
SECRETS OF THE FOOD INDUSTRY

By Alicia Melrose and Pip Martin for

A Vital Journey, an internet course on health and nutrition, run by Belmont Park Retreat.

The VITAL JOURNEY is a program to gain and maintain health. The best way to achieve this is to become informed. So, this week we have another fascinating discussion, this time about the food processing industry. As you can imagine the subject is vast.

We hope that by the end of this discussion you will understand why we discourage processed foods and will feel informed enough to either pass on this information or talk to family and friends about the dangers, especially to those with young children.

Processing of food is something that humans have done for thousands of years. Cooking food is one type of processing to make some food more digestible and to preserve food for times of scarcity for instance in making traditional foods like sausages, black puddings and haggis as well as bread, grain products, milk products – cheese, butter or ghee, pickles. Other processing and preserving includes salting and controlled fermentation – wine and spirits, and lacto-fermented food and beverages. Farmers and artisans like the cheese makers, distillers, bakers, and millers processed foods to make delicious foods, retaining and often increasing the nutritional content.



In modern times we have gone from local artisanal processing to factory and industrial processing which destroys much of the food. Industrial processing depends upon sugar, white flour, refined salt, processed and hydrogenated oils, mass-produced 'dead' vinegars, additives like colours, preservatives and synthetic vitamins, and extrusion processing of grains, all packaged in plastic. These are the tools of the food processing industry.

Let's have a look at the typical modern day breakfast of cereal, low fat milk and orange juice.



THE MODERN BREAKFAST

Packaged cereals are produced by extrusion. Cereal companies buy the grains from the farmer for a pittance. The grains are made into a slurry in a large tank then forced through an extruder where the paste is pushed through a little hole at high temperature and pressure and shaped into little o's, flakes, shredded, or puffed up. A blade slices off each flake, which is carried past a nozzle and sprayed with a coating of cheap oil and sugar, to seal off the cereal to keep it crunchy.

Paul Stitt (1) has written about the extrusion process that destroys the fatty acids and even destroys the chemical vitamins that are added. The amino acids from the proteins are

rendered very toxic by this process, especially lysine which is ravaged by extrusion. This is how all the boxed cereals are made - even those in the health food stores - and mostly in the same factories. ALL dry cereals that come in boxes are extruded cereals. Rolled oats do not receive this treatment but are steamed before drying and packaging.

The only 'advances' made in extrusion processing are those that will further cut cost or will make the food more alluring and addictive. Cereals are a multi-billion dollar business that has created huge fortunes. There is little research on the effects on man or animals. There are only two unpublished studies which were done on rats.

THE RAT EXPERIMENTS

Stitt wrote about an experiment conducted by a cereal company in which four sets of rats were given special diets:

- One group received plain whole wheat, water, and synthetic vitamins and minerals as a nutrient solution.
- A second group received puffed wheat (an extruded cereal), water and the nutrient solution.
- A third set was given water and white sugar.
- A fourth set was given nothing but water and the nutrient solution.

The rats that received the whole wheat lived over a year on this diet. The rats that got nothing but water and nutrient solution lived about two months. The animals on a white sugar and water diet lived about a month. The company's own laboratory study showed that the rats given the solution, water and all the puffed wheat they wanted died within two weeks - they died before the rats that got no food at all. It wasn't a matter of the rats dying of malnutrition. Results like these suggested that there was something actually very toxic in the puffed wheat itself. Proteins are very similar to certain toxins in molecular structure, and the pressure of the puffing process may produce chemical changes which turn a nutritious grain into a poisonous substance.

Another unpublished experiment was carried out in 1960. Researchers at Ann Arbor University were given 18 laboratory rats. They were divided into three groups:

- one group received corn flakes and water;
- a second group was given the cardboard box that the cornflakes came in, and water;
- the control group received rat chow and water.

The rats in the control group remained in good health throughout the experiment. The rats eating the box became lethargic and eventually died of malnutrition. The rats receiving the cornflakes and water died before the rats that were eating the box! But before death, the cornflakes rats developed schizophrenic behaviour, threw fits, bit each other and finally went into convulsions. Autopsy revealed dysfunction of the pancreas, liver and kidneys and degeneration of the nerves of the spine, all signs of insulin shock. The conclusion of this study is that there was more nourishment in the box than there was in the cornflakes. This experiment was designed as a joke. The results were never published and similar studies have not been conducted.

Most New Zealanders eat this kind of cereal. The food industry must be delighted at sales of these boxed cereals. Many of them are at least 50% sugar. Even so-called health food cereals which use whole grains and better quality sweeteners are made by the same method. The whole grain extruded cereals are possibly even more dangerous, because they are higher in proteins so denatured by this type of processing, and the toxic phthalates are still present.

We should be shocked into action when we find out that our expectations of a nutritious breakfast from the most important meal of the day are false. Sayings in German and Chinese echo the old adage: “Breakfast like a king; lunch like a prince; dinner like a pauper”.

THE EXTRUSION PROCESS

Putting cereals through an extruder alters the structure of the proteins. ‘Seins’, which comprise the majority of proteins in corn, are located in spherical organelles called protein bodies. One study investigated change in protein body shape and release of encapsulated alpha-amylase as a result of extrusion processing. During extrusion, it was found that the protein bodies were disrupted and the alpha-amylase dispersed. The results suggest that seins in cornflakes could then interact with each other and other components, forming new compounds which are foreign to the human body. Thus the extrusion process breaks down the organelles, disperses the proteins and the proteins become toxic. When they are disrupted in this way, you have chaos in your food that can result in disruption to the nervous system.



OLD-FASHIONED PORRIDGE

So what are you going to have for breakfast? Eggs in some form are perfect, especially if the yolk is raw or softly cooked. And we need to go back to good old-fashioned soaked porridge or raw porridge - muesli. Even better, acquire a grain mill and roll your own oats fresh each day and soak them as above – the delicate oils in grains are rapidly made rancid on exposure to air. (This is why rolled oats are steamed.) Many cultures have grains like rice or barley or millet for breakfast.

Fresh ground oats must be soaked overnight to get rid of the anti-nutrients which are neutralized in the sprouting process. Soaking neutralises the tannins, enzyme inhibitors and phytic acid which help preserve the grains.

Soak the grains in warm water and add a dash of something acidic like whey, yoghurt, lemon juice or vinegar. The porridge cooks in about a minute. And eat it with butter or cream, coconut and/or coconut oil and chopped nuts like our grandparents did. The nutrients in the good fats in the additions are co-factors to help absorb the nutrients in the grains. One of the great lessons of Weston Price was that without the fat-soluble vitamins A, D E, and K (which act as anti-oxidants to preserve fats or oils) you can take mineral supplements, you can drink carrot juice until you turn orange, but you cannot absorb the minerals in your food without

vitamins that are exclusively found in the animal fats. Fat also slows the absorption of sugars and prevents sugar highs and lows.

Eggs and porridge are excellent breakfast for growing children and teenagers, and great value for money with good protein to prevent craving for sugary, salty non-foods for a good portion of the day! Provide some good protein at lunch to lengthen the effect.

MILK – WHAT SHOULD BE NUTRIENT-DENSE LIQUID-GOLD

The minute you start to process milk you begin to destroy this wonderful food. Milk is one of nature's perfect foods from a sacred animal, the cow. The word milk comes from Latin 'mulgeo' meaning to press out by softening by the hand.

Some of the History

Use of milk, and especially cultured milk foods, by nomadic herdsmen predated the grain-growing civilizations of 10,000 BC by 20,000 years with evidence of milk storage in skins/gourds. Without exception from the dawn of history, the pastoral peoples of the world displayed the finest physical development. Stone Age people had more massive bones than most people today.

Milk is the only substance purposely designed and prepared by nature as food.

“With the honey of bees is the milk mixed,
Come quick, run and drink”
(Vedic religious song of India 2,000 years BC)

All the great civilizations grew upon the back of the ability to milk animals – not just cows but sheep, goats, reindeer, camels, horses, yak, water buffalo, llamas... Having milk meant people never starved, and with the ability to keep the milk by culturing it with what we now know as the amazing lactobacillus and other species, they gave their people the best possible nutrition. Ancient coins and medals depicting bulls offer testimony to the central role of bovines.

Over eons, and with the development of towns and cities only rural dwellers and the wealthy could afford the luxury of drinking fresh milk. But by culturing milk people maintained access to an excellent nutritious food full of life-preserving lacto-bacteria, proteins, vitamins, minerals and enzymes. In hot climates the good fats in milk were preserved by turning it into ghee; in colder parts butter had the same role.

Different kinds of cultured milk foods included kefir (using kefir grains), yoghurt or curd, crème fraiche and raw cheeses. 'Clabbered' milk, also called leben, loven or laben (meaning 'health' or 'long-life') was cultured at room temperature. We have this as a 'Caspian Sea yoghurt' culture (available free).

SLOP MILK AND MILK SICKNESS

Leaping forward to post 1812 (War of Independence), America could no longer get whisky from England. Huge distilleries were set up around the developing cities like New York and Boston. Cows were kept next to the distilleries and fed the acidic fermented grain waste, 'slop'. Cows would produce 'milk' until they died in their own filth. The milk, which was so poor it could not even make cheese or butter, was often adulterated with flour or chalk, and water and sold to the families who moved from rural settlements to work in the burgeoning factories. "Milk sickness" was common. No longer able to breast-feed because of poor nutrition and work, women were forced into buying the disgusting dirty milk. In New York in 1840, 50% of children under 5 died.

By 1890, Koch had discovered the TB bacterium and milk was known to be contaminated with bacteria. Typhoid, scarlet fever, cholera, TB, diphtheria were endemic with the poverty and poor sanitation. Something had to be done.

PASTEURISATION

The quick-fix pasteurisation lobby won the battle for the control of milk over those who wanted to monitor and test, (even although it has never been proven that bovine TB is the same TB that affects humans). Pasteurisation made any milk 'safe' and the long-established status of raw milk as a cure for chronic disease vanished. (It was used by such institutions as the Mayo Clinic in the 1920s, and by Dr Ulrich Williams in his Wanganui homes in the 1930s and '40s. (11)) Rising demand for milk products ensured the expansion of the concept, developed from the breweries, of housing cows inside all their lives to eat foods that cows had never before eaten. Today, such American factory cows produce huge amounts of watery milk very low in fat (half the amount of fat cows should produce – fat which should be consumed as a critical part of milk). Americans in the know are demanding grass-fed NZ butter. We must resist proposals to introduce this kind of milk factory-farming into New Zealand.

MILK PROCESSING

Milk processing plants are big factories. In NZ, milk is collected by tankers with samples taken by the driver for quality testing. Stringent rules cover the temperature and rate of chilling: the milk must be at 8 deg C within 4 hrs. At the factory, the milk is filtered in enormous silo vats, then separated in centrifuges into fat, protein and various other solids and liquids. These are reconstituted to set levels for whole (3.5% fat compared with 4-8% in real milk), low fat and no fat milks. What is left over will go into butter, cream, cheese, dried milk, and a host of other products. Low-fat milk has dried milk (denatured) protein added to make it seem more like milk. Milk to make this milk powder is sprayed out from a pipe at the top of a huge silos – by the time it hits the ground, giant heaters have turned it to powder. Unlike the cholesterol in fresh milk, which plays a variety of health promoting roles, the cholesterol in non-fat dried milk is oxidized. This rancid cholesterol promotes heart disease. (2)

Low fat milk and skim milk mean a lot more money from the butterfat by selling it for ice cream. Skim milk is sold as a health food, but the truth is that butter-fat is in milk for a reason to allow absorption and utilization of the vitamins and minerals in the water fraction of the milk. Along with valuable trace minerals and short chain fatty acids, butterfat is our best source of preformed vitamin A. Butterfat also contains re-arranged acids which have strong anti-carcinogenic properties.

In the States, the milk is pasteurized at 161°F (71.7 deg C) for 15 seconds by passing it quickly over super-heated stainless steel plates. (In NZ these details are regarded as commercially sensitive information.)

If the temperature is 200°F (93C) it is ultrapasteurized. This will have a distinct cooked milk taste - it is sterile and can be sold on the grocery shelf forever. In other words, it doesn't even have to be kept chilled. The bugs won't touch it.

As it is cooked, the milk can also be homogenized by a pressure treatment passing it through a fine filter at pressures equal to 4,000 pounds per square inch. This breaks down the fat globules to such a small size that they remain suspended evenly rather than separating out and floating to the surface. This subjects these good fats to rancidity. Also, after homogenization, proteins are not well-digested and are absorbed into the bloodstream intact. Homogenization has been linked to heart disease and atherosclerosis. (3)

Enzymes in raw milk include lactase for the assimilation of lactose, galactase for the assimilation of galactose and phosphatase for the assimilation of calcium. Dozens of other precious enzymes are destroyed in the pasteurization process. Without them, milk is very difficult to digest. The human pancreas is not always able to produce these enzymes; over-stress of the pancreas can lead to diabetes and other diseases.

Much of the significant amount of vitamin C present in raw milk, plus B6 and B12 is destroyed by heating.

A NOTE ABOUT A1 / A2 MILK – The Devil in the Milk (4)

These two types of milk are available in a few NZ supermarkets. The difference is in a mutation in a tiny protein fragment in some European cattle (especially some of the Friesians) where the peptide proline is replaced by histidine. All milk was, once a upon a time, A2 milk. When we digest A1 milk, a powerful oxidising opioid (narcotic) is produced. There is evidence that this A1 beta-casein gene is implicated in many illnesses including heart disease, Type 1 diabetes, autism and auto-immune disease. Politics and vested interests have so far ensured people continue to have doubts about the importance of A2 milk. Nevertheless we believe raw milk is still hugely better than pasteurized.

ENZYMES

All cell processes require enzymes of which there are over 5,000. Enzymes are present in raw foods to initiate digestion in the mouth and stomach. Every food has its own specific enzymes. Other digestive enzymes are assembled in our salivary glands and pancreas.

In 1922, Dr Laird wrote: "In living cells, the dynamic, driving power ... is found in their enzyme contents". Grains, beans, nuts and seeds have enzyme-inhibitors best deactivated by germinating or sprouting. The enzyme content of lacto-fermented foods like sauerkraut is vastly greater than that of raw food. Accompany cooked meals with a fermented condiment, and chew foods well.

Note that not all foods should be eaten raw. Chinese medicine requires that raw foods be eaten by people with strong digestive fire. For people with poor digestive function, a program like the GAPS diet which begins with gentle cooked food like bone soups, may be very beneficial. Cruciferous vegetables eg broccoli, cabbage may be better steamed to deactivate progoitrens, especially for people with low thyroid function. Cooking carrots and tomatoes increases the antioxidant availability.

New research, **Gut bacteria are what we eat**, (*Nature*, 7th April 2010) shows that our gut microbes, which help humans degrade otherwise indigestible plant material, acquire some crucial digestive enzyme genes from the bacteria in the food we eat. "The human digestive tract harbors trillions of bacteria, many of which establish lifetime, symbiotic relationships with us. The food we eat nourishes our gut flora, and those bacteria feed us with the by-products of their digestive activities... But the food sterilization techniques commonly used might affect the environmental tuning of the human gut function..." states the article! Irradiated food anyone?

Enzymes are killed at 48°C. The food industry places little value on enzymes saying they are broken down anyway during digestion. However the massive amount of work by the distinguished and much-awarded Dr Frances M Pottenger in the 1930s-1950s, on cats, guinea pigs and cows showed what happens to animals fed on cooked foods (particularly milk). They became more and more diseased and died. Another trial on 16 calves in Scotland in 1940 produced the similar results. The multiple enzymes present in raw milk are essential for the digestion of milk. Dr Pottenger and his work were attacked in JAMA (Journal of the American Medical Association) 1984 in a contrived article "Unpasteurized Milk - The Hazards of Health Fetish" by those attempting to outlaw all sales of raw milk.

Michael Schmidt in Canada recently raised two calves – on pasteurized and unpasteurized milk. After 8 weeks changes became evident. Manure from the pasteurized milk calf was runny and grey or white. Its hair was dull and easily pulled out. It was lethargic and after 5 months fears for its survival lead to butchering of both animals. The raw milk calf weighed 200kg, the pasteurized calf 115 kg. Its testicles were 30% smaller. The depth of colour of the liver and kidney from the raw milk calf amazed the vet. The stomach contents of this calf were solid without disagreeable odour. The other calf had stomach contents which were runny and smelled disgusting. (5)

FOOD SAFETY

The modern sequel to this is the latest round of arrests of American farmers selling raw milk and confiscation of their cheeses etc, along with the legislation approved by Senate (2/12/10) giving further huge control to the FDA. A Radio NZ interview about the lengths some New Yorkers go to to obtain raw milk from Amish farmers

who are persecuted by the FDA?

http://www.radionz.co.nz/audio/national/twu/2011/02/19/raw_milk_smuggling

The USA Food Safety Modernization Act is being hailed as a "breakthrough" achievement in food safety, but it will hand vast new powers and funding to the FDA so that it can "clean up" the food supply and "protect" all Americans from food-borne pathogens.

http://www.naturalnews.com/030587_Senate_Bill_510_Food_Safety.html#ixzz16vdfel6V

Mike Adams writes: There's just one problem with all this: **It's all a big lie.** Most deaths from food poisoning are not caused by fresh produce.

We need to be vigilant to ensure our right to access the foods we want to be able to buy and eat in NZ.

Proposed food regulations plan to classify raw milk as a Grade 3 food – the most hazardous category. However the right to buy raw milk will be preserved.

What about E.coli and salmonella etc?

There is much written on this topic (see the WAPF website). One recent experiment involving adding these bacteria to organic certified raw milk from Organic Pastures Dairy milk in California showed the organisms could not be found in the milk next day. Raw milk has natural antibiotic properties.

There is much skulduggery and misinformation about raw milk. There are also genuine concerns about milk not properly collected and handled. NZ regulations are stringent with high penalties. The milk companies themselves also impose high penalties for non-compliance. NZ milk supplied to Fonterra is rigorously tested daily. Smaller raw milk suppliers also have rigorous testing.

In 1936, Edwin Jordan in the USA wrote: "The character of pasture was early observed to affect the kind and abundance of the species of bacteria found in milk; the lack of pasture in more recent years has been demonstrated to have a profound effect". Dr Crewe, a founder of the Mayo Clinic, used a diet of 4 weeks on raw milk in the treatment of a wide variety of serious chronic diseases and he reported no problem even with patients who were very ill. (6)

MILK ALLERGIES

Many people, cannot tolerate the 'milk' sold on the grocery shelves. But real milk is usually very beneficial and doesn't cause problems for most. This milk is not pasteurized or homogenized and is becoming much more available in NZ through rapidly growing Milk Clubs or Farm Shares.

Manna-Cow Milk (contact John Martin 06 3626826) is supplier of raw milk within the Wellington/Levin area.

ORANGE JUICE / ORANGE DRINKS

A new orange juice processing plant is completely automated and can process up to 1,800 tons of oranges per day to produce frozen concentrate single-strength juice, oil extracted from the peel, and cattle feed. The

whole orange is used and enzymes added to get out as much of the juice as possible. It is a very heavily-sprayed crop with organophosphates and cholinesterase inhibitors, which are real mind-benders. These are very toxic to the nervous system and when the oranges are put into the vats, all the pesticide goes into the processing. Acids are added to get out every

COUNTERTHINK



single bit of juice. So you already have a toxic soup.



These juices are extremely damaging to teeth. Rats showed more tooth decay from commercial juices than they did from fizzy drinks. High fructose corn syrup HFCS is frequently added. Fresh-squeezed is better but still high in sugar without the fibre.

ARTIFICIAL FLAVOURINGS, HYDROLYZED PROTEIN AND MSG

Hydrolyzed Protein is protein broken down into its basic amino acids by boiling in acids, alkalis (bases), or enzymes (compared with traditional gelatine broths just gently simmered until the protein releases). It contains glutamic acids and thus also Monosodium Glutamate (MSG). However, since the FDA considers hydrolyzed protein more a flavor enhancer (bouillon), MSG is not listed as an ingredient. Hydrolyzed protein is used as it is cheaper because the protein is usually extracted from the (generally regarded) as less-than-desirable portions of animals such as cow hooves and skin (according to the "Good Eats" episode dedicated to protein bars). Paul Mann. (7)

Research on gelatine and natural broths came to an end in the 1950s when food companies discovered how to produce meat-like flavours in the laboratory. In a General Foods Company report issued in 1947, chemists predicted that almost all natural flavours would soon be chemically synthesized. Following the Second World War food companies discovered monosodium glutamate (MSG), a food ingredient the Japanese had invented in 1908 to enhance food flavours, including meat-like flavours. Humans have receptors on the tongue for glutamate - it is the protein in food that the human body recognizes as meat (but the glutamate in MSG has a different configuration which cannot be properly assimilated by the body). In fact any protein can be hydrolyzed to produce a base containing MSG, so when the industry learned how to make the flavour of meat using inexpensive proteins from grains and legumes, the door was opened to a flood of new products including bouillon cubes, dehydrated soup mixes, sauce mixes, TV dinners, and condiments with a "meaty" base.

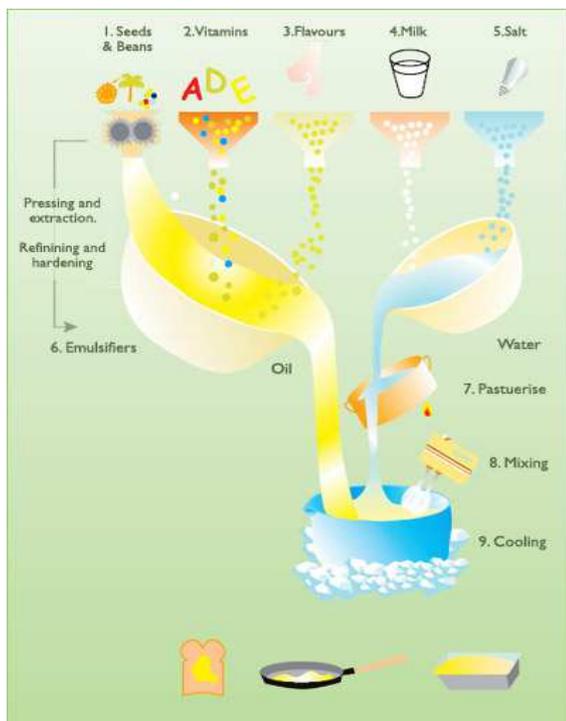
The fast food industry could not exist without MSG and artificial meat flavours to make secret sauces and spice mixes that beguile the consumer into eating bland and tasteless food. The sauces in processed foods are basically MSG, water, thickener, emulsifier and caramel colouring. Your tongue is tricked into thinking that it is getting something nutritious. Dressings, sauce, rice mixes, flavoured tofu, bouillon cubes, dried and canned soups, imitation garlic and onions, dehydrated foods that you add water to, all of these and anything that has a meat-like taste has MSG in it. Probably anything that you buy that says "spices" or "natural flavours" contains MSG! If the MSG in spice mixes is less than 50% it does not have to be included on the label. You may

have noticed that that phrase "No MSG" has disappeared - because MSG is in all the spice mixes, and even Bragg's amino acids. It is all profit based. It is too costly to just use a little onion and garlic for flavouring. Unfortunately, most vegetarian foods are loaded with these flavourings. The list of ingredients in vegetarian hamburgers as well as hot dogs, bacon etc. may include hydrolyzed protein and other "natural" flavourings. 95% of processed foods contain MSG. (8)

HEALTH PROBLEMS WITH MSG

In 1957 scientists found that mice became blind and obese when MSG was administered by feeding tube. In 1969, MSG-induced lesions were found in the hypothalamus in the brain. Subsequent studies pointed in the same direction. MSG is a neurotoxic substance that causes a wide range of reactions from severe headaches to permanent brain damage. We have to question the huge increase in Alzheimer's, brain cancer, seizures, multiple sclerosis and diseases of the nervous system.

"Excitotoxins, the Taste that Kills" (9) describes how the nerve cells either disintegrate or shrivel up in the presence of this free glutamic acid, MSG, if it gets past the blood brain barrier. The glutamates in MSG are absorbed directly from the mouth to the brain. Some investigators believe that the great increase in violence in this country is due, not to sugar, nor even the breakfast cereals, but to the huge increase in the use of MSG in the food which began in the late 1950's, and particularly because it was put in baby food in very large amounts. Baby food is said to no longer contain it, but it may still be a component as hydrolyzed protein. Insulin responds to hydrolyzed protein by spiking. It is addictive. You will crave it, and want products containing it the more you eat it.



FATS AND OILS
 Good Fats vs Bad Fats were covered in Week 3. However we could not have a discussion about the Secrets of the Food Industries without mentioning fats and oils. Oil processing starts with the crude vegetable oil and produces various oils, margarine, shortening and so forth. The plants which are the source of oils are already loaded with pesticides. The steps involved in processing have to do with bleaching, deodorizing, taking all the nutrients out, filtering, and removing saturates to make the oils more liquid. A hexane solvent is added in order to squeeze the very last drop of oil out of the seeds. Caustic refining refers to very alkaline caustic chemicals that are added to the oil. Consider how powerful advertising can be to create a market. The sanitised version from the 'FLORA' MARGARINE WEB SITE:

Margarine Spread Production



1. "Vegetable oils are pressed and extracted from oil crops (eg sunflower, canola and palm) and refined.
2. Ingredients such as beta-carotene are added to the vegetable oils for a golden colour, with flavours to make it tasty, emulsifiers extracted from vegetable oils to guarantee a homogeneous mixture and vitamins making it even more nutritious.
3. The oil phase is then mixed with water which contains milk powder and salt.
4. This mixture is pasteurised (like many food products, e.g. milk) and then chilled and kneaded to form the final desired consistency.
5. The Flora spreads are then packed in tubs and kept refrigerated until they reach your table.

In New Zealand, margarine is permitted to be fortified with vitamin D. While vitamin A deficiency is no longer seen as an issue in New Zealand, most manufacturers continue to add this vitamin. Beta carotene is usually added to give margarine its colour. These are effectively converted in the body into vitamin A and thus contribute to the vitamin A intake."

REMEMBER that to make butter, you take cream, shake it up, wash it in cold water, add salt if desired. You have butter.

It is reassuring that US sales of grass-fed butter (NZ butter is highly valued) are increasing as people share real information about butter.

REAL MARGARINE PROCESSING

Margarine processing uses the cheapest seeds, and most of them are full of pesticides and genetically engineered. Oil is extracted under high temperature and pressure, and the remaining fraction of oil is removed with hexane solvents. The oil is steam cleaned to remove all the vitamins and all the anti-oxidants, but the solvents and the pesticides remain. These oils are mixed with a nickel catalyst and then put into a huge high pressure, high temperature reactor. Emulsifiers are mixed in. What comes out of that reactor is smelly and grey with a cottage cheese texture. The emulsifiers are mixed in to smooth it out, and it is again steam cleaned to get rid of the horrible smell. It is bleached to get rid of the grey colour, and artificial flavours and synthetic vitamins added, then natural colour like anatto. It is then packaged in blocks and plastic tubs and advertising promotes this garbage as a health food.

HYDROGENATED OILS

Saturated fat is mainly found in animal fats, eggs, coconut and palm oil. It is a straight molecule and it packs together easily. That is why it is solid at room temperature. Unsaturated fat, like that found in olive oil, has a little bend with two hydrogen molecules sticking out. When that molecule gets built into your cells, the body wants those two hydrogens together to make an electron cloud to allow reactions in the cell membrane. During hydrogenation, one of the hydrogens is moved to the other side, which causes the molecule to straighten out so it behaves like a saturate.

The original unsaturated (bent) molecule is called 'cis' fatty acid, because the two hydrogens are together. It becomes a 'trans' fatty acid when the two hydrogens are 'across' from each other. But your body doesn't know that this new molecule is something that has never been seen in nature, so when you eat one of these transfats, they become built into your cell membranes. When it gets into your cell membranes, your body wants to make reactions where those two hydrogens should be but it can't find them. So the reaction can't take place.

The more transfatty acids that you eat, the more hydrogenated your cells become and the more chaos you are going to have on the cellular level. This is a phony, toxic molecule that tricks your body into thinking it is something real; your body puts it in a cell, and then the cells can't work.

All the margarines, shortenings, spreads, even low transfat spreads are made with all these ingredients. You cannot buy any packaged or processed foods that don't have these transfatty acids in them. They are in all the chips, crackers, and french fries. Chips used to be cooked in tallow which is a very safe fat, and gave a little extra profit for to beef farmers. Now partially hydrogenated soybean oil or canola is used. We used to use butter, eggs, cream, all good wholesome foods (except the sugar!) for biscuits and desserts. Now they can imitate butter, eggs and cream and nuts so all you have is sugar and artificial things in these packaged puddings and artificial desserts.

BROMINE

"It's an antibacterial agent similar to chlorine; it's a fumigant for agriculture and termites (methyl bromide); it's a virulent pesticide that kills insects on contact... and you probably [used to have] it for breakfast." (12) It causes depression, brain fog, inability to concentrate, and jittery irritable anxious obese kids. Bromine makes oil solid – BVO (brominated vegetable oil) solidifies body fat. It is added to citrus-flavoured soft drinks eg Mountain Dew and Gatorade to help disperse the citric acid. BVO causes psychoses (with resultant depression) so caffeine is added as a pick-me up. Potassium bromate used to be added to bread and flour and still is in the USA and Japan, as a dough conditioner (makes the dough more elastic). Once upon a time, iodine was used. Iodine protects the thyroid and helps eliminate toxic metals from the body especially fluoride, lead, arsenic, aluminium, cadmium, mercury and ... bromine. But bromine kicks out iodine by competing for the same receptors in vital thyroid hormones.

Other Sources of Bromine:

- Plastics, like those used to make computers, and in cars
- Medications such as Atrovent Inhaler, Atrovent Nasal Spray, and anesthesia agents
- Fire retardants (common one is polybromo diphenyl ethers or PBDEs) used in fabrics, carpets, upholstery, and mattresses
- Bromine-based hot tub and swimming pool treatments

BPA - Bisphenol A

Canada in October 2010 was the first country to do ban BPA. For years environmental groups all over the world have been presenting evidence to show the toxicity of BPA. A study in the US found that 95% of people tested had been exposed to BPA.

BPA is used to manufacture polycarbonate, a rigid plastic used to make infant feeding bottles, plates, mugs, jugs, beakers, microwave oven ware and storage containers. It is also used in the production of the epoxy-phenolic resins that form internal protective linings for cans and metal lids. The resins are also used as coatings for water storage tanks and wine vats. You will pick up higher levels of BPA on the heat paper receipts from check-out tills than from the contents of canned food.

Its main concern is as a hormone (endocrine) disruptor. These produce a wide range of adverse effects including reproductive, developmental and behavioural problems.

As with many toxins, those most at risk are the foetus, infants, and children around puberty. Young children are especially vulnerable because endocrine disruptors affect how their bodies grow and develop. Children have immature organs, high metabolic rates, relatively low bodyweight, and are going through rapid physical development. All liquids which contained BPA were found to be oestrogenic (has the effects of estrogen eg makes males female).

The highest levels of BPA were found in cans of peas. BPA was also found in the liquid from cans of artichokes, beans, mixed vegetables, corn and mushrooms. It is estrogenic to a human breast cancer cell, scientists reported.

The best way to avoid BPA is to avoid microwaved and canned food, drink from glass or stainless steel bottles. For baby bottles, choose glass or look for companies that make hard plastic bottles (with number over 7) without bisphenol A. Choose fresh! Otherwise look for frozen or packaged foods in cellophane or food in reusable glass jars. And, instead of buying soft drinks in cans, recycle glass bottles and carry good water from home. Stainless steel drink bottles are the next best option.

At the end of the day for food companies, it comes down to money and the cheapest and most efficient ways to manufacture food. Health is not a consideration here.

SPIRITUAL FOOD PREPARATION - MADE WITH LOVE



Artificial flavours and preservatives are made by chemical companies in factories; they are not being made by the loving hands of a cook. All the artificial ingredients added to the food help the rich get richer. The life is completely processed out of the food and then to market the 'food', a handful of artificial 'nutrients' is thrown in. Can you imagine what kind of feeling, what kind of radiation comes from that factory food prepared under feelings of anger, apathy, resentment, depression and stress?

It is one of the most important and least understood activities of life that the radiation and feeling that go into the preparation of food affect everyone who partakes of it. And this activity should be unhurried, peaceful and happy because the

substance of the life-stream performing the service flows into that food and is eaten, and actually becomes part of the energy of the receiver and blesses the receiver.

1. "Fighting the Food Giants", Paul Stitt
2. Dr Mercola: <http://www.mercola.com/article/milk/no-milk.htm>
3. "The Cream No Longer Rises to the Top", Robert Cohen
4. "The Devil in the Milk" Keith Woodford
5. "A Tale of Two Calves", in 'Wise Traditions', Fall 2010, pp85-86
6. "The Untold Story of Milk", Ron Schmid ND p 104, p 258
7. http://www.associatedcontent.com/article/1856887/hydrolyzed_protein.html?cat=5
8. "[Hydrolyzed Vegetable Proteins: The Full Story](#)", Jack L. Samuels
9. "Excitotoxins, the Taste that Kills", Russell Blaylock MD
10. "[The Truth About Aspartame, MSG and Excitotoxin](#)" Mike Adams interview with Dr Russell Blaylock
11. "New Zealand's Greatest Doctor, Ulrich Williams of Wanganui - a Surgeon Who Became a Naturopath", Brenda Samson
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