



“Carbon Negative” Grown Vegetables & Fruits

What makes our **VerdaLlum** vegetables different? It's working with the smallest of organisms; microorganisms, to help the biggest of organisms, our planet Earth. Giving us these nutrient rich vegetables is nature's way to say:

Thank You!

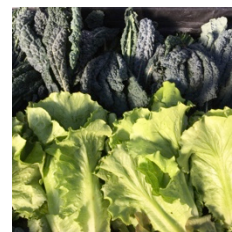
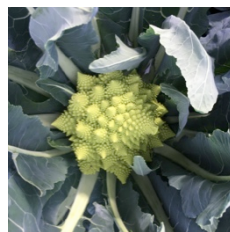
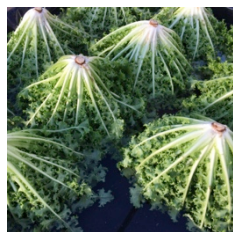
Healthy soil, healthy people, healthy planet!

Ultimately, the health of any plant or animal organism depends on the access and availability of nutrients and minerals. In plants, it's the availability and access to these minerals and nutrients in the soil. It is thanks to the smallest of creatures, the microorganisms, the mycorrhizal function of fungi and their structures, called mycelium, that indirectly make these nutrients and minerals available to us. One handful of soil contains literally trillions of these micro-organisms, and it's to them that we owe our health and well being, and perhaps most important of all, our ability to fight off harmful bacteria and viruses, strengthening our immune system.



Yet surprisingly, we know very little about the myriad work and activity of these microorganisms. What we do know is that a healthy soil, and therefore healthy plants, need a rich, abundant, and balanced number of the trillions of microorganisms that make our food nutrient rich and full of minerals. For microorganisms to thrive, and do what they do, they need safe and comfortable habitats. Microorganisms like dark and damp places, and of course they need food, the minerals and nutrients in the soil they process and eat, and make available to plants.

What is Biochar? The fibrous structure in a plant creates passageways and cavities that allow water to bring the nutrients to different parts of the plant or tree. In trees this is visible when cutting a branch in spring and seeing the water drip or sometimes, even flow out of it. When fibrous biomass is carbonized using pyrolysis, a burning in absence of oxygen, and added to the soil, the pores and cavities become an ideal housing structure for microorganisms, we call them sponges, or five star hotels for microorganisms.



The soil from Circle Carbon Labs has its origins in the Amazon Jungle, where “Terra Preta”, or “Black Soil” was first discovered some 100 years ago. It was found that these soils were extremely fertile, something that cannot occur naturally in the Amazon, due to the heavy rainfall that washes naturally occurring top soil away, so they are anthropocene, or man-made. Terra Preta soils have been dated up to 8000 years old. The main differentiating ingredient in Terra Preta is BioChar, which is activated in a process that takes between six and twelve months.

Making Biochar also traps CO2 gas in the carbonized biomass and creates a “soil reef” where valuable microorganisms can multiply, making nutrients and minerals more available to plants, that in turn make these nutrients and minerals available to us. This ability to make the char recalcitrant, or permanent, makes it carbon negative (*Carbon Negative is Planet Positive!*), or a valuable method to mitigate climate change by fixing, or “trapping” the CO2 in the char, and putting it back into the soil, where it belongs.

Pictured above: Our VerdaLlum vegetable boxes offer a selection of our best seasonal vegetable greens available, 100% organic, local, and carbon negative. We offer two sizes: Medium €25.- and Large (Family) €40.- plus deposit for box €15.-/€20.-. Online or by appointment only, pick up at farm. Call us or register on our website for more information.

