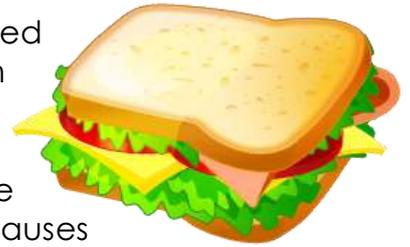


## Acid-Alkaline Balance

Modern agriculture and food processing has dramatically changed the way we eat. Where once humans lived primarily on uncultivated plant food, we now consume large amounts of grains, meat, and processed foods. Many of these foods prevalent in the modern era form acid in the body, unlike uncultivated plant foods that are alkalising. Consequently, this causes the body to function in an acidic environment, which has the potential to contribute to disease.



Implementing a diet to balance acid-alkaline may be beneficial particularly to those with recurrent kidney stones, or losses in bone density, as in osteoporosis.

### pH

Normal arterial blood pH is slightly alkaline at between 7.365-7.450. In the body the metabolism of acids results in the production of hydrogen ions that are then neutralised via alkaline products, such as bicarbonate. Variations to blood pH can alter many functions within the body and adversely affect organs. Acids are removed from the body via the eliminatory channels; lungs, kidney, and sweat glands.

### Food

Western diets are commonly high in acid and low in alkaline foods. Therefore, to improve acid-alkaline balance within the body, the focus should be upon increasing the intake of alkaline-forming foods in the diet. Ideally, each meal should contain a balance of acid and alkaline foods.

The simplest approach to this is to reduce the consumption of refined foods and increase fresh fruit and vegetables. It is also important to consider quality of the food, as some fruits and vegetables that would normally be alkalising, form acids in the body when not ripe. And, sometimes the way the food is prepared will influence its pH, as with soybeans, which are alkalising as miso, but acidifying as tofu.

Adding freshly juiced alkalising fruit and vegetables to the diet also contributes to a more alkaline pH. Other products that may be beneficial for neutralising acids include green foods, such as spirulina, chlorophyll, and wheatgrass.

## Exercise

Exercise has the ability to contribute to acid-alkaline balance as it promotes elimination of acids through sweating and exhalation via the lungs.

## Relaxation techniques

Relaxation techniques such as meditation, deep-breathing exercises, acupuncture, and massage have the potential to have an alkalisating effect on the body by decreasing the secretion of acidifying, stress hormone, cortisol. Exercises involving deep breathing also promote elimination of acids through exhalation.

| Alkaline-forming foods   | Low-level alkaline forming foods   |
|--|--|
| <p>Vegetables (except those listed as acidifying)<br/>           Fruits (except those listed as acidifying)<br/>           Molasses<br/>           Maple syrup<br/>           Horseradish<br/>           Raisins</p>    | <p>Almonds<br/>           Blackstrap molasses<br/>           Brazil nuts<br/>           Chestnuts<br/>           Lima beans<br/>           Millet<br/>           Fermented soy products (i.e. miso, tempeh)</p>   |
| Acid-forming foods   | Weak-acid forming foods  |
| <p>Buckwheat<br/>           Legumes (i.e. chickpeas, lentils)<br/>           Tea, Coffee, &amp; Cocoa<br/>           Fish, Shellfish<br/>           Meat<br/>           Poultry<br/>           Milk<br/>           Eggs<br/>           Grains (rice, wheat, oats, quinoa)<br/>           Pasta<br/>           Cranberries, Prunes, Plums, Blueberries<br/>           Asparagus<br/>           Brussel sprouts<br/>           Olives<br/>           Pepper<br/>           Alcohol, Soft drinks<br/>           All sugar</p>   | <p>Fermented dairy products (i.e. yoghurt)<br/>           Lacto-fermented vegetables<br/>           Whey<br/>           Unripe fruits<br/>           Berries<br/>           Tomatoes<br/>           Rhubarb<br/>           Watercress<br/>           Sauerkraut<br/>           Lemon juice<br/>           Vinegar<br/>           Honey</p>  |