

KEW SCIENCE FESTIVAL AT WAKEHURST PLACE

# FOOD FOR THE FUTURE

OPTIMIZING NUTRITION USING EVERYDAY SCIENCE & ALCHEMY  
FEATURING TRADITIONAL & UNUSUAL INGREDIENTS, FERMENTS & CONCOCTIONS

## MENU

### LIVING GREENS & HEMP SHOTS

A VITAL BOOST OF PROBIOTICS, SUPER FRUITS, ALGAE AND PLANT PROTEINS

### BARLEY MAKIZUSHI

NORI SHEETS STUFFED WITH BARLEY AND SEASONAL VEGETABLES  
SERVED WITH MISO AND LIME SAUCE

### BLACK BADGER BURGERS

A LEGUME, NUT AND HERB PATTY MADE WITH CARLING OR BADGER PEAS  
ON FLATBREADS WITH KRAUTSLAW

### TERIYAKI TEMPEH

FERMENTED SOYA BEAN SLICES BRAZED IN A HOT & SWEET SAUCE  
WITH BUCKWHEAT NOODLES, PICKLED PEPPERS AND SESAME KALE

### FAVA FARINATA

A PANCAKE MADE WITH A FAVA BEAN FERMENT  
WITH ROCKET PESTO



## Green Smoothie

This vital and delicious drink is a powerhouse of nutrition. Green smoothies are easy to digest and full of healthy fiber. They are best made in a sturdy blender, but a hand-held blender will work if you are persistent. The nutrients are easy for the body to assimilate as the cellular structure has already been broken down by the vigorous blending. There are countless variations and boosts you can add to your smoothie. They are most delicious when ice cold, so try to chill your base liquid or use frozen fruits in the mix.

This is a basic recipe for making 1000ml of smoothie, which is about 4 portions.

300g kale, spring greens or spinach, very tough stalks removed

300g base liquid of your choice, cold water, dairy, oat or soya milk work well

400g mixed fruit of your choice, I like an apple, some frozen berries and a banana

1. Start by washing the greens and preparing the fruit. Remove very tough stalks, especially if your blender is low power.
2. Blend the greens and the base liquid together until very smooth.
3. Add your choice of fruit and blend again to a consistency of your choice.

### Variations and boosts

- For a protein-rich smoothie add 100g of soaked nuts such as cashew or almonds.
- Protein powders made from whey, hemp or seed can also be included in the mix.
- Algae such as spirulina are also a helpful boost, full of protein, iron, magnesium and vitamins A and B6.
- For an omega oil boost add 50g each of soaked flax, hemp and pumpkin seeds.
- For a probiotic boost, you can replace a percentage of your base liquid with live yoghurt or another fermented product such as kefir or kombucha.

## Makizushi

### with miso and lime dipping sauce

Makizushi are a delicious dish of rice or other grains wrapped up in nori seaweed, traditionally eaten cold with a strong-tasting dipping sauce. The fillings range from raw fish to vegetables, pickles and eggs. Seaweed is a wondrous and much underused food stuff. It's a protein source and rich in calcium, zinc and iodine. Barley is one of the oldest cultivated grains, it is a resilient and high yielding crop which has a sweet, earthy flavour and a chewy texture. It is rich in protein and a good source of complex carbohydrates. Miso is a paste made from fermented soya beans, it is highly nutritious and a good source of Vitamin B.

Makes 4 servings

1 cup short grain rice or pearled barley

2 cups boiling water

½ tsp salt

½ tsp sugar

1 tsp rice or white wine vinegar

4 sheets Nori seaweed

½ cucumber, peeled and cut into thin strips

1 carrot, cut into thin slices

1 tbsp. toasted sesame seeds

2 tbsp. miso paste

½ tsp flaked chilli

Juice of 1 lime

1. Bring the water and salt to the boil; add the rice or barley and bring back to the boil and reduce to a simmer. Cover with a tight-fitting lid and cook for 15 minutes or until the water is fully absorbed.
2. Tip the cooked grain into a large bowl and mix in the vinegar and sugar. Allow to this cool for 15 minutes before using.
3. Place a sheet of Nori on a dry surface or on a bamboo sushi mat.
4. Working with wet hands, spread 1/4 of the grain evenly over the bottom 2/3 of the sheet, leaving 1/3 uncovered.
5. Place strips of carrot and cucumber 2cm from the bottom of the sheet onto of the grain. Sprinkle over sesame seeds.
6. Roll Nori tightly from the bottom. Seal by moistening with water top 2cm of the nori. Repeat with remaining ingredients. Slice with a serrated knife into 4cm thick slices.
7. For the dipping sauce mix together the miso, chilli, lime juice and the same volume of water. Mix to a smooth loose paste.

## Black Badger Burgers

Black badger beans are a classic dark brown Carlin Pea, also known as Black or Grey Peas. They have been grown with great success in the north of the UK for over a thousand years and are often referred to as the medieval mushy pea. They are very high in protein, vitamin B and manganese. The flavor is earthy and sweet. They are easy to grow, although dried or cooked tinned peas can be bought from [www.hodmedods.co.uk](http://www.hodmedods.co.uk). Makes burgers

400g tin of black badger beans  
300g roasted squash or cooked and mashed root vegetables  
100g chopped, toasted hazelnuts  
1 tbsp. tomato puree  
1 clove garlic, pureed  
salt  
pepper  
chill powder  
olive oil

1. Mash half of the peas with the roasted squash to form a sticky pulp.
2. Mix the remaining peas, nuts, onion, garlic, tomato and seasoning into the pulp.
3. Divide the mixture into 4 and form into 4 squat patties and refrigerate for an hour.
4. Heat 2 tbsp. of olive oil in a frying pan over a medium heat and gently fry the burgers for 2 - 3 minutes on each side.
5. Serve on a bun or in a flatbread with your favorite slaw

## Krautslaw

Through fermentation, the humble cabbage is transformed into a delicious powerhouse of goodness. This slaw uses fermented and fresh cabbage as well as other root vegetables to make a fresh and pungent salad as beautiful as it is nutritious. Makes 600g of slaw

½ small white cabbage, grated or very finely sliced  
2 carrots, grated  
1 fresh beetroot, grated  
3 tbsp. pre-made sauerkraut  
1 tbsp. chopped dill  
2 tbsp. mayonnaise  
salt and pepper

1. Chop, slice and grate all of the vegetables.
2. Mix together with the sauerkraut, dill and mayo. Season to taste and serve cold.

## Teriyaki Tempeh

Tempeh is made from fermented soybeans bound by *Rhizopus* fungi into a compact bean cake. It has a unique flavour and texture and is a complete protein as it contains all of the essential amino acids. It is also rich in isoflavones, which are said to strengthen bones, help to ease menopause symptoms, reduce risk of coronary heart disease and some cancers. One can buy it in Asian and health food stores and it comes raw, smoked or ready fried. This dish is essentially fried tempeh in a teriyaki sauce, but I use apple juice or apple concentrate as the sweetener in my teriyaki. Serves 4

250g ready fried tempeh or raw tempeh cut into 8 strips

1 tbsp. grated ginger

50ml apple juice concentrate or 100ml apple juice

50ml tamari or dark soya sauce

50ml water

Juice of 1 lime

25g sesame seeds, dry toasted

Sunflower oil

1. Heat a large frying pan over a medium to high heat and brush with oil and fry the tempeh strips until they go golden brown. Raw tempeh will need more oil and a longer fry.
2. Add the ginger and cook for a moment or two before adding the apple juice, soya sauce, lime juice and water.
3. Turn up the heat and cook hard until the liquid has reduced by  $\frac{2}{3}$ <sup>rd</sup> and it starts to produce big dark glossy bubbles. Turn the tempeh over in this sauce once or twice and remove from the pan.
4. Top the tempeh with the remaining sauce and sprinkle over the sesame seeds.
5. You can de-glaze the pan with more water or apple juice to make extra sauce.

## Farinata

Farinata is a Genovese pancake made with chickpea or favabean flour - it's delicious, fermented, high protein, vegan and gluten free. Farinata are delicious cooked as a simple pancake or as a tray bake, poured over fine chopped raw or roasted vegetables.

150g chickpea or fava bean flour  
450g warm water  
6 spring onions or a small leek  
1 red pepper, sliced  
1 courgette, small cubes  
olives  
25ml olive oil  
3g salt  
Chilli flakes

1. Mix the flour and water and whisk to a smooth batter. Cover and leave in a warm place for 12 - 18 hours. You can do this in two stages which encourages the fermentation. (which in this case makes the chickpea more digestible and the nutrients more available) The batter should be bubbly and have a slight cheesy aroma.
2. Preheat the oven to 200'c and line a large, heavy baking tray with non-stick baking paper.
3. Finely chop the onions or leek and pepper and scatter about the bottom of the tray. Dress with half of the oil.
4. Mix the salt into the batter and whisk. Pour this over the onions or leek - it should be about cm thick. Pour over the remaining oil, scatter with olives and sprinkle over a pinch of chilli flakes.
5. Bake for about 20 minutes, it should be golden and set with the texture of a well-done omelette.
6. Cut into slices and serve hot.
7. If you prefer, you can also make several smaller ones in a frying pan - preheat a thick bottomed oven proof frying pan or skillet to a median heat. Brush liberally with oil and spoon in a ladle full of batter. Using the bottom of the ladle, swirl the batter round so it covers most of the pan. Sprinkle over the onions, chilli and some oil and cook till it is set. Transfer the pan to the oven and cook for a few minutes to brown the top. Serve hot

## Rocket pesto

100g rocket  
50g toasted hazelnuts  
20g grated parmesan  
1 tbsp balsamic vinegar  
4 tbsp olive oil  
Salt and Pepper

**Method:** Wash and dry the rocket. Toast the hazelnuts in a dry pan or under a grill until they are a shade or two darker. Allow them to cool before using them. Place all of the ingredients except the oil in a food processor and start to blend. Pour the oil in, a little at a time, until the pesto has emulsified. Add salt and pepper to taste.