Grow Your Way to Health!

The OceanGrown Method for Growing Wheat Grass at Home

Why Grow Wheat Grass at Home?

Without doubt, one of the simplest and least expensive ways for an individual to enhance his or her health is to grow and juice wheatgrass at home. All wheatgrass, when cut about 7-8" high, is nutritious—even when it is grown on a synthetic bed and watered with plain water. When wheatgrass is watered for 7-9 days with OceanGrown's **OceanSolution**™, the grass (and the resulting juice) has been found to contain more of the 90+ minerals found in nature than any other vegetable we're aware of. **OceanSolution**™ brings to plants the same natural balance of major and trace elements found in all oceans of the world. By attaching a carbon atom to each mineral the inorganic minerals are then transformed by the grass into an organic form, making them bio-available to the human body.

What You'll Need to Get Started

Nothing could be easier than growing wheatgrass at home. These instructions will help you get started with a proven method which you can then adjust as you get comfortable with growing your own grass. Here's what you'll need:

- Raw, whole wheat berries (we use Hard red spring or winter wheat berries)
- **OceanSolution**™
- A minimum of two 14" x 18" cafeteria trays (or a similar substitute)
- A large kitchen mixing bowl
- A colander
- Sturdy scissors
- Clean spray bottle for watering the grass
- Two cloths of sheeting or similar material, slightly larger than the growing trays
- A TDS meter (optional but very useful)

The following instructions are arranged chronologically from Day 1 through Day 10, allowing you to implement the instructions one day at a time.

The Big Idea

Because a tray of grass takes approximately 8-9 days to grow, the idea is to start the first tray, then start the second tray 4-5 days later. Harvesting 1/8 of a tray will only yield about 1-2 ounces of juice per day. But that is sufficient to begin with until you get used to the taste and your body becomes accustomed to the strength of this new nutrient-filled food. If you measure the amount of grass you juice each day (about 1/8 tray), the two trays will

overlap each other in their growing cycles allowing you to always have some grass ready to juice.

As you begin to consume more ounces per day, you will need to get additional trays and begin a new tray, say, every other day to keep from running out of grass. To begin with, learn to stagger the starts of your first two trays so as to keep yourself supplied with 1-2 ounces of juice per day.

Day 1:
Soaking the WheatGrass Berries

BIG IDEA: *It takes 1.5 cups of* ***dry*** *wheat berries to cover a 14" x 18" tray adequately for growing. You will need to soak these berries in* **OceanSolution**™ *for eight (8) hours to stimulate sprouting.*

1. Mixing the **OceanSolution**™ (hereafter OS): In any convenient clean bottle or container, mix a 1:150 ratio of OS. This means 3/4 ounce of OS for every gallon of pure water. Or you may carefully add OS to your container of pure water until your TDS meter indicates the mixture to have reached about 1100 ppm. Tap Water is not recommended.

   2.Put 1.5 cups of wheat berries in a large kitchen bowl and pour the OS/water mixture into the bowl, enough to cover the berries generously to allow for absorption.

   3.Cover the bowl and soak for 8 hours.

Day 2:
Sprouting the Berries

BIG IDEA: *After the wheat berries have soaked for 8 hours, they need to be thoroughly drained and rinsed with pure water and kept moist and in the dark for about 24 more hours.*

1. After the berries have soaked, pour the water and berries into a large colander in the sink and let the water drain out.

2. Set the colander containing the damp berries, on an

empty cafeteria tray (or other suitable drain) to catch any further draining water. You may prefer to pour the berries onto a well-drained flat surface and form them into a mound.

3. Place a damp cloth (thick, so it will hold moisture, like a terry cloth kitchen towel or wash rag) over the top of the berries. The purpose of this rag is to keep the berries moist and in darkness while they begin to sprout.

4. Let the berries sit for 24 hours, keeping the cloth damp. Toward the middle of this 24-hour period, you should see a small white sprout (root) appear at the end of each wheat berry. By the end of this 24-hour period the sprout should be approximately 1/16" to 1/8" long. The berries are now ready to be "planted" on the trays. If you allow tails to get too long, many will break during planting.

[NOTE: It's very important that the berries stay moist during this second 24-hour period. Use your hand to feel the berries occasionally during the second day to make sure they are staying moist. If necessary, apply a fine mist occasionally, and keep the cloth on the top damp.]

Day 3:
"Planting" the Berries

BIG IDEA: *By the third day, the wheat berries should be ready to move to the trays for growing.*

1. The damp berries, with their sprouted tails (roots) are now ready for moving to the growing tray.

2. Pour the 1.5 cups of sprouted wheat berries out onto the tray, spreading them evenly edge to edge. It's okay if they overlap each other a bit; spread them out as evenly as you can, especially along the edges of the tray and in the corners. Press down lightly on the berries with your hand to settle them.

3. Using your sprayer, spray a healthy mist of

OS/water mix over all the berries, dampening (not soaking) the entire surface of the tray and all the berries.

4. Next, the berries must be covered to keep them in darkness, and they must remain moist, for the next 48 hours or so. You can do this in any of several ways:

a. Cloth Method: Cut a piece of cloth approximately 16" x 20" (slightly longer and wider than your trays). Bed sheets, pillowcases, and similar fabrics work well. Simply spread this cloth over the top of the tray so all the berries are covered. Keep this cloth damp at all times with your sprayer. As the berries' roots intertwine and send out their grass shoot, the shoots will eventually lift the cloth up off the tray as they grow. When the shoots are about 1" high, you can remove the cloth and let the grass continue to grow. (The 1" grass will be a pale yellow from lack of light under the cloth but will quickly begin turning to a dark green.) The advantage of this method is watering the cloth directly to keep the berries moist.

b. Tray Method: Take an empty cafeteria tray and turn it upside down on top of the tray with the berries. Since the tray is not porous, a dark, moist, warm greenhouse environment is created under the tray for the berries. But you will have to check it occasionally to make sure the sprouting berries are staying damp. Spray a fine mist occasionally to keep them moist. The advantage of this method is the greenhouse environment created by the tray.

c. When starting many trays at a time, you may simply stack them (no more than six high) and cover the top tray as in Method b. above.

Try different methods and use the one you like best.

Days 4-5:
Initial Growth Spurt

BIG IDEA: *For the next 24-36 hours, the berries' roots will continue to intertwine, building their own fibrous mat. The light green grass shoots will*

continue to grow, pushing up against their covers.

1. Keep the berries covered and moist for these 1-2 days.
2. As needed 1-2 times per day (depending on humidity and temperature) spray the cloth covering the berries (or remove the tray covering and mist the berries directly) to maintain adequate moisture.

3. By the fourth day, the green shoots should be nearly 1" tall or higher. By the end of the fifth day you should be able to remove the covering cloth or tray. (Regardless of the day, remove the cloth when the green shoots are 1" high.)

Days 5-7:
Growth to Maturity

BIG IDEA: *The goal during the remainder of the growth cycle is to provide the grass with sufficient OS/water mix to grow to maturity.*

1. When the grass is 1" tall, it is ready to continue growing without benefit of any cover.

2. For days 5-7, you will need to water the grass from above, spraying the OS/water mix directly onto the grass itself, letting the moisture run down onto the root mat.

3. For days 7-9, by tenderly grasping a small section of grass you will be able to gently lift up the grass pad off the tray at each end and water the roots of the grass by spraying OS/water mix directly onto the roots and leaving a thin film of moisture on the tray itself. When you lower the root pad back down to the tray, the roots will absorb the moisture you have left on the tray. Too much water will cause the roots to rot and become discolored. It is better to mist frequent light coatings of nutrient rather than leaving standing water on the trays for the root bed to sit and soak in.

4.Your grass should continue growing successfully as a result of your careful watering until harvest time (approximately 7-8" tall).

5. Now is the time to start your next batch of seeds so that they will be ready to plant on this tray in two days, after your harvest.

NOTE ON LIGHT: Your grass will grow fine with indirect sun light coming in through windows, or with light from overhead light fixtures. A grow light, suspended 6-8" above your grass, is ideal, but not mandatory.

Day 8/9: Harvest!

BIG IDEA: *Your grass should be ready to harvest and juice around day 8 or 9. Ideal harvest height is about 7-8".*

1. There are two basic options when it comes to harvesting your grass:

Option #1: Harvest it all at once. Use a pair of scissors to cut the grass off just above the root level. Store it in a sealed container or plastic bag in the refrigerator for up to a week. The advantage of harvesting it all at once is that it frees up the tray to be prepared immediately for another batch. (If you purchase additional trays, this is less of an issue.)

Option #2: Harvest it as you juice it. Use scissors to cut just as much grass, as you want to juice that day. The advantage of this method is that the grass continues to grow on the tray and stay "alive." The disadvantages are that the tray remains full and cannot be reused immediately, plus the grass may begin to "lodge" (grow pale in color and fall over). Grass should be harvested ideally when it is bright green and standing straight up. If the color begins to fade and it begins to fall over, cut it and store it in the refrigerator.

Option #3: If the root mat is free of mold (see Appendix A) you may choose to juice it along with the grass, greatly increasing your yield.

2. When you have harvested all the grass from the tray and have not juiced the mat, the remaining root mat can be composted in your compost pile, put down like tiles on top of eroding patches of topsoil in your yard (it will not continue to grow, but will help hold soil in place), thrown into a worm bin, or otherwise disposed of. If you continue to water a harvested root mat, the grass stubs will re-grow, but the grass will grow more slowly and never reach the same height or thickness as the initial growth. Few wheatgrass juicers attempt a second harvest from a single tray of grass.

3. When your first tray is ready for harvest, you should have a second tray about halfway through the growth cycle. Prepare the newly emptied tray for the newly started berries.

Appendix A:
Additional Tips on Juicing Wheat grass

1. **Temperature:** Wheatgrass grows best when the room temperature is in the mid-70's F. Cooler temperatures slows the growth, while warmer temperatures promotes the growth of mold around the base of the grass stems.

2. **Mold** comes in many varieties and is introduced into a growing operation in many ways. It's frequent cause is insufficient air circulation that easily can be remedied by a ceiling fan or a wall or table mounted oscillating fan. Mold is also caused by over-watering and is sometimes found embedded in the masonry or other building materials of the growing room. This can usually be cured by thoroughly washing down the offending part with hydrogen peroxide or bleach.

3. **Juicing:** When juicing wheatgrass, it is best to only juice the wheatgrass when it is a minimum of 6" to 8". Shorter grass will yield smaller amounts of juice since it is not mature enough for juicing. Longer grass is getting too old and will lose water content and nutrients. If using a twin gear juicer try a few drops of flax oil before juicing to cut down the foam. On most wheatgrass juicers, you can put the pulp back through the juicer a 2nd or 3rd time to get further extraction.

4. **Taste:** The taste of wheat grass juice grown with OS is quite strong—and very potent. We recommend starting with 1-2 ounces per day and increasing the amount you drink gradually. You can offset the strong taste of the juice by mixing in small amounts (to taste) of organic apple juice or other sweet juices such as carrot or beet. Diluting the juice by half with pure water will also "soften" the taste.

5. **Schedule:** How much grass to grow (how many trays to prepare at once) will depend on how much juice you want to consume. Grass grown according to these instructions (1 1/2 cups of berries seeded on a 14" x 18" tray) should yield approximately 14-16 ounces of juice (if you run the grass pulp back through your juicer several times to extract all juice remaining in the pulp). Of course, the quality and efficiency of your juicer will impact the amount of juice you get per tray.

Using 16 ounces of juice per tray as an example, if you want to consume four ounces of juice per day, then one tray will last four days. Since it takes 8-9 days to grow a tray of grass, then you will need to start a new tray every four days to keep the cycle going and always have fresh grass to juice.

First, determine how much juice you are getting from one tray of grass.
Second, determine how much juice you want to drink each day.
Then, based on an 8-9 day growth cycle, figure out how often you will need to start a new tray to always have grass available.

6. **Books:** Authors such as Ann Wigmore and Steve Meyerowitz have written helpful books on wheat grass growing and juicing. Reading further will deepen your understanding of the nutritional benefits of wheatgrass juice and furnish additional growing techniques. Most health food stores have books by these and other authors on wheatgrass growing and juicing.

7. **Disinfecting:** Be sure to wash each plastic tray thoroughly to remove any soil residue or mold/bacteria, which may be on the tray. A weak bleach solution (1:10) is an excellent disinfectant for cleaning your trays, though hot soapy water is adequate as well.

8. **Tray Rack:** You may want to purchase a shelf or rack system to hold your wheatgrass trays while they are growing—but before you do: first take a couple of weeks to determine how much grass you are going to grow and juice for you and/or your family. If you are growing only for yourself, well less than a dozen trays will suffice. However, if you are consuming enough grass that you need to start a new tray every other day, or two trays every three days, then you will need more trays and, probably, some sort of rack or shelf system to hold them. So first determine how many trays you'll be growing regularly, then figure out where to put them.

9. **Growing Media:** Wheatgrass can be grown other than hydroponically. Some like to start by using potting soil because it is the most natural medium and requires the least maintenance in terms of watering (soil holds moisture the best of any medium, requiring

less frequent watering). Once you have learned to grow wheatgrass successfully in potting soil you may want to experiment with paper towels (two thickness of paper towels spread on the cafeteria trays; the wheat berry roots will grow into the moist paper towels and form a root bed). Other synthetic media are available in various forms from vendors on the Internet. However, 1/4" bed of good quality potting soil provides an excellent base for beginners.

10. **Supplies:** Additional trays (used or new) can sometimes be found at restaurant supply firms in your area. The best source we've found for inexpensive new trays is Katom Restaurant Supply in Russellville, TN. The Carlisle fast food trays #028-CT1418 . Contact them at 1-800-541-8683 or http://www.katom.com.

Reorder **OceanSolution**™ for watering your grass from OceanGrown, Inc. at 941-921-2401 or visit our website www.oceansolution.com.

11. **Wheatseed.** The best wheat seed to use for juicing are hard red spring or winter wheat berries. At OceanGrown, we purchase our wheat seed in bulk from Dogwood Gardens Ph: 903-833-1024. Website: www.wheatgrassman.com. We have enjoyed very good success and consistent sprouting with his wheat seed. This is also a excellent website to expand your knowledge on wheatgrass. For quantities of 25 lbs or less, you may order from Hippocrates Health Institute in Florida (561-471-8876) or Sprout House in New York (800-777-6887).

12. **OceanSolution**™**:** The method for growing presented in these brief instructions is not the only way to grow wheatgrass—but it is a way that works! Experiment with different methods and continue to modify your growing strategy as you learn. Whatever size trays you use, growing medium you employ, or methods for soaking and rinsing, we encourage you to remain constant in your use of **OceanSolution**™ as a nutrient feed. Your wheat grass, and the juice from it, will take up more major and trace minerals as a result of being watered with **OceanSolution**™ than with any other product. Wheatgrass, and other fruits and vegetables, can appear healthy on the outside but be nutritionally deficient on the inside. Cows can starve when grazing on fields of lush (nutritionally deficient) grass, which is grown in mineral-poor soil. Therefore, it is not enough for wheatgrass to be green and standing tall in a tray. To be of maximum benefit to you, it must be provided a natural balance of all major and trace mineral elements. Using **OceanSolution**™ will make your grass nutritionally dense—and that means maximum nutrition and health for you!

Appendix B:
Wheat grass Juicers

Obviously, you will need a wheatgrass juicer to extract the juice from the wheat grass you have grown. OceanGrown does not sell wheatgrass juicers, but there are a number of models at varying prices available in the market. A search on the Internet will yield a number of juicers to choose from. We suggest a few websites below.

Here are some guidelines on selecting a juicer:

1. The juice of any grass, fruit, or vegetable is contained in the individual cells of the plant. These cells have to be broken to release the juice, either by cutting or squeezing/crushing. Juicers fall into these two basic categories: juicers that cut or juicers that press.

2. You cannot juice wheatgrass effectively with any juicer which uses a cutting blade or teeth to cut up the grass and release the juice. All of this type of juicer will quickly become clogged with the fiber of the grass. Therefore, juicers such as the Champion, Juiceman, Jack Lalanne Power Juicer and others, which have spinning or turning blades or teeth, are not appropriate for juicing wheat grass.

3. This leaves juicers which press or squeeze the wheatgrass (instead of cutting it) as a way to extract the juice. The most popular all-purpose juicer, which will also juice wheatgrass, is the twin-gear Green Star (888-354-7336) www.tribest.com. But like all twin-helix juicers, it produces much foam. There are also a number of pressing/squeezing juicers made exclusively for wheatgrass, both electrical and manual such as those made by Sundance Industries (845-565-6065) www.sundanceind.com. An excellent source on the Internet for comparing all-purpose juicers, and dedicated wheatgrass juicers, is www.discountjuicers.com.

Here at the OceanGrown office, where we grow and juice solely for our families, we use and have been very satisfied with the GreenStar (electric) and The Healthy Juicer (manual). Both are available at www.discountjuicers.com

Note: OceanGrown, Inc., is not affiliated with any of the companies or products mentioned above. We mention them only as a convenience for those interested in

acquiring the materials needed to grow and juice wheat grass at home.

OceanGrown, Inc.
7453-C Commercial Circle
Fort Pierce, FL 34951
Tel. (941) 921-2401
Fax 941-921-2015
http://www.oceangrown.com
info@oceangrown.com