

## **ENERGY SAVING - OIL Food products - Yoghurt.**

So much of the food we buy today is packaged in plastic, an oil based product. How many plastic yoghurt pots, for example, are thrown away each week countrywide? It must surely amount to millions. What a waste of oil resources and the energy needed to produce them, which is largely derived from other fossil fuels and it is so easy to make at home

So, I am persuaded to dig out my old tattered copy of “home preserving and bottling” by Gladys Mann, a LEISURE PLAN” book published in 1970 by Hamlyn, look up her basic recipe for yoghurt and make it myself from now. Ah Here it is with some added points from me:-

Just take 1 pint (20fl oz) or (550ml) of milk. Bring to the boil (frothy) then reduce heat slightly and simmer for a couple of minutes. Longer simmering will result in a thicker yoghurt. Set aside to cool to about 40degrees centigrade (hand heat) stirring frequently to prevent a skin forming. Putting the pot of milk into a bowl of cold water will speed up this process. Add 1 tablespoon of natural bio yoghurt or yoghurt culture. Stir and pour into warm glass jars, ceramic pudding basin or empty previously used clean plastic yoghurt pot from the supermarket, or a vacuum flask. Keep warm for eight hours until thickened or set . Stir again to produce an evenly smooth mixture and when cool place in fridge. When cold cover with some sort of lid to keep clean. Serve with fruit, jam, honey, lemon curd etc. and enjoy.

NB. If using glass jars or ceramic bowls, sterilising them with boiling water before filling with the hand hot milk to which a tablespoon of bought yoghurt /yoghurt culture has been added is probably a good idea. Sterilising can easily be done in a pressure cooker, in a steamer (for vegetables) or simply by placing them in a large saucepan standing them on a trivet, then filling both jars and saucepan with cold water, bringing to the boil, then keeping it at boiling point for a minute or two.

The reasons why yoghurt is so good for us is also found in the above mentioned book. This is what the author has written:-

Yoghurt has been eaten for centuries by the peasant communities of the world but only since 1963, when the fruit-flavoured variety was introduced from Switzerland, has it become a popular part of our normal diet.

It is basically milk with the addition of a fermenting agent, or bacillus, which produces lactic acid. This lactic acid aids digestion and the assimilation of calcium which makes it a valuable health food. The milk

may be from the cow or the goat; it may be whole milk, skimmed, dried or evaporated, or a mixture of these. The nutritional value of the yoghurt depends entirely on the milk chosen. Natural yoghurt has many uses in cooking - it can be stirred into soups, sauces, and casseroles, spooned over white fish before baking and used in salad dressings. It enhances the flavour and adds nutritional value wherever it is used. Try it also with cereals at breakfast or with hot scones and home-made jam for tea.

It is expensive to buy in large quantities for a family, but it can be made at home for little more than the cost of the milk.

Indian housewives make it every day and use it often to add to rice or to give zest to helpings of hot pickle. In such a hot climate it makes a refreshing end to every meal.

The procedure is simple although there are variations in the method of incubation. It is worthwhile testing each to see which produces the most satisfactory result or is the most convenient for yourself.”

### **SAVING ENERGY Joy Pagano**

As we were reminded by our film night on 26th October in the library, almost everything we use or consume in our daily lives, apart from those items that have been hand crafted using natural materials such as wood, stone, grasses, reeds, rattan etc., have been produced using fossil fuels particularly oil, yielding petrol, plastics, paints, pharmaceuticals etc. all of which simply would not exist without oil.

Even the majority of our foodstuffs have been grown or reared dependant upon artificial fertilizers, another derivative of the oil industry, which is now past its peak of availability from deposits in the Earth's crust. We only have to look at the last desperate measures of companies like BP to 'suck up' every last drop of the stuff from ever deeper wells under the sea bed i.e. the Gulf of Mexico which caused huge environmental damage and loss of life. So, what do we do, when we take oil so much for granted? When we have become so 'hooked' upon it that it has become symbolically our very 'life blood'. Can't we at least try to change things by.....

### **LIVING IN CLOVER IN FARM AND GARDEN.**

A recent episode of "Country file" on BBC1TV Sunday evening, featured an organic farmer who instead of spreading artificial fertilizers on his fields, was growing a certain acreage of clover to be ploughed back into the soil as mature plants. Wonderful! Not only does this humble plant provide the soil

with nitrogen, essential for plant growth, but its flowers are beloved of bees and other pollinators, thus also benefiting birds. The farmer reckons that by this simple method of providing a healthy soil (to which worms can return and help break down the organic matter into usable nutrients for crops) he is saving a lot of money by not using artificial fertilizers, the cost of which is rising in step with increasing oil prices.

Impressed by this organic farmer and also the comments of Monty Don on TV's "Gardener's World", I decided to follow their lead and invest in a packet of Green Manure seeds from my local garden centre for part of my vegetable garden. The seeds are made up of Rye, Vetch, Italian Rye Grass and Forage Pea. They should all sprout from the still warm soil soon and when they have overwintered and reached about 23 cm (9 inches) tall in the Spring, I will dig them in. Some I might leave to grow taller and then chop them up before adding to the compost bin or again digging in. I wonder what seed heads of Rye look like. Are they suitable for flower arrangements and would the birds like the seeds too if I leave a small patch to ripen in next summer's sun? This leads me on to.....

### **SUN, WATER, AND A MINERAL OXIDE TO PRODUCE POWER.**

Thanks to my brother who reads the "New Scientist", I was informed of an extremely interesting development in Spain, where a lot of research has been taking place involving the large arrays of solar panels that have been installed in some of their sunniest most arid land. They have discovered how to manufacture hydrocarbons (usable fuel) from sunlight, water and a catalyst called cerium oxide. Apparently, Concentrated solar power is used to break down the water into hydrogen and oxygen. The hydrogen is then reacted with carbon dioxide to make the hydrocarbon methane, leaving a bi-product of water. Needs a bit more research this does, so when I have done a bit more digging, I'll let you see what I can 'turn up', 'turn over' or perhaps now.....

### **HELP TO TURN DOWN THE AMOUNT OF POWER WE USE IN OUR HOMES.**

Here are a few things we can all do to save energy. They are all well known but worth repeating to give us all a bit of confidence.

1. Don't waste any food - recycle leftovers into omelettes, soups, burgers, salads etc. Compost peelings,

egg shells etc.

2. Grow your own fruit and vegetables as much as possible.
3. Buy a steamer to cook several vegetables together over one hob.
4. Cook a complete meal (stew) in one pan.
5. Turn central heating down a notch or two.
6. Walk don't drive to shops/supermarket with a shopping trolley. Good exercise too!
7. Share car journeys with neighbours. In this way we can share our ideas on energy saving with them too!

Best of luck and "watch this space" as they say, for my next bit of 'spade work'. . All yours,.. Joy Pagano

### **RUNNING ON SUNSHINE By Joy and Luigi Pagano**

The image is of our bungalow in Handforth, it shows our 15 x 250W Cay Max photo voltaic solar panels. They were supplied and fitted on 5th August by SkyGen Renewable Energy Solutions, based in Macclesfield, at a cost of just under £10,000. (NB The three panels shown in the centre of the roof are to heat our water and were fitted 5 years ago by a different company, so are not connected to the new PV solar panels.)

The expected generation of electricity per year, taking into account the number of panels and their aspect is some 3,257 kWh, with an expected income from the government's Feed-In-Tariff scheme of some £1,410. tax free, plus an expected saving on our electricity bill per year of £305. All the electricity we generate goes straight into the National Grid and we are paid 43.3p. per kWh through our electricity utility company every quarter, whether we use the power we generated to run our appliances or not. This is indeed what helps to make the FIT scheme so attractive.

Also, since there are no moveable parts to wear out and thus little or no maintenance costs, the panels are expected to be in tip top working condition for at least 25 years which, incidentally is the number of years that the FIT scheme is planned to run.

### **SOME SOLAR FACTS**

1. The UK receives 60% of the solar energy that shines on the equator
2. Each square metre of the UK (at 30 degree angle) receives 900 - 1200

kWh of energy per year.

3. An average home uses 3,600 kWh per year. A 4kWh ph system produces 3,400 - 4,000kWh per year which equates to approx. 95% -110% of an average household's requirements.

To find out if a number of solar panels would fit your own home, see [www.skygen-renewable.co.uk](http://www.skygen-renewable.co.uk) or e-mail [Andrew.gosling@skygen-renewable.co.uk](mailto:Andrew.gosling@skygen-renewable.co.uk), telephone no. 01625 263407, mobile 07899 752678.

Finally, we are delighted with our installation and the fact that to date we have 'clocked up' 630kWh, which means that our utility company owes us £272.79!