



Vitafruit

JAM & MARMALADE MAKER



Introduction

With the Tefal Vitafruit Jam Maker home-made jams, jellies, marmalades and chutneys are easy to make. There is no need for constant stirring or thermometers, everything is done automatically. Making jellies is easy as the juice extraction program steams the fruit to remove the fruit juices, without the need to strain through a jelly bag.

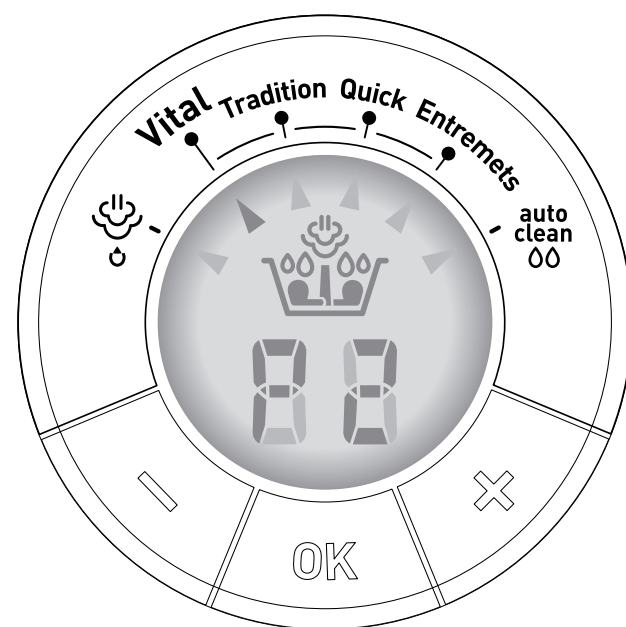
The Vitafruit makes about 3lb of preserves using around 1 kg of fruit.

There are a variety of programmes to choose from – “Tradition” which takes about 45 minutes; “Vital” for making jams that are lower in sugar content; “Quick” made using jam sugar with added pectin; “Desserts” for making rice pudding and chutneys; plus “Juice Extraction” to make juice for jellies. The “Auto Clean” function loosens any sticky residue and makes cleaning the bowl easy.



Control Panel

- P1** Juice extraction
- P2** Vital programme
- P3** Tradition programme
- P4** Quick programme
- P5** Desserts (labelled in French Entremets)
- P6** Auto Clean



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About our recipes

The cooking times stated in the recipes are approximate and the exact time will depend on the ripeness and pectin content of the fruit. Some programmes are not recommended for all fruits and this is explained in each recipe.



Jam making techniques

Pectin content of fruit

For jams and jellies to set, it is necessary for the fruit to contain sufficient pectin. The table below is a guide to the pectin levels in different fruits.

Fruits low in pectin	Fruits with medium pectin	Fruits high in pectin
Blackberries (late season)	Apricots (fresh)	Blackcurrants
Blueberries	Blackberries (early season)	Citrus fruits
Cherries	Dessert apples	Cooking apples
Elderberries	Greengages	Damsons
Marrow	Loganberries	Gooseberries
Nectarines	Plums (soft or dessert varieties)	Limes
Peaches	Raspberries	Plums (some varieties)
Pears	Sweet oranges	Quince
Pineapple	Tayberries	Redcurrants
Rhubarb		Seville oranges
Strawberries		

For fruits low in pectin, use jam sugar with added pectin; or add lemon juice or commercial liquid pectin (available in larger supermarkets). Alternatively, low or medium pectin fruits can be mixed with a high pectin fruit. The «Quick» programme is not recommended for making jam and jelly using fruit with a high pectin content as it will set too firmly. Use the «Tradition» programme instead.

How to choose the right fruit

Select healthy fruits that are neither too ripe nor too green. Do not use fruit which is worm eaten or damaged by pests. For best results, prepare fruit just before jam making. Fruit prepared too soon in advance will be less tasty and lose some of its vitamins. If seasonal fruit are lacking, you can use frozen fruit (see page 6 for more details).

Preparing the fruit for jam making

When cooking fruit in the Vitafruit Jam Maker, the fruit does not break down as much as when using a saucepan or preserving pan. In general, the pieces of fruit are roughly the same size before and after cooking. Therefore, when making strawberry jam small berries can be left whole, but medium or large strawberries should be cut into quarters or even eighths. Alternatively, thickly slice the berries. Fruit such as apricots and plums require the stones removed and cutting into chunks before cooking. Small berries such as blackcurrants, redcurrants, raspberries, and loganberries do not require any preparation.

Take care when handling some fruits such as blackberries and cherries as the juice can permanently stain clothing and surfaces.

Making jam

Jam can be made using the “Vital” (reduced sugar) or “Tradition” programme. The “Quick” program, which uses jam sugar, is only suitable for low or medium pectin fruits. If the fruit is very sharp, such as raspberries or some varieties of gooseberries, we do not recommend using the “Vital” program as the resulting jam tastes too tart and is insufficiently sweet.

Making Jelly

First the juice is extracted by steaming the fruit using the “Juice Extraction” programme **P1**. Stirring the fruit and pressing it with the ladle during steaming helps to extract the maximum amount of juice. Then, the extracted juice can be made into jelly by using the “Vital” or “Tradition” program. We do not recommend using the “Quick” program when making jelly.

Making marmalade

Due to the smaller capacity of the Tefal Vitafruit Jam Maker, the method of preparation and quantities have been adapted for use in the Tefal Jam Maker. First the whole oranges or other citrus fruit must be boiled in a separate pan to soften the peel, then the pulp is retained for marmalade making and the peel cut into strips. Alternatively, you can extract the juice from the fruit which is then boiled and reduced by half. Please follow the instructions in the recipes carefully.

It is important with marmalade that the peel is very soft and tender before adding the sugar as it won't soften any more once the sugar is added.

Use the “Tradition” programme for making marmalade. The “Vital” and “Quick” programmes are not recommended.

Instead of fresh fruit, an alternative is to use commercially prepared concentrated Seville bitter oranges in 850 g cans, available in most large supermarkets, located in the jam section. Water and sugar are added to the prepared orange pulp, and then cooked in the Vitafruit Jam Maker. For a recipe sheet please contact our Customer Relations Team on 0845 602 1454 (for UK) and (01) 677 4003 (for Ireland) or consult our web site: www.eatthealthily.co.uk then click on the section recipes for Vitafruit.

Making chutney

Chutneys are made from a mixture of chopped fruit and vegetables cooked with vinegar, spices and sugar using the “Desserts” **P5** program.

Sterilizing jars

Use glass jam jars, new or re-used, or preserving jars with rubber seals. Wash the jars or base of preserving jars, in warm water and washing-up liquid, rinse well and then place in a cool oven - 140°C (Fan oven 120°C)/Gas mark 1 for 15-20 minutes.

Testing for a set

To test if the jam, jelly or marmalade is set, place 1 teaspoon of jam onto a cold saucer and allow to cool for 1 minute, then push the surface with your fingertip, and if the surface wrinkles, setting point is reached. If not, retest again after an extra 5 minutes.

Alternatively, remove some jam with a wooden spoon, then after 2 seconds tilt it so that the jam drips. If the jam is set, the drops run together to form large flakes which break off sharply.

Filling the jars

Filling the jars and sealing them is called “potting”. Fill the sterilized jars to within 3mm/1/8th of an inch of the top of the jar.

For jam jars, buy jam pot covers to fit the size of jar, usually either 1 lb or 2 lb. Use 2 lb size covers to fit the three wide necked jam jars supplied with your Vitafruit. While the preserve is still hot place the waxed circle, wax side down, onto the surface of the jam and smooth out any bubbles. Then take a cellophane wrapper and dampen it with cold water on one side. Place the dampened side uppermost on the jar and secure with a rubber band. Using metal screw top lids on top, will give an extra seal to the preserve to keep it longer.

Preserving jars usually have a thin rubber ring in the lid, which acts as a seal, and are secured with either a screw band or clips.

If making chutney, there is no need to sterilize the jars as the vinegar acts as a preservative. Chutney must be covered with vinegar-proof lids as vinegar corrodes metal, so use jars with plastic coated metal lids such as bought pickle jars. Jam pot discs and covers are not suitable as the vinegar will evaporate through them. Alternatively, use preserving jars.

Storage

Jam and jelly made using the Traditional and Quick programme should last about 1 year if kept in a cool, dark, dry place. If made using the Vital programme, due to the lower sugar content it will only keep for about 3 to 4 weeks. Once opened it should be stored in the refrigerator and consumed within 1 week of opening.

Frequently asked questions

If I don't have fresh fruit, can I use frozen fruit instead?

You can use frozen fruit but it is preferable to defrost it first before putting it into the jam maker. If you do not defrost them beforehand, this will increase the length of the cooking cycle by about 5 to 10 minutes, but check for a set after the normal cooking time to see if the preserve is ready. It is normal when using frozen fruits for the paddle to stop turning for a while, but as the fruit thaws it will soon turn freely.

In compliance with European regulations, good quality, ripe frozen fruit is frozen the day it is picked.

Current freezing techniques allow the vitamins and flavours to be conserved.

What are the maximum and the minimum quantities of fruit I can cook in the jam maker?

1kg of fruit is the maximum quantity of fruit recommended to avoid overflows.

Also, you must never exceed the maximum filling level mark (see the ridged line marked on the inside of the bowl).

For the minimum quantity, we recommend not less than 500 g of fruit. The recipes for 1 kg of fruit can be reduced by half, but the cooking time should be reduced by about 5 to 10 minutes.

After setting the cooking time it does not count down?

This is normal. The cooking time does not count down until the contents of the bowl reach the required boiling temperature. This can take up to 15 minutes.

If I press the wrong button on the control panel, how can I return to the previous step?

You can clear the system by pressing the OK button for 3 seconds and then selecting the correct programme.

If I press the wrong button during the Vital programme, what can I do?

If you have made a mistake when making the syrup, you can clear the system by pressing the OK button for 3 seconds and then start preparing the syrup again.

If you have made a mistake during the second step of the programme, which is to say when cooking the jam (once you have already added the fruits or the juice), clear the system by pressing the OK button for 3 seconds. Start the cooking time again but with the Tradition programme P3 (if you set the Vital programme, when you clear this it returns to the start of the programme, which is to say cooking the syrup, the step which has already been completed).

Which types of sugar can I use?

White caster, granulated or jam sugars can be used. Do not use brown sugar (as it will cause the jam to ferment), diet sugar, low calorie sugar or artificial sweeteners.

Why does rice pudding burn and stick to the bottom of the bowl?

Follow the recipe and only add the sugar at the end when cooking is complete. It is normal for thin, brown skin to caramelize on the base of the

bowl. To avoid cooking the rice for too long use Arborio risotto rice instead of pudding rice.

How does the lid of the jam maker work?

It has been specially designed to remain in the raised position to allow the water to evaporate while the jam cooks (the centre of the lid rests on the rotor blade).

However, it is hermetically sealed during the Juice Extraction programme (when it is placed on the strainer).

Do not use the lid when cooking jelly in order to help the evaporation of the water.

When using the Vital programme, why does the syrup crystallise?

You have forgotten to add the quarter of fresh lemon. If you do not have a lemon, you can use 1 tablespoonful of fresh lemon juice instead.

Why does the paddle not turn when making jam?

If the preparation is too stiff, the paddle cannot turn but this does not damage the appliance. After cooking for awhile, the preparation will soften and the paddle will start turning.

Can I soak the fruit in alcohol or fruit syrups such as Grenadine, before making the jam?

Soaking fruit before making jam is not detrimental but only use the Tradition programme. Soaking fruit increases the quantity of water in the preparation and the Tradition programme (longer heating time than the other programmes) will allow this surplus water to evaporate.

Should I pre-cook the fruits when making jam?

Pre-cooking is only usually necessary for the Quick programme and is integrated into the programme cycle. However, some fruits such as gooseberries, rhubarb, dried apricots and apple & blackberry jam do need a short pre-cooking time and this is explained in the recipe.

There are overflows during the Juice Extraction programme, what should I do?

If there are overflows during the Juice Extraction programme, perhaps there is too much water in the bowl. Do not add more than 750 ml. During extraction regularly stir and press the fruit down to extract the juice to help prevent overflows.

Why does the appliance stop during pre-cooking in the Quick programme or during cooking in the Tradition programme?

You have forgotten to add water (approximately 200 ml) to the fruits. The preparation is too dry and the appliance has switched to safety mode.

I have set the programme, but I cannot set the cooking time?

After selecting the programme required press OK and the timer display flashes, set the cooking time using the + and - buttons, press OK again and the display stops flashing.

The drive spindle has become sticky from spilled jam mixture. How do I clean it?

The drive spindle is not removeable. If it becomes dirty, unplug the appliance and wipe the drive spindle with a damp cloth.

I have fitted the bowl on the base but the display on the Jam Maker is blank and I cannot programme it?

Check the bowl is correctly aligned. Remove the bowl and try re-fitting it again, checking it is firmly pushed onto the base.

On the auto clean function not all of the residue is cleaned from the bowl?

When the programme finishes, use a washing up brush to loosen any residue, then rinse out the bowl.

When making jam and marmalade there is a lot of white frothy scum. What did I do wrong and how can I remove it?

Scum is normal when making preserves. After testing if the jam is set, skim it off with a strainer. Alternatively, stir in a knob of butter or a few drops of glycerine with a wooden spoon.

My jam or jelly is too runny and not firmly set. What did I do wrong? Can I re-boil it?

Jam cooked on the Vital programme often has a softer, continental style set. If your jam or jelly is too runny re-boiling it will not help. Instead you can use it as a sauce over puddings and desserts.

When making marmalade why do you need to boil the fruit in a saucepan first?

This is to soften the peel. Due to the smaller capacity of the Tefal Jam Maker it is not possible to make marmalade in the traditional UK way of simmering fruit for an hour or more in a large quantity of water. The method of preparation and the recipe quantities has been adapted for use in the Vitafruit Jam Maker.

Why do I have to put the jam jars in the oven to warm them?

This is important to sterilise the jars, to avoid any microbes causing food spoilage when storing the jam.

Can I use the waxed circles and cellophane wrappers to seal the jars?

Yes, buy jam pot covers to fit the size of jars used, usually 1 lb or 2 lb. 2 lb jam pot covers fit the wide necked jars supplied with your Vitafruit Jam Maker. While the preserve is still warm place the waxed circle, wax side down, onto the surface of the jam and smooth out any bubbles. Then take a cellophane wrapper and dampen it with cold water on one side. Place the dampened side uppermost of the jar and secure with a rubber band.

If my jam goes mouldy, what is the cause?

- You probably sealed the jar when the jam was warm, instead of very hot or cold.
- The lid might be damaged.
- The jar was damp or had not been sterilized.
- You have not filled your jar completely.
- Storing in too warm a place.

Remove the mould and a thick layer off the surface of the jam, store in the fridge and eat the jam quickly.

If my jam ferments, what is the cause?

- The fruit was not cooked enough.
- You have used brown sugar.
- Your jam did not contain enough sugar.
- Your fruit was damaged or over-ripe.
- The jar was not sealed properly.

Remember jam made using Vital programme only keeps for about 3 to 4 weeks. Once opened it must be stored in the refrigerator and consumed within 1 week.

There is no miracle solution for fermented jam, you just have to throw it away.

Problem solving

Problem	Cause
Fruit or peel floating on the top	Potted too soon. Leave to cool for 15 minutes, then stir it well and pour into jars
Bubbles dispersed in jelly	Caused by leaving the jelly too long before potting in jars. Scum that has not been removed prior to potting
Mould forming on the surface	Often caused by using unsterilised jars or storing in too warm a place. Also can occur if potted while warm, instead of cold or very hot.
Crystallised jam	Using too much sugar



Spring

Savour orchard fruits and red fruits!

In the spring, orchard fruits, like apricots and red fruits, such as redcurrants, are fully ripe. The best way to eat them is without a doubt at the time of picking. But delicious jams also enable you to rediscover their intense taste and flavour.

- Apricots are one of the fruits that provide the most pro-vitamin A: 1.5 mg/100 g. Vitamin A and in particular carotenoids are known for their action on the skin, encouraging tanning.
- Red fruits (cherries, strawberries, raspberries, redcurrants, etc.) are rich in polyphenols, a wide family of food antioxidants.
- Strawberries (0.40 mg/100 g) and redcurrants (0.24 mg/100 g) are a good source of zinc, which has a positive effect on the skin's cells.



Average nutritional composition of fruits, per 100 g	Cherries	Strawberries	Raspberries	Redcurrants
Energy value (Kcal)	68	35	38	33
Carbohydrate (g)	15	7	6	5
Protein (g)	0,8	0,7	1,2	1,1
Fat (g)	0,4	0,5	0,4	0,3
Water (g)	81	89,5	83	82,5
Fibre (g)	1,7	2,1	6,7	8
Minerals (mg) Potassium, Phosphorous, Calcium, Magnesium, Sodium, Iron, Copper, Zinc, Manganese, Fluoride	355	210	296	364
Vitamins (mg) Vitamins C, B1, B2, B3, B5, B6, B8, B9, E, pro-vitamin A	16	61	26	41

Black cherry jam (soft set)

Vital (P2)	Tradition (P3)	Quick (P4)
Vital programme not recommended for Black Cherry jam.	Due to the low pectin content of cherries the Tradition programme is not recommended.	1 kg black cherries 200 ml water 800 g jam sugar a knob of butter (optional)
		Pre-cooking time: about 20 min
		Cooking time: about 4 to 6 min
		Yield: about 3 lb

As cherries have a low pectin content, use the Quick programme and jam sugar with additional pectin.

1. Preparing the fruit

Wash and dry. Remove the stones. Either leave cherries whole or cut them in half.

2. For Quick programme (P4)

Put the stoned fruit and water in the bowl. Programme the pre-cooking time indicated above and press OK. When the jam maker beeps, add the jam sugar and press OK again. The programmed time 7 minutes is automatically displayed. Set the cooking time, checking the jam sugar packet for advice on boiling time, and press OK.

3. Test for a set

When cooking is finished, test for a set (see page 5 for details). Skim any scum or add butter to disperse. Wait 4 or 5 minutes before potting. Stir gently and then pot and label (see page 5 for details).

Variations:

- Add the grated rind and juice of 2 unwaxed oranges together with the cherries.
- Add 45 ml (3 tablespoons) Kirsch after testing for a set.
- Use red cherries instead of black cherries.





Rhubarb jam

Vital (P2)	Tradition (P3)	Quick (P4)
1 kg rhubarb stalks ¼ unwaxed lemon with peel on 600 g granulated sugar a knob of butter (optional)	1 kg rhubarb stalks 800 g granulated sugar a knob of butter (optional)	Quick programme not recommended for Rhubarb jam
Juice extraction time: 20 min	Juice extraction time: 20 min	
Cooking time: 40 min	Cooking time: 40 min	
Yield: 1¼ lb	Yield: 2 lb	

1. Preparing the fruit

Cut off rhubarb leaves. Wash and dry the stalks. Remove any fibrous threads as for runner beans. Cut into 3 cm-long pieces and put them in the strainer.

2. Extracting the juice

Remove the paddle from the bowl, add 400 ml cold water and put the strainer with the rhubarb on top. Put the lid on. Select programme **P1** and press OK, then select 20 minutes extraction time. During extraction, occasionally press the fruit down with the ladle to crush and stir to obtain the most juice. Retain the pulp.

3. For Vital programme (P2) - soft set style

Set aside the juice and the pulp. To make a syrup, add the sugar, 150 ml water and ¼ lemon with its peel to the Vitafruit bowl. Do not add the juice and pulp. Select **P2** and press OK. The display shows “ - - “. When the jam maker beeps, after about 15 – 20 minutes, add the prepared juice and pulp. Programme the cooking time indicated above and press OK. Remove the lemon and any pips at the end of cooking.

For Tradition programme (P3)

Add the rhubarb pulp to the extracted juice plus the sugar. Select **P3** and press OK, then select the cooking time indicated above and press OK.

4. Test for a set

When cooking is finished, test for a set (see page 5 for details). Skim any scum or add butter to disperse. Pot quickly and label (see page 5 for details).

Variation:

After a set has been obtained, stir in 50 g roughly chopped stem ginger plus 2 tablespoons stem ginger syrup for Rhubarb and Ginger Jam. Leave to stand until a skin begins to form before potting.

Note: Rhubarb jam tends to spit during cooking so always stop the timer before removing the lid.

Strawberry jam

Vital (P2)	Tradition (P3)	Quick (P4)
1 kg strawberries 150 ml water ¼ unwaxed lemon with peel on 350 g granulated sugar a knob of butter (optional)	1 kg strawberries 200 ml water 3 tablespoons fresh lemon juice 800 g granulated sugar a knob of butter (optional)	1 kg strawberries 200 ml water 3 tablespoons fresh lemon juice 1 kg jam sugar a knob of butter (optional)
Cooking time: about 25-30 min	Cooking time: about 30 min	Pre-cooking time: about 20 min
Yield: 1¼ lb	Yield: about 2¾ lb	Cooking time: about 4 min Yield: about 3½ lb

1. Preparing the fruit

Wash the strawberries and remove the stems. Leave small berries whole but cut medium or larger strawberries into quarters or even eighths. Alternatively, thickly slice the berries.

2. For Vital programme (P2) - soft set style

Add the sugar, water and ¼ lemon with its peel. Do not add the fruit. Select **P2** and press OK. The display shows “ - - “. When the jam maker beeps, after about 15 - 20 minutes, add the prepared fruit. Programme the cooking time indicated above and press OK. Remove the lemon and any pips at the end of cooking.

For Tradition programme (P3)

Add the fruit, water, lemon juice and sugar to the bowl. Select programme **P3** and press OK, then select the cooking time indicated above and press OK.

For Quick programme (P4)

Put the fruit, water and lemon juice in the bowl. Programme the pre-cooking time indicated above and press OK.

When the jam maker beeps, add the jam sugar and press OK again. The programmed time 7 minutes is automatically displayed. Set the cooking time, checking the jam sugar packet for advice on boiling time, and press OK.

3. Test for a set

When cooking is finished, test for a set (see page 5 for details). Skim any scum or add butter to disperse. Wait 4 or 5 minutes before potting. Stir gently and then pot and label (see page 5 for details).

Variation:

If preferred you can use Tradition **P3** recipe and 1 bottle (250 g) liquid apple pectin extract to set the jam. Prepare using steps 1 and 2, then remove the paddle using oven gloves, stir in the liquid pectin with a wooden spoon and remove any scum. It is not necessary to test for a set. Pot as directed above. Do not move jars for 12 hours as it could affect the set.





Raspberry jelly

Vital (P2)	Tradition (P3)	Quick (P4)
1 kg raspberries about 500 g granulated sugar 150 ml water ¼ unwaxed lemon with peel on a knob of butter (optional)	1 kg raspberries about 700 g granulated sugar	Quick programme not recommended for Raspberry jelly
Juice extraction time: 45 min	Juice extraction time: 45 min	
Cooking time: about 30 min	Cooking time: about 30 min	
Yield: 1½ lb	Yield: about 1½ lb	

1. Extracting the juice

Wash the fruit and dry well. Remove the paddle from the bowl, add 750 ml cold water and put the strainer in position. Add the fruit to the strainer.

Select programme **P1** and press OK, then select the extraction time stated above. During extraction, regularly press the fruit down with the ladle and stir to obtain the most juice. Discard the pulp at the end of the extraction time. If necessary, sieve the juice to remove any fine pulp or odd seeds.

For the Tradition programme only, measure the juice and calculate the amount of sugar required; use 600 g sugar for each 1 litre of extracted juice. For example, for 900 ml extract you would use 675 g sugar.

2. For Vital programme (P2)

Set aside the extracted juice. Add the sugar, water and ¼ of a lemon with its peel to the bowl; but do not add the juice.

Select **P2** and press OK. The display shows «- -». When the jam maker beeps, add the extracted juice. Programme the cooking time indicated above and press OK. At the end of the cooking time remove the lemon and any pips.

3. For Tradition programme (P3)

Add the extracted juice, and sugar to the bowl. Select programme **P3** and press OK, then select the cooking time indicated above and press OK.

4. Test for a set

When cooking is finished, test for a set (see page 5 for details). Remove any scum; pot quickly before it sets and label (see page 5 for details).

Variation:

Use 1 kg loganberries or tayberries instead.

Redcurrant jelly

Vital (P2)	Tradition (P3)	Quick (P4)
1 kg redcurrants about 500 g granulated sugar 150 ml water ¼ unwaxed lemon with peel on a knob of butter (optional)	1 kg redcurrants about 600 g granulated sugar	Quick programme not recommended for Redcurrant jelly
Juice extraction time: 45 min	Juice extraction time: 45 min	
Cooking time: about 30 min	Cooking time: about 30 min	
Yield: 1½ lb	Yield: about 1½ lb	

1. Extracting the juice

Wash the fruit and dry well. Remove the paddle from the bowl, add 750 ml cold water and put the strainer in position. Add the fruit to the strainer. Select programme **P1** and press OK, then select the extraction time stated above.

During extraction, regularly press the fruit down with the ladle and stir to obtain the most juice. Discard the pulp at the end of the extraction time. If necessary, sieve the juice to remove any fine pulp or odd seeds.

For the Tradition programme only, measure the juice and calculate the amount of sugar required; use 600 g sugar for each 1 litre of extracted juice.

2. For Vital programme (P2)

Set aside the extracted juice. Add the sugar, water and ¼ of a lemon with its peel to the bowl; but do not add the juice. Select **P2** and press OK. The display shows «- -». When the jam maker beeps, add the extracted juice. Programme the cooking time indicated above and press OK. At the end of the cooking time remove the lemon and any pips.

3. For Tradition programme (P3)

Add the extracted juice and sugar to the bowl. Select programme **P3** and press OK, then select the cooking time indicated above and press OK.

4. Test for a set

When cooking is finished, test for a set (see page 5 for details). Remove any scum; pot quickly before it sets and label (see page 5 for details).

Variation:

Add small pieces of split vanilla pods during cooking and remove at the end, before potting.





Summer

Quench your thirst with summer fruits!

All summer fruits contain more than 80 % of water, and consuming them regularly helps to rehydrate you. As high summer temperatures are a source of dehydration and it is therefore essential to consume water and also fibre.

- Blackcurrants (7 g/100 g), raspberries (6.7 g/100 g) and redcurrants (8 g/100 g) are very good sources of fibre. They serve to retain water and preserve the body during high temperatures.
- Figs are a good source of vitamin B9 (0.07 mg/100 g), and peaches are a good source of vitamin B3 (or PP, 1 mg/100 g). These B group vitamins also contribute to hydration.



Average nutritional composition of fruits, per 100 g	Apricots	Blueberries	Peaches	Plums
Energy value (Kcal):	47	50	40	52
Carbohydrate (g)	10	9,9	9	12
Protein (g)	0,8	0,6	0,7	0,7
Fat (g)	0,1	0,5	0,1	0,1
Water (g)	85	83	87	82,5
Fibre (g)	2,1	3	2	2,3
Minerals (mg) Potassium, Phosphorous, Calcium, Magnesium, Sodium, Iron, Copper, Zinc, Manganese, Fluoride	365	95	238	298
Vitamins (mg) Vitamins C, B1, B2, B3, B5, B6, B8, B9, E, pro-vitamin A	10	23	9	7

Green gooseberry jam

Vital (P2)	Quick (P4) using granulated sugar	Quick (P4)
Vital programme not recommended as gooseberries taste too tart and need a lot of sugar to sweeten them.	1 kg ripe green gooseberries 200 ml water 1 kg granulated sugar a knob of butter (optional)	1 kg ripe gooseberries 200 ml water 1 kg jam sugar a knob of butter (optional)
	Pre-cooking time: about 15 min	Pre-cooking time: about 15 min
	Cooking time: about 7-12 min	Cooking time: about 4-9 min
	Yield: about 4 lb	Yield: about 3¾ lb

Note: For gooseberry jam it is necessary to precook and soften the fruit before adding the sugar. Therefore, we do not recommend using the Tradition programme, instead use the Quick programme with granulated sugar.

1. Preparing the fruit

Top and tail the gooseberries, then wash them and cut them in half. Add them to the bowl and the water.

2. For the Quick Programme (P4)

Programme the pre-cooking time indicated above and press OK. When the jam maker beeps, press OK button to stop the beep. Remove the lid and crush the gooseberries to a pulp with a potato masher (suitable for use on non-stick) or the back of a wooden spoon.

Add the granulated or jam sugar (depending on the recipe) and press OK again. The programmed time 7 minutes is automatically displayed. Set the cooking time as indicated above and press OK. If using jam sugar, check the packet for advice on the maximum boiling time.

3. Test for a set

When cooking is finished, test for a set (see page 5 for details). Skim any scum or add butter to disperse. Stir gently, then pot and label (see page 5 for details).

Variation:

You can use red-skinned varieties of gooseberries instead to make a red colour gooseberry jam with a sweeter flavour.

Spiced red tomato chutney

Desserts (P5)
1 kg ripe vine-ripened or home grown tomatoes* 2 red peppers, deseeded and finely chopped 2 onions, finely chopped 2 garlic cloves, crushed 1 level teaspoon black mustard seeds 225 g soft light brown sugar 75 g sultanas ½ level teaspoon ground cloves 2 level teaspoons smoked hot paprika 300 ml good quality red wine vinegar
* The tomatoes must be flavoursome for this recipe otherwise the chutney will lack flavour.
Cooking time: about 1 - 1¼ hours
Yield: about 2½ lb

1. Preparing the ingredients

Chop the tomatoes with their skins on. Deseed and finely chop the peppers. Finely chop the onions. Alternatively, they can be chopped in a food processor. Crush the mustard seeds with a pestle and mortar.

2. Cooking the ingredients

Add all the ingredients to the bowl. Cover with the lid. Select Desserts programme (P5) and press OK, then select the cooking time of 1¼ hours hour and press OK. After cooking for 1 hour, regularly check the consistency every 5 minutes to avoid overcooking. The chutney should be thick and pulpy with no excess liquid. It is ready when a wooden spoon drawn through the pan leaves a clear trail that only very slowly fills with juice.

3. Filling the jars

Allow to cool a little, then ladle into clean, warm jars. Cover with a lid and label. Store in a cool, dry, dark place for at least 4 weeks to mature. Use within about 3 months.

Serve with

Burgers, sausages, cold meats and cheese.

Variations:

- The amount of sugar can be adjusted according to the sweetness of the tomatoes and your personal taste.
- For a milder spice taste use smoked sweet mild paprika.
- The paprika can be omitted for a non-spicy tomato chutney.

Fresh apricot jam

Vital (P2)	Tradition (P3)	Quick (P4)
Vital programme not recommended for Apricot Jam	1 kg apricots, just ripe 200 ml water juice of 1 lemon 600 g granulated sugar a knob of butter (optional)	1 kg apricots, just ripe 200 ml water juice of 1 lemon 800 g jam sugar a knob of butter (optional)
	Cooking time: about 35 min	Pre-cooking time: about 20 min Cooking time: about 4 – 6 min
	Yield: about 2¾ lb	Yield: about 3 lb

1. Preparing the fruit

Wash, dry and halve the fruit. Remove the stones. Cut into 1 cm pieces or chop in a food processor.

2. For Tradition programme (P3)

Add the fruit, water, lemon juice and sugar to the bowl. Select programme (P3) and press OK, then select the cooking time indicated above and press OK.

For Quick programme (P4)

Put the prepared fruit, lemon juice and water in the bowl. Programme the pre-cooking time indicated above and press OK. When the jam maker beeps, add the jam sugar and press OK again. The programmed time 7 minutes is automatically displayed. Adjust the cooking time, checking the jam sugar packet for advice on boiling time, and press OK.

3. Test for a set

When cooking is finished, test for a set (see page 5 for details). Skim off any scum or add butter to disperse. Pot and label (see page 5 for details).

Variations:

- Add 1 whole vanilla pod with the fruit and remove at the end of cooking.
- Add 30 ml (2 tablespoons) Grand Marnier liqueur at the end of cooking.
- Use a mixture of 400 g fresh peaches and 600 g fresh apricots.

Blueberry jam

Vital (P2)	Tradition (P3)	Quick (P4)
1 kg fresh blueberries 150 ml water 350 g granulated sugar ¼ unwaxed lemon with peel on	1 kg fresh blueberries 200 ml water 6 tablespoons fresh lemon juice 1 kg granulated sugar 1 bottle (250 g) apple pectin extract	Quick programme not recommended for Blueberry jam.
Cooking time: 25 – 30 min	Cooking time: 20 min	
Yield: 2¼ lb	Yield: 4½ lb	

Blueberries are a low pectin fruit so it is necessary to add commercial pectin to obtain a good set.

1. Preparing the fruit

Wash and dry the fruit; remove any stalks.

2. For the Vital programme (P2)

Add the sugar, water and ¼ lemon with its peel on. Do not add the fruit. Select (P2) and press OK. The display shows “ - - “. When the jam maker beeps, after about 15 - 20 minutes, add the prepared fruit. Programme the cooking time indicated above and press OK. Remove the lemon and any pips at the end of cooking.

For the Tradition programme (P3)

Add the blueberries, water, lemon juice, and sugar to the bowl. Select Tradition programme (P3) and press OK; then select the cooking time indicated above and press OK.

Carefully remove the paddle using oven gloves, stir in the liquid pectin with a wooden spoon and skim off any scum. It is not necessary to test for a set.

3. Filling the jars

Stir gently and then pot (see page 5 for details). Do not move the jars for 12 hours. Label when cold.

Variations:

- When using the Tradition programme, for a less sweet taste use 800 g sugar instead of 1 kg but the yield will be less.
- Frozen blueberries can be substituted for fresh blueberries.

Raspberry jam

Vital (P2)	Tradition (P3)	Quick (P4)
Vital programme is not recommended for Raspberry jam as it tastes too tart due to the reduced quantity of sugar.	800 g fresh raspberries 200 ml water 3 tablespoons fresh lemon juice 1 kg granulated sugar a knob of butter (optional) ½ bottle liquid apple pectin extract (250 g size)	800 g fresh raspberries 200 ml water 1 kg jam sugar a knob of butter (optional)
	Cooking time: about 25 min	Pre-cooking time: about 15 min Cooking time: about 4 - 9 min
	Yield: about 3¼ lb	Yield: about 3¼ lb

As raspberries only have a medium pectin content, we advise adding apple pectin extract or using jam sugar which already has pectin added.

1. Preparing the fruit

Remove any stalks or leaves.

2. For Tradition programme (P3)

Add the raspberries, water, lemon juice and sugar to the bowl. Select Tradition programme (P3) and press OK; then select the cooking time indicated above and press OK. At the end of the cooking time, crush any odd whole raspberries to a pulp with the back of a wooden spoon.

Carefully remove the paddle using oven gloves, stir in the liquid pectin with a wooden spoon and skim off any scum. It is not necessary to test for a set.

For the Quick programme (P4)

Add the raspberries and water to the bowl. Programme the pre-cooking time indicated above and press OK. When the jam maker beeps, add the jam sugar and

press OK again. The programmed time 7 minutes is automatically displayed. Adjust the cooking time, checking the jam sugar packet for advice on boiling time, and press OK.

3. Filling the jars

Skim any scum or add butter to disperse. Pot quickly and label (see page 5 for details). Do not move the jars for 12 hours. Label when cold.

Variations:

- For raspberry jam with a tart taste, you can use 1 kg raspberries instead of 800 g and the yield will be slightly more.
- You can use loganberries or tayberries instead of raspberries.

Blackcurrant jam

Vital (P2)	Tradition (P3)	Quick (P4)
Vital programme is not recommended for Blackcurrant Jam as it tastes too tart due to the reduced quantity of sugar.	650 g fresh blackcurrants 400 ml water 1 kg granulated sugar a knob of butter (optional)	As blackcurrants have a high pectin content using the Quick programme is not recommended.
	Cooking time: about 20 min	
	Yield: about 3¼ lb	

When making blackcurrant jam more water is added than usual as the fruit has such a full flavour and it still sets well. Choose large, juicy blackcurrants. Smaller hard berries should not be used as they will make hard fruit in the jam.

1. Preparing the fruit

Remove any stalks, wash and drain.

2. For Tradition programme (P3)

Add the blackcurrants, water, and sugar to the bowl. Select Tradition programme (P3) and press OK; then select the cooking time indicated above and press OK.

3. Test for a set

When cooking is finished, test for a set (see page 5 for details). Skim off any scum or add butter to disperse. Pot and label (see page 5 for details).

Note: This is the maximum quantity of blackcurrant jam that can be made in the Tefal Vitafruit Jam Maker.

Autumn

Bite into autumn fruits!

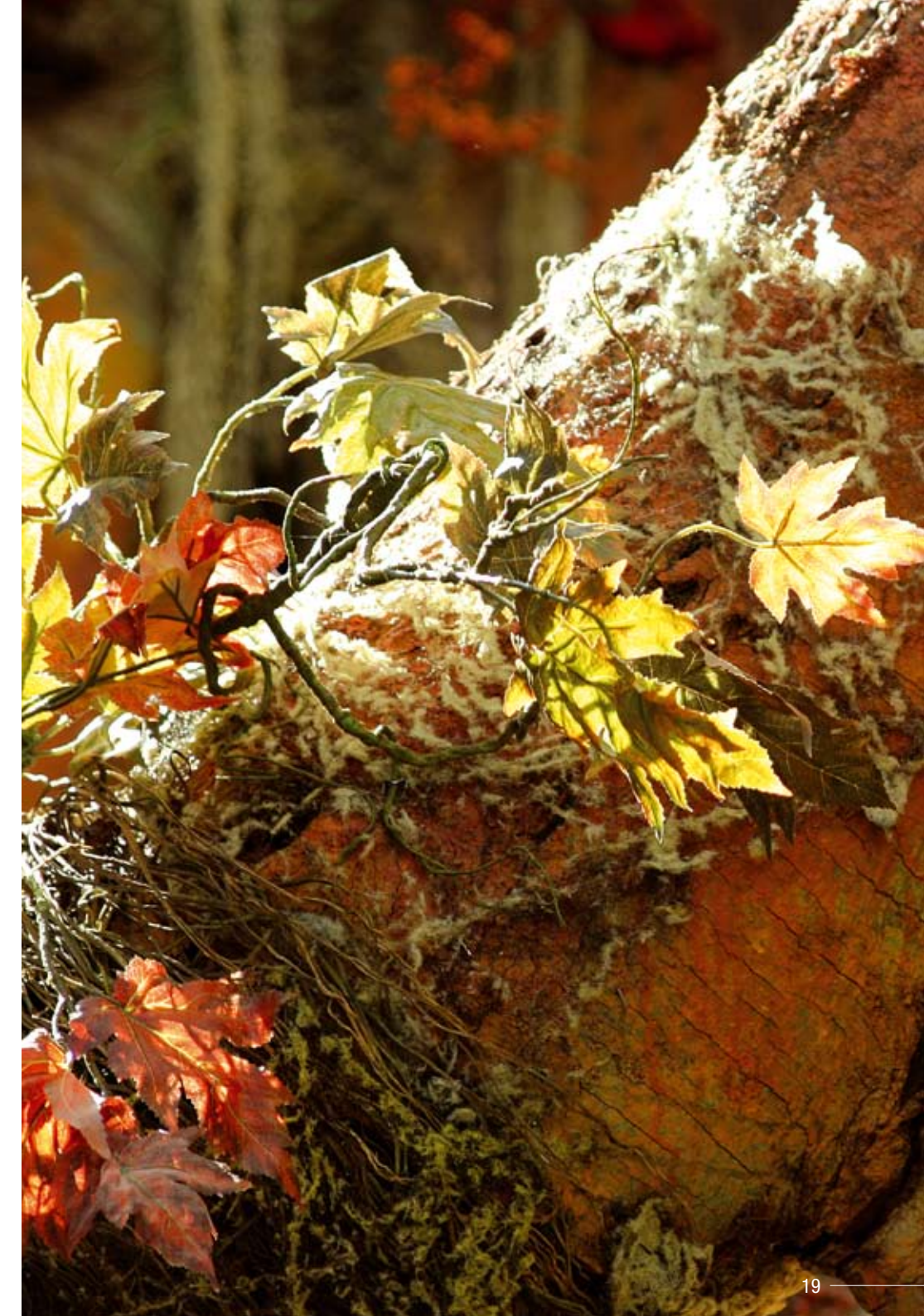
A balanced diet means eating all types of food and having a varied choice. This principle is easy to apply with autumn fruits, which offer a wide variety of shapes, colour and tastes.

In autumn, many fruits are ripe and ready to use: quince, pear, apple, plum, blackberry, or, instead use more exotic fruits like bananas, lemons, sharon fruit (persimmon), mangoes, papayas, grapefruits.

- Mangoes (3 mg/100 g) and papayas (0.95 mg/100 g), for example, are rich in carotene, vitamin A precursor. Take advantage of the profusion of autumn fruits.



Average nutritional composition of fruits, per 100 g	Quince	Fig	Blackberry
Energy value (Kcal)	28	57	54
Carbohydrate (g)	6,3	13	11,2
Protein (g)	0,3	0,9	1,3
Fat (g)	0,2	0,2	0,5
Water (g)	84	82	84,6
Fibre (g)	6,4	2,3	1,7
Minerals (mg)			
Potassium, Phosphorous, Calcium, Magnesium, Sodium, Iron, Copper, Zinc, Manganese, Fluoride	237	336	297
Vitamins (mg)			
Vitamins C, B1, B2, B3, B5, B6, B8, B9, E, pro-vitamin A	15	6	34



Cider apple chutney

Desserts (P5)
700 g Bramley cooking apples 700 g onions 150 g sultanas finely grated rind and juice of 1 unwaxed lemon 350 g demerara sugar 300 ml cider vinegar
Cooking time: about 30 min
Yield: about 2½ lb

1. Preparing the ingredients

Peel, core and dice the apples into 1 cm pieces. Finely chop the onions. Alternatively, chop the apple and onion in a food processor.

2. Cooking the ingredients

Add all the ingredients to the bowl. Cover with the lid. Select programme **P5** and press OK, then select the cooking time of 30 minutes and press OK. After cooking for 20 minutes, regularly check the consistency every 5 minutes to avoid overcooking. The chutney should be thick and pulpy with no excess liquid. It is ready when a wooden spoon drawn through the pan leaves a clear trail that only very slowly fills with juice.

3. Filling the jars

Allow to cool a little, then ladle into clean, warm jars. Cover and label. Store in a cool, dry, dark place for 6 to 8 weeks to mature in flavour. Use within a year.

Serve with

Cheese, cold meats, pâtés and sausages.

Variations:

- Instead of cider vinegar you can use clear malt vinegar instead.
- The amount of sugar can be adjusted according to your personal taste.
- Add 1 level teaspoon ground ginger and 1 level teaspoon ground allspice for a spicier taste.

Hot mango chutney

Desserts (P5)
2 large ripe mangoes (about 600 g each) 225 g cooking apples 1 small onion 1 red chilli 12 g fresh root ginger 1 garlic clove, crushed 175 g soft light brown sugar 300 ml white wine vinegar ½ level teaspoon ground cinnamon ½ level teaspoon ground cloves
Cooking time: about 35 min
Yield: about 2½ lb

1. Preparing the ingredients

Peel and stone the mangoes, cut them into 1 cm pieces. Peel and chop the apples. Finely chop the onions. Alternatively, chop the apples and onions in a food processor. Deseed the chilli and finely chop. Peel the ginger and finely grate.

2. Cooking the ingredients

Add all the ingredients to the bowl. Cover with the lid. Select programme **P5** and press OK, then select 35 minutes cooking time and press OK. After cooking for 30 minutes, regularly check the consistency every 5 minutes to avoid overcooking. The chutney should be thick and pulpy with no excess liquid. It is ready when a wooden spoon drawn through the bowl leaves a clear trail that only very slowly fills with juice.

3. Filling the jars

Allow to cool a little, then ladle into clean, warm jars. Cover and label. Store in a cool, dry, dark place for 6 to 8 weeks to mature in flavour. Use within a year.

Serve with

Curries, cold ham, poultry and game.

Variations:

- The amount of sugar can be adjusted according to your personal taste.
- For a non-spicy version omit the chilli and root ginger.

Plum jam

Vital (P2)	Tradition (P3)	Quick (P4)
1 kg ripe plums 150 ml water ¼ unwaxed lemon with peel on 450 g granulated sugar a knob of butter (optional)	1 kg ripe plums 600 g granulated sugar 200 ml water a knob of butter (optional)	As most varieties of plums have a high pectin content using the Quick programme is not recommended.
Cooking time: about 25 min Yield: 1¾ lb	Cooking time: about 30 min Yield: 2½ lb	

1. Preparing the fruit

Wash, dry and halve the fruit. Remove the stones. Cut into 2 cm pieces or thick slices. For a smoother jam, chop in a food processor. If using the Vital programme, chop the fruit into 1 cm pieces or chop in a food processor.

2. For Vital programme P2

Add the sugar, water and ¼ lemon with its peel on. Do not add the fruit. Select **P2** and press OK. The display shows “- - “. When the jam maker beeps (after about 20 minutes) add the prepared fruit. Programme the cooking time indicated above and press OK. Remove the lemon and any pips at the end of cooking.

For Tradition programme P3

Add the fruit, water and sugar to the bowl. Select programme **P3** and press OK, then select the cooking time indicated above and press OK.

3. Test for a set

When cooking is finished, test for a set (see page 5 for details). Skim off any scum or add butter to disperse. Pot quickly before it sets and label (see page 5 for details).

Variations:

- Damson jam – use damsons instead of plums.
- Greengage jam – use greengages instead of plums



Three fruits compote

Tradition (P3)
275 g peaches or nectarines 275 g apricots 450 g Bramley cooking apples (total weight of fruit 1 kg) 100 g granulated sugar 2 – 3 tablespoons water, depending on fruit
Cooking time: about 5 - 10 minutes
Serves: 6

1. Preparing the fruit

Wash the fruit. Remove the stones from the peaches or nectarines, and apricots; cut into 2 cm pieces. Peel the apples, core and cut into 2 cm pieces.

2. For the Tradition Programme (P3)

Add the prepared fruit, sugar and water to the bowl. Select programme (P3) and press OK, then select the cooking time indicated above and press OK. The cooking time will vary depending on the fruit used.

3. Serving the fruit compote

Either serve warm or leave to cool. Use within 48 hours and store in the refrigerator.

Serve with:

Yoghurt for breakfast, porridge, rice pudding, ice-cream, in a pastry flan case or delicious as a dessert served with crème fraîche.

Variation:

Use other combinations of mixed fruit such as raspberries, strawberries, apricots, peaches, nectarines, redcurrants, blackcurrants and apples, using a total of 1 kg fruit. Remember that the flavour of blackcurrants can tend to dominate so don't add too many.

Blackberry jelly

Vital (P2)	Tradition (P3)	Quick (P4)
Vital programme not recommended for Blackberry jelly	1 kg blackberries about 450 g granulated sugar juice of 1 lemon	Quick programme not recommended for Blackberry jelly
	Cooking time: about 20 min Yield: about 1½ lb	

1. Extracting the juice

Wash the fruit and dry well. Remove the paddle from the bowl, add 750 ml cold water and put the strainer in position. Add the fruit to the strainer, and then put the lid on. Select programme (P1) and press OK, then select 45 minutes extraction time. During extraction, regularly press the fruit down with the ladle and stir to obtain the most juice. Discard the pulp at the end of the extraction time. If necessary, sieve the juice to remove any fine pulp or odd seeds. Measure the extract and use 750 g sugar for each 1 litre extract. For example, for 600 ml extract you would use 450 g sugar.

2. For Tradition programme (P3)

Add the extracted juice, sugar and lemon juice to the bowl. Select programme (P3) and press OK, then select the cooking time indicated above and press OK.

3. Test for a set

When cooking is finished, test for a set (see page 5 for details). Remove any scum; pot quickly before it sets and label (see page 5 for details).

Variations:

- Add 2 teaspoons of vanilla sugar when adding the sugar.
- Instead of blackberries use brambles collected from hedgerows. Wash very well before use.

Apple and blackberry jam

Vital (P2)	Tradition (P3)	Quick (P4)
Vital programme not recommended for Apple and Blackberry Jam	400 ml water 600 g sliced sour cooking apples e.g. Bramleys (weight after peeling and slicing)	Quick programme not recommended due to the high pectin content of apples.
	600 g blackberries juice of 1 lemon 800 g granulated sugar	
	Juice extraction time: 20 min	
	Cooking time: 20 min Yield: 3¼ lb	

1. Preparing the fruit

Peel the apples and thinly slice; weigh to obtain 600 g. Place them in the strainer together with the blackberries.

2. Extracting the juice

Remove the paddle from the bowl, add 400 ml cold water and put the strainer with the fruit on top. Put the lid on. Select programme (P1) and press OK, then select 20 minutes extraction time. During extraction, occasionally stir the fruit with the ladle. At the end of the extraction time, crush the pulp using a potato masher or the back of a wooden spoon until the berries have broken up.

3. For Tradition programme (P3)

Measure the extracted juice into a jug; set aside. Add the fruit pulp to the bowl, plus 200 ml of the extracted juice, lemon juice and sugar. Select (P3) and press OK,

then select the cooking time indicated above and press OK.

4. Test for a set

When cooking is finished, test for a set (see page 5 for details). Skim any scum or add butter to disperse scum. Pot immediately while still hot and label (see page 5 for details).

Note: Apple and Blackberry jam tends to spit during cooking so always stop the timer before removing the lid.

Variation:

Make Apple and Raspberry jam by substituting 600 g raspberries for blackberries.



Winter

Stock up on energy with sun-filled fruits!

Citrus fruits, with their warm, sun-filled colours, are rich in vitamin C and group B vitamins that protect you from winter ailments.

- Guava is very rich in vitamin C (243 mg/100 g of fruit), as are kiwis (80 mg/100 g) and citrus fruits (lemon, clementine, orange: 40 to 50 mg/100 g). Vitamin C provides energy and vitality throughout the day.
- Passion fruit, guava or peach jam supply B group vitamins, and in particular B3 vitamins that are essential for the organism.



Average nutritional composition of fruits, per 100 g	Lemon	Clementine	Orange
Energy value (Kcal)	29	46	45
Carbohydrate (g)	2,5	10,4	9
Protein (g)	0,9	0,7	1
Fat (g)	0,4	0,2	0,2
Water (g)	88,5	86,9	86,3
Fibre (g)	2,1	1,4	1,8
Minerals (mg)			
Potassium, Phosphorous, Calcium, Magnesium, Sodium, Iron, Copper, Zinc, Manganese, Fluoride	217	202	247
Vitamines (mg)			
Vitamins C, B1, B2, B3, B5, B6, B8, B9, E, pro-vitamin A	53	43	54

Dried apricot jam

Vital (P2)	Tradition (P3)	Quick (P4)
Vital programme not recommended	250 g dried whole apricots 850 ml cold water 675 g granulated sugar juice of ½ lemon 1 bottle apple pectin extract (250 g) Precooking time in a saucepan: 30 min Cooking time: 15 min Yield: 3 lb	We recommend using Tradition programme for best results.

The dried apricots are soaked overnight and then stewed in a saucepan before pureeing; ready for making jam. We do not recommend soaking and stewing the fruit directly in the jam maker.

Due to the low pectin content of dried apricots, add apple pectin extract to ensure a good set.

1. Softening the dried apricots

Place the apricots in a large saucepan and leave to soak in 850 ml cold water overnight. The next day, simmer the apricots in the water for about 30 minutes until the fruit is soft. Drain the apricots and retain the soaking liquor.

2. Preparing the fruit

Purée the apricots in a food processor or hand blender until smooth.

3. For Tradition programme (P3)

Add the purée to the Vitafruit bowl plus 250 ml of the soaking liquor, sugar and lemon juice. Select (P3) and press OK, then select the cooking time indicated above and press OK.

Carefully remove the paddle using oven gloves, stir in the liquid pectin with a wooden spoon and skim off any scum. It is not necessary to test for a set.

4. Filling the jars

Skim any scum or add butter to disperse. Pot quickly and label (see page 5 for details). Do not move the jars for 12 hours. Label when cold.

Note: This is the maximum quantity of Dried Apricot Jam that can be made in the Tefal Vitafruit jam maker.

Three fruits marmalade

Vital (P2)	Tradition (P3)	Quick (P4)
Vital programme is not recommended for this recipe as the marmalade would taste too bitter with a reduced quantity of sugar.	1 large white grapefruit 1 large sweet orange 2 lemons (Total fruit weight about 700 g) 1.2 litres water 1.35 kg granulated sugar 1 bottle liquid apple pectin (250 g) Pre-cooking time: 45-55 min Cooking time: about 7 min Yield: about 4 lb	Quick programme not recommended for this recipe.

This is a very useful recipe when all the Seville orange marmalade has been eaten. It has a mild yet tangy flavour with a small amount of peel. The fruit is pre-cooked using the Desserts programme, before making the marmalade.

1. Preparing the fruit and softening the peel

Cut the oranges and lemons in half. Extract the juice using a citrus press and add to Vitafruit bowl.

Wash and peel the grapefruit. Remove and discard any excess pith from the grapefruit peel, then cut into strips, thinner for fine shred and coarser for coarse cut. Place peel in a pan, cover with about 750 ml cold water and ½ teaspoon bicarbonate of soda. Bring to the boil, cover and simmer for about 7 to 10 minutes, stirring occasionally, or until the skins can be crushed easily with a fork. Meanwhile, remove segments from grapefruit; retain the skin membranes and squeeze out all the juice, then roughly chop the grapefruit flesh.

2. Pre-cooking the fruit

Add the grapefruit flesh, softened peel, and water to the juice in the Vitafruit bowl. Cover with lid. Select Desserts programme (P5) and press OK, then select 45-55 minutes pre-cooking time. Cook until the liquid is reduced by half, to about 600 ml.

3. For Tradition Programme (P3)

At the end of the pre-cooking time add the sugar to the bowl. Select programme (P3) and press OK, then select the cooking time indicated above and press OK.

4. Adding the liquid pectin

After the cooking time, carefully remove the paddle using oven gloves. Stir in the liquid pectin using a wooden spoon. Skim off any scum. It is not necessary to test for a set when using liquid pectin. Leave to stand for about 3 minutes to prevent peel from floating. Pot and label (see page 5). Leave the jars to set for 12 hours before moving.

Variation:

You can alter the flavour by adjusting the proportions of grapefruit, orange and lemon in the recipe. Just make sure the total weight of unpeeled fruit comes to 700 g.



Traditional Seville orange marmalade

Only home-made marmalade prepared with Seville oranges has that intensely unique sharp, bitter orangey taste. Bitter Seville oranges are only available in January and February so remember to make sufficient to last you for a year.

The fruit preparation time is longer than for jam making. Most of the pectin is contained in the pith and skin, which needs to be boiled first in a saucepan for a long time to make sure it is very soft and tender. The pectin can be obtained either by putting the pips and pith in a muslin bag, and cooking it with the fruit juices; or by boiling the whole oranges and retaining the cooking liquor which contains the pectin. The peel can be cut to the thickness you prefer, either before or after boiling.

In the Tefal Vitafruit Jam Maker, due to the limited capacity, it is often not possible to pre-cook the fruit in the appliance. Instead this is done in a large saucepan, pressure cooker pan or preserving pan on the hob. If you don't have a sufficiently large enough pan you can divide the fruit between two saucepans instead.

Seville bitter orange marmalade (whole fruit method)

Vital (P2)	Tradition (P3)	Quick (P4)
Vital programme is not suitable with Seville oranges as the marmalade would taste too bitter with a reduced quantity of sugar.	2 kg whole Seville oranges, unpeeled about 1 kg granulated sugar juice of 2 lemons	Quick programme not recommended for Seville Orange Marmalade due to high pectin content.
	Pre-cooking time in saucepan: 1½ to 2 hours	
	Cooking time: about 30 min	
	Yield: about 4-5 lb	

The whole fruit method is only suitable for use with Seville bitter oranges. This marmalade is darker in colour due to the longer cooking time and has a noticeable bitter tang as the whole fruit is used.

1. Softening the peel

Wash the whole oranges and put into one or two large saucepans. Fill with enough water to cover them well. Simmer for 1 hour, change the water and simmer for a further ½ to 1 hour until the oranges are so tender they are easily pierced with a skewer.

2. Preparing the fruit

Remove the oranges and retain the liquid. Allow the oranges to cool, then cut in half and scoop out the pulp with a metal spoon; discarding the pips and retaining the peel. Slice some of the peel in shreds; about 100 g - 125 g is sufficient; then discard the rest of the peel. Cut up the pulp and weight it.

3. For Tradition Programme (P3)

For every 100 g pulp, allow 150g granulated sugar and 125 ml of the reserved liquid. Put the pulp, cut peel, sugar, lemon juice and liquid in the Vitafruit bowl. Select programme (P3) and press OK, then select the cooking time indicated above and press OK.

4. Test for a set

When cooking is finished, test for a set (see page 5). The setting period for marmalade is a short one, so test early, and continue testing in 2 to 3 minute intervals. Remove any scum. Leave to stand for 15 minutes. Stir to evenly distribute the peel. Pot and label (see page 5).

Variations:

- After a set has been obtained, stir in 50 ml whisky for Whisky Marmalade.
- After a set has been obtained, stir in 20 g finely shredded, drained stem ginger in syrup for Orange and Ginger Marmalade.
- After a set has been obtained, stir in 2 tablespoons treacle for a richer, darker colour.
- Use organic Seville oranges

Seville orange shred marmalade (juice method)

Vital (P2)	Tradition (P3)	Quick (P4)
Vital programme is not suitable with Seville oranges as the marmalade would taste too bitter with a reduced quantity of sugar.	700 g whole Seville oranges, unpeeled juice of 1 lemon 1.7 litres water 1.35 kg granulated sugar	Quick programme not recommended for Seville Orange Marmalade
	Pre-cooking time in saucepan: about 2 hours	
	Cooking time: about 20 min	
	Yield: about 3½ lb	

With this method it is important to retain all the pips and pith in a muslin bag, as this contains a lot of the pectin which will help set the marmalade. This marmalade has a sweeter taste than the whole orange method due to the higher sugar content.

1. Preparing the fruit

Wash the oranges and cut them in half. Extract the juice using a citrus press and put in a large saucepan. Place the pips and bits of pith on the press onto a square of muslin laid inside a bowl. Extract the juice from the lemon and discard the squeezed lemon. Scrape out any remaining pith and pips from the oranges with a metal spoon onto the muslin, tie to form a bag. Extract the juice from the lemon and discard the squeezed lemon.

Cut the halved oranges in half again and then cut peel into strips, thinner for fine shred and coarser for coarse cut. About 100g is sufficient, but this can be increased or decreased depending on how much peel you like. Discard the rest of the peel.

2. Softening the peel

Add the lemon juice, peel, water and muslin bag to the orange juice in the pan. Bring to the boil and then simmer gently, uncovered, for about 2 hours or until the peel is quite soft and the liquid reduced by half. Remove the muslin bag, squeezing out all the sticky, jelly-like substance; stir it back into the pan, then discard the bag.

3. For Tradition Programme (P3)

Put the orange cooking liquor, peel and sugar into the Vitafruit bowl. Select programme (P3) and press OK, then select the cooking time indicated above and press OK.

4. Test for a set

When cooking is finished, test for a set (see page 5). The setting period for marmalade is a short one, so test early, and continue testing in 2 to 3 minute intervals. Remove any scum. Leave to stand for 15 minutes. Stir to evenly distribute the peel. Pot and label (see page 5).

Variations:

- To make about 7 lb jam, double the quantities and pre-cook in two large saucepans or a preserving pan. Squeeze out the muslin bag; measure the juice into a jug, pour half into the Vitafruit bowl and retain half. Boil up the marmalade in two separate batches in the Vitafruit, following steps 3 and 4. Between batches clean the bowl using Auto Clean programme (P6) and allow appliance to cool for 30 minutes before making the second batch.
- Use organic Seville oranges.



Onion marmalade

Tradition (P3)

1 kg onions
6 tablespoons sunflower oil
75 g granulated sugar
300 ml dry white wine
100 ml sherry vinegar
2 pinches salt
freshly ground black pepper

Cooking time: 10 min + 13 - 15 min

Yield: about 2 lb

1. Preparing the ingredients

Peel the onions and cut into thin slices lengthways from root to the shoot end. Add to the bowl together with the olive oil. Cover with the lid.

2. Cooking the ingredients

Select Tradition programme **P3** and press OK, then select 10 minutes cooking time and press OK. At the end of the cooking time, add the other ingredients. Cover with the lid and select Tradition programme **P3** and press OK, then select 15 minutes cooking time and press OK. Five minutes before the end of the cooking time, regularly check the consistency to avoid overcooking. The marmalade should be thick and pulpy with no excess liquid. It is ready when a wooden spoon drawn through the pan leaves a clear trail that only very slowly fills with juice.

3. Filling the jars

Allow to cool a little, then ladle into clean, sterilized jars. Cover with a lid and label. Either use straightaway or store in a cool, dry, dark place and use within 2 months. Serve warm or cold.

Serve with

Pâtés, terrines, sausages, cheese or a ploughman's lunch.

Variations:

- Use red onions or shallots instead of ordinary onions.
- Substitute soft light brown sugar for granulated sugar

Rice pudding

Desserts (P5)

1 litre semi-skimmed milk
150 g Arborio risotto rice*
50 g granulated sugar
1 vanilla pod, sliced in half (optional)

Cooking time: about 15 - 20 min

Serves 4

** For best results we recommend using Arborio risotto rice instead of pudding rice for this recipe. Pudding rice takes slightly longer to cook.*

1. Preparing the rice

Wash the rice well and drain. Place in the bowl with the paddle. Cut the vanilla pod in half lengthways to expose the seeds.

2. Cooking the rice pudding

Add the milk and vanilla pod. Select programme **P5** and press OK, then select 15 minute cooking time and press OK. When it beeps, check the consistency of the pudding. If there is too much liquid, cook for another 3 to 5 minutes.

3. Adding the sugar

Add the sugar 1 minute before the end of the cooking time. Remove the vanilla pod and serve.

Variations:

- For a creamier rice pudding, add 100 ml single or double cream 1 minute before the end of the cooking time.
- Omit the vanilla pod and instead add a handful of raisins 1 minute before the end of the cooking time.

Note: It is normal for the milk to caramelize slightly on the base of the bowl and form a thin, brown skin.



Nutrition and Vitamins



1/ NUTRITIONAL VALUES OF JAM

- **Carbohydrates:** On average, jams and marmalades contain 65 % sugar, around 5 % of which comes from the fruit used. Thanks to the VITAL programme, this percentage of sugar is largely reduced. The correct preservation of jams is related to their sugar content.
- **Energy:** Jams are energetic foods, containing on average 260 to 300 calories per 100 g.
- **Minerals: They conserve the minerals and trace elements of the fruit:** phosphorous, iron, sodium, potassium, etc. They are a good source of minerals.
- **Vitamins: Vitamin B is preserved**, but the loss of vitamin C depends on the cooking time. This loss is practically total when cooked for a long time in an evaporating preserving pan, but may only be around 25 % when vacuum cooked at low temperature.

Jams can be eaten at breakfast, at afternoon tea time or even with a dessert. Jam can be eaten with bread, which is rich in complex carbohydrates, and an important source of energy. No more than 60 g per day should be consumed as part of a 2,400 daily calorie intake. The daily consumption of one to two teaspoons for children and one tablespoon for adolescents and adults is reasonable.

2/ FOOD NUTRITION REQUIREMENTS EVOLVE WITH AGE

2.1 Evolution of food with age

- **Child's nourishment:** Between the ages of 2 and 5, a child's life changes from that of a quiet infant's life to an active school life. His/her food becomes more varied from the age of 3 years.
- **Teenager's nourishment:** The teenage years are a turning point between childhood and adulthood. The relationship to food also changes. In five years, the weight of a child doubles and he/she grows 8 to 12 cm per year, thus requiring more micronutrients. Nutritional intake increases considerably.
- **Adult's nourishment:** An inactive adult needs relatively low and regular calorie intake. A varied diet provides sufficient calories and micronutrients.
- **Senior nourishment:** A healthy life style, a balanced diet and physical activity contribute to delaying the effects of ageing by preserving the quality of life for

seniors. With age, the risk of deficiencies in protein, fat, calcium and vitamins appear.

2.2 The specific requirements in proteins, fat, calcium, iron and water, according to age

Protein: an adult is estimated to require around 1 g of protein per kilo of weight per day. Children require around 2 g per kilo of weight per day. A teenager requires more protein, around 10 to 20 % of the daily energy intake. A senior also requires more protein than an adult, in order to limit amyotrophy (muscle deterioration).

Fat: an intake that amounts to around 1/3 of daily energy expenditure is recommended for all. A balanced diet must include essential fatty acids from the Omega 3 family, the main one being alpha-linolenic acid (rapeseed and soya oils), and the Omega 6 family, the main one being linoleic acid (sunflower and corn oils).

Calcium: children and teenagers need a very high intake of calcium. During growth spurts, around 1,200 to 1,500 mg/day are required (2 yoghurts, 40 g of cheese and 330 ml of semi-skimmed milk) to increase bone mass. Adults' requirements are estimated at 800 mg per day, and for seniors between 1,000 and 1,400 mg per day.

Iron intake also needs to be increased during teenage years due to the growth of tissues and the multiplication of red blood cells. The required intake is between 12 and 18 mg per day for boys and between 13 and 18 mg per day for girls.

Water requirements of a sedentary adult are 1.5 litres throughout the day, with 1 or 2 glasses every hour. Mineral water or water rich in calcium and magnesium are preferred.

2.3 The specific requirements in carbohydrates, fibres, vitamins and minerals, according to age: the advantages of fruit and jam

Teenagers have deficiencies in B group vitamins, but also in vitamins A and E in girls. Oral contraceptives increase requirements for B6, B2 and B9 vitamins. Foliates (vitamin B9) are needed for synthesis, repair and functioning of genetic material (DNA and RNA). They are essential during rapid growth periods, such as childhood or pregnancy. They play an important role in forming blood cells. Figs, strawberries and mangoes are rich in folates.

The vitamin requirement of seniors increases by 10 to 30 %, particularly for vitamins C, B6, B9, A, E and D. Vitamin B9 requirements are 400 mg per day at any age.

Vegetable fibre is necessary for the intestines to work properly. Red fruits, such as blackcurrants, strawberries and redcurrants, contain the most fibre. Passion fruits, guava and kiwis also provide a lot.

The source of complex carbohydrates provided by cereals, bread, potatoes, dry vegetables and starches changes over time in a child. Bread replaces or is added to the starch intake during the two main meals. Jam is a perfect ally to replace sweet biscuits with bread at snack time.

Sugar requirements for sporty people are higher. On days before physical effort, it is recommended to consume 10 g of complex carbohydrates/kg/day without exceeding 600 to 700 g/day. 2 to 4 hours before physical effort, the sportsperson should have a meal made essentially of carbohydrates. During the physical effort, it is recommended to drink small quantities (100 to 150 ml every 10 to 20 min) of water low in minerals, with a little sugar (50 to 80 g of sugar per litre).

3/ THE HEALTHY ADVANTAGES OF FRUIT

A balanced diet is a varied diet. Many fruits are good for our health, preventing certain cancers and cardiovascular illnesses thanks to their micronutrient content: fibres, minerals, trace elements and vitamins. No one fruit covers all of our nutritional needs, hence the necessity to consume at least 5 different fruits and vegetables every day.

3.1 Eating fruit re-balances overall energy and sodium-potassium balance

The low energetic value of fruit (30 to 90 calories per 100 g) and their high fibre content means they fill you up, while providing few calories. A good sodium-potassium balance helps the correct functioning of cells. But, our current food habits are too rich in sodium:

- **physiological salt requirement:** 2 g/day/person.
- **maximum quantity recommended by the WHO:** 6 g/day/person.
- **average consumption in France:** 10 g/day/person.

Fresh fruit rich in potassium, such as apricots, bananas and blackcurrants (over 300 mg of potassium per

100 g of fruit), help to re-establish the organism's sodium-potassium balance. Potassium also plays a role in muscular contraction, and in the correct functioning of heart muscle.

3.2 Eating fruit reduces the risk of cancer

It seems that fruit can prevent cancer (in particular colon cancer thanks to the protective effect of vitamin B9) and heart diseases, by supplying the body with protective substances, such as vitamins, minerals, fibres and vegetable compounds called phytohormones.

3.3 Eating complex carbohydrates restricts the development of major nutritional pathologies

The increase in cardiovascular diseases, overweight and obesity, and type 2 diabetes is related to an imbalanced diet and to an inactive lifestyle. The current consumption of added sugars needs to be reduced by 25 % and the consumption of fibres increased by 50 %. It is recommended to consume complex carbohydrates, particularly bread, at each meal. The consumption of jam, in reasonable quantities, on bread, at breakfast and snack time, is an enjoyable way of applying these nutritional recommendations.

4 / A BALANCED DIET IN PRACTICE: A QUESTION OF RHYTHM TOO

A balanced diet requires three to four well-balanced meals per day: raw vegetables as a starter, a main dish with proteins, vegetables and/or starches, dairy products, fruit.

- **Breakfast**, which breaks a long fasting period, is the most important meal of the day. It should supply ¼ of daily nutritional needs.
- **Lunch** should cover 1/3 of daily needs.
- **Afternoon snack time** is essential for the nutritional balance of children and teenagers, providing 15 to 20 % of daily nutritional values. It avoids uncontrolled snacking between meals.
- **Dinner** is often the only real meal of the day. It is often too large and sometimes continues with snacking in front of the TV. The ideal evening meal should be lighter than lunch. It should take into account food already eaten at lunchtime.
- **Snacking** throughout the day is strongly inadvisable because it is a source of imbalance. However, nourishment can be spread beyond the three traditional meals.

Quick start guide to cooking preserves

The cooking times and sugar quantities are based on using 1 kg fresh fruit unless stated otherwise. The cooking times are approximate and the exact time will depend on the ripeness and pectin content of the fruit. Some programmes are not recommended for all fruits and these are marked with an asterisk. Fruits which set best with the addition of apple pectin extract are marked "Use Pectin". See the individual recipes in this book for ingredient quantities.

Fruit	Vital programme (P2)		Tradition programme (P3)		Quick programme (P4)			
	Cooking time recommended	Quantity of sugar recommended	Cooking time recommended	Quantity of sugar recommended	Pre-cooking time recommended	Cooking time recommended	Quantity of sugar recommended	
JAMS	Apple & blackberry jam	*	*	Juice extraction time: 20 min Cooking time: 20 min	800 g	*	*	*
	Fresh apricot jam	*	*	35 min	600 g	20 min	4 - 6 min	800 g
	Dried apricot jam	*	*	Pre-cooking time: 30 min Cooking time: 15 min	"Use pectin" see recipe	*	*	*
	Black cherry jam (soft set)	*	*	*	*	20 min	4 - 6 min	800 g
	Blackcurrant jam	*	*	20 min	1 kg (use 650 g fruit)	*	*	*
	Blueberry jam	25 min	350 g	20 min	"Use pectin" see recipe	*	*	*
	Green gooseberry jam	*	*	*	1 kg	*	Check recipe p. 14	1 kg
	Plum jam	25 min	450 g	30 min	600 g	*	*	*
	Raspberry Jam	*	*	25 min	"Use pectin" see recipe	15 min	4 - 9 min	1 kg
	Rhubarb jam	Pre-cooking time: 20 min Cooking time: 40 min	600 g	Juice extraction time: 20 min Cooking time: 40 min	800 g	*	*	*
JELLY	Strawberry jam	25 min	350 g	30 min	800 g	20 min	4 - 6 min	1 kg
	Blackberry jelly	*	*	35 min	750 g sugar for each 1 litre juice	*	*	*
	Raspberry jelly	30 min	500 g	30 min	750 g sugar for each 1 litre juice	*	*	*
MARMALADE	Redcurrant jelly	30 min	500 g	30 min	750 g sugar for each 1 litre juice	*	*	*
	Seville orange marmalade (whole fruit method)	*	*	30 min	150 g sugar for each 100 g pulp	*	*	*
	Seville orange marmalade (juice method)	*	*	20 min	1.35 kg	*	*	*
CHUTNEYS	Three fruits marmalade	*	*	Pre-cooking time: 45-55 min Cooking time: 7 min	"Use pectin" see recipe	*	*	*
	Cider apple chutney	*	*	30 min	350 g	*	*	*
	Hot mango chutney	*	*	35 min	175 g	*	*	*
	Onion marmalade	*	*	10 + 13 -15 min	75 g	*	*	*
Spiced red tomato chutney	*	*	1-1¼ hr	225 g	*	*	*	

