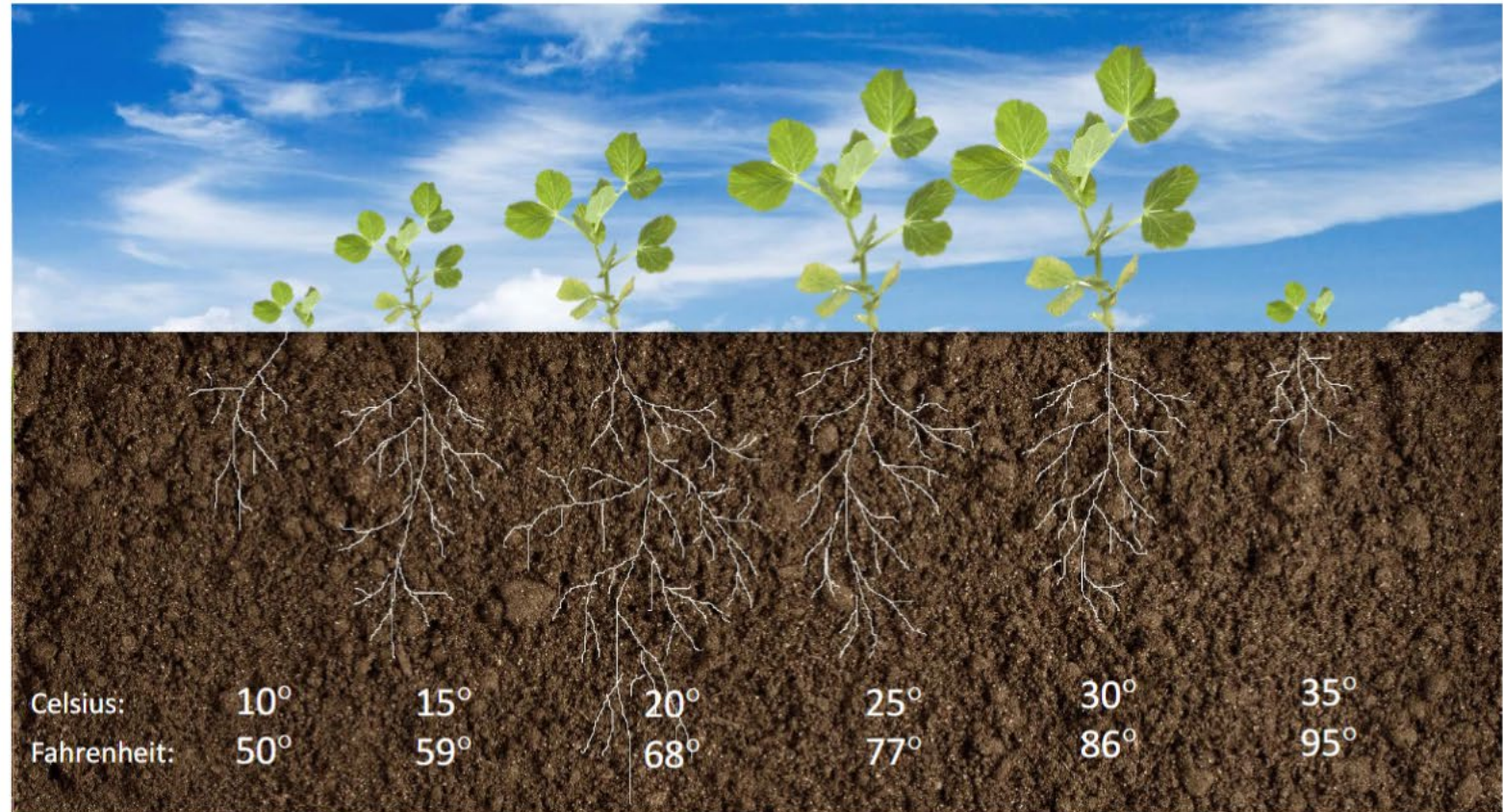


SOIL TEMPERATURE AND NUTRIENT UPTAKE

Effects

- Temperature affects the plant's ability to grow properly, and therefore will affect the nutrient uptake.
 - The influence of temperature can be through plant metabolism where a minimum, optimum, and maximum temperature for nutrient uptake exists and can change with plant growth and development.
- If the nutrient source is decomposing organic materials, then temperature can also affect the rate for that process (because it will impact the soil microbial activity).

Effect of Soil Temperature on Root Development



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NITROGEN CYCLE

Processes

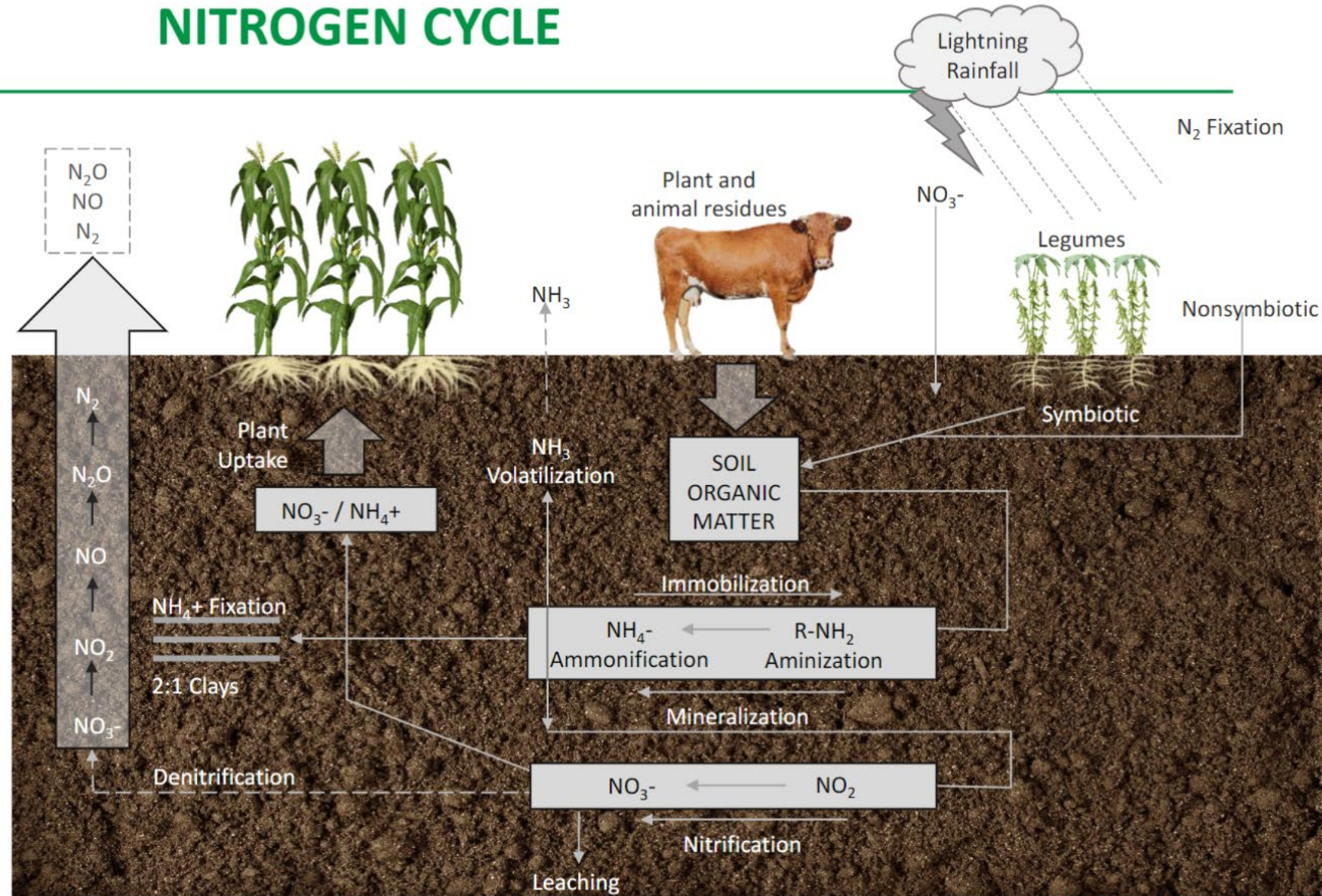
- Fixation
- Ammonification/Mineralization
- Nitrification

Losses

- Denitrification
- Volatilization
- Immobilization
- Leaching

Goal:

- Crop uptake of N



Adapted from Havlin JL, Tisdale ST, Nelson WL, and Beaton JD (2004) *Soil Fertility and Fertilizers: An Introduction to Nutrient Management* (Seventh Edition), p. 98



IMPORTANT BACTERIA

Bacteria	What it does
Nitrogen-fixing bacteria	<ul style="list-style-type: none">• Form symbiotic associations with the roots of legumes like clover.• Visible nodules are created where bacteria infect a growing root hair.• Plant supplies simple carbon compounds to the bacteria and the bacteria convert Nitrogen (N_2) from air into a form that the plant can use.• When the plant decomposes, soil nitrogen increases.
Nitrifying bacteria	<ul style="list-style-type: none">• Change ammonium (NH_4^+) to nitrite (NO_2^-) then to nitrate (NO_3^-) – this is a preferred form of nitrogen for grasses and most row crops.• Nitrate is leached more easily from soil.• Nitrification inhibitors can reduce the activity of one type of nitrifying bacteria.
Denitrifying bacteria	<ul style="list-style-type: none">• Convert nitrate to nitrogen (N_2) or nitrous oxide (N_2O) gas.• Denitrifiers are anaerobic – are active in saturated soils or inside soil aggregates.
Actinomycetes	<ul style="list-style-type: none">• Large group of bacteria that grow as hyphae-like fungi.• Responsible for the “earthy” smell of freshly turned healthy soil.• Decompose a variety of substrates – but are especially important in degrading recalcitrant compounds like chitin and cellulose.• Active at high pH levels.• A number of antibiotics are produced by actinomycetes.



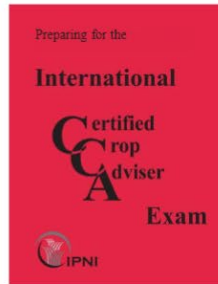
REVIEW

To complete this lesson, click on 'Quizzes' below. Then click on 'Start Quiz'.

Your test results will be automatically calculated.

A passing score is 80% correct responses.

Good luck!



Thank you participating in this lesson and for adding to your knowledge and expertise of Nutrient Management, Soil and Water Management, and Pest and Crop Management.

Portions of the content in this lesson were used with permission from the **International Plant Nutrition Institute** (IPNI) and came from the *Preparing for the International Certified Crop Adviser Exam* manual.


For more information or to purchase a copy of the IPNI manual, please go to the IPNI store by clicking here: <https://store.ipni.net/collections/frontpage/products/preparing-for-the-international-certified-crop-adviser-exam>.



PLANT AND SOIL BASICS



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Quizzes	Status
1	Q-CCA-1: Plant & Soil Basics 

[Next Lesson →](#)

Q-CCA-1: Plant & Soil Basics

by Larry Cooper | Jun 27, 2018 | Uncategorized |

Q-CCA-1: Plant & Soil Basics

Question 1 of 25

1. Question

Which of the following is NOT an essential nutrient for plants?

- N
- Cu
- Na
- H

Check



Course Navigation

▼ **CCA1. Plant & Soil Basics**

● **Q-CCA-1: Plant & Soil Basics**

- ▶ CCA2. Soil Testing & Plant Tissue Analysis
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- ▶ CCA8. Soil & Water Management (D)
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- ▶ CCA10. Pest Management (B)
- ▶ CCA11. Pest Management (C)
- ▶ CCA12. Crop Management (A)
- ▶ CCA13. Crop Management (B)
- ▶ CCA14. Crop



Welcome to
BHN UNIVERSITY


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**Becoming a
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See more...

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by Larry Cooper | Sep 19, 2018 |
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by Larry Cooper | Jun 26, 2018 | Uncategorized |



Course Status: In Progress

This course is required for all Huma Gro® Sales Staff and is recommended for all Huma Gro® Sales Distributors. There are 25 lessons in this course, and each Lesson contains a quiz that must be passed (80% correct) before the participant can progress to the next lesson. Some of the lessons, such as "Lesson 1: How to Sell Huma Gro Products," also have sub-parts (called Topics) that each have their own short quiz. At the end of the 25 Lessons there is a final exam that must be passed at 80%. Once that exam is passed, this online system will generate a Certificate of Completion that you should provide to your supervisor.

Course Navigation

- ▶ CHGA-1. Becoming a Certified Huma Gro® Adviser, Overview: How to Sell Huma Gro®
- ▶ CHGA-2. An Introduction to Ultra Efficient Micro Carbon Technology® in Huma Gro® Complete Crop Nutrition Programs
- ▶ CHGA-3. An Introduction to Advanced Soil Health 1 Using Huma Gro® Sustainable Soil Fertility Products
- ▶ CHGA-4. An Introduction to Advanced Soil Health 2 Using Huma Gro® Carbon-Rich Organic Acid Products
- ▶ CHGA-5. An Introduction to Advanced Crop Macro Nutrition 1 Using Huma Gro® Productss
- ▶ CHGA-6. An Introduction to Advanced Crop Macro Nutrition 2 Using Huma Gro® Products
- ▶ CHGA-7. An Introduction to Advanced Crop Secondary Macronutrients using Huma Gro® Products



**Becoming a CERTIFIED HUMA GRO[®] ADVISER:
Lesson #1A: How to Sell Huma Gro[®]**

Presented by:

BIO HUMA NETICS[®]



CHGA-1. Becoming a Certified Huma Gro® Adviser, Overview: How to Sell Huma Gro®

by Larry Cooper | Jun 26, 2018 |

In this first module we provide an overview of the Huma Gro® product, how the products work, how to sell them, and the sales resources and tools that are available. We also provide some history of Bio Huma Netics (BHN) and discuss the supporting documentation and services available for Huma Gro® products and other BHN brand product lines. Because this is an overview, it is one of the lengthier modules with quite a bit of supporting material. You'll go through a PowerPoint, some videos, and some documents as you complete the module. There will, of course, be a quiz at the end, so pay close attention to all the content.

Lesson Topics	
<input type="radio"/>	A. Huma Gro Sales Overview Presentation
<input type="radio"/>	B. BHN History
<input type="radio"/>	C. BHN Abundance Philosophy
<input type="radio"/>	D. Video: Introduction to Huma Gro Products
<input type="radio"/>	E. Lyndon Smith on How to Sell Huma Gro
<input type="radio"/>	F. Sal Ghia (Peru), How to Sell Huma Gro Products to Growers
<input type="radio"/>	G. The Huma Gro Product Guide
<input type="radio"/>	H. The Huma Gro App
<input type="radio"/>	I. The Huma Gro Product Mixing Guide
<input type="radio"/>	J. Color Differences in Huma Gro Liquid Products
<input type="radio"/>	K. Addressing Perceived Huma Gro Product Failures

Quizzes	Status
1 Q CHGA Lesson 1. How to Sell Huma Gro	<input checked="" type="checkbox"/>

[Next Lesson →](#)

Course Navigation

- ▼ CHGA-1. Becoming a Certified Huma Gro® Adviser, Overview: How to Sell Huma Gro®
 - A. Huma Gro Sales Overview Presentation
 - Q-CHGA-1A. Huma Gro Sales Overview Presentation
 - B. BHN History
 - Q-CHGA-1B. BHN History
 - C. BHN Abundance Philosophy
 - Q-CHGA-1C. BHN Abundance Philosophy
 - D. Video: Introduction to Huma Gro Products
 - Q-CHGA-1D. Video: Introduction to Huma Gro Products
 - E. Lyndon Smith on How to Sell Huma Gro
 - Q-CHGA-1E. Lyndon Smith on How to Sell Huma Gro
 - F. Sal Ghia (Peru), How to Sell Huma Gro Products to Growers
 - Q-CHGA-1F. Sal Ghia (Peru), How to Sell Huma Gro Products to Growers
 - G. The Huma Gro Product Guide
 - Q-CHGA-1G. The Huma Gro Product Guide
 - H. The Huma Gro App
 - Q-CHGA-1H. The Huma Gro App
 - I. The Huma Gro Product Mixing Guide
 - Q-CHGA-1I. The Huma Gro Product Mixing Guide
 - J. Color Differences in Huma Gro Liquid Products
 - Q-CHGA-1J. Color Differences in Huma





Become Huma Gro[®] Certified

- **To Get Started**
 - Send an email to: learn@bhn.us
 - An account will be set up for you and a link will be sent to you.
- **CCA – other languages**
 - Spanish and other languages upon request
- **CHGA – other languages**
 - Spanish and other languages upon request
 - CEUs – will be developed



Certified Huma Gro® Adviser



The Hidden Opportunity

- **Process Mapping**

- Process defines HOW work gets done.
- 72% of all organizational problems lay hidden in broken business processes.

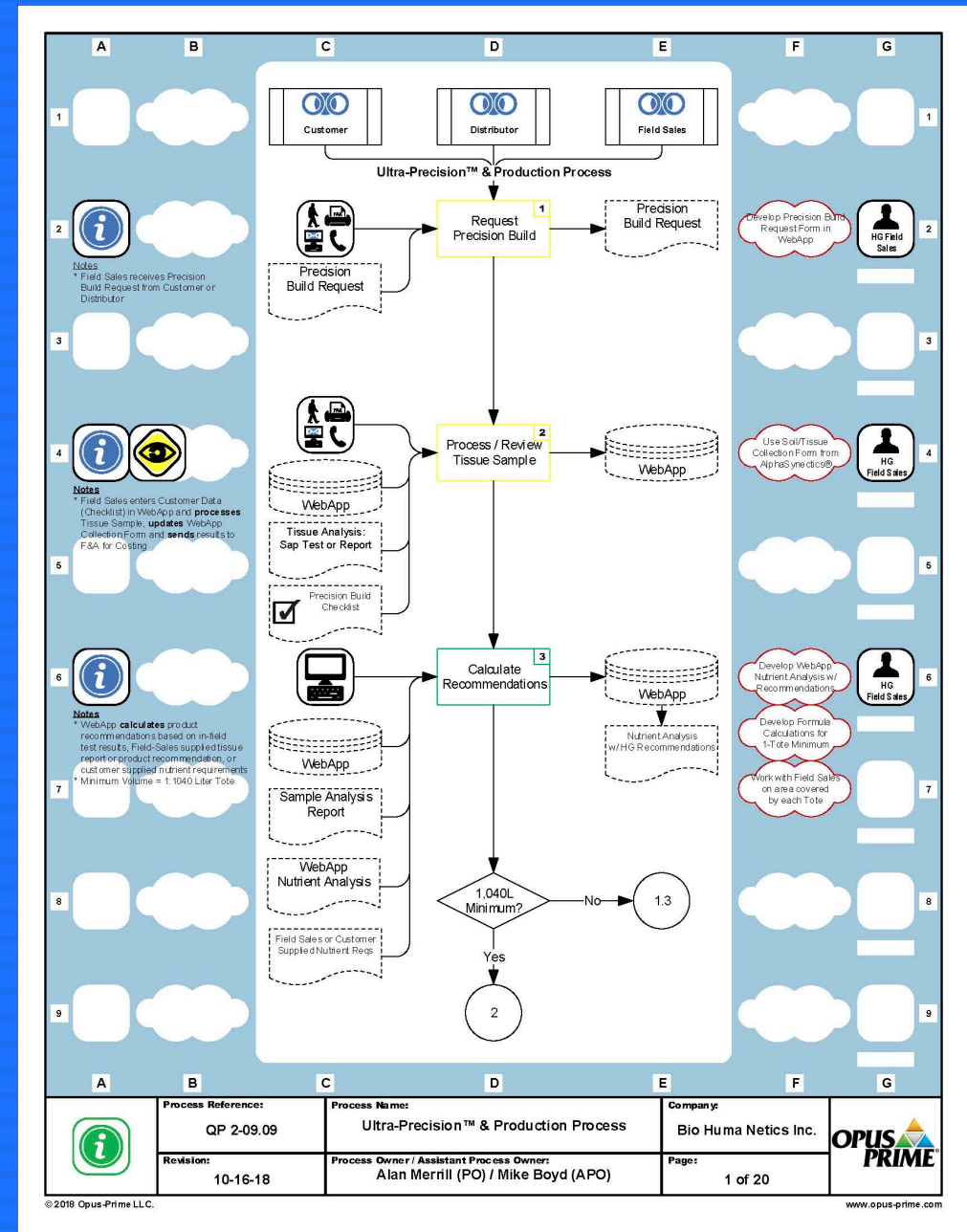
- **Integrity and Process Mapping**

- Process Mapping Drives Improvement

- **Plan to Work Ratios: 1:4**

- Every moment spent **planning** saves four moments in **execution**.
- Plan the Work, Work the Plan

- *A well-designed process makes it easy to do the right thing.*



Fertilgold® Website



☰ MENU

Precision Organic Nutrition for a Premium Organic Crop

Organic liquid crop nutrition... REDEFINED!

[See our full line of products](#)

PRIMARY MACRONUTRIENTS

N-5.5



- Effectively treats nitrogen deficiency symptoms
- Provides quick crop response
- Can be applied foliarly without risk of phytotoxicity
- Resists nitrogen leaching and volatilization
- Can be effectively tank-mixed with other crop inputs

This product is not yet registered for sale.

[DETAILS](#)

NK



- Provides quick nitrogen and potassium crop response
- Can be applied foliarly without risk of phytotoxicity
- Resists tie-up in the soil
- Resists nitrogen leaching and volatilization
- Can be effectively tank-mixed with other crop inputs

This product is not yet registered for sale.

[DETAILS](#)

K-6



- Effectively treats potassium deficiency symptoms
- Provides quick crop response
- Can be applied foliarly without risk of phytotoxicity
- Resists tie-up in the soil
- Can be effectively tank-mixed with other crop inputs
- Is a non-salt-contributor and does not contain chloride

Currently available in: AZ, AR, CO, FL, GA, ID, IL, IN, IA, MN, MO, NE, NM, NY, OH, SD, TX, WI

[DETAILS](#)

3-2-5



- Provides quick NPK crop response
- Can be applied foliarly without risk of phytotoxicity
- Resists tie-up in the soil
- Resists nitrogen leaching and volatilization
- Can be effectively tank-mixed with other crop inputs

This product is not yet registered for sale.

[DETAILS](#)

SECONDARY MACRO & MICRONUTRIENTS

Ca



- Nitrogen-free calcium nutrient product for foliar application
- Effectively treats calcium deficiency symptoms
- Provides quick crop response
- Can be applied foliarly without risk of phytotoxicity
- Can be effectively tank-mixed with other crop inputs

Currently available in: AZ, AR, CO, FL, GA, ID, IL, IN, IA, MN, MO, NE, NM, NY, OH, OR, SD, TX, WI

[DETAILS](#)

Fe



- Relieves chlorotic symptoms of iron-deficient plants
- Provides quick crop response
- Can be applied foliarly without risk of phytotoxicity
- Can be effectively tank-mixed with other crop inputs
- Resists tie-up in the soil

Currently available in: AZ, AR, CO, FL, GA, ID, IL, IA, MN, MO, NE, OH

[DETAILS](#)

Mg



- Effectively treats magnesium deficiency symptoms
- Regulates the uptake of other plant nutrients
- Provides quick crop response
- Can be applied foliarly without risk of phytotoxicity
- Can be effectively tank-mixed with other crop inputs

Zn



- Effectively treats zinc deficiency symptoms
- Provides quick crop response
- Can be applied foliarly without risk of phytotoxicity
- Can be effectively tank-mixed with other organic crop inputs



[Return to Products Page](#)


Fertilgold® K-6

From: **\$32.50**

This product is registered for sale in: AZ, AR, CO, FL, GA, ID, IL, IN, IA, MN, MO, NE, NM, NY, OH, SD, TX, WI

Package Size (2) 2.5 Gallon Bottles [Clear](#)

Package Contains (2) 2.5 Gallon Bottles
\$13.00 per Gallon

\$32.50

1 [Add to cart](#)

Category: Primary Macronutrients

Description

Additional information

Highlights

Documentation

Description

Carbon-complexed with Micro Carbon Technology®, OMRI-Listed **Fertilgold® K-6** is an organic potassium product derived from potassium sulphate (6.0% K₂O and 2.0% sulfur, with 4.0% organic matter) that effectively maximizes potassium uptake by plants. Potassium promotes internal cellular strength for fruit development and maturity, and it helps to regulate the movement of water and nutrients within the plant.

Benefits of Use:

- Effectively treats potassium deficiency symptoms
- Provides quick crop response and can be applied just prior to crop need
- Can be applied foliarly (according to label directions) without risk of phytotoxicity
- Resists tie-up in the soil and remains available through the plant root system
- Can be effectively tank-mixed with other organic crop inputs
- Is a non-salt-contributor and does not contain chloride
- Aids in potassium uptake in heavy clay, compacted, or high-salinity soils
- Is completely water soluble and can be water incorporated

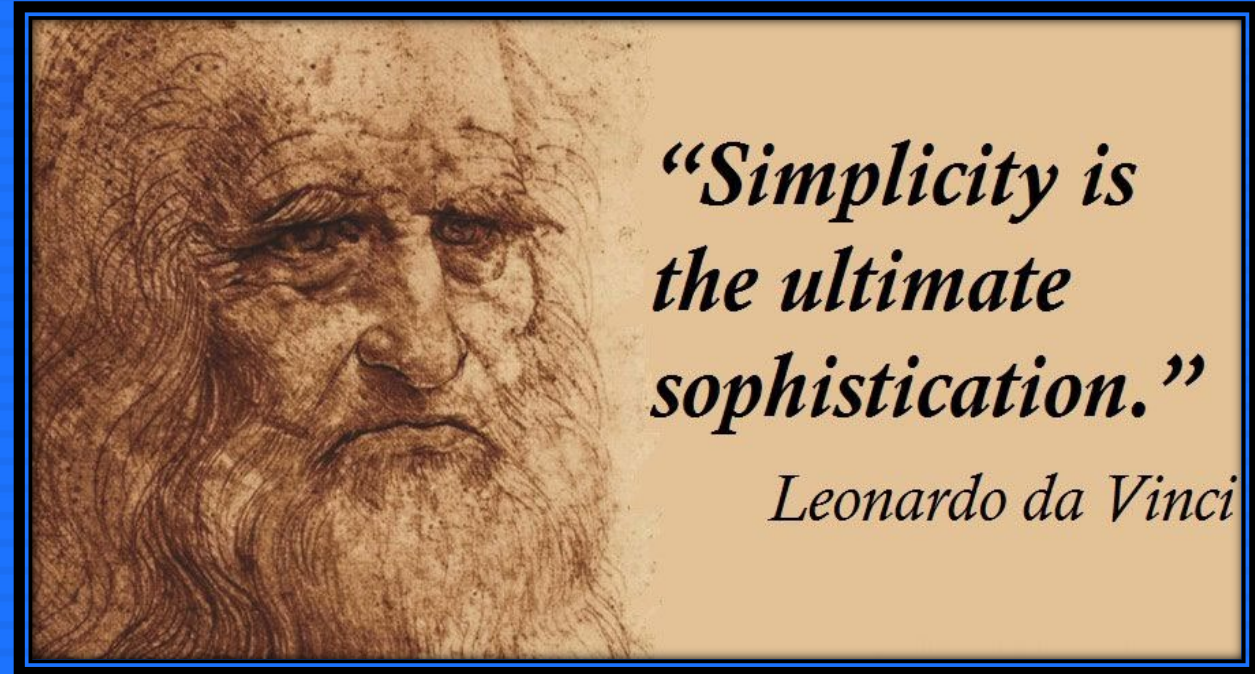
Ag 4.0

Innovation of Grower, Technology, and Service
New Methods, New Technologies, New Services



Ag 4.0 – The Future of Ag – What BHN is Working On

- Simplified SMART Technologies
- Ultra-Precision™
- SMART Nutrient Management
- Autonomous Vehicle Application
- Vertical Farming
- Animal and Human Health

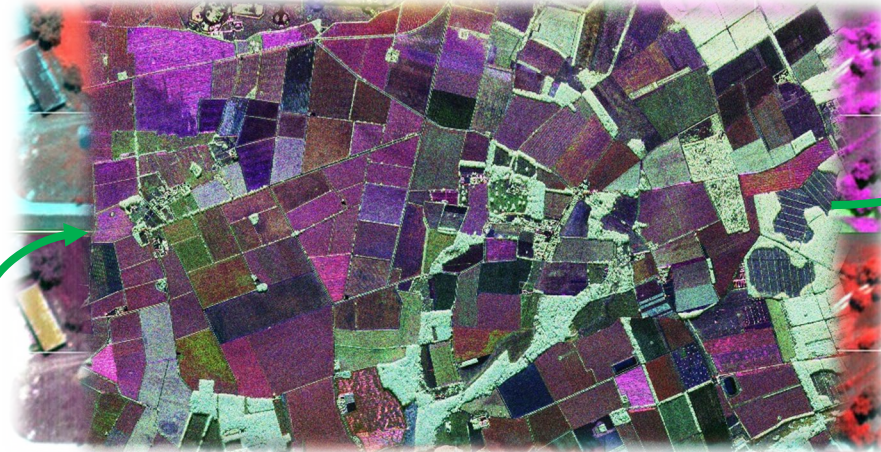


ULTRA- PRECISION

SMART Nutrient Management



Low-Earth-Orbit Satellite Constellation

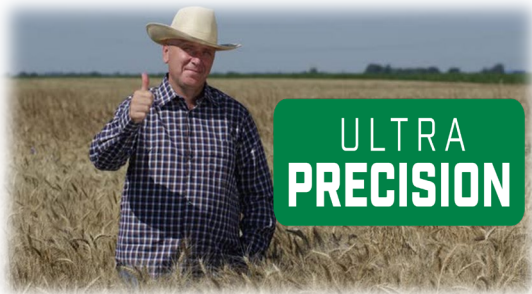
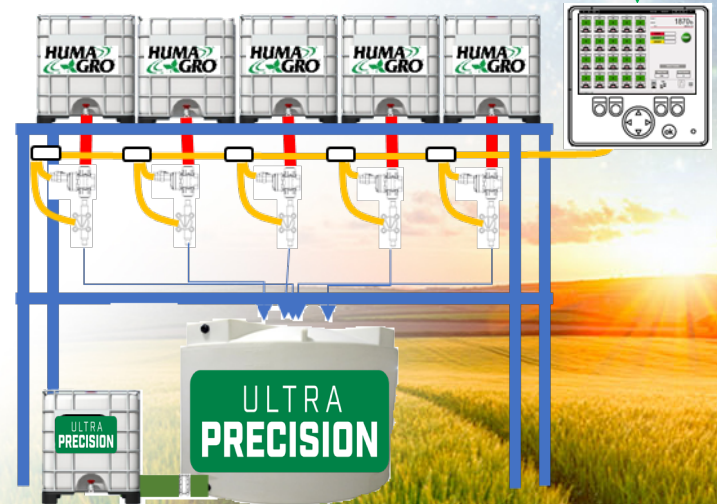


Hyper Spectral Ag Imaging



Nutrient Deficiencies, Pest Presence

ULTRA PRECISION



+ BHN WORLD CONFERENCE 2018



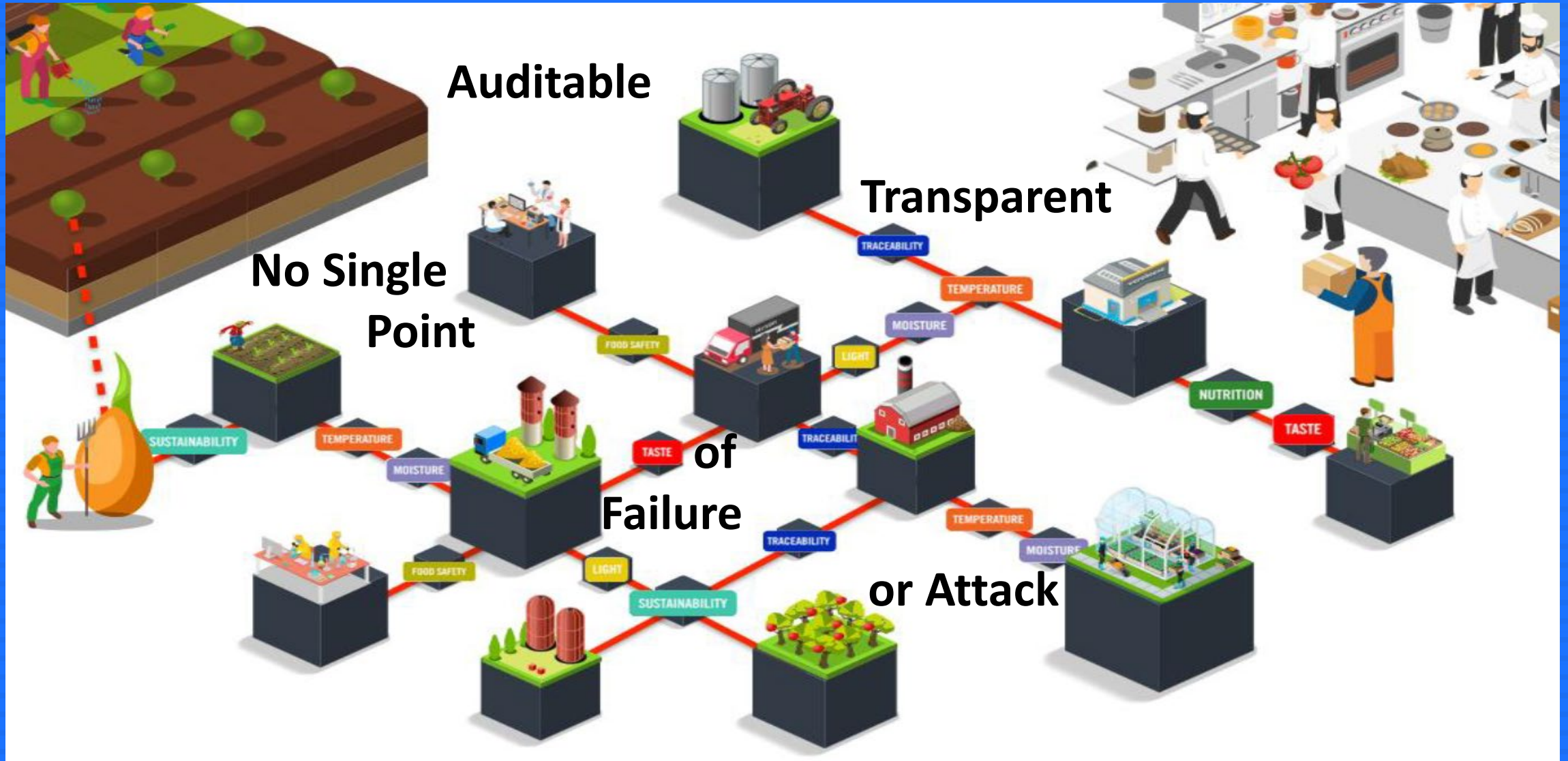
Autonomous Application



Vertical Farming



The Missing Piece in Ag/Food: Blockchain



Animal and Human Health



**MICRO CARBON
TECHNOLOGY®**

HEALTHY EATING PLATE

Use healthy oils (like olive and canola oil) for cooking, on salad, and at the table. Limit butter. Avoid trans fat.



The more veggies—and the greater the variety—the better. Potatoes and french fries don't count.

Eat plenty of fruits of all colors.



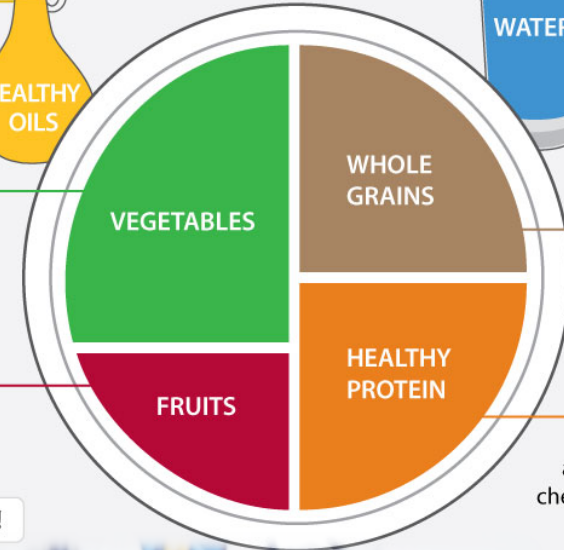
© Harvard University



Drink water, tea, or coffee (with little or no sugar). Limit milk/dairy (1-2 servings/day) and juice (1 small glass/day). Avoid sugary drinks.

Eat a variety whole grains (like whole-wheat bread, whole-grain pasta, and brown rice). Limit refined grains (like white rice and white bread).

Choose fish, poultry, beans, and nuts; limit red meat and cheese; avoid bacon, cold cuts, and other processed meats.



Harvard Medical School
Harvard Health Publishing
www.health.harvard.edu



Health is Built on a Nutritional Foundation + BHN WORLD CONFERENCE 2018



THANK YOU!