HOW TO EASY HYDROPONICS

GROWING SEEDLINGS

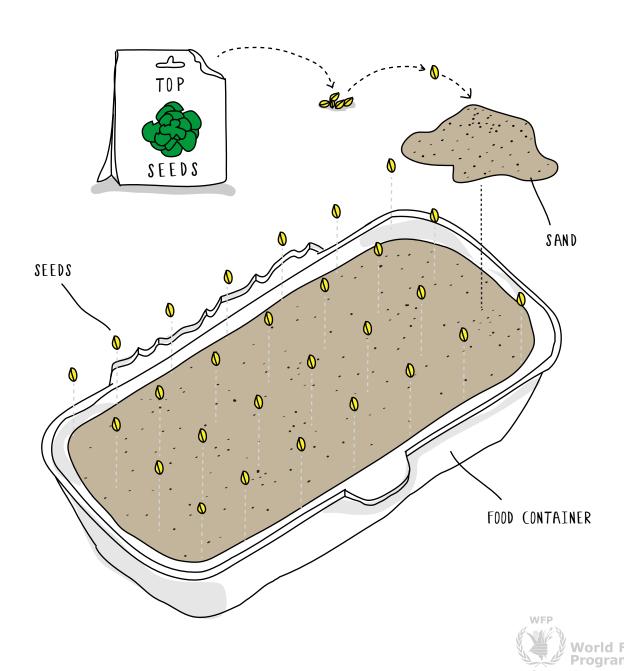


TABLE OF CONTENTS

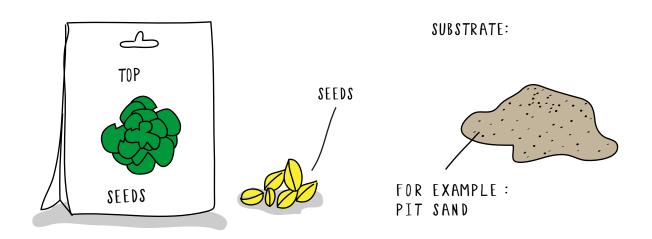
Materials You Need.	p. 3
1. Preparing the Substrate.	p. 4
2. Planting Seeds.	p. 5
3. Germinating Seedlings.	p. 6
4. Hydroponic Growing Details.	p. 7

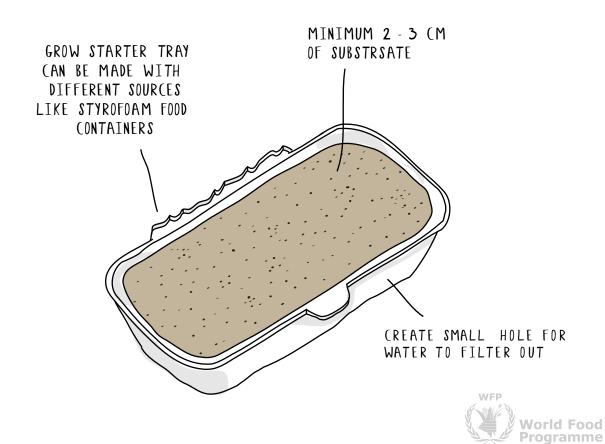
Concept by Isabel Inc. www.isabel.io

Concept, Design, Illustrations by Antonio Scarponi / **[onceptual)evices** www.conceptualdevices.com



MATERIALS YOU NEED:





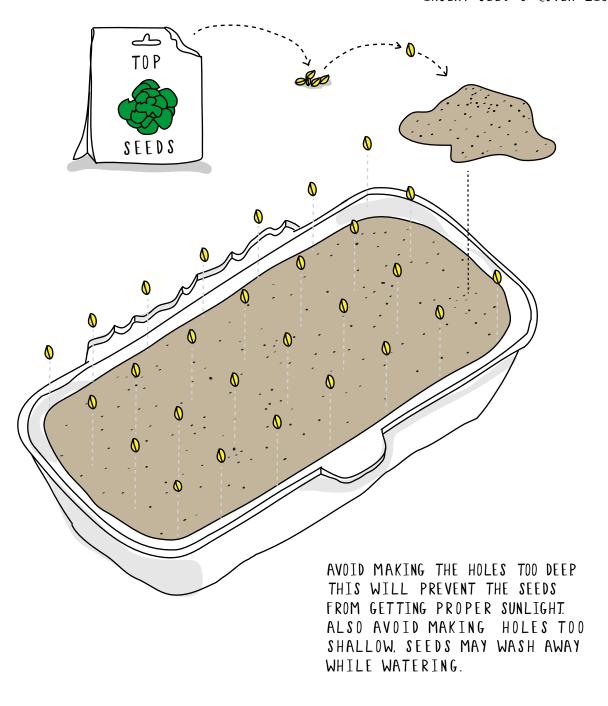
1 PREPARING THE SUBSTRATE

IN HYDROPONICS, OTHER MATIERALS ARE USED TO REPLACE SOIL. WE CALL THESE MATERIALS 'SUBSTRATES'. LIST OF EXAMPLES BELOW.





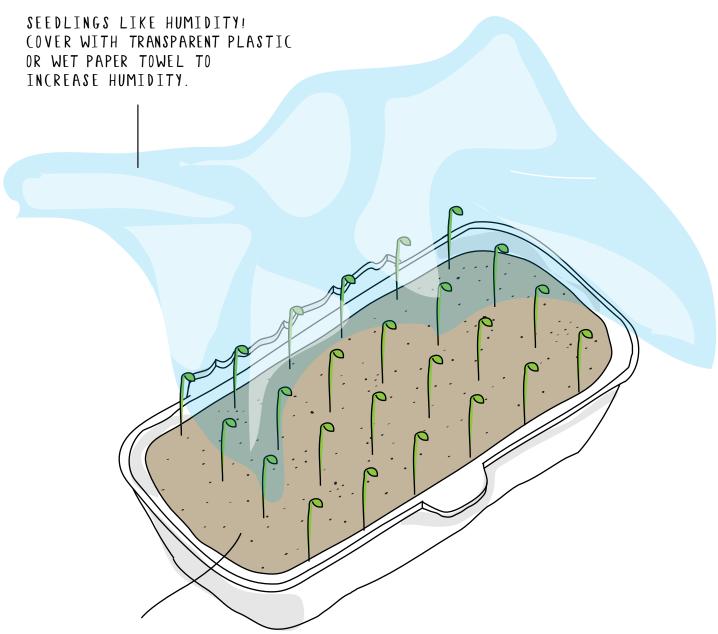
MAKE A HOLE 0.5 (M DEEP WITH FINGER OR PEN INSERT SEED & (OVER LIGHTLY





3 GERMINATING SEEDLINGS

PLACE TRAY IN INDIRECT SUNLIGHT AFTER A FEW DAYS, PLANTS WILL START SPROUTING. WATER GENTLY & KEEP SUBSTRATE MOIST.



LEAVE COVER ON FOR THE FIRST 3 DAYS OR UNTIL THE FIRST LEAVES SPROUT

WATER ONCE A DAY WITH HALF-STRENGTH NUTRIENT SOLUTION SEE PG.7 FOR DETAILS



4 Hydroponic Growing Details

Growing Cycle

	Crop	First	Second	Harvest
	Variety*	transplant	Transplant	Time
SUMMER	Head Lettuce Baby Greens Spices Asian Greens Hearty Greenst	Days 14 Days 14 Days 14 Days 14 Days 14	Days 14 No transplant Days 14 Days 7 Days 14	 Days 42 Days 28 Days 42 Days 35 Days 42

	Crop	First	Second	Harvest
	Variety*	Transplant	Transplant	Time
WINTER	Head Lettuce Baby Greens Spices Asian Greens Hearty Greens	Days 14 Days 14 Days 14 Days 14 Days 14	Days 21 - 28 No transplant Days 21 -28 Days 14 Days 21 -28	Days 56 Days 42 Days 56 Days 42 Days 56

Solution Mixing Instructions (Using Molina Salts)

Note: Our nutrient solution contains two parts; A & B. Follow instructions below to make them.

Solution A Solution B

Disolve in 5 liters of water:		Disolve in 2 liters of water:	
1 bag x	Nitrato de potasio	1 bag x	Sulfato de magnesio
1 bag x	Nitrato de amonio	1 bag x	Micronutrientes
1 bag x	Superfosfato triple	1 bag x	Quelato de hierro

* Crop Varieties

Head Lettuce: Romaine, Butterhead, Oakleaf, Batavia **Baby Greens:** Arugula, Spinach, Mixed Lettuce, Water Cress

Spices: Basil, Cilantro, Parsely, Mint, Sage

Asian Greens: Bok Choy, Tatsoi, Mustard Greens, Mizuna **Hearty Greens:** Swiss Chard, Spinach, Kale & Chicory

Nutrient Solution Recipes

For every liter of water add both 5 mL of **Solution A** & 2 mL **Solution B**. Use syringe to measure exact amounts.



Note: For seedlings, use half-strength solution. 2.5 mL of Solution A & 1 mL of Solution B



Concept by Isabel Inc. www.isabel.io

Design, Illustrations by Antonio Scarponi / [onceptual)evices www.conceptualdevices.com

© World Food Program, 2016.

