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# virginia home food production



## FACT SHEET

DEPARTMENT OF HORTICULTURE

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### FERTILIZING YOUR GARDEN

The amount of fertilizer to apply to a garden depends on the natural fertility of the soil, the amount of organic matter present, the type of fertilizer used, and the crop being grown. Get a soil test to determine your fertilizer needs.

Vegetables fall into three categories according to their fertilizer requirements. If your garden is large, try to group crops according to their fertilizer requirements to make application easier.

Fertilizers are sold by their analysis, such as 5-10-10 or 10-10-10. The numbers refer to the percent nitrogen, phosphorus, and potash, respectively. In 100 pounds of 5-10-10 there are five pounds total nitrogen (N), ten pounds available phosphorus ( $P_2O_5$ ), and ten pounds soluble potash ( $K_2O$ ). A fertilizer of high analysis such as 10-10-10 is more expensive per 100 pounds than a fertilizer of low analysis such as 6-8-8, but you will use less of the high analysis fertilizer per 1000 square feet of garden, and it is often the best buy.

#### Relative Nutrient Requirements for Vegetables

Heavy Feeders	Medium Feeders	Light Feeders
Broccoli	Beans	Peas
Cabbage	Beet	Peanut
Cauliflower	Carrot	Pepper
Celery	Chard, Swiss	Radish
Corn, Sweet	Cucumber	Spinach
Lettuce	Eggplant	Sunflower
Onions	Greens	Turnip
Potatoes, Irish	Melons	
Potatoes, Sweet		
Tomatoes		
Pumpkins		

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Don't use a "weed-and-feed" type fertilizer in or near your garden. The weed killers will injure your vegetables.

The 3 numbers stand for:  
 5% Nitrogen  
 10% Phosphorus  
 5% Potash  
 In the fertilizer

In the absence of a soil test, for those having a very limited garden area or those that are container gardening, the following rule may be followed: apply 20 lbs. of 10-10-10 or 40 lbs. of 5-10-10 per 1000 square feet.

Fertilizer per	<u>1000 sq.ft.</u>	<u>100 sq.ft.</u>	<u>bushel</u>
if using 5-10-10	40 lbs.	4 lbs.	2 oz. or 4 Tbl.
10-10-10	20 lbs.	2 lbs.	1 oz. or 2 Tbl.

Incorporate and thoroughly mix all fertilizers before planting.

In the fall or in the spring before working the soil, measure out the correct amount and spread the fertilizer evenly over the ground. You can toss it from a pail by hand, use a spreader or just dribble dry plant food in furrows two inches deep. Furrows should be located on both sides - three inches away from the row. Use 1 to 2 pounds of fertilizer for 100' of row. Be sure to wear gloves to protect your skin from irritating chemicals. Always follow the directions on the label for rate of application of all fertilizers. Add the correct amount. Too much will kill the plants and pollute the environment.

Organic materials may be used in combination with, or instead of, chemical fertilizers. In any case, it is important to calculate the total available nutrients in order to be certain that the plant is being supplied with adequate nutrient levels.