



# ... Introduction

In October 2007, Choice tested the claim that non-centrifugal juicers produce juice that lasts longer and contains more nutrients. Manufacturers claim cold-press-style machines' juice is more nutritious and that it'll stay fresh and tasty for up to 48 hours. According to the makers, the gentle, slow-turning action of a cold press machine produces a greater quantity of juice, which retains more vitamins, minerals, enzymes, phytochemicals and fibre than that produced by other methods. Their argument is that high-speed centrifugal juicers heat up the juice, allow air to enter and therefore cause damage to some of the perishable nutrients.

They found that the manufacturers' claims are true...

## Health claims tested

	<b>Centrifugal Juicers</b>	<b>Non-centrifugal Juicers</b>	
<b>Less oxidation</b>	x	✓	The apple juice from the centrifugal juicers separated and went brown a few minutes after juicing
<b>More fibre</b>	x	✓	The Greenpower Hippocrates & the Oscar Vital Max scored the highest at 90% on performance
<b>More nutritious</b>	x	✓	The Greenpower Hippocrates' juice contained well over double the beta-carotene and alpha-carotene of the juice from every other juicer in the test
<b>Greater quantity of juice</b>	x	✓	Although the cold pressed juicers did produce more juice, the Healthstart Compact scored the lowest for the juice produced because its carrot juice was a little grainy and it produced a lower quantity
<b>Easier cleaning</b>	x	✓	All the centrifugal juicers have large, bulky parts that are hard to fit into a domestic sink for cleaning
<b>Stays fresh for 48 hours</b>	x	✓	The juice from the non-centrifugal juicers didn't separate, smelt fresh and looked palatable and green after 48 hours in the fridge

Choice scored the juicers for performance & ease of use. Choice also tested the manufacturers' claims that juice made by cold-press-style machines is more nutritious and that it'll stay fresh and tasty for up to 48 hours.

### Key findings:

- ✓ All the juicers performed reasonably well, with even the worst getting a good score
- ✓ non-centrifugal juicers do extract more nutrients — in some cases double or even three times as much!
- ✓ Juice from the non-centrifugal juicers still looked and smelt palatable after 48 hours.
- ✓ All the centrifugal juicers have large, bulky parts that are hard to fit into a domestic sink for cleaning.



## ... Nutritional analysis

Choice tested the nutritional claims, by sending a sample of carrot juice from each juicer to a lab to be analysed for minerals (potassium and calcium), Vitamin C and the phytochemicals alpha and beta-carotene, to see if the non-centrifugal juicers did extract or retain more nutrients.

The juice from all the non-centrifugal juicers contained about double — in some cases triple — the calcium of the juices produced by the centrifugal juicers (bar one, the Magimix).

*The Greenpower Hippocrates' juice contained well over double the beta-carotene and alpha-carotene of the juice from every other juicer in the test.*

Potassium was much the same for all juices tested.

Vitamin C quantities were too low to measure accurately.

### How long did the juice stay fresh?

A sample of apple juice from each juicer was refrigerated for 48 hours, then evaluated for colour, overall appearance, smell and texture, to test the claim that juice from non-centrifugal juicers holds up longer.

The apple juice from the centrifugal juicers separated and went brown a few minutes after juicing. After two days it was noticeably deteriorating, didn't smell fresh, had a hard froth on top (except juice from the Magimix) and a layer of sediment at the bottom — indicating a higher level of oxidation.

By contrast, the juice from the non-centrifugal juicers didn't separate, smelt fresh and looked palatable and green after 48 hours in the fridge, indicating less oxidation.

And the reason why? It's possible that the oxidation or friction from higher-speed centrifugal juicers turns the juice bad faster than the slow-turning machines.

### CHOICE conclusion:

- ✓ ***Non-centrifugal models do produce juice that lasts longer and contain more nutrients.***

### Brands tested

- Breville Ikon Juice Fountain BJE510
- Breville 800 Class 800JE
- Delonghi JE 850 M
- Sunbeam Café Juice JE7600
- Sunbeam Café Series JE8900
- Kambrook Twin Speed Juicer KJE40
- Morphy Richards 48951
- Magimix Le Duo Plus
- Greenpower Hippocrates GPT-E1303
- Oscar 900 VitalMAX (Chrome)
- Champion 2000+
- Healthstart Compact



# ...Test results

Here's some test results of the juicers tested by Choice, grouping centrifugal & non-centrifugal juicers. The overall score is made up of 50% performance & 50% ease of use.

**Performance:** The tester processed a kilogram each of carrots, apples, oranges and a combination of watermelon and pineapple. From these, she evaluated each juicer's abilities across a range of textures and consistencies. She was looking for juice that was smooth rather than pulpy, grainy or frothy.

**Ease of use:** Included how easy it was to 'feed' the juicer (affected by the size of the chute and how small the contents had to be chopped before it would fit), assembly and disassembly of parts, cleaning, use of controls, collecting juice, and removing pulp.

**Safety:** Each juicer was also assessed to see how easy it was for hands of various sizes to come into contact with the blades through the food chute, when it was fully assembled. Safety wasn't scored, but you'll find comments in the profiles.

		Performance		
Brand/model (in rank order)	Type	Overall score (%)	Performance score (%)	Ease of use score (%)
<b>Centrifugal juicers</b>				
<b>Breville Ikon Juice Fountain BJE510</b>	Centrifugal	83	85	80
<b>Breville 800 Class 800JE</b>	Centrifugal	81	83	78
<b>Delonghi JE850M</b>	Centrifugal	80	85	74
<b>Sunbeam Café Juice JE7600</b>	Centrifugal	80	83	76
<b>Sunbeam Café Series JE8900</b>	Centrifugal	80	83	76
<b>Kambrook Twin Speed Juicer KJE40</b>	Centrifugal	75	80	70
<b>Morphy Richards 48951</b>	Centrifugal	75	80	70
<b>Magimix Le Duo Plus</b>	Centrifugal	71	83	58
<b>Non-centrifugal juicers</b>				
<b>Greenpower Hippocrates GPT-E1303</b>	Cold-press, twin-gear	80	90	70
<b>Oscar 900 VitalMAX (Chrome)</b>	Cold-press, single-gear, 3 step auger	78	90	66
<b>Champion 2000+</b>	Single auger, masticating	74	85	62
<b>Healthstart Compact</b>	Similar to cold-press, single auger	72	78	66

## ... "What to buy"

In regards to Cold-Pressed Juicers, here's what Choice had to say on what to buy...

What to buy	
Brand	Price
Greenpower Hippocrates GPT- E1303	\$749
OSCAR 900 VitalMAX (Chrome)	\$540



The Healthstart Compact and the Champion produced juice containing high levels of calcium. Apple juice from both looked and smelt palatable after 48 hours. Although easy to clean, they're expensive, have a small chute, no cord storage and no dishwasher-safe parts. The Healthstart Compact scored the lowest for the juice produced because its carrot juice was a little grainy and it produced a lower quantity.

## Benefits of non-centrifugal juicers

The non-centrifugal juicers tested by Choice were mostly more expensive than centrifugal models. Despite this, they have a smaller chute size and no dishwasher-safe parts or cord storage. They're also slower at processing and you sometimes need to give the fruit and vegetables a good shove to get them down the chute.

*However, there are several advantages to non-centrifugal types...*

- ✓ If you store your juice rather than drinking it soon after making it, one of these machines may suit you
- ✓ You can also use some of them for food processing, mincing, grinding coffee beans and for making sausages, pasta/noodles, seasonings, nut butter, soy milk, baby food and ice cream
- ✓ They have fewer parts and are easier to clean
- ✓ The Cold-press juicers can juice wheatgrass and herbs
- ✓ Their warranties are generally longer than those for centrifugal juicers
- ✓ They're much quieter than centrifugal models

**Choice confirms, the test shows that the juice from these machines contains more nutrients than most centrifugal models, and it lasts longer.**





## ... Profiles

Choice profiled 2 cold press juicers in their report. Here are the results...

### **Greenpower Hippocrates GPT-E1303**

**Price: \$749**

#### Good points

- ✓ Excellent result for orange, carrot and combined pineapple and watermelon juice, and very good for apple juice.
- ✓ 12-year warranty on the motor and five years on parts and labour
- ✓ Very good instructions with DVD
- ✓ Large pulp container and good-sized jug
- ✓ Can process wheatgrass, barley grass, alfalfa, and seeds such as sesame and pumpkin
- ✓ Can be used as a food processor, meat mincer, soy milk and tofu maker, frozen dessert and baby food maker and pepper & coffee grinder
- ✓ You can buy an attachable pasta and noodle maker
- ✓ Quiet
- ✓ Juice still looked and smelt palatable after 48 hours
- ✓ Good levels of tested nutrients in juice

#### Bad points

Narrow chute, and no cord storage  
Hard vegies take more time and effort to process  
Some cracks and crevices trap dirt

### **Oscar 900 VitalMax (Chrome)**

**Price: \$540**

#### Good points

- ✓ Excellent result for orange, apple, carrot and combination pineapple and watermelon juice
- ✓ Other uses include mincing, chopping, sausage making, noodles/pasta, nut butters, fruit ice creams, purées and desserts
- ✓ 20-year warranty on the motor, five years on parts and labour
- ✓ Different strainers for different functions, such as juicing and mincing
- ✓ Juices wheatgrass, barley grass, alfalfa
- ✓ Quiet.
- ✓ Easy to clean.
- ✓ Juice still looked and smelt palatable after 48 hours
- ✓ Good calcium levels

#### Bad points

No parts are dishwasher-safe  
No cord storage  
Narrow chute  
Small juice jug and pulp container  
Hard vegies take more time and effort to process



**Greenpower Hippocrates**  
**\$749**



**Oscar Vital Max 900 (chrome)**  
**\$540**