

inside

How do we know what we are buying is really natural?

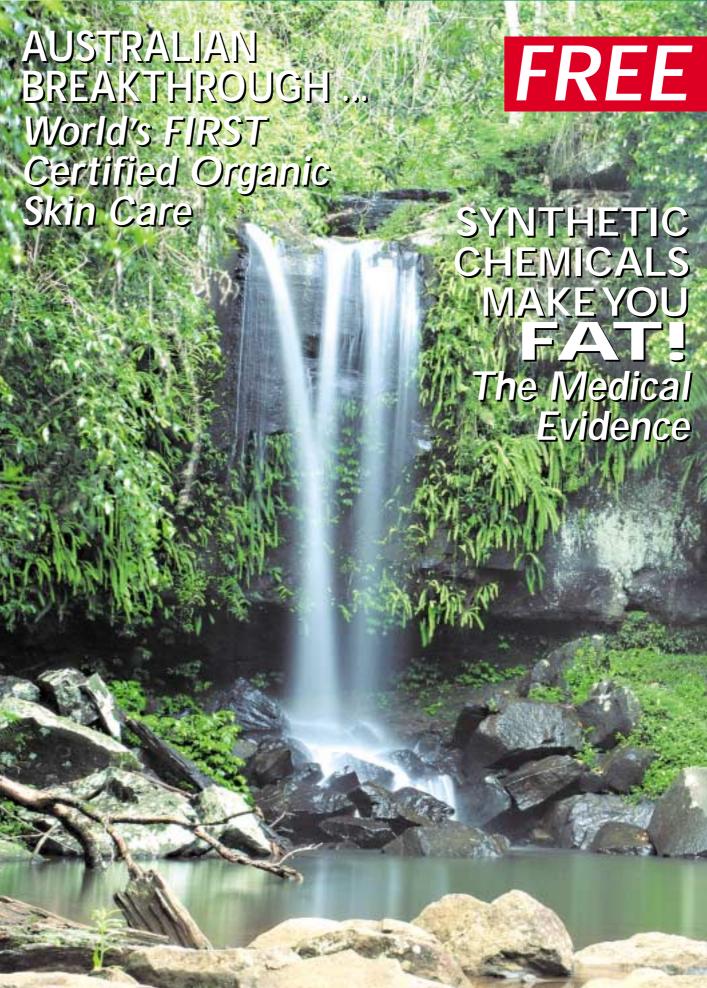


Certified
Organic
Probiotic
Super Food.
The Way of
the Future.



Atoms in agriculture. How pesticides are as insidious as atomic fallout.

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100%
Beneficial
Ingredients

Revolutionary
Bio-Active
Cold
Formulation

Cou for it!

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organic and natural living

Looking for the Logo of Guarantee

AUSTRALIAN CERTIFIED ORGANIC

The world is set for a food and farming revolution due to the lead taken by the Australian organic food and farming sector. We are moving from a reactive disease and sickness management industry to a preventative health management industry whether in personal wellbeing, or increasingly now, in our food and agriculture sectors.

Since the 1980s, in Australia, a leading group of farmers, processors and consumers with a common aim to ensure production and consumption of safe, organically wholesome foods has been maintaining Australia's true image and integrity as a clean and green producer of foods and fibres.

This group is known as the Biological Farmers of Australia Co-operative and now boasts the largest member-based grouping of interests in the organic industry. The BFA, as it is known, has a well-established nationally and internationally recognised set of standards for organic production. It has an international auditing and certification team who oversee truth in labelling of certified organic products carrying the BFA logo, as well as an active co-operative that publishes



Dr Andy Monk CEO, Biological Farmers of Australia Co-op Ltd

journals and technical bulletins aimed at increasing public understanding with regard to organic farming and organic products. The BFA also responds to enquiries from farmers and consumers.

This has been driven by:

- Lifestyle changes among consumers and demand for new healthier and safer foods.
- Health risks associated with the consumption of unnatural food ingredients.
- Concerns about the use of hormones, steroids and antibiotics in the livestock industry.
- · Concerns about the bacterial contamination in food.
- Concerns about being able to purchase a consistent, quality product.

The BFA has reacted to this through its aims of ensuring that what the consumer wants is what the farmers and food processors produce – sustainably produced foods without the use of synthetic substances and unnatural food ingredients.

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ORGANIC

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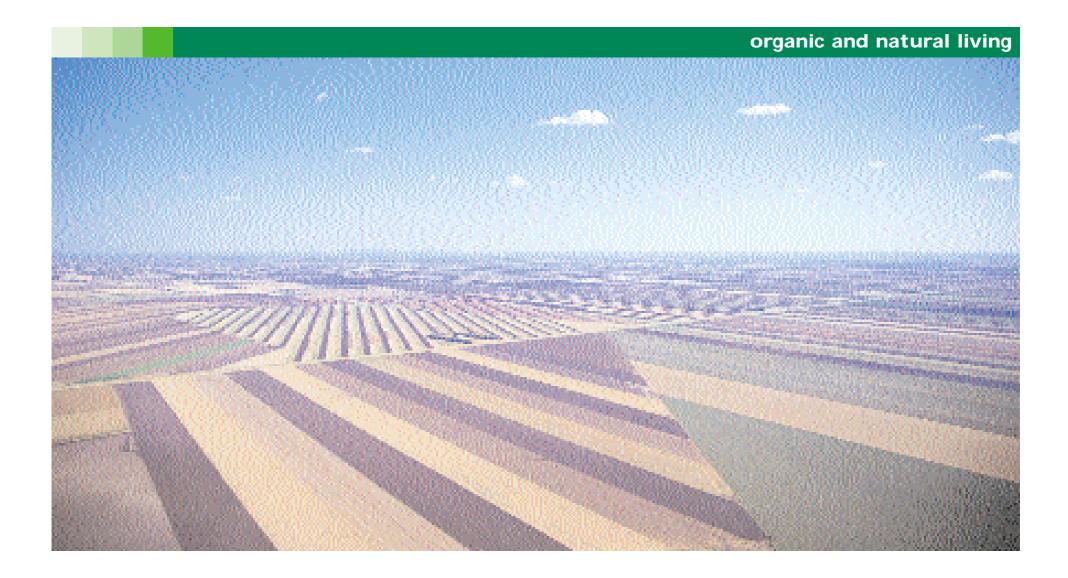


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SO WHAT IS ORGANIC?

Organic farming means farming in a way that cares for the environment, without relying upon synthetic chemicals and other unnatural interventionist approaches to farming and food production. Hence, organic food comes from organic farms utilising the best of both traditional agriculture and modern techniques.

Rather than using synthetic pesticides to kill pests, farmers prevent pests by planting a diverse range of crops, by rotations, using natural biological and environment friendly applications, and conserving natural ecosystems. This means no artificial pesticides, no herbicides, no hormones and no growth promotants that have a



questionable place in our aim to maintain healthy bodies.

The same logic of natural and preventative health management (rather than reactive disease management) is applied to GMOs, or Genetically Modified Organisms, that the organic industry prohibits in the production of organic foods. With many safe and proven forms of farming already available, the organic farmer believes it is important to allow Mother Nature to provide us with food the way nature intended.

For organically processed foods and personal care products, only minimal processing is permitted, with a limited number of non-agricultural but natural or traditional ingredients allowed. Hence no synthetic chemicals, unnatural dyes, colourings, flavourings or other additives are permitted.

SO WHAT IS CERTIFICATION?

The certification program was set up in the 1980s by the BFA to ensure that what was claimed to be organic was just that. It required an independent set of Standards and an independent team of assessors (known as auditors) to ensure that farmers, processors and others in the production chain were complying with the rules and regulations laid down by the organic community.

Australia does not have domestic legislation for the term "organic" and is unlikely to for some years yet, so the only way to ensure something is organic is to seek and rely on the logos of organic certifying bodies, such as that of the BFA, to confirm that it has been independently certified to truly national and international standards for organic production.

If it is not certified and carrying the logo you cannot be sure that the produce is organic.

There are two levels or categories to certification:

Farmers require a minimum of three years of organic management before they can carry a certification stating "Organic". There is a transitionary certificate called "In Conversion to Organic" which can be borne after the first 12 months of organic production until the three-year period is complete. In both instances, foods bearing either label confirm that those products are being produced organically.

SO WHO MONITORS THE MONITORS?

The BFA, via its certification arm, is strictly scrutinised both nationally and internationally by organisations such as AQIS – the Australian Quarantine Inspection Service as well as IFOAM – the International Federation of Organic Agriculture Movements, and other international government authorities. There are no substitutes or half-measures in organic farming and production.

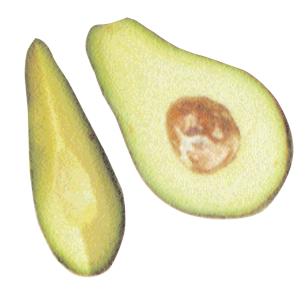
The BFA is a not-for-profit co-operative, owned by its members, which ensures that the true interests of the organic community are maintained and upheld.

So why purchase certified organic products? Every time you purchase certified organic products you are investing in the future of our country, its hard-working and caring farmers and their families. This is a future we can ill afford to ignore. We have the power to make a difference. One thing we can do every day to support our sustainable agricultural future is to purchase certified organic products.

Of course the personal health and wellbeing benefits of organic products are well documented. No wonder this industry is growing at the rate it is. People around the world are awakening to a realisation of what they have been missing out on for decades.







Organic Cosmetics for Natural Beauty!

How do we know what we are buying is really natural?

s the number of people who are concerned about toxins in our environment grows, more and more cosmetic companies are seen to be jumping on the natural and organic bandwagon. But what does natural and organic mean when we see it on a product label? How do we know what we are buying is really natural and organic? What are the natural alternatives to chemicals? And is natural really better for us?

Our skin is the largest eliminatory organ in the body. It is a two-way membrane. Toxins are eliminated through the skin via perspiration and absorbed through the skin, into the body's systemic circulation, through hair follicles and sebaceous glands (not through sweat glands). One square inch of skin contains 65 hairs, 100 sebaceous glands, and 650 sweat glands,

Cosmetic manufacturers are not supposed to claim that their products penetrate our skin. If they did (the products would then be labelled a 'drug' and henceforth be governed by much stricter regulations. This is both good and bad. Good because it means your skin can be nourished from the outside with some wonderful ingredients. Bad because it means some cosmetic manufacturer can put into their products that would never be allowed to be taken orally, but are still absorbed into our system, through our skin.

WHAT DOES "NATURAL" AND "ORGANIC" MEAN ON PRODUCT LABELS?

Nowhere does the idea of "natural" or "organic" take a more gratuitous bruising than the cosmetics industry.

If we look at the term "natural" we probably define it as "existing in, or formed by nature; not artificial". Many labels have long lists of chemical names, some followed by the phrase "derived from . . ." (some natural substance). This is misleading to consumers.

When chemicals such as Cocamide DEA or Sodium Hydroxysultaine are followed by the term "derived from coconut oil" the consumer is led to believe that these synthetic chemicals must be natural. While this may be true in some cases; it is ultimately irrelevant because what you end up with after the chemical processing is usually anything but natural or pure.

For example, to create Cocamide DEA, a foaming agent in some shampoos, requires the addition of a synthetic chemical and known carcinogen, Diethanolamine – DEA, to the coconut oil. It is therefore no longer natural, or safe!

If we look at the term "organic," we usually think it means 'grown and cultivated without the use of chemicals'. That is the conclusion most cosmetics companies would like us to make when we see the term "organic" on a label. Some of those companies are cynically using



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the chemistry definition of "organic" - meaning a compound that contains a carbon atom. Carbon is found in anything that has ever lived. By using this definition of organic, they are saying that a petrochemical preservative called Methyl Paraben is "organic" because it was formed from leaves that rotted over thousands of years to become crude oil, which was then used to make this preservative.

An increasing number of companies are now claiming to use "organic" herbs in their products. But what about the rest of the ingredients? Are they safe? Isn't there an authority that governs the use of the term "organic" on labels? The simple answer is NO. However, the term "certified organic" IS governed by a number of internationally recognised bodies. In Australia, Australian Certified Organic (ACO) is the largest. Searching for products with the logo of a certifying body on the label is the only way you can guarantee the organic authenticity and integrity of every ingredient in the product. Without this, the organic claim means nothing, as it cannot be verified. Here are some examples of internationally recognised certifying bodies:





HOW DO WE KNOW WHAT WE ARE BUYING IS REALLY "NATURAL" AND "ORGANIC"?

Fortunately, there is a very simple way to differentiate between hype and truth in cosmetics - and that is to read the ingredient list on the label. It is a legal requirement that all skin care products must be labelled with the ingredients in descending order of their quantity in the product. A good rule of thumb is to divide the ingredients list into thirds: the top third usually contains 90-95% of the product, the middle third usually contains 5-8% and the bottom third, 1-3%. Here is the ingredient list of a "natural" and "organic" body moisturiser from a well known "natural" skin care company.

APRICOT CREAM

Natural or Organic ingredients include:

- Water (Deionised),
- 2. Isopropyl Palmitate (Palm Oil Derivative),
- 3. Apricot Kernel Oil,
- Bis-Diglyceryl Caprylate/Caprate/Isostearate/ Stearate/Hydroxystearate Adipate (Vegetable Triglyceride),
- 5. Glyceryl Stearate SE (Vegetable Derived),
- Caprylic/Capric Triglyceride (Glycerin-derived emollient).
- 7. Ceteareth 12 (Organic Emulsifier),
- 8. Tocopherol Oil (Vitamin E),
- 9. Chamomile Extract,
- 10. Sage Extract,
- 11. Linden Extract (Lime Blossom Extract),
- 12. Balm Mint Extract,
- 13. Shea Butter (From Karite),
- 14. Wheat Germ Oil,
- 15. Carrot Oil,
- 16. Cetyl Alcohol (Organic Co-emulsifier),
- 17. Sodium Hydroxide (pH Adjuster),
- 18. Sorbic Acid (Organic Compound),
- 19. Tocopherol Acetate (Vitamin E Derivative),
- 20. Methylparaben (Organic Compound), 21. Propylparaben (Organic Compound)
- 21. Propylparaben (Organic Compound),
- 22. Imidazolidinyl Urea (Organic Compound),
- 23. Fragrance,

24. FD&C Yellow No. 5, D&C Red No. 33. Content: Apricot Oil (2.5%)

Take note of the last point that says "Content: Apricot Oil (2.5%)". Notice that Apricot Oil is number 3 on the list. Because skin care manufacturers are required to list the ingredients in descending order this means everything AFTER Apricot oil makes up LESS than 2.5% by volume.

This means that about 90% of that product is water and Isopropyl Palmitate. Isopropyl Palmitate, is derived from Isopropyl Alcohol, synthetic alcohol, and Palmitic Acid, a fatty acid from palm oil. It is known to cause skin irritations and dermatitis in rabbits and has been shown to have comedogenic (acne promoting) properties. Nos 4, 5 and 6 are all produced by chemical reactions between various fatty acids and glycerol.

Nos 4, 5 and 6 are all produced by chemical reactions between various fatty acids and glycerol (synthetic glycerine). They are largely synthetic and have been shown to cause allergies and dermatitis.

No. 7 is a synthetic emulsifier that may contain dangerous levels of ethylene oxide and dioxane, both known carcinogens.

Nos 8-15 are natural ingredients used in very small amounts that may have been grown using pesticides and herbicides.

No. 16 may be natural or synthetic and has been shown to cause contact eczema.

No. 17 is otherwise known as Caustic Soda and is extremely alkaline and corrosive.

No. 18. Sorbic acid was once isolated from the mountain ash berry, but is now chemically synthesised and is a toxic preservative.

No. 19 is synthetic Vitamin E.

Nos 20-22 are toxic and allergenic preservatives. No. 23. Probably synthetic, may contain phthalates that have been linked to birth defects.

No. 24. Synthetic colours that could be potentially carcinogenic.

Now let's look at an ingredient list of a certified organic body moisturiser. This ingredient list says:

CERTIFIED ORGANIC BODY INTENSIVE

- 1. Organic Aloe Vera,
- 2. Organic Safflower oil,
- 3. Purified Water,
- 4. Organic Avocado oil,
- 5. Organic Shea butter,
- 6. Non-GMO Lecithin,
- 7. Organic Sugar-Cane Ethanol,
- 8. D-Panthenol (pro-vit b5),
- 9. Organic Olive juice extract,
- 10. Organic Grapefruit Seed extract,
- 11. Natural gum,
- 12. Organic vanilla extract,

No. 1. from organic aloe vera plants with potent healing properties to regenerate the skin.

No. 2 is cold-pressed from organic safflower seeds, with emollient and skin softening properties.

No. 3. Purified Water.

No. 4 is cold-pressed from organic avocado fruit, very nourishing for dry skin.

No. 5 is from organic shea nut beans, fantastic at preventing stretchmarks and contains a natural sunscreen.

No. 6 is from non-genetically modified soybean oil, a natural moisturising factor contained in healthy skin.

No. 7 is from organic sugar, helps emulsify the oils, butters and aloe together.

No. 8 is a precursor to vitamin B5, healing and moisturising.

No. 9 is from olive juice, a natural antioxidant that protects the skin from UV damage. No. 10 is from grapefruit seeds, a natural antibacterial.

No. 11 is a natural gum to soften the skin and thicken the product.

No. 12 is from organic vanilla beans and smells divine.

WHAT ARE THE NATURAL ALTERNATIVES TO CHEMICALS?

All skin care products, both synthetic and natural, contain items from the following categories in some combination or other:

EMOLLIENTS

Emollients serve two functions; they prevent dryness and protect the skin, acting as a barrier and healing agent. Water is the best emollient, but because it evaporates quickly it is ineffective. It needs to be held on the skin by emollient oils in what is called an *emulsion*.

Synthetic emollients are occlusive i.e. they coat the skin and do not allow it to respire (much like plastic wrap), which can cause skin irritation. Some synthetic emollients can accumulate in the liver and lymph nodes. They are also nonbiodegradable, causing a negative environmental impact.

Natural emollients actually nourish the skin. They are metabolised by the skin's own enzymes and absorbed into it. They are readily biodegradable and are of edible quality.

Some Synthetic Emollients

PEG compounds (eg PEG- 45 Almond Glyceride) may contain the toxic by-product dioxane

Synthetic alcohols (anything that contains the phrase benzyl –, butyl-, cetearyl-, cetyl -, glyceryl-, isopropyl-, myristyl propyl-, propylene-, or stearyl-) eg Isopropyl Palmitate, Diglyceryl Caprylate) have been shown to cause allergies and dermatitis.

Hydrocarbons (eg mineral oil, petrolatum, paraffin) contain carcinogenic and mutagenic Polycyclic Aromatic Hydrocarbons (PAHs) and can cause chemically induced acne. Silicone Oils (eg dimethicone, cyclomethicone, copolyol) can clog the skin like plastic wrap and cause tumours when painted on lab animals (according to the Material Safety Data Sheet supplied by the manufacturer).

Some Natural Emollients

Plant Oils (eg. Jojoba, Avocado, Rosehip) Shea, Cocoa and Jojoba Butters

HUMECTANTS

The main purpose of any cream is to keep the skin moist. Many conventional creams form a suffocating film on the skin to prevent moisture loss.

Even a natural humectant, glycerin, actually attracts water from the air and surrounding tissue. It keeps the skin moist as long as there is sufficient moisture in the air. In a dry climate it actually draws moisture from the skin.

Collagen, elastin and keratin enjoy some popularity as humectants. Whilst they are compatible with the skin and deposit a protective film, they are usually sourced from animals and therefore cannot be termed "cruelty free". Some skin care companies would like you to believe that your skin can use special animal proteins to rejuvenate and replace aging cells. This is nonsense! The size of the molecules, even when broken down (hydrolysed), are far too large to penetrate the skin. Even if they could get in, they would be immediately rejected as foreign matter and attacked by the immune system.

Natural phospholipids, from lecithin, are fantastic humectants. An important benefit of phospholipids is that they are hygroscopic (attract water from the surrounding air) and hold water where an increased level of hydration is needed. Therefore, phospholipids increase the hydration levels of the skin without being occlusive (forming a film to prevent water loss, and preventing normal cellular function).

A recent study proved the value of topically applied phospholipids in skin care. It found that environmental factors (sun, wind, pollution) and the detergents and solvents, found in most skin cleansers, actually stripped the natural phospholipid content from the top layer of skin. This loss resulted in a rough feel and a pitted appearance under a microscope. Importantly, the phospholipids in the uppermost skin layers cannot be replaced by natural cell function, as the top layer of cells no longer metabolise; they serve only as a protective barrier.

Remarkably, the study showed that topically applied plant phospholipids restore the barrier function of the skin, protecting it from substances such as bacteria and harmful chemicals.

Some Synthetic Humectants

Propylene Glycol – causes irritation and contact dermatitis

Ethylene/Diethylene Glycol – causes irritation and contact dermatitis

PEG compounds (eg Polyethylene Glycol) – may contain the toxic by-product dioxane

Ethoxylated surfactants (eg "- laureth-") – may contain the toxic by-product – dioxane Synthetic alcohols (eg Glyceryl Coconate, Hydroxystearate, Myristate, Oleate) have been shown to cause allergies and dermatitis.

Some Natural Humectants

Lecithin

Panthenol (pro-vitamin B5) Glycerin

EMULSIFIERS

Emulsifiers hold two ingredients together that normally don't mix. This can either be a physical substance (like a wax) or a physical action (shake well before use!). Synthetic emulsifiers are usually petroleum/hydrocarbon derivatives and can be allergens. Natural emulsifiers are obtained from various nuts, berries and leaves.

Some Synthetic Emulsifiers

Alkoxykated Amides (eg TEA, DEA, MEA, MIPA compounds) can undergo nitrosation to form nitrosamines, which are known carcinogens

PEG compounds – may contain the toxic byproduct dioxane

Sorbitan Stearate, Laurate, Palmitate, Oleate etc Ozokerite, Ceresin, Silicone and Montan Waxes Isopropyl Stearate, Laurate, Palmitate, Oleate

Some Natural Emulsifiers

Plant Waxes (eg. Candelilla, Carnauba, Jojoba, Rice Bran) Xanthan Gum Quince Seed

SURFACTANTS

<u>Surf</u>ace-<u>act</u>ive-ag<u>ents</u> are substances capable of dissolving oils and holding dirt in suspension so it can be rinsed away with water. They are used in skin cleansers and shampoos.

A serious problem with ethoxylated surfactants

(those that utilise ethylene or propylene oxide in the chemical reaction) is that they can be contaminated with dioxane, a potent carcinogen. These surfactants are listed on labels as ingredients ending with –eth, (like laureth) or containing the phrase PEG (PolyEthylene Glycol), or PPG (PolyPropylene Glycol). Another dangerous class of surfactants are amides. These are listed on labels containing the term TEA – TriEthanolAmine, DEA – DiEthanolAmine and MEA, MonoEthanolAmine. All compounds containing TEA, DEA and MEA can undergo

containing TEA, DEA and MEA can undergo nitrosation with other chemicals to form nitrosamines, which are carcinogenic. One study has found that over 40% of products containing triethanolamine (TEA) were contaminated with these potent carcinogens.

Natural saponins (foaming agents) are a much

Natural saponins (foaming agents) are a much better choice for shampoos. They gently cleanse the hair and scalp without stripping the natural oils.

Some Synthetic Surfactants

Sodium or Ammonium Lauryl or Laureth Sulphate
Sodium Methyl Cocoyl Taurate
Sodium Lauroyl or Cocoyl Sarcosinate
Cocomidopropyl Betaine
TEA (Triethanolamine) compounds
DEA (Diethanolamine) compounds
MEA (Monethanolamine) compounds
PEG (Polyethylene Glycol) compounds
Quaternium -7, 15, 31, 60 etc
Lauryl or Cocoyl Sarcosine
Disodium Oleamide or Dioctyl Sulfosuccinate etc.

Organic Cosmetics for Natural Beauty (continued)

Some Natural Surfactants

Castile Soap Yucca Extract Soapwort Quillaja Bark Extract

PRESERVATIVES

The decaying process is natural and happens with or without preservatives. Skin care products do not (and should not) last for ever. Just like food, all natural skin care products will eventually deteriorate and go rancid. The effectiveness, not safety, of synthetic chemical preservatives has only been "proven" by animal testing. Chemical preservatives are generally used because they are much cheaper than, and extend the shelf life of the product more than natural alternatives. Storing natural products in the fridge will help extend their life.

Some Synthetic Preservatives

Imidiazolidinyl Urea (Germall 115) and Diazolidinyl Urea (Germall II) Causes contact dermatitis. Germall 115 releases formaldehyde over 10°C. DMDM Hydantoin Highly toxic, causes contact dermatitis, contains formaldehyde. Used in shampoos and deodorants.

Methyl, Propyl, Butyl and Ethyl Paraben Toxic, Causes allergic reactions and skin rashes. Used in almost everything!

2-Bromo-2-Nitro-Propane-1, 3-diol. (Bronopol) Toxic, causes allergic contact dermatitis. Used in face creams, shampoos, mascaras and bath oils.

Benzalkonium Chloride Highly toxic, primary skin irritant. Used in shampoos, conditioner and deodorants.

Quarternium-15 Toxic, causes skin rashes and allergic reactions

Chloromethylisothiazolinone and Isothiazolinone Causes contact dermatitis.

Methylisothiazolinone and Methylchloroisothiazolinone

Both cause allergies.

Butylated Hydroxytoluene (BHT) and Butylated hudroxyanisole (BHA) Both cause allergic contact dermatitis.

BHT is carcinogenic.

Some Natural Preservatives

Tea Tree Essential Oil Thyme Essential Oil Grapefruit Seed Extract Bitter Orange Extract

IS "NATURAL" REALLY BETTER?

There are some people who believe that there really are "safe" synthetic chemicals.

If we look at chemical use historically, we see a pattern of fantastic chemical breakthroughs that are sold to us as the "new" answer to our problems, which are then subsequently banned (or withdrawn) after the damage has been done. Remember the "miracle" of DDT for getting rid of pests on crops?

I believe that the search for newer, better and safer chemicals is foolish. Mother Nature always has, and always will, provide us with everything we need.

We should avoid all synthetic chemicals. By seeking out truly natural and organic products we are making a positive difference to our own health as well as supporting ecologically sound business ideals

The World is Going Organic

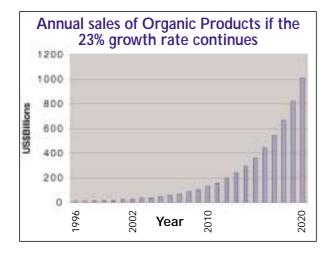
FROM GRASSROOTS MOVEMENT TO SIGNIFICANT INDUSTRY

f current growth rates are maintained it is quite conceivable that the world's agriculture will be fundamentally organic by 2020. In order to understand how this is possible one must understand two distinct phenomena in society: fads and trends.

What is a Fad?

An idea that is taken up with great enthusiasm for a brief period of time; a craze.

Fads come and go. A fad is driven by hype and generates many sales in a short period of time. Generally speaking, it is a top-down movement, which generally starts with a sophisticated marketing campaign attuned to society's current mindset. For example, newfangled weight-loss equipment offering "immediate success" will initially be perceived as valuable, and a large number of people will buy it. However, after a short period of use, the equipment will be put away and forgotten.



What is a Trend?

It is the general direction in which something tends to move.

Trends eventually become the norm. A trend is a grass roots, bottom-up movement that is driven by repeat business. A good example is the "natural" movement that started around 1970. Back then the term "natural" was not used very much on product packaging. Then a few companies started using it in response to public demand. The growth in sales of "natural" products prompted large corporations to create their own "natural" products. Now, three decades later, we ask ourselves, "What isn't natural?"

The organic movement began at the same time as industrialised agriculture. It evolved through the '50s and '60s with the launch of such books as Silent Spring, by Rachel Carson, which exposed the toxic bio-accumulative effects of pesticides. During the '70s the development of the organic market was stimulated by growing consumer interest in health and nutrition and the increasing awareness of the importance of preserving the natural environment. More recently the movement has been given significant impetus by events such as outbreaks of Bovine Spongiform Encephalopathy (BSE or Mad Cow Disease), and the controversy of Genetically Modified Organisms (GMOs), which have motivated people to search for healthy alternatives.

World trade in organic products is dominated by the United States, the European Union and Japan. Recent market research has shown that consumer demand is growing rapidly in these major markets. The sale of organic products is expected to reach between 5% and 10% of total food sales by the year 2005.

USA

Consumer sales of organic products in the United States reached USD\$5.6 billion in 2000, a rise of 19% since 1999. With sales in 2001 reaching USD\$9.4 billion, the organic segment should be worth between USD\$13-USD\$18 billion by 2005.

EUROPE

Research across seven European countries found that organic spending should nearly double every five years. During 2000, 29 million people in the UK said they had consumed organic food, a figure that represents almost half the population. Currently there are some 142 million consumers of organic food in Europe, showing that organic food has hit mainstream after many years as an "alternative" niche market. The UK, which had organic sales of GBP£605 million in 2000 and is expected to reach GBP£1 billion by the end of 2003, will continue to be a key market for organic products. By 2006, 58% of European consumers are expected to be buying organic products.

JAPAN

The Japanese are the largest per capita consumers of organic products in the world. Japan had a national market value of USD\$1.5 billion in 1998, which grew to USD\$3.2 billion in 2002. The majority of organic products in Japan are distributed through local co-operatives.

Over the next 20 years, projecting the same compounded growth that the "natural" phenomenon has enjoyed it is clear that the organic movement will play a significant role in world trade.

MARKET	2002 RETAIL SALES	CURRENT GROWTH RATE
USA	USD\$9.4 Billion	19%
Europe	USD\$9.2 Billion	22% (UK 2001 40% growth to USD\$0.8 Billion)
Oceania*	USD\$9.0 Billion	21% (Japan 2001 21% growth to USD\$3.2 Billion)
* South East Asia, Japan, Taiwan, Australia and New Zealand		

SILENT SPRING

Rachel Carson Biologist, Writer, Ecologist 1907-1964 "The more clearly we can focus our attention on the wonders and realities of the universe about us, the less taste we shall have for destruction."

- Rachel Carson © 1954

isturbed by the reckless use of synthetic chemical pesticides after World War II, Rachel Carson reluctantly changed her focus in order to warn the public about the long-term effects of misusing pesticides. In *Silent Spring* (1962) she challenged the practices of agricultural scientists and the US Government, and called for a change in the way humankind viewed the natural world. Carson was attacked by the chemical industry and some in government as an alarmist, but courageously spoke out to remind us that we are a vulnerable part of the natural world, subject to the same damage as the rest of the ecosystem. Testifying before Congress in 1963, Carson called for new policies to protect human health and the environment.

Rachel Carson died in 1964 after a long battle against breast cancer. Her legacy for the beauty and integrity of life continues to inspire new generations to protect the living world and all its creatures.

world and all its creatures. Rachel Carson's *Silent Spring*, which in 1962 exposed the hazards of the pesticide DDD, eloquently questioned humanity's faith in technological progress and helped set the stage for the environmental movement. Anyone reading *Silent Spring* will be moved by Carson's revelation of the deadly effects of exposure to seemingly harmless chemicals through bio-accumulation (1), bioconcentration (2) and bio-magnification (3). While pesticides ("-icide" is Latin for "to murder or kill" as in "homicide") had existed for centuries, World Wars I and II served as a watershed for the modern agrichemical industry. Chemicals and

technologies developed for warfare were later adapted for use in agriculture and pest control.

Over the past 40 years many scientific studies have verified Carson's findings regarding the adverse effects of agricultural chemicals, including those used on plants for medicinal and cosmetic purposes, which led to known carcinogens such as DDT, Dieldrin and a host of others being banned. The unfortunate thing is that it took decades (up to the 1990s for some) for this to happen. One of Carson's most important discoveries was what is known today as biomagnification. An example of this process is the case of Clear Lake, California. In order to "control" an insect called a gnat (a relative of the mosquito) at Clear Lake, north of San Francisco, the authorities used the chlorinated hydrocarbon insecticide dichloro diphenyl dichloro ethane (DDD - a relative of DDT), in a diluted form of one part DDD to 70 million parts water. At first the gnats were brought under control, but soon their numbers increased. So the authorities again sprayed one part DDD to 50 million parts water.

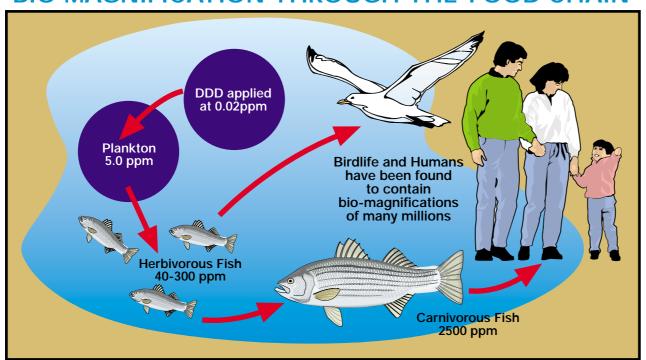
In the winter after the first treatment, many hundreds of birds were discovered dead. And again, in the winter following the second treatment, many more birds were found dead. After examination of the fatty tissue of the birds, extraordinarily high levels of DDD were found, much higher than was ever put into the water. Researchers realised that the chemical had been taken in by the smallest life form, concentrated, and then passed on to the next life form until its concentrations reached the phenomenal levels found in the birds.

No trace of DDD was found in the water. Why? Did it biodegrade? No! It had been absorbed into the bodies of life that the lake supported. Worse still, the poison had been passed up the food chain. That is why we still find these chemicals in our food today, particularly in root vegetables and fish. After 23 months, the plankton from the lake still had the chemicals in it. All the birds, fish and frogs examined also had the chemical in them.

DDD was added to the water in very low concentrations (0.02ppm), yet it was found that plankton organisms were found to contain 5ppm, a multiplication (biomagnification) of 250. Plant-eating fish had been found to contain 40-300ppm, and carnivorous species of fish stored a massive 2,500ppm, a bio-magnification of 125,000! It has been established since this original work that some compounds can bio-magnify through the food chain many millions of times, and we are at the top of most food-chains.

Bio-accumulation, bio-concentration and biomagnification will take place with practically all substances our bodies are exposed to. Understanding this concept is very important in protecting us from the adverse effects of chemical exposure. The sad truth is that when we introduce synthetic chemicals into our environment, it takes many years for us to "discover" what really happens. This is not a scientific approach that benefits society, but a science that uses society for profit and experimentation. Given the recent introduction of GMOs (genetically modified organisms) into the agricultural supply chain, Carson's book is just as relevant today as when it was written in 1962.

BIO-MAGNIFICATION THROUGH THE FOOD CHAIN



1. Bio-accumulation:

Compounds accumulate in living things any time they are taken up and stored faster than they are broken down (metabolised) and excreted. Daily we bioaccumulate many vital nutrients such as vitamin A, D and K, trace minerals, essential fats and amino acids. This is a normal process for our well-being. The downside, however, is that this also happens with substances that are harmful.

2. Bio-concentration:

The process by which living organisms can collect and concentrate chemicals from the surrounding environment.

3. Bio-magnification:

The process that results in the accumulation of a substance in an organism at higher levels than are found in its own food i.e. it becomes more concentrated as it moves through the food chain.

In-Liven Your Health

Compiled & edited by Dr. Robert Chamberlain March, BS, MsT, RMT, ND (USA certified)

lmost 100 years ago, the Russian born bacteriologist and 1908 Nobel Laureate, Ilya Mechnikov, stated: "Death begins in the colon."



Ilya Mechnikov 1908 Nobel Laureate

In his groundbreaking book *Prolongation of Life*, Mechnikov documented in detail the unusually lengthy life spans of several societies that practised eating fermented foods and special bacterial cultures called kefirs. He made consistent observations of 100+ year-old men and women that were still

leading highly active and healthy lives!
It was Professor Ilya Mechnikov that coined the term "probiotic" to describe friendly bacteria. His research made a direct link between human longevity and the necessity of maintaining a healthy balance of probiotics in the body.

DEATH BEGINS IN THE COLON

TODAY . . . ALMOST A CENTURY LATER . . . Brilliant medical researchers from all over the world are refocused on the importance of probiotics in the diet, quietly reshaping the way medical science views health.

Building on Mechnikov's early research, their vital new discoveries are bringing more and more credence to this startling medical evidence:

"Up to 90% of all known human illness and disease can be traced back to an unhealthy colon!"

Do we have a false sense of complacency about our health? Do we believe that because we faithfully take our vitamins, or regularly bombard ourselves with silver bullets, pills and potions, that we won't contract a disease? CURRENT NEWS FLASH: North Americans ingest more vitamin and mineral supplements per capita than any other educated population

per capita than any other educated population in the world. Yet, **1 out of 2 Americans will still die due to either heart disease or cancer!** Similar death rates for heart disease and cancer now exist worldwide.

FUTURE FILE: As the general public learns more about probiotics, and health practitioners acknowledge their importance in the maintenance of our health, **we will have connected the dots** between a healthy colon, sound health and increased life span.

85% Probiotic Bacteria : 15% Pathogenic Bacteria is the ideal ratio of good to bad bacteria in the gut

85% Pathogenic Bacteria: 15% Probiotic Bacteria is the ratio most people have

When you suffer from low quantities of good (probiotic) bacteria your immune system is severely compromised.

This leaves you predisposed to fatigue, joint inflammation, viral attack, parasites, allergies and all manner of digestive disorders and life-threatening diseases.

WHY VITAMINS AREN'T ENOUGH!

Once harmful toxin-producing bacteria and fungi take over in the gastrointestinal tract, our immune system has become severely compromised. Given our exposure to stress, toxic chemicals, antibiotics, steroidal drugs and carcinogenic substances, it is a must that we proactively guard the health of our gut and supplement with probiotics every day.

Without the correct balance of 85% probiotic bacteria to 15% pathogenic bacteria, some form of physical disease is likely to manifest itself. Maintaining this critical ratio is the single most important thing we can do to ensure good health and longevity.

Common Warning Signs of a Bacteria Imbalance

- Difficulty losing weight, sugar/carbohydrate cravings
- Frequent fatigue, poor concentration
- · Frequent constipation or diarrhoea
- Faulty digestion, acid reflux and other gut disorders
- Sleeping poorly, possible night sweats
- Painful joint inflammations/stiffness
- Bad breath, gum disease & dental problems
- Frequent colds, flu or infections
- Chronic yeast problems, candida
- Acne, eczema, skin & foot fungus, etc
- Extreme menstrual or menopausal symptoms
- Allergies and food sensitivities

We are exposed to **BILLIONS OF METRIC TONNES OF POLLUTANTS** in our everyday lives

Lead, mercury, cadmium (plus over 4500 other toxic heavy metal by-products), drugs, vaccines, and a host of other dangers are wreaking (creating) havoc in our bodies.

As our toxin levels rise and go unchecked, our immune system and other mission critical processes in our body become dangerously compromised and begin to fail.

HOW BACTERIA WORKS MIRACLES IN OUR BODIES

Bacteria are at the base of all life on this planet. They were the original life and they most certainly will be the last, because absolutely no living thing on earth can exist without them. Understanding how bacteria operates and rules the body is often the missing link in understanding the demise of our first line of defence: The Immune System.

The proprietary strains of probiotics in In-Liven have been developed and perfected to deliver their benefits – in spite of interference from toxins.

THE MAGIC CYCLE

Bacteria have no teeth, but rather produce enzymes. These enzymes then identify, digest and deliver nutrients where they need to go. You have tens of trillions of cells, each of which needs 100,000 enzymes to function correctly.

It is enzymes that are responsible for every metabolic process in your body.

If there is a deficit of friendly (probiotic) bacteria in the human gut, then there is a deficit of enzymes.

Without these vital enzymes, nutrients do not get used. This lack of uptake of nutrients is at the heart of what causes most of the disorders in the human body.

You can consume the best nutrients in the world, but if you cannot digest and assimilate them, then everything is lost.

Things that Kill Bacteria in the Body

- Antibiotics
- · Birth control pills
- Steroidal/hormonal drugs
- Fluoride
- Chlorine
- Coffee/tea
- Carbonated drinks
- Man-made vitamins
- Synthetic ascorbic acid
- Radiation
- Stress
- Preservatives
- Additives
- Pesticides
- Fertilisers

Today, most of us have lost our ability to digest nutrients. This is largely due to the fact that the "anti-probiotic" things (see the things that kill bacteria above) we are exposed to have killed off the friendly bacteria necessary to produce the enzymes that digest these nutrients.

Enzymes are responsible for all building and repairs in the body, and they need amino acids to get these jobs done. It is crucial to good health to have amino acids floating in the body – available at a moment's notice – so that enzymes can utilise them when needed. In-Liven saturates the body in naturally occurring amino acids when taken daily. Amino acids also provide the building blocks for most of the hormones, neurotransmitters, neuromodulators and other information chemicals that regulate and control ALL communication in every cell of our body.

THE COMPETITION TO SURVIVE

The strongest bacteria will always kill the weaker ones. Further, bacteria compete for food sources. Therefore, it is a fallacy to think you are helping the body by taking a probiotic supplement that only has one, two or maybe even four types of lactobacillus, and no food source with it. These new bacteria will deplete the number of bad and good bacteria in your body, as they compete for food.

That is why it is important to supply all 13 key Lactobacillus members along with the foods they like to eat. Then they work in harmony as a unit, in order to balance the populations of pathogenic (harmful) bacteria in the body. The 13 probiotic Lactobacillus bacterium contained in In-Liven work synergistically to manufacture over 6,000 additional substrains of healthful bacteria that work in the body.

Another important by-product of our "bacteria wonder strains" is **Lactic Acid**. Bacteria manufacture lactic acid to protect themselves from bad bacteria. Lactic acid has a pH factor of 3.5 or less. NO BAD bacteria can live in this environment and, in fact, this low pH

environment promotes the growth of good bacteria.

It is vital to your health that a proper environment is maintained in the intestinal tract and that it has the proper balance of 85% friendly to 15% unfriendly bacteria. Without this proper balance of bacteria, all manner of physical disease manifests itself. This singular focus, of cultivating the proper intestinal flora, is the most important thing we can do to ensure good health. In the absence of abundant friendly flora, the body loses its fantastic ability to heal itself.

Probiotic bacteria (friendly bacteria) prevent the invasion and colonisation of harmful bacteria. fungi, yeast, viruses, moulds, and other parasites. Thus, these friendly bacteria prolong a healthy life.

They maintain chemical and hormonal balance, regulate nutrients, and stimulate correct digestion and proper immune function. They will process putrefied materials and pathogenic products like Candida, harmful bacteria and parasites, and in many cases will penetrate the permeable lining of the gut wall and permanently destroy potentially harmful organisms.



In short, the main health benefits of probiotics include:

Increased digestion, alleviation of digestive disorders, enhanced assimilation and synthesis of nutrients (including vitamins, minerals, and proteins), improved absorption of calcium, protection against E. coli infection, improved immune function, improved lactose tolerance and digestibility of all milk products, reduction of vaginal infections and yeast infections, increased anti-carcinogenic (anti-cancer) activity, reduction/prevention of peptic ulcers caused by H. pylori bacteria, reduction in bad cholesterol, and reduction of acne.

Each of the 26 certified organic whole food ingredients that comprise In-Liven are predigested by these 13 uniquely cultured probiotic lactobacillus for three weeks prior to bottling. This process is called "bio-potentiating" – as it increases the bioavailability of all the free-form nutrients.

Sporogenes are the most stable and "intelligent" of any of the Lactobacilli bacteria. It has taken several years to develop them to the point where they are compatible with our other 12 probiotic bacteria in In-Liven.

Sporogenes derive their name from spore-bearing lactic acid bacteria, and are an inspired and wonderful gift from the Tibetan monks who have been cultivating them for centuries from a cheese they make from yaks' milk.

When good bacteria die they give their bodies up as food to the others. Our Sporogenes actually convert these expired bacteria to nutrients for the body.

During the life cycle of this species it forms spores. Spores are a fully alive, but dormant, stage for these bacteria. They have developed a protective envelope in which they wrap themselves. Therefore they are totally unharmed by stomach acid and, in fact, are actually benefited by it, as it helps the Sporogenes release their outer envelope to begin their life cycle in the intestine. They are also not harmed by rather high temperatures.

Once they reach the intestine, they are very rapid and effective colonisers and are one of the most prolific lactic acid producers of all the Lactobacillus bacteria. As a result they soon lower the pH of the intestine, making it inhospitable to yeast and other putrefactive bacteria.

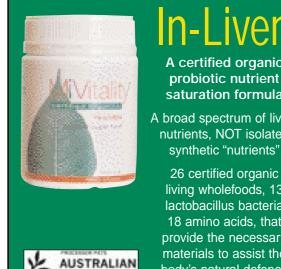
As the pH of the colon becomes normal, the putrefactive and pathogenic bacteria diminish in number, allowing beneficial bacteria including the Lactobacillus to multiply. The result is a rapid increase in lactic acid and butyrates, which serve as nourishing fuels for the cells that line the

With the vastly reduced number of putrefactive and pathogenic bacteria inhabiting the colon, a substantially reduced level of toxic substances

leave the colon with the fluids absorbed into the hepatic-portal bloodstream that goes from the gastro-intestinal tract to the liver. With a manageable level of toxins to deal with, the liver is able to neutralise all of them, and the posthepatic blood circulation is clear of even low levels of toxins. Hence, there is no longer a stimulation of the disease process or the breakdown of weak genes in the outlying tissue cells. The hidden disease process is thus halted.

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A certified organic probiotic nutrient saturation formula

A broad spectrum of living nutrients, NOT isolated synthetic "nutrients"

living wholefoods, 13 lactobacillus bacteria 18 amino acids, that provide the necessary materials to assist the body's natural defence system.



Sherrill Sellman, author of MOTHERS, Prevent Your Daughters From Getting Breast Cancer

MOTHERS, Prevent Your Daughters From Getting Breast Cancer

e live in a chemical soup. They're everywhere, in everything and they're here to stay. How many? It is estimated that since World War II, more than 80,000 synthetic chemicals have invaded our world. About 40 million tons are manufactured worldwide.

It is shocking to learn that hardly any of these substances have been tested for safety, but have been added to our food, skin care, water, cleaning products etc. without our consent and, most of all, without warnings of their potential dangers. Approximately 1000 new chemicals are made each year.

Surprisingly, city dwellers use more chemicals per acre than farmers and spend more than one billion dollars annually. In a lifetime 50 lbs of toxic waste can enter a body from drinking water and at least 450 lbs can enter the body through the skin. Organochlorines are chlorine-based chemicals. They are extremely toxic and lethal. Herbicides, pesticides, including DDT, its metabolite DDE, dieldrin, atrazine, methoxychlor, hetachlor, kepone, chlorine bleach, most disinfectants as well as various plastics such as vinyl chloride made into the plastic products such as baby bottles and babies soft toys.

They accumulate in our bodies in many ways: from drinking water, from food grown with agricultural chemicals, from plastic migrating into canned and microwaved foods, and from food or body contact with chlorine bleached paper products (coffee filters, tampons, paper cups, toilet papers). Although pesticides are designed to kill insects and other organisms, that's not all they do. In fact, only 2 per cent of the 1.2 billion pounds of pesticides sprayed on crops accomplish this purpose! The other 98 per cent are absorbed into the air, water, soil, or food supply - and into our bodies. The majority of organochlorines are stored cells and breast tissue. The tendency of organochlorines to stay in the body is evidenced by the fact that recent samples of fat and breast milk collected from women in the United States and Canada contained DDT, chlordane and dieldrin, organochlorines banned for over three decades (as well as those in current use such as DDE and PCBs). Women with high levels of agricultural organochlorines in their blood are 4 to 10 times more likely to develop breast cancer than women with low levels. Women with breast cancer have 50-60 percent more PCBs, DDE and other pesticides and organochlorines in their tissues than women without breast cancer.

The really scary thing about these pervasive chemicals is that fetuses and infants can be harmed by exposure to chemicals at levels that do not appear to harm adults. In fact, these hormonedisrupting chemicals can have effects at extraordinarily low doses, as low as parts per trillion. Mixtures of chemicals can have effects that are different from those of individual chemicals. For instance, a combination of only two different organochlorines together in minute doses has been found to be 1000 times more potent in affecting human estrogen receptors as with the chemicals alone.

So, there's no escape. We're surrounded. Products that look innocent, such as commercial soaps as shampoos, can be harboring potent carcinogenic hormone disrupters. So are our foods. Our favorite salad green, lettuce, can be sprayed with pesticides as many as 12 times in its short life. The lawns our children play on, the household cleaners we use in our ovens, on the sink, for the toilet. The water we bathe in. These are just some of the evercontaminating ways chemicals have silently infiltrated into our lives and put at health at risk. What do we do to survive the toxic onslaught? It has become obvious that going organic is really no longer an option. From eating organic fruits and vegies to using organic personal care products, household cleaning products and organic pest control, going organic is really the only way to go. A recent study found that pre-schoolers who were eating primarily organic foods had 6-9 times less pesticide residues in their bodies! So, just making small changes do make a difference!

Regulations on the use of toxins in cosmetics



he Food and Drug Administration (FDA) Handbook is the "bible" of regulations and standards laid down in the United States of America for the manufacture of food and drugs, including cosmetic and skin care products. It also forms the basis of regulations for Australia.

Below you will find excerpts from the FDA Handbook that allow for the use of known harmful ingredients in the manufacture of cosmetic and skin care products.

Almost any ingredient may be allowed in cosmetics and perfumes...

"With the exception of color additives and a few prohibited ingredients, a cosmetic manufacturer may, on his own responsibility, use essentially any raw material as a cosmetic ingredient and market the product without approval." and . . .

"Although not prohibited by law or regulation, in addition, the manufacturers of cosmetic fragrance products have voluntarily



agreed to not use or to limit maximum use levels of certain selected ingredients which have been found to cause depigmentation, irritant, neurotoxic, or phototoxic or other allergic reactions."

Mercury in cosmetics...

"The use of mercury compounds as cosmetic ingredients is limited to eye area cosmetics at concentrations not exceeding 65 parts per million of mercury calculated as the metal (about 100 ppm or 0.01% phenylmercuric acetate or nitrate) and provided no other effective and safe preservative is available for use.

Mercury compounds are readily absorbed through the skin on topical application and have the tendency to accumulate in the body. They may cause allergic reactions, skin irritation or neurotoxic manifestations."

Nitrosamines, known cancer-causing agents, allowed . . .

"Cosmetics containing as ingredients amines or amino derivatives, particularly di- or triethanolamine, may form nitrosamines if they also contain an ingredient which acts as a nitrosating agent as, for example, 2-bromo-2-nitropropane-1,3-diol (Bronopol, Onyxide 500), 5-bromo-5-nitro-1,3-dioxane (Bronidox C) or tris(hydroxymethyl)nitromethane (Tris Nitro), or if they are contaminated with a nitrosating agent, e.g., sodium nitrite. Amines and their derivatives are mostly present in creams, cream lotions, hair shampoos and cream hair conditioners. The nitrosation may occur during manufacture or during product storage.

... Many nitrosamines have been determined to cause cancer in laboratory animals... In surveys of cosmetic products

conducted in 1991-92, NDELA (a nitrosamine) was **found in 65% of the samples at levels up to 3 ppm**."

Dioxane also ...

"Cosmetics containing as ingredients ethoxylated surface active agents, i.e., detergents, foaming agents, emulsifiers and certain solvents identifiable by the prefix, word or syllable 'PEG', 'Polyethylene', 'Polyethylene glycol', 'Polyoxyethylene', 'eth-', or '-oxynol-', may be contaminated with 1,4-dioxane. It may be removed from ethoxylated compounds by means of vacuum stripping at the end of the polymerisation process without an unreasonable increase in raw material cost.

In rodent feeding studies conducted for the National Cancer Institute, 1,4-dioxane was found to produce cancer of the liver and the nasal turbinates. It also caused systemic cancer in a skin painting study. Skin absorption studies demonstrated that dioxane readily penetrates animal and human skin from various types of vehicles. However, it was also determined that most of the dioxane applied to the skin in a vehicle evaporates into the environment and may not be available for skin absorption. The contamination of ethoxylated surfaceactive agents with dioxane was first reported in 1978. Many of the raw materials analyzed since then have been found to contain dioxane; some contained as much as, or more than, 100 ppm."

Reference:

http://www.cfsan.fda.gov/~dms/cos-prd.html

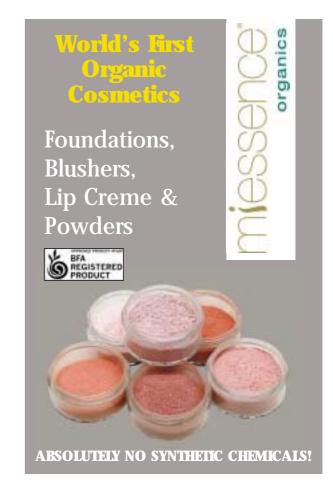
Australian Breakthrough WORLD'S FIRST CERTIFIED ORGANIC SKIN CARE

hat started as a hobby in her kitchen may become a revolution in the beauty industry for creator Narelle Chenery. Her search for truly natural skin care began almost a decade ago after finding out through her own research that many so-called natural ingredients were actually very toxic and dangerous. When she couldn't find a range that was truly pure, she decided to create her own. In 2001 Australia's leading organic certifying body, Australian Certified Organic (ACO), awarded their "Australian Certified Organic" seal of approval to

Miessence* which includes skin and personal care products.

"We are enormously excited by our future prospects," says Narelle. "We hope to bring the benefits of organic agriculture to the fore and educate people about the importance of avoiding toxins in their daily lives."

Narelle is very passionate about educating consumers and giving practical guidelines for them to follow. She writes for leading health publications and has gained popularity on TV and radio by explaining the difference between natural, organic and certified organic.



CHEMICALS MAKE YOU FAT – THE MEDICAL EVIDENCE

ELIMINATE CHEMICAL CALORIES



hat is the cause of obesity? Why do current estimates suggest that women are gaining weight to the tune of 450g and men 225g each year despite the many diets they undertake? Could it be true that the

Dr. Paula Baillie-Hamilton

chemicals in our food, skin care and detergents make us fat?

The foundation for most diets today is based on the work of Drs Johnston and Newsborough of Michigan University who, during the 1930s, developed the theory that if a person consumes fewer calories than the body needs, the body will burn up its fat stores.

In her groundbreaking book, *The Detox Diet - Eliminate Chemical Calories and Enhance Your Natural Slimming System*, Dr Paula Baillie-Hamilton tackles what she believes is the root cause of weight gain. Our own natural weight-control system is being poisoned by the toxic chemicals that we encounter in our everyday lives – this damage makes it increasingly difficult for our bodies to control their own weight, so we end up getting fatter even if we

eat less food. This detox diet approach tells us how to avoid the most "fattening" chemicals, or "chemical calories" in our food and around our home. It explains how we can shed our body's load of chemical calories safely, and rebuild our natural slimming system.

Synthetic chemicals damage our health in two ways. First, by acute "poisoning" through exposure to large quantities, which induce almost immediate and often violent reactions that account for a staggering 220,000 fatalities worldwide every year. The second, more subtle way is by long-term exposure to much lower levels. This is what Dr Baillie-Hamilton explores in her book.

"The Detox Diet" links the current fat epidemic to the toxic synthetic chemicals used in agriculture, skin care, cosmetics and household products. Toxic synthetic chemicals are highly fat soluble and when we are exposed to them the body creates fat to safely store those toxins it cannot process and eliminate safely. Carbamates, a group of insecticides and herbicides used in the growing of food, cosmetic and medicinal ingredients, are also used as growth promoters in battery-farm

situations because they slow down the metabolic rate. So, the same synthetic chemicals used on our fruit and vegetables are used to fatten livestock! Carbamates are also used in medicine to promote weight gain in humans.

People are not overweight simply through their own lack of effort, such as exercise. The truth is that the finger of blame must also be pointed at toxic chemicals. It is known that toxic chemicals, even when present in very small amounts, directly damage muscles and disrupt the hormones that control their growth. Catecholamines, a valuable group of slimming hormones, also seem to come under frequent attack by these chemicals, which interferes with the metabolic process and inhibits our body's own natural slimming systems. Dr Baillie-Hamilton recommends the replacement of our food, skin care, cosmetics and household products that contain toxic synthetic chemicals with organic products, combined with effective detoxification. In addition, her research suggests that the highest levels of "slimming nutrients" are found in organically grown produce.

CLEANSING - PREVENTATIVE MAINTENANCE



THOMAS BIGE MD (Hun.), Dip. Nat., Cert. T.C.M. (Beijing) Dip.C.H.T., Dip.R.T. (Sydney) Senior Fellow (ALUMNI) The wise man foresees the trouble ahead and steps out of harm's way, while the fool blunders on into punishment. 99

Solomon – c2300 BC

Lack of knowledge about how your body functions and ignoring its needs are major contributing factors to ill-health. You can no longer afford to neglect the important duty of looking after your most valuable asset, your own health.

NATURAL BODY CLEANSING (Detoxifying)

THE SIMPLEST WAY TO PREVENT & TREAT:

- Premature Aging
- Digestive Disorders
- Lack of Performance
- Nervous Tension
- Weight Problems
- Allergies, Insomnia
- Diseases, Cancer

THE SOLUTION

THE "WEED-SEED-FEED" PROGRAM

Identify and investigate pre-existing disorders such as digestion, insomnia, lack of energy, allergies or any other suspected health problems. Seek the advice of a qualified health practitioner because self-diagnosis could lead you to a wrong conclusion.

"WEED" – Eliminate the toxic accumulation from your digestive system. This could be in the form of bacterial, fungal or parasitic infestation, toxic deposits, gallstones, and excess bile etc. by doing a Liver/Gall Bladder Flush, taking Detoxifying Supplements or

THE TOXIC HARVEST OF THE 21ST CENTURY



having Colon Hydrotherapy.

"SEED" – Replace and enhance the good bacteria (Probiotic) growth in your bowel to protect your digestive system from toxic reinfestation.

"FEED" – Eat food and natural supplements suitable for your individual needs, by seeking dietary and nutritional advice from a qualified health practitioner to rectify bad dietary habits. To combat the ever-increasing number of toxins destroying our health, the program should be repeated regularly. However, its effectiveness depends largely on the quality of supplements you use.

- Regularly cleanse your body of toxic waste.
- Educate yourself to be able to identify and replace products containing harmful ingredients
- Enhance the function of your immune and digestive systems to achieve Optimum Health You should spend a minimum of one month on the initial cleansing phase ("WEEDING"). To minimise the accumulation of toxins in your body and to enhance your health, the "SEED & FEED" parts of the program should become lifelong habits.

To ensure you are on the right track, follow-up with a "Check-Up" from your health professional every four months.

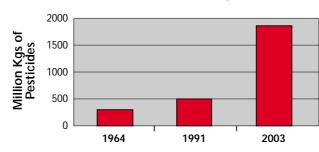
ATOMS in AGRICULTURE

Modern conventional farming methods employ the use of synthetic chemicals and fertilisers known as pesticides, which are sprayed or injected into the ground. Pesticides are hazardous to human health and the environment, undermine local and global food security and threaten agricultural biodiversity.

In his 1974 book *Atoms in Agriculture*, Dr Americo Mosca, famous chemistry prizewinner of the Brussels World Fair, discovered that toxic genetic chemicals used in agriculture are more dangerous than atomic fallout.

"I calculate that in the U.S. the use of toxic genetic chemicals, (herbicides, insecticides, hormones, steroids etc.) cause damage equal to the atomic fallout from 145 H-bombs of 14 megatons each, or in terms of atomic bombs - from 72,500 atomic bombs of the Hiroshima type. For this reason, disease of all kinds and the birth of mentally retarded babies have increased tremendously in the United States in the last 10 years. The damage to plants, crops, soil fertility and water pollution are practically incalculable. If use of these toxic genetic chemicals persists in agriculture and on food, this will cause the destruction of the American people.'

Use of Pesticides in Agriculture



Organic farming methods may involve more labour and time but the processes are far less damaging to the world's eco-system and the human race.

COMBINATION OF PESTICIDES LINKED TO PARKINSON'S DISEASE.

The latest findings of the team led by Deborah Cory-Slechta, Ph.D., professor of environmental medicine and Dean for Research at the University of Rochester School of Medicine and Dentistry, appear in the Dec. 15, 2000 issue of the *Journal of Neuroscience*.

The Journal reported that two commonly used agriculture chemicals: the herbicide paraquat (paraquat dichloride) and the fungicid maneb (manganese ethylene bisdithiocarbamate) – combined – creates the exact pattern of brain damage in mice that doctors see in patients with Parkinson's disease.

"The environmental reality is that several of these chemicals are used on the same crops and in the same geographical locations. You've got to get rid of the weeds. Then the insects. Then funguses. These are different chemicals that do different things, but they're often applied in the same fields," says Cory-Slechta, who was joined in the research by graduate student Mona Thiruchelvam and faculty members Eric Richfield, Raymond Baggs, and A. William Tank.

Maneb, paraquat and many other pesticides are used in the agriculture-rich areas of the country, including the Midwest, California, Florida and the North-east. The map of their use mirrors areas of the country where people are more likely to die of Parkinson's disease.

The study is one of the first to examine the effects of such chemicals in tandem. The current regulations and determinations of safety levels are usually based on the effects of single chemicals. In the real world, however, we are exposed to mixtures of chemicals every day. There are thousands upon thousands of combinations.

"No-one has looked at the effects of studying together some of these compounds that, taken by themselves, have little effect," says Cory-Slechta. "This has enormous implications."

HOW TO BECOME AN INGREDIENT DETECTIVE!

ave you ever bought a product that you were assured was natural, only to find that you couldn't pronounce half of the ingredients on the label? Would you like to learn more about "semi-natural" and "derived from" ingredients than the brochure tells you?

There is a source of information that comes from the ingredient manufacturer that is called a Material Safety Data Sheet (MSDS). MSDSs are a summary of important information on chemical substances regarding product information, hazard identification, first-aid measures, exposure limits and precautions when using the ingredient.

The Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (HCS) requires an MSDS be prepared for chemicals that are hazardous according to the criteria described in the HCS.

A good website to start researching the chemicals used in skin care and other products is: www.hazard.com/msds
This takes you to the SIRI (Safety Information Resources Inc.) MSDS website.
You are given three search options

- 1. Search by the manufacturer, which in most cases you probably won't know
- 2. Search their database by entering the ingredient name
- 3. Additionally, you can search another database for chemical toxicity data not found in the MSDS section.

For example, if we use the database search (2nd option) to look for information on phenoxyethanol, which is used as a preservative in many so-called "natural" skin care products we see five different MSDSs on file.

A sample of information found on this ingredient included: Hazards Identification

EMERGENCY OVERVIEW

WARNING! Harmful if swallowed. Causes skin irritation. May cause central nervous system depression. May cause kidney damage. May cause respiratory and digestive tract irritation.

Target Organs: Kidneys, central nervous system.

POTENTIAL HEALTH EFFECTS

Skin Contact: Severe irritation or burns. Eye Contact: Severe irritation or burns. Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhoea. May cause central nervous system depression, characterised by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. May cause kidney failure. May be harmful if swallowed. Lesions may appear in the brain, lungs, liver, meninges and heart. A little scary don't you think?

ANIMAL TESTING DATA

Lethal Dose 50 (LD50) indicates the quantity of the chemical necessary to kill 50% of the animal test subjects and is measured in units per kilogram of the animal's body weight.

Oral, mouse: LD50 = 933 mg/kg; Oral, rat: LD50 = 1260 mg/kg; Skin, rabbit: LD50 = 5 mL/kg; Skin, rat: LD50 = 14422 mg/kg. By arming yourself with independent information about the many toxic ingredients found in today's skin and personal care

found in today's skin and personal care products, you can make an informed decision to protect the health of you and your family.



ANNUAL SALES OF ORGANIC PRODUCTS HAVE GROWN TO ALMOST USD\$30 BILLION WORLDWIDE AND YET DO NOT INCLUDE A RANGE OF FULLY CERTIFIED ORGANIC SKIN, PERSONAL & ORAL CARE PRODUCTS.

JOIN THE ORGANIC MOVEMENT

Organic and Natural Enterprise Group (ONE Group) has successfully developed the Miessence® skin care range – the world's first and currently only fully certified organic skin, personal and oral care products to food standards. If you are interested in providing a healthier lifestyle for yourself and your family, why not join ONE Group as a representative.

