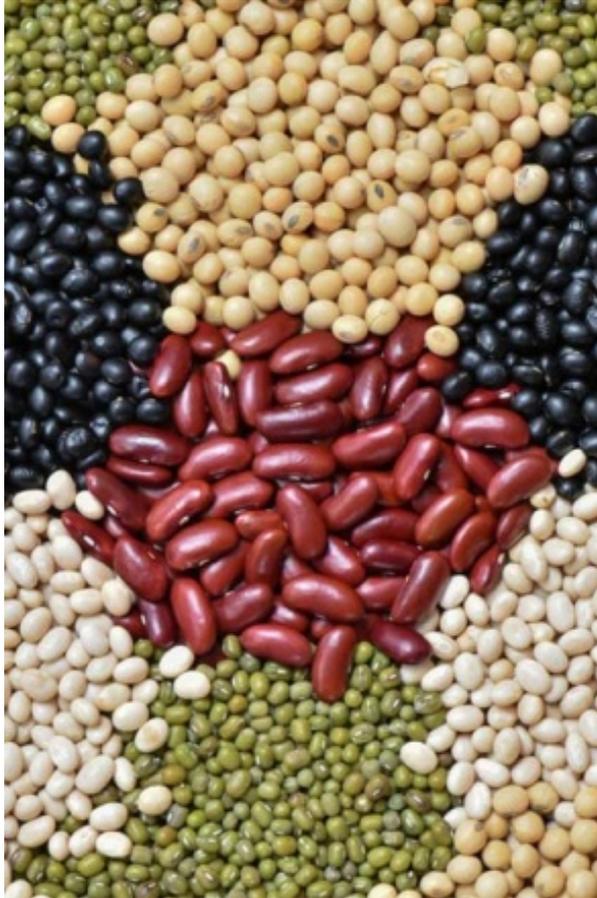


# Pulses



# What is a pulse?

A pulse is the dry edible seed that comes from a pod belonging to the legume family.

Well known pulses include chickpeas, lentils, peas, butter beans, haricot beans, adzuki beans, red kidney beans and mung beans.

## How to maximise the nutrition in pulses

The nutritional value of many plant foods can significantly be reduced by what are often referred to as anti-nutrients, these include lectins, phytate and protease inhibitors which can all have a negative effect on the human body. Traditional cultures throughout the world have used methods of soaking, sprouting and fermenting to prepare pulses, grains, nuts and seeds to help neutralise some of the effects of anti-nutrients. At the same time, these processes increase the bioavailability of beneficial nutrients and break down starches, proteins and fats, making them easier to digest.

Combining different methods can reduce these compounds substantially, sometimes even completely.

## Soaking

Soaking pulses reduces the levels of phytates that can bind minerals such as calcium, iron and zinc, impairing their absorption.

Phytic acid is an anti-oxidant, so can confer benefits, but eating too many high phytate foods without proper preparation could lead to mineral deficiencies.

Soaking has been found not only to decrease phytates in legumes, but also protease inhibitors, lectins, tannins and calcium oxalate.

Another benefit of soaking is the reduction in cooking time, so this simple process also saves on energy.

## Soaking beans

- place your chosen beans into a bowl and cover with water
- for every 200g add a pinch of bicarbonate of soda
- leave the bowl at room temperature for 18 – 24 hours
- drain, rinse well and they are ready to cook
- never use the soak water to cook the beans
- always cook beans thoroughly, skimming off any indigestible sugars
- red kidney beans and lima beans must be boiled vigorously for 15 minutes before lowering to a simmer and cooking until tender

## Soaking lentils

- place the lentils in a bowl and cover with water
- for every 200g stir in 1 tablespoons apple cider vinegar
- leave the bowl at room temperature for 8 hours
- drain, rinse and they are ready to cook
- never use the soak water to cook the lentils

## **Sprouting**

The greatest vitality in the life cycle of a plant is in the sprout. As a seed germinates, it springs into life and become superbly suited to our nutritional needs. Many ancient cultures knew the value of sprouting seeds. They were mentioned in Chinese writing dating back 5,000 years and ancient documents found in the Vatican library refer to sprouting.

The sprouting process makes the seed far easier for us to assimilate and metabolise. The active enzymes in germinating seeds aid digestion and assimilation of nutrients placing less of a burden on the digestive system. All lentils and beans (with the exception of kidney beans and lima beans) can be sprouted

## **How to sprout**

Choose a large jar, put in your chosen seed, cover with filtered water and fasten with mesh lid or a piece of fine net secured with a rubber band. After soaking (between 8–12 hours, depending on the seed) pour off the soak water and rinse well. Turn the jar upside down and let it drain. Rinse the sprouts morning and evening. It is important to keep them moist, warm (room temperature is fine) and well drained. Between rinsing, place the jars at an angle for ease of drainage. Once the sprouts are ready, strain through a colander and wash thoroughly. Make sure they are well drained, put in a bowl, cover and store in the fridge.

## **Fermenting**

The process of fermentation allows beneficial bacteria to digest and convert many potential anti-nutrients. Good examples for beans are Japanese miso and Indonesian tempeh. Lentils are fermented with rice to make Indian idli batter

## **Lectins**

Lectins can cause a variety of digestive problems for people and whilst sprouting and fermenting will decrease lectins, not all lectins are necessarily completely destroyed by these methods. However most of the time for most people these methods will make a difference. (Be wary of sprouting alfalfa as in this instance the lectin activity is actually enhanced by sprouting.)

Other ways to reduce lectins are:

Add the sea vegetable kombu to legumes during cooking as it binds lectins in a way that makes them unavailable to the gut wall.

Use asafoetida in pulse dishes to aid digestion.

Use a pressure cooker, which is the best form of cooking to eliminate lectins

# Chickpeas

## **Chana masala**

200g chickpeas, soaked overnight and cooked until tender

3 tablespoons olive oil

2 bay leaves

1 onion roughly chopped

1 tomato roughly chopped

1 inch piece fresh ginger, peeled & grated

4 cloves garlic, chopped

1 inch piece fresh turmeric, peeled & grated

1 green chilli pepper, chopped

1 teaspoon ground chilli

1/2 teaspoon ground cumin

1 teaspoon garam masala

pinch salt

handful of fresh coriander roughly chopped

Pulse the onion, tomato, ginger, garlic, turmeric and chilli pepper together in a food processor into a paste. Gently warm the bay leaves in the olive oil until fragrant add the paste and cook for 2-3 minutes. Add the ground chilli, cumin & garam masala. Season with a pinch of salt; tip in the chickpeas and enough water so the mixture makes a sauce that coats the chickpeas. Cook until the chickpeas are heated through, stir in the fresh coriander and serve.

## **Warm chickpea salad**

200g chickpeas.

2 tablespoons olive oil

2 cloves garlic, finely diced

400g tin of chopped tomatoes

12 fresh sage leaves finely shredded

1 teaspoon fresh thyme leaves

salt and pepper to taste

4 handfuls rocket

2 tablespoons basil pesto

4 tablespoons yeast flakes

Soak the chickpeas overnight, strain, rinse tip into a pan cover with water and cook until tender.

Gently heat the olive oil and soften the garlic, tip in the tomatoes, sage, and thyme; increase the heat and cook for 2 to 3 minutes. Strain the chickpeas

and add to the tomato mixture, season with salt and pepper, and continue cooking until the beans are heated through.  
Divide the rocket between 4 plates, spoon the chickpeas on top, add a swirl of basil pesto and top with yeast flakes.

## **Falafel with hummus & red sauerkraut**

*serves 4*

250g chickpeas, soaked for 12 hours

4 heaped tablespoons red sauerkraut (or any delicious fermented veg)

### *Hummus*

½ the raw, soaked chickpeas

1 clove of garlic, crushed

2 tbsp lemon juice

pinch of ground cumin

¼ tsp salt

2 tbsp tahini

### *Falafel*

½ the raw, soaked chickpeas

1 small onion, very finely chopped

1 clove of garlic, crushed

1 dessertspoon olive oil

2 tbsp chopped parsley

2 tbsp chopped coriander

1 tsp ground cumin

¼ tsp chilli powder

1 tbsp gram flour

¼ tsp salt

First make the hummus, cook half the soaked chickpeas until tender. Strain the chickpeas, reserving about 150ml of the cooking liquid, and place in a food processor with the garlic, lemon juice, cumin, 1½ tbsp of the cooking liquid, salt and tahini. Purée until smooth. If the mixture is too thick, add a little more cooking liquid.

To make the falafel, place the raw chickpeas in a food processor and pulse until lightly broken. Add the remaining ingredients and continue pulsing until you have a smooth but distinctly grainy purée.

Gently form the mixture into about 20 small patties, making each roughly the size of a 50p piece. Place on an oiled baking tray and bake in a hot oven. Serve the hot falafel with hummus and sauerkraut.

# Lentils

## **Red lentil dahl**

*serves 4*

2 onions diced  
2 leeks sliced  
3 cloves garlic chopped  
2 tablespoons coconut oil  
1 tbsp freshly grated ginger  
1 teaspoon fresh turmeric grated  
1 teaspoon ground cumin  
200g red lentils  
1 tin chopped tomatoes  
500ml vegetable stock  
salt pepper

Gently cook the onions, leeks & garlic in coconut oil for 5 mins  
Add the ginger, turmeric and cumin and cook for a further 2 minutes.  
Add the lentils, tomatoes and stock, stir well, season with salt & pepper and cook on a medium low heat for 15/20 minutes, until reduced and thick.  
Remove from the heat, cool and refrigerate for 24 hrs  
Gently bring to the boil, adding a little water if necessary, cook for 2 minutes and serve with steamed greens

## **Sprouted lentil, kale & hazelnut salad**

*serves 4*

4 handfuls kale, thick stalks removed and finely shredded  
1/2tsp salt  
juice of half a lemon  
4 handfuls sprouted green lentils  
1 tablespoon olive oil  
1 finely diced large shallot  
2 finely diced cloves of garlic  
1 teaspoon ground cumin  
  
2 tablespoons hazelnut butter  
1 tablespoon tamari  
splash of water

1 tablespoon hemp seeds  
1 tablespoon sunflower seeds

Massage the kale with the salt for a minute then stir in the lemon juice

Mix together the olive oil, shallots, garlic and cumin and mix into the lentils. Add the kale and divide between 4 bowls.

Mix the hazelnut butter and tamari together with enough water to make a thickish pouring consistency

Top each salad with the hazelnut sauce hemp and sunflower seeds

### **Aromatic spiced lentils**

*serves 4*

200g brown lentils

1/2 litre veg stock

2 red onions chopped

1" piece of ginger, grated

2 cloves garlic chopped

6 ground cardamom seeds

olive oil.

juice of half a lemon.

handful chopped coriander

Wash lentils well, pop in a pan, cover with water and cook until tender and strain.

Gently heat the olive oil and cook the onion until soft add the ginger, garlic & cardamom seeds. Strain the lentils. Purée 2/3rds of the lentils with enough stock to make a smooth not too thick sauce. Tip in the remaining lentils.

Warm through add the lemon juice, stir in coriander and serve with pasta or jacket potato

# Haricot

## **Cassoulet**

*serves 6*

300g dried haricot beans  
1 piece of kombu seaweed  
4 tablespoons olive oil  
2 red onions, finely chopped  
4 celery sticks chopped  
4 cloves garlic chopped  
4 carrots chopped  
400g tin chopped tomatoes  
2 bay leaves  
1 tablespoon chopped thyme  
6 sage leaves finely chopped  
500g of winter squash, peeled, seeded and cut into chunks  
1 teaspoon cumin  
1 tablespoon seed mustard  
1 tablespoon tamari  
1 large baking potato  
extra olive oil  
salt & black pepper  
breadcrumbs tossed in olive oil

Soak the beans overnight, drain, rinse well, cover with cold water, add the kombu and bring to the boil. Simmer for 15 minutes, cover tightly and set aside.

Gently cook the onions, celery, garlic and carrots in 3 tablespoons of olive oil until soft, add the tomatoes and herbs.

Drain the beans, reserving the liquid, and stir into the vegetable mixture including the kombu and adding enough of the reserved liquid to make sure the beans are completely immersed in the liquid. Simmer gently for an hour. Toss the squash in 1 tablespoon of olive oil season with cumin, salt and black pepper and roast until tender and crisp.

When the beans are cooked stir in the seed mustard, butternut squash adding liquid as necessary to make the beans really moist, season and turn into a baking dish, cover with breadcrumbs and bake until crisp.

## **Pasta e fagioli**

200g dried haricots beans  
1 piece of kombu  
1 tablespoon olive oil  
2 stalks of celery, finely sliced  
2 carrots, diced  
1 large onion, diced  
3 cloves garlic, finely diced  
½ teaspoon chilli flakes  
½ teaspoon dried oregano  
200g tinned chopped tomatoes  
½ litre vegetable stock  
175g small shaped pasta  
small bunch parsley  
salt and black pepper

Soak the beans in plenty of cold water for about eight hours, then drain and rinse well. Put in a large pan with the kombu cover with water, bring to the boil, skim the top, turn down the heat and cook until tender. Make sure the beans are always covered with water so top up as necessary.

Heat olive oil in a large saucepan over medium heat. gently cook the celery, carrots, onion & garlic, until soft add the chilli flakes and oregano, stir in tomatoes and stock and simmer on a low heat for 15 to 20 minutes.

Blitz half of the beans, with the kombu and some of the cooking water to a thick paste and tip into the tomato mixture. Add the whole beans and enough of the cooking water to make a thick soup.

the soup simmer gently while you cook the pasta in salted boiling water in another pot until al dente, drain and add to the soup with the parsley. Season to taste and serve

## **Haricots mash**

350g haricots beans  
1 piece kombu  
2 chopped cloves garlic  
2 tablespoons olive oil  
1 teaspoon lemon juice  
½ teaspoon chopped fresh thyme  
salt & freshly ground black pepper

Soak the haricot beans overnight. Drain, rinse well, cover with water, add the kombu and bring to the boil, simmer until tender, checking the liquid level from time to time. Strain, reserving the cooking liquid and process in a food processor with the garlic, olive oil, lemon juice and thyme adding any of the reserved juice as required until you have a creamy purée alternatively you can use a masher to mash the beans, season, warm through and serve with wilted greens, salad or whatever you fancy.

# Peas

## **Yellow pea soup with gremolata**

250g whole yellow peas  
2 teaspoons bicarbonate soda  
strip of kombu  
2 bay leaves  
2 tablespoons olive oil  
2 medium leeks, sliced  
1 medium carrot, peeled and chopped  
2 sliced sticks celery,  
2 cloves garlic finely chopped  
1 litre vegetable stock  
teaspoon dried thyme  
salt and black pepper.

Place the marrowfat peas in a bowl. Mix the bicarbonate of soda with a little hot water and add to the peas along with enough cold water to cover well. Leave to soak for 12 hours.

Strain the peas and rinse thoroughly. Tip into a pan add the kombu and bay leaves, cover with water, bring to the boil, lower the heat and simmer until the peas are tender.

Whilst the peas are cooking gently cook the leeks, carrot, celery and garlic in the olive oil until soft, tip in the stock add the thyme and cook for 10 minutes. Strain the peas remove the bay leaves, roughly chop the kombu and add the peas and kombu to the veg and stock. Tip into a processor and blitz until smooth, return to pan, season with salt and black pepper and serve with gremolata

### *Gremolata*

15g dried dulse

zest of 1 lemon

2 rounded tablespoons chopped parsley

Toast the dulse in a frying pan until crisp but be careful not to burn it.

Cool, then crumble & mix with the lemon zest & parsley.

### **Mushy peas**

250g dried marrowfat peas

2 teaspoons of bicarbonate of soda

1 teaspoon salt

Place the marrowfat peas in a bowl cover generously with water

Dissolve the bicarb in a little hot water and tip into the peas. Leave to soak for between 12 - 18 hrs.

Drain the peas and rinse well. Tip into a pan cover with approx.

750ml water and bring to the boil.

Reduce the heat and simmer until the peas have fully broken down about 30 mins. Add the salt.

If the peas are too runny, reduce the liquid with the lid off; if the peas are too thick add a little water.



*falafel, with hummus and red sauerkraut*

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