



## Juicing Fruits and Vegetables

Juicing fruits and vegetables at home has become popular. It helps people get the maximum benefit from their produce in a delicious way. Juicing involves placing fruits and vegetables into a specialized machine that purees and separates the food into a juice and fiber.



#### What are the benefits of juicing fruits and vegetables at home?

Most of us are aware that eating fruits and vegetables is important. It decreases our waist size and lowers our risk for heart attacks, strokes, and cancer. Despite this, 70% of Americans eat less than the United States Department of Agriculture (USDA) recommended amount of five or more servings of fruits and/or vegetables daily. Here is where juicing can help:

- Juicing is a fun and delicious way to increase fruits and vegetables in your diet.
- Research shows that juicing fruits and vegetables significantly reduces the amount of pesticide residue that would otherwise be eaten. This is because the peel, where pesticides are found, becomes separated from the juice and discarded.
- Homemade juice includes the pulp, which is often discarded in the juices that you buy at the store. This pulp contains healthy fiber as well as minerals and vitamins.
- Drinking juiced vegetables such as beets has been shown to lower blood pressure.
- Some people have found juicing to be an effective way to lose weight by using juiced fruits and vegetables to help replace calorie rich foods at mealtime.
- Commercial juice is pasteurized (heated to high temperatures) to kill harmful bacteria.
   Unfortunately, this process also decreases some of the health-promoting compounds of the food. Juice made from raw vegetables retains these healthy properties.

### What are the drawbacks of juicing?

- As raw juice isn't pasteurized, it is prone to spoil quickly. It is best to drink the juice soon after it is prepared.
- Juicing mixes air into the fruit and vegetables, which can destroy some of the cancer fighting polyphenols that would be preserved if the food was eaten whole.
- Juicing is more expensive than eating the fruits and vegetables whole. Juicers range from between \$40.00 to more than \$1000.00.
- Juicing removes some of the healthy fiber that is found in fruits and vegetables. However, some
  juicers have a pulp filter that can be removed to increase the amount of fiber in the juice, or fiber
  can be added back into the juice with supplements like psyllium, guar gum, or ground flax seed.

NOTE: Fiber helps your body control sugar and therefore is beneficial for people with diabetes. See our handout <u>Glycemic Index and Glycemic Load</u> for more information. Fiber also adds bulk to the foods that you eat which increases your sense of fullness. This will help you eat fewer calories and increase weight loss. Finally, fiber supports healthy bowel function and even helps to lower cholesterol!



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#### Which juicer is right for me?

There are three main types:

- **Citrus juicers** Cut halves of fruits are squeezed onto a reamer which squeezes the juice from the fruit. Easy to clean, but limited in what can be juiced.
- **Juice extractors** Spinning blades puree pieces of fruits and vegetables and separate the juice from the other parts. They allow for more options in what can be juiced, but require more effort to clean and maintain. More expensive models are best for juicing hard vegetables like beets and carrots.
- **Blenders** A blender purees the whole food into juice and fiber. Retaining the fiber helps slow the speed at which the body absorbs the plant sugars, reducing the glycemic index.

See http://www.consumersearch.com/juicers for a free buying guide to juicers.

#### Sample Recipes

Here are two recipes that you might want to try. Feel free to experiment with your own recipes. Consider using vegetables that you grow yourself right at home.



#### Green Ninja:

2 granny smith apples, ½ cup green grapes, 1 cup broccoli, 1 cup cauliflower. Makes 12 oz juice and may be especially helpful for hangovers!



#### Pink Moon:

1/4 watermelon, 1/2 cucumber, 1 cup strawberries. Makes 27 oz of juice.

#### References/Acknowledgements:

- 1. Clifford A et al. Delayed tumor onset in transgenic mice fed an amino acid based diet supplemented with red wine solids. *American Journal of Clinical Nutrition*. 1996;64:748-756.
- 2. Kapil V et al., 2010, Inorganic Nitrate Supplementation Lowers Blood Pressure in Humans: Role for Nitrite-Drived NO. *Hypertension*. 2010;56:274-281.
- 3. Rasmussen RR et al. 2003, Distribution of multiple pesticide residues in apple segments after home processing. *Food Additives and Contaminants*. 2003;20(11):1044–1063.
- 4. Recipes contributed by Sam Evans

The information in this handout is for general education. It is not meant to be used by a patient alone. Please work with your health care practitioner to use this information in the best way possible to promote your health.

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