

# Buchanan School



Ask us about our Tower Garden

## **What is a tower garden?**

The tower garden is a vertical aeroponic growing system that allows you to grow up to 20 vegetables, herbs, fruits, and flowers in less than 3 square feet (Indoor or outdoor)

## **How does it work?**

Aeroponic is an advanced form of hydroponics. It is the process of growing plants in an air or mist environment rather than soil

Aeroponic systems use water, liquid nutrients, and a soilless growing medium to quickly and efficiently grow more colorful, tastier, better smelling, and incredibly nutritious produce.

## **Where do the plants get their nutrients?**

Tower Garden has created a special plant food called Tower Garden Mineral Blend. It contains the pure earth minerals essential to healthy plant development.

The Mineral Blend provides an all-natural 'Shortcut' for plants which typically must source nutrients from decomposing organic matter in soil.

The result is a greater nutrient uptake and superior growth for a range of plants

## **Water you say?**

Yes! 20 gallons to be precise. A low-wattage, submersible pump in the reservoir pushes the nutrient solution to the top of the Tower Garden through small central pipe.

The nutrient solution then drips down the inside of the Tower, evenly cascading over the exposed plant roots.

## **What do you use instead of soil?**

Plants grow in a soilless medium called Rockwool. When seedling's are ready, usually about 3 weeks after germination, you'll plant them in your Tower Garden.

Rockwool provides plant roots with oxygen and consistent moisture, encouraging rapid healthy growth.

## **How did the school pay for this?**

We received funding from the Manitoba Teacher Society and St James Assiniboia Innovative Grants to purchase 2 Tower Gardens and supplies that now reside in our classrooms.

## **What will you do with the plants when they are done with a growing cycle?**

We are still in the planning process but will want to share the fruits of our labor with the community.

## **Want to do some of your own research? Check out these links:**

- Tower Garden Website <http://www.towergarden.ca/>
- Time-lapse 4 weeks growth cycle <https://www.youtube.com/watch?v=REd54J6iags>
- How the Tower Garden works <https://www.youtube.com/watch?v=l7EzYmO9u8M&feature=youtu.be>