



MONTESSORI  
School of Denver

## **Montessori School of Denver Urban Farm Community Supported Agriculture (CSA) Program**

Led by a qualified team of Montessori School of Denver staff and faculty, our Middle School students are participating in a unique and innovative Urban Farm program. MSD's Urban Farm offers students a chance to learn more about gardening and farming in a variety of different ways. In addition to traditional outdoor gardening methods, students learn about the future of farming through an indoor extension of the outdoor garden using hydroponics.

The Vertical Farm at the Montessori School of Denver is housed in an up-cycled, 40' shipping container that is capable of growing over an acre of food in just 320 square feet. This environmentally-controlled, indoor, vertical farm uses LED lighting and hydroponic growing techniques to grow food sustainably. This system makes it possible to reduce the environmental impacts of growing local food by reducing water consumption up to 90% and eliminating the use of synthetic pesticides, insecticides, and fungicides.

With this new learning space, students of all ages learn about the future of farming and also about giving back to the community, as a portion of the food grown in the Vertical Farm is donated to communities in need in the greater Denver area.

### **About the CSA**

Our Community Supported Agriculture (CSA) program provides hydroponically grown leafy greens and herbs year-round, and during the Summer and Fall months there will also be produce from the soil gardens. The Winter CSA share is harvested weekly by MSD staff and Middle School students, with the average share size providing 1-2 lbs of produce per week.

Our Winter MSD Urban Farm Community Supported Agriculture (CSA) program will run for 10 weeks starting on January 16 and finishing on March 20, 2019.

Pick-up, payment, and detailed share information are listed later in this document.

## Our Practices

### *Vertical Farm*

We grow leafy greens and herbs in the Vertical Farm in a soil free environment using significantly less water than an outdoor farm. This controlled environment allows us to create an ideal growing condition for our crops using cutting edge technology, and gives us precise control over all aspects of growing - including temperature, humidity, lighting, and nutrients. We use hydroponic nutrients, ultra-low energy consumption LED lighting, and purified water. We do not use insecticides, herbicides, or fungicides, and maintain a pathogen and pest free environment using diligent sanitation practices. Although soil is not required to grow hydroponic plants, seeds still require a solid medium on to which they can anchor their roots. Our seeds are started in Oasis Horticulture grow media, which is a non-toxic, inert polymer foam.

Several of our hydroponic crop varieties are harvested as “living greens,” which means that the root ball remains attached after harvesting. Living greens have several advantages over traditionally cut greens, including better nutrient retention, fresher flavor, and longer shelf life. After consumption, we recommend that you dispose of the root ball and attached grow media into your normal waste stream. Unfortunately, our grow media is not compostable or recyclable at this time.

### *Soil Gardens*

We grow a wide variety of vegetables, herbs, and flowers in our outdoor soil garden beds. We utilize vertical trellises to maximize growing space. In addition, we have one bed covered with a shade cloth, which allows us to grow cool season crops during the heat of the summer. We follow organic farming practices in the soil garden and do not use pesticides, herbicides, or fungicides. Produce from the soil gardens will include beans, squash, tomatoes, cucumbers, and herbs.

## Education

Our CSA share program is an opportunity for our Middle School students to learn how to grow food hydroponically, vertically, and in a controlled environment. Through the lens of math, science, business, and nutrition, our students engage with the Vertical Farm by learning the basics of how to maintain a successful hydroponic system, including starting seeds, transplanting seedlings, and harvesting crops. Students also learn the in's-and-out's of how to run a small business through being involved with distribution of CSA shares and in the CSA share accounting.

## CSA Cost and Payment Policy

The cost of our Winter CSA share is \$220. The contract and credit card only payment link is below. The Winter CSA cycle will start January 16, 2019 and end March 20, 2019. Exact share size and products will vary from week to week depending on what is available for harvest.

## Pick-up

Produce will be available for pick-up during two pick-up windows on Wednesdays, one from 11:30am to 12:30pm, and one from 2:30pm to 4:00pm (see pick-up schedule below). Members are responsible for picking up their own shares. If you are unable to pick up your share or you are having another person pick up your share for you, please email Caleb Gruber, our Vertical Farmer, at [cgruber@msd-co.org](mailto:cgruber@msd-co.org) at least 24 hours in advance or your share will be donated.

Our living greens are normally packed into plastic clamshell containers or small plastic produce bags. If you would like to re-use your clamshell or another container to pick up your greens, please notify Caleb Gruber via email with "CSA" in the subject line. **Please ensure that your container is clean and sanitized before pick-up time. MSD is not responsible for food contamination due to un-washed containers.**

### Location

The pick-up site will be at the Vertical Farm, which is located south of the Welcome Center. Look for the white shipping containers with lots of windows and bright colored lights!

### Contact Information

Any questions or concerns regarding the MSD CSA share program should be directed to Caleb Gruber at: [cgruber@msd-co.org](mailto:cgruber@msd-co.org). Please include "CSA" in the subject line. You may also contact us by phone at (303)756-9441, ext. 295.

Pick-up dates for the Fall CSA are as follows:

- |                      |                      |
|----------------------|----------------------|
| 1. January 16, 2019  | 6. February 20, 2019 |
| 2. January 23, 2019  | 7. February 27, 2019 |
| 3. January 30, 2019  | 8. March 6, 2019     |
| 4. February 6, 2019  | 9. March 13, 2019    |
| 5. February 13, 2019 | 10. March 20, 2019   |

If you are unable to pick up your share on any of these days, please make prior arrangements with us to pick up your share on a different day or donate it.

### Crop List for Fall CSA Program

Each CSA share will contain a variety of the following crops:

#### *Leafy Greens*

- Living Head lettuce (butterhead, loose leaf, romaine)
- Kale (Red Russian, Lacinato)
- Swiss chard (Rainbow, ruby red)
- Mizuna
- Baby Bok choy

#### *Herbs:*

- Basil
- Parsley
- Chives
- Mint

### CSA SHARE CONTRACT

To enroll in the Fall CSA program, please click on the following link to sign the CSA Share Contract and make your payment: [https://forms.diamondmindinc.com/montessoridenver/csa\\_winter?token=475092863](https://forms.diamondmindinc.com/montessoridenver/csa_winter?token=475092863)

Thank you for your participation in the MSD Winter CSA Program!

Caleb Gruber, Vertical Farmer ([cgruber@msd-co.org](mailto:cgruber@msd-co.org))

Lexi Fickenscher, Urban Fam Manager ([lfickenscher@msd-co.org](mailto:lfickenscher@msd-co.org))