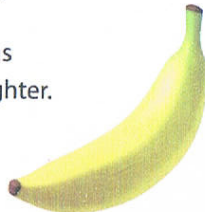


## Golden Rules For A Better Brain

1. Avoid all processed, manufactured, refined, additive loaded, synthetic, nutrient deprived foods.
2. Drink water.
3. Eat as nature intended you to, good natural foods
  - Variety every day and on successive days
  - Fresh
  - Colourful - vegetables have a great array of colours
  - Whole
  - Moderation - watch the portion size
  - Quality
  - Raw if possible
4. Minimise reliance on takeaway meals, which are often loaded with energy, fat and sugars. Be very selective.
5. Aim to eat the same time each day. The body loves routines and regulates its systems accordingly.
6. Sit to eat and use the dining table - that's what it is for. Superb family time, learning about how and what to eat, sharing and bonding time, so make it pleasant and happy.
7. Make it a rule to wash hands before and clean teeth after a meal. The body will thank you for it.
8. Make family meals a team effort. Involve everyone on menu planning, buying, growing, cooking and packing lunches - even delegating meal preparation and presentation.
9. Restrict the availability of rubbish food. Have in stock healthy alternatives and set a good example.
10. Don't forget the EMOTIONAL vitamins
  - praise, approval, hugs, interest and laughter.



## Some other ideas...

This leaflet has focused only on possible effects in the brain of the modern world of new chemicals and changes in diet. Other factors of course could be influential and even interactive with these.

The basic principles are just 2 - water to drink and natural food. (What our grandparents ate).

## Websites...

[www.brainfoodnz.co.nz](http://www.brainfoodnz.co.nz)

[www.ifbb.org.uk](http://www.ifbb.org.uk)

(Institute for food, brain and behavior)

[www.coeliac.org.nz](http://www.coeliac.org.nz)

[www.fedupwithfoodadditives.info](http://www.fedupwithfoodadditives.info)

[www.fabresearch.org](http://www.fabresearch.org)

[www.literacyworldwide.org](http://www.literacyworldwide.org)

## Books...

'Fed Up' Sue Dengate

'The Failsafe Cookbook' Sue Dengate

'They Are What You Feed Them. How Food Can Improve Your Child's Behavior, Mood And Learning'

Dr. Alex Richardson

'The Complete Guide to Food Allergy and Intolerance'

Professor Jonathan Brostoff and Linda Gamlin

## First aid for problem behaviour

1/2 tsp of sodium bicarbonate or baking soda in a glass of water.

This dose can be safely repeated up to five times a day. \*

\*Dr. J.A. Chunn MB (NZ), MRCPE, Fellow American Academy of Allergy Fellow Australian Collage of Allergists

\* You can assist your child by keeping a food diary and recording reactions under the headings, Mood, Health, Learning, Behaviour.

2013 Brain Food Parent Nutrition brochure written by Julienne S. Law New Zealand International Teacher, Dr Jenny Scott Auckland, New Zealand and the late Dr Patricia Holborow of Wellington New Zealand.

# Brainy Food



## A guide to food for better learning

In this leaflet we look at how to optimise the health and performance of body and brain with a focus on foods.



The body is what we live in and the brain makes us who we are.



## What's going on?

Teachers of many years experience have noticed a marked deterioration in health, behaviour and learning of pupils. When asked what the problems are, teachers list that many children display the following characteristics, pointing out that these do not occur all the time in any one child and that each child will vary in the number, type and frequency of these.

### Restlessness

*Difficulty sitting still, fidgety, on the go the whole time, driven.*

### Impulsiveness

*Easily distracted, interrupts or intrudes on others, unpredictable.*

### Inattentiveness

*Fails to follow instruction, or complete work, disorganised, lacks focus.*

### Poor Coordination

*Clumsy, writing at times large spidery or illegible, mixed left - right dominance.*

### Poor Mental Processing

*Letter reversals, inconsistent spelling or maths, day dreams.*

### Antisocial Behaviour

*Argumentative, aggressive, destructive, defiant, devious, swears, steals and lies.*

### Emotional Instability

*Extremes of feelings, easily frustrated, overreacts to touch, pain, sound, weepy.*

### Health Issues

*Prone to infections, glue ear, eye puffiness or dark circles, allergies, asthma, eczema, hives, headaches, muscle or stomach pains, excessive thirst and perspiration.*

### And others, that were hardly seen in the past.

These children don't want to be ill, unhappy or not to learn and tiredness cannot account for the problem.

While teachers note the changes in pupils, health professionals note changes in disease patterns - large rises in diabetes, cardiovascular disease, cancers and others. Body size has increased so it is not lack of food - indeed the range and choice of food has increased enormously. But diet has significantly changed and also there has been an explosion in the number of chemicals unknown in the natural world that life is now exposed to.

## What factors in the diet have brought these changes in health, behaviour and learning?

Both body and brain need an adequate supply of nutrients to grow and function, and the brain particularly is especially chemically sensitive and easily disrupted.

### There are two main factors:

1. *Deficiency of nutrients in processed food.*
2. *Reaction to the number or amount of chemicals both artificial and natural*

## 1. Nutrients

### Minerals

**Iron** is needed to carry oxygen and iodine to regulate metabolism. Low levels of either of these will result in tiredness, apathy, weakness, low energy, poor concentration, poor memory and irritability - the symptoms of anaemia. Iron is found in many different foods including both animal and plant-based sources. Iron absorption is affected by our diet so minimise caffeine intake and increase vitamin C when eating plants high in iron or eat vegetables which are high in both (eg broccoli).

**Iodine** is well sourced from fish, but in countries where the soil is deficient eg. New Zealand, it is added to table salt. Commercially produced food uses non iodised salt, so where too much processed food is consumed iodine deficiency can result.

**Zinc** is important in a wide number of roles - energy, immunity, skin, vision, hearing, cell division to name a few. It also has the reputation of being the most deficient mineral in populations on a modern diet. Like iron, it is well sourced in meat and fish, but its absorption is hindered by phytates in wheat.

A recent study has found that tartrazine (102) a yellow food dye widely used in manufactured food and drink increases the loss of zinc.

### Vitamins

Called vitamins as they are needed for vitality. Like minerals they have to be sourced from food for the body is unable to make most of them. The presence of large amounts of sugar in blood or intestine slows the absorption of vitamin C.

### Essential Fatty Acids (EFAs)

Structural fats can not be made by the body which is why they are called essential - they have to be eaten. The intake of too much energy, fats, sugars and starches will compete with the utilization of EFAs. A diet too high in processed food inhibits the supply and upsets the balance of the EFAs and the other nutrients needed for growth of body and brain.

## 2. Chemicals

### Too Many

Modern living exposes us to thousands of chemicals that our bodies have never experienced and have not developed the necessary mechanisms to reject, excrete or render them safe. These chemicals pervade our soils, air, water and food. Some are 'accidental' such as lead, cadmium, aluminium, crop pesticides, fumigants and some are deliberate such as perfumes, air fresheners, insect poisons, shampoos, cleaners, to mention a few. Then there are those added to foods and drinks - colours, flavours, preservatives, flavour enhancers, sweeteners, bulk agents and many more - over 3000 of them. Many countries do not allow certain food additives particularly artificial colours, but others regard trade agreements as a priority and have few restrictions. One example is polyphosphates, (450, 451, 452) which are banned in Germany for their effect on the nervous system. But here they are pervasively present in many foods consumed by children eg luncheon sausage, sausages, bacon, baked goods, cooked chickens and certain raw meat (watch out for those that are ready basted ). These chemicals can accumulate in the body, interact with other chemicals, interfere with body mechanism, block enzymes or neurotransmitters, excite or depress hormone regulatory systems, interfere with the immune system and do all sorts of other mischief. Even small amounts can be toxic and some people with chemical sensitivity can be particularly affected. Small children are especially vulnerable.

### Too much of any one thing!

This can arise from consuming too much of any one food every day. Wheat and sugar are the main culprits, especially if the wheat is refined, depleting it of nutrients and processed into pasta, pastry, pizza, pies, noodles, spaghetti, cakes, scones, biscuits and more. These deprive the appetite of nutritious food, rob the body of nutrients and contribute little except calories, setting up cycles of overeating. Fruit juices have too much sugar and salicylates in one hit, especially damaging in children. Juice may be a natural food but it is not natural to consume the liquid from 12 oranges in one glass. Fibre slows the absorption of sugar so that it doesn't flood the bloodstream. The answer here is to widen the variety of food, target those that are rich in nutrients and go for a whole - whole grain, whole fruit. You can easily list 20 vegetables for a start and many are cheap to buy in bulk eg. potatoes, carrots and onions. Some are very easy to grow, even in a pot or bucket eg. herbs like flat leafed parsley, silver beet, lettuce.

**And remember that 'water kills the meanest thirst' and it's FREE!**