# Possibilities

NUTRITION COALITION, INC. ♦ Fargo, ND 58108-3001 ♦ 1-800-447-4793 ♦ www.WillardsWater.com ♦ July, 2014

## "Cosmetic" Issue May Indicate Liver &/or Immune System Issues

Small pockets of fat that give skin an "orange peel" or "cottage cheese" appearance, known as Cellulite, may indicate actual health concerns and not be the "strictly cosmetic" issue many people have long assumed.

Cellulite's appearance is made worse by:

- ♦ Fluid retention,
- ♦ Build up & storage of toxins,
- ♦ Poor Circulation, and
- Poor Muscle Tone.

Since a buildup of toxins is often a cause of Cellulite, having cellulite may indicate your body's detoxification system may need some support. The specific areas needing help may be your **liver** and your **lymphatic system**.

Detoxification is defined as the "mobilization and elimination of unwanted wastes, toxins, pathogens, and other unwanted debris from your body". So, if you want to rid yourself of cellulite, doing what you can to achieve and maintain a healthy liver and keeping the fluid in your lymphatic system (called the lymph), are believed to be two key goals to achieve reduced cellulite.

Your lymphatic system is a part of your circulatory system. Its fluid — the lymph — moves between your cells, tissues, and organs, along a sort of lymphatic "freeway" of capillaries. About 75% of these capillaries are located near the skin's surface. That's why getting rid of cellulite requires supporting and helping your lymphatic system to work as well as possible.

To keep your lymph moving, and therefore not piling up and resulting in cellulite, you need to keep moving. Unlike your blood, which is pumped by the heart to keep it circulating, your lymph only moves when you move. Without enough movement your lymph becomes sluggish and swells... and that's when you see cellulite has formed.

Obviously movement is desirable to support your lymphatic system, and to prevent cellulite. Acceleration Training, (also called Whole Body Vibration Training) is said by many to be the best way to do this.

However if you don't have a Power Plate, a mini trampoline, or Rebounder, is said to provide some of the same benefits. The Rebounder also is good in that it doesn't stress knees and ankles, like jogging on hard surfaces can.

If you don't have either a Power Plate, or Rebounder, exercises called "high intensity interval training (HIIT)," are suggested.

Additionally, Intermittent Fasting is said to be especially good in the battle against cellulite. Intermittent Fasting involves limiting one's eating to a set time frame every day — such as eating only during an 8-hour window, or even cutting it down to 6 hours, and for some people even less than that. Just don't cut down too much, as that can obviously lead to other problems.

Through the years, we've had many, many reports from people saying they had been surprised to see their **cellulite disappearing** after they began regular drinking of **Willard's Water**. For years we had no idea why. Then we learned that **toxins** built up in one's system was widely recognized as at least one of the causes of cellulite.

Now, hearing that **poor circulation**, and **fluid retention** are also recognized causes, it makes even more sense to us that some people see their cellulite disappearing coincident with their Willard's Water use...after all **Willard's Water** is known to significantly **increase one's elimination of toxins and wastes** of all kinds, and to **improve circulation** in many people.

And way more than a few people have noted a reduction in **fluid retention** with WW use. Not everyone notices these things, but many have.

### It's Here!

For the first time, there is a specially formulated Willard's Water product just for plants!

The Ultimate Dark has been, and still is, an absolutely amazing product for plants, crops, and gardens, in addition to being the preferred Willard's Water product for most people, pets and livestock. But the new plant formula, has a couple of advantages.

First, it's approved by the USDA for plant use, so anyone using it in commercial plant operations, or as a farmer, will find that beneficial.

And, since it's formulated for plants, it will be simpler for most people to use. It comes with instructions just for plants, with the dilutions noted for various types of applications. No more having to "do the math" yourself.

We know many of you will want to be sure to hang on to the details about this new product, so we've put those in the "insert sheet" in this newsletter which makes it easier to carry with you, to share with others, or to know that all the details you need are in that page, so you can quick grab it if you have to come get it for reference when planting or tending to your garden, or telling someone else about it!

Since those actions also help rid the body of cellulite, the coincidence of cellulite reductions occurring coincident with regular Willard's Water use doesn't seem so mysterious any more.

We can't point to any studies specifically on WW and cellulite, but, we do know Willard's Water has been found to aid in those ways, and since "those ways" turn out to fight cellulite, it sort of makes sense to us, anyway. But, remember, we are **not** health experts of any kind... we're just passing along what real experts say on the subject, and relaying what many users of Willard's Water have reported.

## It Feels Good To Be Right...Even Better to Have An Iconic Publication "Shout It From the Rooftops"

By Ben

A couple months back, we ran a piece about the "French Paradox," how American scientists couldn't get their heads around the fact that French people, with their diets so heavy in butter and other saturated fat, don't die earlier than Amer- This is likely wrong. You see, we need icans, who often avoid such fats.

We argued that it only seemed like a paradox because saturated fat was never the problem, and therefore there was no paradox. American medical researchers simply had a bad theory.

Enter today. The current (June 23rd) issue of Time Magazine's cover story says simply, "Eat Butter." Its subtitle is "scientists labeled fat the enemy. Why they were wrong."

It always feels good to have such a mainstream publication (some would even say iconic) coming around to our viewpoint, which I feel we should restate in summary for those of you that didn't read the original article.

Fat is not your enemy. In fact, it's a necessary part of any quality diet, and should arguably be the majority source of calorie intake. But not all fat is created equal.

For decades, saturated fat has been de-

monized as causing heart disease. This has caused Americans to seek out unsaturated fats, often in the form of replacing butter or lard in their cooking with vegetable oils.

both Omega-6 and Omega-3 fatty acids. ideally in nearly equal amounts.

Omega-6 fatty acids are inflammatory, Omega-3 fatty acids are the opposite anti-inflammatory.

Omega-6 fats are found chiefly in vegetable sources, like corn oil, which is now used in virtually all commercial cooking.

Omega-3 fatty acids are found most famously in fish, but also in all animal fats, particularly from grass-fed animals (grain-fed cows will produce milk that's heavier on the 6 side).

Excess Omega-6 fats lead to a chronic state of inflammation, which in turn is likely a major cause of autoimmune disorders, as well as numerous other health problems, including heart disease. (And Americans usually consume 15-40 times as many Omega-6 as Omega-3) — that's certainly an excess of the

Now enters the problem: unless you do

Time Magazine: "...scientists labeled fat the enemy. Why they were wrong."

all your own cooking, there's no real way to control the imbalance of 6:3 fats in your diet. Which is why many experts suggest taking a supplement of the Omega-3's.

A truly fine source is **Daily's Omega-3** Fish Oil Softgel Capsules (Items J-391 or J-392) and/or Organic Hi-Lignin Flax Seed Oil Softgel Capsules (Item J-77). Both are fine sources of Omega 3 that, while they won't bring your ratio to ideal levels by themselves, can do a substantial amount to limit the damage our society's preferred diet is doing to you.

And, don't forget that drinking Willard's Water along with your Omega-3 supplements, (and with all your supplements obviously) will very significantly boost your body's absorption and utilization of any nutrients you take in.

That's also true of nutrients in the foods you eat... some people's bodies don't break down foods well enough to get all the benefit of the nutrients those foods would provide, and other people's bodies just aren't very good at absorbing specific nutrients.

Either way, Willard's Water has shown great benefit in helping all bodies to absorb the nutrients provided to it whether from food or supplements.



#### Trivia & Tidbits . .

Omega-6's.)

- 1. What is "wagger pagger bagger" slang for in England?
- 2. What is pseudogyny?
- 3. Where did the name "Sanka" come from?
- 4. Who was the first American to win a Nobel Prize?
- 5. George Washington called his friend, Marquis de Lafayette, when they spoke.
- 6. What was the English actress known as Twiggy's childhood nickname?
- 7. Charles E. Weller is best known for a single sentence he created, which was what sentence?

#### AND THE ANSWER IS...

1. Wastepaper basket.

A woman using a man's name as her pen name; a man using a woman's is pseudandry. 3. Sans Cafeine French for "wthout caffeine". 2. A woman using a man's name as her pen n

of Portsmouth.

4. Theodore Roosevelt in 1906 for helping to end the Russo-Japanese War with the Ireaty

6. "Sticks" was her nickname. 5. He called him Fayette.

 $\mathcal{L}_{\mathcal{L}}$ , "Now is the time for all good men to come to the aid of their party" — a typing exercise.

ON "THE WEB"!

www.willardswater.com

www.nutritioncoalition.com

<u>Please Note</u>: We are not health authorities of any kind. This newsletter represents our own views—presenting information we believe to be true and correct, but is "opinion", nonetheless. We also have a vested interest in most of these topics, so don't claim to be impartial. This newsletter, or anything else we publish, is no substitute for a competent health professional. User reports, though published here, don't prove anything—we pass them along because they certainly are of interest to others using the same products, or who have an interest in them.

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## PRODUCT HIGHLIGHTS & UPDATES FROM CHARLIE

### Avoid Weakening with Age, Easily Carry Grandchildren & Groceries? Without Bodybuilding?

By Ben

A major stumbling block, I think, with getting people to exercise is that there's a miscommunication as to what constitutes "exercise." I've found that most people that I've preached the benefits of this to have a greatly exaggerated kneejerk vision in their minds of what I'm talking about, especially if I refer to strength training. So here's my definition:

Strength training is training your muscles to get stronger.

That's it. The term "strength training" evokes in most people's minds the Olympic power lifters and the grotesquely over-developed Mr. Olympia contestants. Those are extremes. Nobody is suggesting you need to veer to those extremes to be healthy. In fact, I would argue there's much very unhealthy about pursuing those goals. I've never met a powerlifter without knee problems, and being excessively muscled has some of the same health risks as morbid obesity (sleep apnea, for instance).

The reality is, any time you're doing an exercise with the goal of getting stronger, you are involved in strength training. This is all relative to your own current strength, whether you have trouble with five pounds or can carry six hundred pounds on your back. The important thing is that, whatever the maximum you can handle, you're aiming for more, whether it be lifting that amount more times or just lifting something heavier.

A further misconception is that you need to go to a gym to train. Nothing could be further from the truth. In fact, I don't recommend getting a gym membership until you're already in a well-developed routine and only if you really enjoy working out for its own sake.

Many of the most effective exercises make use of nothing more than your

own body for equipment. Think pushups. Think unweighted squats. Think lunges. Or leg raises. Or pull-ups. Most of us learned all these in gym class. They're taught for a reason: almost anybody can do them (or a modified version of them) at no cost to themselves, and they work.

Every one of those basic exercises has dozens of variations meant to be easier or harder, for people of different physical conditions. If you can't do a full standard push-up, do them with your knees on the ground to take some of your weight off your arms. There's no shame in it.

Training for strength doesn't mean you have to spend every day lifting weights. I do it every third day, taking two days to recover and let the tissues rebuild (most people take one day off, but I've found this suits me better). Training for strength doesn't mean you're going to get bulky. People work to get bulky. They have specific routines for it, and some dedicate their lives to it. Most likely, you're just going to get firmer, as fat either gets replaced with muscle or has more muscle under it to adhere to in a more defined and shapely manner.

There's one thing that strength training will do for all people: make them stronger. And keep them from getting weaker with age.

Does it still sound like something only for pro athletes?

Thought not.

Now, how do you go about starting this? That's a great question with no easy answer. Our customers are a diverse group of people, with a huge range of ages and health conditions. So I don't feel comfortable giving any one-size-fits-all recommendations.

The web has a wealth of resources on all of this, and youtube.com has an end-toxins and wastes, etc.

less variety of videos demonstrating proper form for every conceivable exercise.

The most important thing is to talk to somebody that understands your particular situation, such as your health care practitioner or other professional, or just your annoying friend who keeps on telling you to come to the gym with them.

We're all different, and no general-interest newsletter like this can ethically say what's a good program for everybody. But I'm confident you can fairly easily find out what's good for YOU, with a little research and a little experimentation and a lot of faithful practice.

Remember: you're not aiming for rapid gains. Slow and steady wins the race in most things, and it especially does in the case of getting in shape.

And, to make exercising somewhat easier on your body, whether you're into actual bodybuilding, or just getting somewhat stronger as we've been discussing, I have no doubt that drinking Willard's Water routinely, and deliberately drinking some before and after your workouts, will reduce dehydration and soreness from those workouts. I'm convinced of this due to my own experiences, and based on the reports of a lot bodybuilders, triathletes and marathon runners who have told us exactly this through the years... when they add Willard's Water to their routines, they don't dehydrate as much as they normally did, or get as sore as they normally did, from the same workouts.

Plus, as I've mentioned numerous, but can't overstate the importance, Willard's Water does indeed increase your absorption of the nutrients you need... including the ones you need to help you in your efforts to get stronger. Besides all the other known reasons to use WW... reducing inflammation, free radical scavenging, better elimination of toxins and wastes, etc.

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## It is used for mailing address Information in the printed version

## Symbolic "Coming Home" Gave Comfort He'd Really Gone Home...

"They were enjoying the card games that night...a cozy family night. My mother and her parents and an aunt and uncle were all enjoying the nice quiet time together.

"It certainly was a contrast to the events across the globe... with World War II raging, and local boys off in the fighting, feeling peaceful was a rare luxury.

"They all heard it. They heard the front door open when my mother's Aunt Alice had apparently returned from the movie she'd gone to see. They thought it was funny that she didn't even say hello, but went immediately upstairs. They heard her footsteps go all the way to the end of the hall and into the far, back bedroom.

"They wondered if she was alright—it really was odd that she hadn't greeted anyone when she got home. But they didn't disrupt the card game to go find out.

"The game did get disrupted, however, about 15 to 20 minutes later, when the front door opened, and Aunt Alice came in...and came out to say hello. They asked her why she hadn't come in before...when she'd come in and gone upstairs. Well, she didn't know what they'd heard, she said, but it wasn't her...the movie had just gotten out and she'd just now come home.

"They all went upstairs. wondering what they'd find. They found nothing. Nothing was disturbed. No one was there.

"Several days later, they read in the local paper that Tom P. had been killed in action *on the night they'd heard the footsteps*. His family had owned their house before they did, and that back bedroom had been his room.

"It was a real comfort to "hear" firsthand, the symbolic return to one's home, because it somehow conveyed to each of them the assurance that when we leave this earth, we return to our <u>real</u> home, in our Father's house."

Reprinted from our May 2000 issue. Editor's Note: You are invited to send your own "unexplained help/fork-in-the-road/inspirational stories" for sharing in this column, anonymously, if you choose.



## E-Mails, Mailbag & Phone Calls. .



#### Ultimate Dark WW Better for Her

**Knees?** — "C.G." called to find out if there's any problem in drinking the Ultimate Dark is some "settling" occurs and some of its nutrients come out of solution and settle on the bottom. No problem, we explained. It can happen and if it does, just shake it and should go back into solution.

She was VERY happy to hear that, as she had switched to the Clear WW due to her uncertainty about the settling of the Ultimate Dark WW, but she noticed after being on the Clear for awhile that her **knees** seemed to be **more swollen and giving her more problems** than they did when she was routinely drinking the **Ultimate Dark WW**.

So, back to the Ultimate, she decided. We should note that Ultimate Dark has always been found to work better for people with **Gout**, which is a type of arthritis, and other **arthritis sufferers** have also seemed to usually prefer the **Ultimate Dark**.

It seems to work very well bring down swelling. So some feel it would also be better where any **inflammation** is the problem... from **asthma, to sinus problems, to gout, etc.** They may be on to something. The Ultimate has been reported to work better on blood sugar issues (high OR low), energy, gout (and other inflammatory problems as mentioned) and to be easier to get into one's daily routine as many people find themselves "wanting it" more than the Clear — almost like a craving. Some say this may be due to the additional minerals in the Ultimate since cravings for anything often result when mineral deficiencies exist.

**Burn on His Chest** — "L.J." told us he had spilled a cup of hot coffee on his chest while sitting on his couch. He said he expected it to be real bad based on how much it hurt and how hot the coffee was... but he put **Willard's Water** on it and no more pain, "no nothing" as he said. And to his surprise by the next day it was healed up. He said it was really impressive to him.



#### PRODUCT HIGHLIGHTS & UPDATES FROM CHARLIE

## It's Here! Willard's Water Formulation **Many Have Been Requesting for Years!**

it. It's been the core of our business since 1983, and chances are, you use it routinely. So it's with great excitement that we announce there is now a new formulation of Willard's Water called PlantCatalyst®. Many of our customers have experienced miraculous results of watering their plants &/or crops with Willard's Water in any form. Many people find that interesting since people may well get the same kind of though the weather didn't cooperate at nutritional benefits. As to plant and crop benefits, well....

For instance, farmers have reported reducing the amount of normal fertilizer they use by up to half when they spray on liquid fertilizer accompanied by extremely diluted Willard's Water.

An increasing number of studies demonstrate WW's effectiveness in increasing crop yields, plant growth, flowering, and general health of the plants by increasing their rate of nutrient absorption and use.

Enter **PlantCatalyst**®, a new formulation designed specifically for use on plants. Before we get into the details of PlantCatalyst, a review of some of the types of reports we've gotten for years from people using Willard's Water on their plants and crops... which make it abundantly clear why a formula made for Plants has long been desired.

#### DRY SEASON —

Wavne H. is a farmer in extreme northern Minnesota. In fact his land is actually just over the Canadian border, although he has a US mailing address. Wayne gently corrected me when I once told him that I didn't think many farmers would take the time to treat seed with Willard Water before planting it.

"If they'd seen what I saw last spring and summer, they'd FIND the time to do it", he said.

"Why; what happened?"

"Well, it was drier than I've ever seen it. We had just about no snow at all and not a drop of rain all spring. Soil was like dust. But everyone planted the small grain anyway, and hoped for the best. We've got such a short growing

Willard's Water: you know it, you love season you can't just sit around and wait for things to happen. I treated my seed with a mixture of fish and kelp and WW and it germinated well and came up **pretty quick** and was doing pretty well, considering the conditions . . and then it finally rained a little. But very little of my neighbors' seed sprouted at all, before it rained.

> "I wound up with a decent crop even all." and, he added, his unfortunate neighbors barely got any crops.

#### <u>ALFALFA TEST —</u>

I recall another MN farmer . . this guy from the southwest part of the state. He had sprayed just four-tenths of an ounce of WW concentrate per acre, along with something else he was applying, on his alfalfa. (That was years ago and the price of WW then was, in constant dollars, many times higher than it is now, so the product was used really carefully . . the minimum we now recommend is an ounce per acre.)

Roger's neighbor had a selfpropelled swather, so Roger hired him to to cut the alfalfa. After the neighbor finished the job, he asked him, "Roger, how come there's such a difference between the west half of the field and the east half? When I was making a round, every time I got over to the east side I had to shift down . . . the stuff must have been six inches higher and a lot heavier." Roger owned up to the fact that he'd added Willard Water to the mix on the east side, and not on the west side, because this was the first year he'd used the WW and he wanted to see if it would make a difference. As he said, he got the answer loud and clear!

#### WATERMELONS GROW WHERE THEY "CAN'T GROW"-

That same year, Clarence, another farmer friend, planted watermelons. He knew his heavy black soil was not at all right for producing watermelons (they grew great in the "sand" 150 miles west) but he loved watermelons and it didn't take much time to plant them, so he had tried it every year for many years . . but never had had any success. This year, he

treated the seeds and watered the vines several times with the WW during the growing season and was amazed as he harvested many very large, delicious melons, which he shared with us. We all agreed this certainly didn't prove anything, but I'm sure Clarence was 100% convinced it was the WW... he'd failed enough times without it.

#### ONE-SIXTH OF REQUIRED HERBICIDE —

I also remember, quite vividly, the experience he told us about with his weedy soybeans. He was well into his sixties and was having some significant health problems and got well behind on his field work that summer. His account of the bean field went like this, as best I recall:

"Those beans south of the buildings just looked terrible . . there were volunteer sunflowers from last year all through it and a lot of cockleburs. I didn't much care what the neighbors thought . . they knew I'd been sick and they're used to my fields not looking so great anyway. But my combine is about 25 years old and I figured if I tried to run those tough sunflower stalks through it, I'd break something for sure . . probably many times . . never would get the beans in the bin. So I went down to the elevator and asked Tom what he had that I could spray on soybeans this time of vear that would kill the other stuff and not kill the beans. Used to be there wasn't anything you could spray on beans. But he told me I could use (ed. note: we've forgotten the name of the product). And it would take about seven days to kill the stuff I wanted to and I had to use three quarts per acre. Said he knew what a cheap son-of-a-gun I was and that I'd try to use less, but it had to be three quarts or I might as well forget it. Well, of course I wasn't going to apply that much, so I told him I needed enough for 20 acres — didn't tell him I had 60 acres.

"I mixed it with the surfactant I sell and some crop oil and the WW, of course, and it was getting near dark so I got to make just one round and had to quit for the night. That next morning I

went out first thing and the sunflowers were just bent in a U-shape with the tops pointing at the ground and the cockleburs were laying flat and the beans were looking a little peaked. So I changed the mix to just a pint an acre and finished the field and it worked great.. much faster than it was supposed to with one-sixth the amount of the chemical. And I think the Willard Water even helped the vield, even applied that late in the season, because they did better than I thought they would, but of course I can't prove that it helped."

Now for the details on PlantCatalyst, the new Willard's Water product formulated specifically for plants.

PlantCatalyst should simplify getting the amazing Willard's Water's benefits to your plants. And, since it is (or will soon be) licensed in all 50 states, anyone using it in commercial plant operations, or as a farmer, will find that beneficial.

#### **PlantCatalyst®**

Like all living beings, plants get their nutrients through cells, and their ability to grow and flourish is directly tied to cellular absorption, retention, and utilization of nutrients. Gardeners and professional growers have been using Dr. Willard's Water® products to enhance cellular absorption of nutrients for nearly 40 years. These growers have found that using Dr. Willard's on plants will help stimulate plant health, growth, and yield with spectacular results. We developed Dr. Willard's PlantCatalyst® specifically for use on plants and PlantCatalyst® is the only Dr. Willard's product specifically designed and government approved for use on plants.

The potential impact of Dr. Willard's PlantCatalyst® on plants, even in very dilute solutions, was first identified in one of Dr. Willard's first published experiments conducted in a commercial greenhouse. He and Dean Sime, owner of the Jolly Lane Greenhouse in Rapid City, South Dakota, added one ounce (30 ml) of PlantCatalyst® to a 1,000 gallon (4,000 litre) reservoir and reduced Sime's standard nutrient application by 50% (see Roy Jacobsen, Aqua Vitae, 1992, pages 69-71). Sime's testimony in a video also entitled, Aqua Vitae, mentions improvements in seed germination, sturdier stocks, more blooms and more buds (see also Jacobsen, pages 69-71).

The results of that experiment have

been supported in subsequent years by test data on over 100,000 plants in commercial greenhouses in Florida, Ontario and British Columbia and studies at institutions such as the University of Wisconsin and South Dakota State University, among others. Many of the studies can be viewed by visiting the research tab on our PlantCatalyst® website here.

Like all Dr. Willard's Water® products, the precise mechanism behind how PlantCatalyst® actually operates within the plants' cells remains a bit of a mystery, but the reported impact on plants is well documented and fairly extensive. Benefits of using Dr. Willard's PlantCatalyst® include:

- ◆ Larger and/or greener plants
- ◆ More blooms &/or earlier blooming
- ◆ Sturdier stocks &/or more extensive root systems
- ◆ Greater resilience in stressful growing environments
- More yield per plant, larger fruit flowers & enhanced flavor and aroma

PlantCatalyst® and other Dr. Willard® products have been tested and analyzed by many reputable laboratories, universities and commercial greenhouse owners/operators around the world. This testing with plants, animals, and humans demonstrates the enhanced cellular absorption and nutrient retention features of these unique products.

## HOW TO USE DR. WILLARD'S PLANTCATALYST®

NOTE: PlantCatalyst® is not designed to replace your nutrients/fertilizer but rather to serve as an addition to your normal nutrient/fertilizer routine. However, PlantCatalyst® will significantly increase the plant's ability to utilize nutrients so you may want to reduce the amount of fertilizer you're using by 30-50% if applying PlantCatalyst®.

#### **HOME GARDENING**

Prior to planting, soak seeds overnight in a PlantCatalyst® solution comprised of one ounce of PlantCatalyst® added to one gallon of water.

After seeds are planted, spray the plants once daily with a diluted PlantCatalyst® solution. Compression or tank sprayers, such as Hudson or Chapin brands sold at Home Depot, Ace Hardware or Lowes, are the most common type of home gardening spray equipment and are best suited for use with Dr. Willard's PlantCatalyst®. Sprayer sizes

vary greatly, from one quart to four gallons, so finding a model to fit various gardening needs won't be hard. Once you have one that fits your needs, add one half ounce of Dr. Willard's PlantCatalyst® per 32 oz of water, but no more than two ounces of PlantCatalyst® per sprayer, and soak seeded area daily until the plant has sprouted. Once the plant has sprouted, apply the PlantCatalyst® spray solution once or twice a week throughout the growing cycle.

### GREENHOUSES OR HYDROPONIC GROWING ENVIRONMENTS

Prior to planting, soak or spray seeds using a mixture of one ounce of PlantCatalyst® to one gallon of water. If using rock wool cubes, use this mixture to soak your cubes prior to seeding. You can also use this mixture to soak cuttings prior to planting. Spray seeds/cuttings with this mixture daily throughout the germination stage.

In the reservoir add two ounces of PlantCatalyst® per every 50 gallons of water. PlantCatalyst® can be combined with any nutrient formula, but watch your plants closely for any signs they're getting too many nutrients and reduce nutrient levels accordingly.

PlantCatalyst® should also be added to your regular foliar spray routine. For manual operations or smaller crops, mix ½ ounce of PlantCatalyst® to 32 oz. of water and spray a light mist on your plants. For automated systems or later crops, use the rate recommended for reservoir application above. Dr. Willard's PlantCatalyst® should be added to any foliar feed application to increase absorption and effectiveness.

#### **ROW CROP OPERATIONS**

If feasible, prior to planting, soak seeds overnight in a PlantCatalyst® solution comprised of one ounce of PlantCatalyst® added to one gallon of water.

If using a pre-planting treatment to hasten seed germination, add two ounces of PlantCatalyst® per 50 gallons of water/treatment solution and apply as directed.

For use with a liquid fertilizer as a side dressing, mix three ounces of PlantCatalyst® per 50 gallons of water/fertilizer solution. The fertilizer solution should contain ½ the amount of fertilizer ordinarily used.

When spraying grain & forage crops as a foliar treatment, use 2 ounces of Plant-Catalyst® per 100 gallons of water and spray that a rate of ten gallons per acre. •