

The consumption of nutritious fruits and vegetables is a major component of a balanced and nutritious diet and healthy eating guidelines. Australian dietary guidelines ([www.eatforhealth.gov.au](http://www.eatforhealth.gov.au)) recommend that on a daily basis adults should include 5 vegetable and 2 fruit serves within our diet. Unfortunately most Australians only eat half the recommended quantity leaving our diets in a deficit. Whole fruits are preferable to juice, and we all should be trying to eat a rainbow of fruits and vegetables choosing different colours and types so as to get maximum benefit and an overall nutrient balance. The guidelines also suggest that for value and quality you should buy fresh and those fruits and vegetables that in season. In addition, if including frozen or canned fruits and vegetables in your diet try and buy without sugar or salt. Remember that frozen vegetables can be highly nutritious and convenient.

Fruits and vegetables provide many nutritional components that we need daily to maintain a healthy body and mind. Vitamins, minerals, phytonutrients and importantly dietary fibre are needed to prevent malnutrition and negative impacts on your overall health and wellbeing.

Those people that have difficulty in eating fresh raw foods such as those with fatigue, reduce saliva (Sjögren's), or those with dental issues may benefit from the softer texture of cooked fruits and vegetables. Whilst juicing fresh fruits or vegetables can provide most of the vitamins, minerals and plant chemicals (phytonutrients) most of the healthy fibre is lost during the juicing process. Fibre can be retained if a blender or a blitzer is used however, if a juicer is used you will need to use the remaining pulp in soups or stews to gain the dietary fibre lost or discarded as waste product.

It is often reported that juicing is better for you than is eating whole fruits and vegetables due to your body absorbing the available vitamins and minerals quickly and in a more available form. Other claims are that a juice diet can reduce cancer and chronic disease risks, repair immune systems, act as a detoxification agent removing toxins from your body, aid digestion and help you lose weight. However strong scientific evidence to support these claims is still not available and most dietary experts adhere to greater benefits from eating the fruit or vegetable itself. As a contradiction, some juices or teas containing fruits and vegetable have anecdotally been sprouted as have calming properties such as easing digestion or helping with nausea and I admit that I regularly

combine pineapple, ginger, fennel and mint to help with nausea. (Recipe attached)

It may be that health improvements can be attributed to be seen as a result of a juiced cocktail allows someone that has not included or enjoyed eating fresh fruits and vegetables in the past to now get benefits from increasing their recommended nutrient load in a drinkable form therefore improving their overall diet.

The Food and Drug Administration warns that

"juicing, in some cases, lead to foodborne illness. All raw food can harbor pathogens that cause vomiting, diarrhoea, and in worst case scenarios conditions like E.coli, hepatitis, and even kidney failure. The pasteurization process that most packaged juice and milk commonly goes through kills these dangerous organisms; juicing on its own doesn't."

If juicing raw fruits and vegetables is something you are going to include as part of your overall diet and to reduce any potential foodborne contamination risk, you should take care to wash all fruits, vegetables and juicing or blending equipment thoroughly. You should also drink your juice soon after preparation to reduce bacterial risk and to maximise food nutrient intake as there is a large degree of evidence that shows that the nutritional content of fruits and vegetables start to reduce once they are exposed to light and air, some nutritionists also report that the nutritional value is compromised due to fibre locking in the phytonutrients as well as other vitamins.

One final and very important consideration is that due to juicing whole fruit you may be taking more fruits and vegetables than needed

for your overall kilojoule energy load. Fibre within a piece of fruit can make us feel fuller and also slow down the absorption of fruit sugars therefore the fresh juice you are preparing and consuming may have more sugar than you realise and disturb blood sugar levels causing blood sugar spikes and over time add calories leading to weight gain. Particular caution is needed if you have diabetes. Due to the increased fruit sugars many nutritionist recommend vegetable juices or a combination juice which includes a higher proportion of vegetables than fruits as vegetable juices do not have the same effect.

The Australian dietary guidelines recommend that juice be included only as an occasional item and when consumed only 125ml or ½ cup of fruit juice without any added sugar.

## JUICES



### BLENDING, JUICING OR EATING WHOLE FRUITS AND VEGETABLES

## SO WHAT IS A VEGETABLE SERVE?\*

A standard serve is about 75g (100-350kj)

½ cup	cooked green or orange vegetables
½ cup	cooked dried, frozen or canned beans, peas or lentils
1 cup	green leafy or raw salad vegetables
½ cup	sweet corn
½ med	potato or other starchy vegetable
1 med	tomato or
½ cup	canned tomato or beetroot

Occasionally

125ml or ½ cup of fruit juice without any added sugar  
30g dried fruit (4 dried apricots, 1½ tablespoons of sultanas)

## SO WHAT IS A FRUIT SERVE?\*

A standard serve is about 150g (350kj)

1 med	apple, banana, orange or pear
2 small	apricots, kiwi fruit or plums
1cup	diced or canned fruit (no added sugar)



## DIGESTIVE EASE RECIPE

Can be prepared as a blended juice or as a dessert particularly nice in summer. Simply combine all together either in a bowl or in a blender.

1. ¼ to ½ pineapple, peeled and cut into small pieces
  - Pineapple contains bromelain which is an enzyme that helps breakdown food.
2. A small piece of ginger (2 cm cube)
3. 10 g fennel (4cm cube)
4. Mint leaves
  - Ginger, fennel and mint help calm the stomach and relieve digestive discomfort, nausea, cramping, bloating and flatulence. Together they make a tasty treat as well as helpful aid to digestion and regular bowel movements.

## IN SUMMARY:

- Whole fruits and vegetables are best but if you are gaining your fruit and vegetable diet content through as a liquid try blending so as to retain the dietary fibre.
- Always thoroughly wash all foods and equipment
- Consume juice immediately without any storage
- Keep fruit and vegetable ingredients within your recommended diet counts i.e 5 serves of vegetables and 2 serves of fruit.
- Eat or juice a rainbow to gain a variety of nutrients and flavours

References:

Australian dietary guidelines [www.eatforhealth.gov.au](http://www.eatforhealth.gov.au)  
<http://www.mayoclinic.org/healthy-lifestyle/nutrition-and-healthy-eating/expert-answers/juicing/>  
Images: [www.123rf.com](http://www.123rf.com)