

Back to Eden

Healing With Flax
Drawing Power of Flax
How Christ Ministered
Who is in Control?
Products / Coming Programs
Microwaving Food

PO BOX 850 LAVINGTON 2641

KAYE SEHM 02 6025 5018

This issue: Autumn 2019 No 78

Information contained in this newsletter is for advice only. If you choose to use any remedies or follow the advice in these newsletters, you do so at your own risk.

e mail: backtoeden@aapt.net.au

www.kayesrecipesandremedies.com

Banking Details for any donations towards expenses for Back to Eden

*BSB 640000 (Hume Bank)
*Account 302670512 (Kaye Sehm)
*preferred account OR

BSB 012708 (ANZ)
Account 530788894 (Kaye Sehm)

Around thirty years ago Peter and I hosted a visiting speaker who gave some lectures on health here in Albury. He was a medical doctor from USA who was travelling with his wife. He gave me some information that I have followed since then and have never forgotten. He spoke to me about the value of adding flaxseed to our diet each day. He and his wife were also doing this. He told me about some of the benefits of this, adding that flax oil could also be used, but his suggestion was that as flax oil was very unstable, it is far easier and cheaper to add freshly ground flax to our diet each day. He believed this was just as effective.

So for almost every day since then we have had about two tablespoons of ground flax seed added to our breakfast. I grind it up fresh each day as I was taught that it can oxidize very quickly. Often we eat it mixed with fruit and kefir, but also sprinkle it on any grains or savoury breakfast we are eating. I believe this advice was very sound advice and am thankful as Peter and I are in reasonably good health even though we are getting older. As I researched this newsletter and read about the benefits of flax, I was very thankful that we established this habit all those years ago.

For any Donations - banking details

I have had a number of people contact me who want to give me a donation towards the work I am doing. I have decided to place my banking details at the top of this column. I have given two accounts here. The Hume Bank account is preferred as I am able to see names of people who have donated. The ANZ account does not reveal to me names who made a donation, but I have put it there as I know it is easier for some people to use an ANZ Bank branch. All donations are thankfully received. Another way you may like to donate is to send some postage stamps through the mail. From Kaye and the **Back to Eden** team

Healing with Flax....

Thousands of years ago the value of flax was appreciated in the countries bordering the Mediterranean Sea and the Middle East regions. It was used as a food and the flax fibres were spun into linen to provide clothing and other textile related products.

To this day, flax cultivation has remained both culinary and domestic, although crop production has become more wide scale. Most commercial flax production involves oilseed varieties of flax, in which the seeds will eventually be dried and crushed and used to produce different grades of oil. This is not food grade flax, but is used in wood finishes, paints, coatings, and has other industrial uses.

While cotton, wool and silk remain the most popular natural fibres in the global textile market, the global flax market has grown in recent years following increased production of linen products in China. But through recent years, the use of flax as a food began to slowly come into awareness soon after 1959 when Dr Johanna Budwig presented her research findings on how essential fatty acids – especially omega-3 played a significant role in treating cancer. She determined that early cancer cells had fat abnormalities. People who took omega-3 fatty acids prevented the development of these abnormal cells. While it would take years for this research to be appreciated, the information was out there.

Before 1986 flaxseed oil was known as linseed oil and was not used as food and was unrefined. After this, it was successfully introduced and marketed for human consumption as flaxseed oil. Despite this, some today still refer to flaxseed oil and linseed oil as the same, as well as referring to the actual seeds as either linseeds or flax seeds.

Understanding EFAs

Essential fatty acids (EFAs) are a special type of “good fat”. They are also essential nutrients necessary for life, but must be obtained through diet because the body cannot make them. EFAs are required for the proper structure and function of every cell in the body, and are important for optimal health. EFAs increase the absorption of vitamins and minerals, nourish the skin, hair and nails, promote proper nerve functioning, help produce hormones, ensure normal growth and development and prevent and treat disease.

Fats (fatty acids) fall into two main groups – saturated and unsaturated – based on their chemistry. There are three major classes of unsaturated fatty acids: omega-3, omega-6 and omega-9. The omega-9s are non-essential because the body can make them from other fatty acids. The omega-6s and omega-3s are essential and are not made by the body so they must be obtained from the diet. These fatty acids are involved in various biological processes, and produce many compounds when they are metabolized.

These two primary families of essential fatty acids, omega-3 and omega-6 have basic lipids (fats) within each group. Fatty acids within each of these families may be converted from each other, but not across families, and therefore both families must be consumed in food. The Western diet typically includes omega-6 fatty acids in large amounts, and foods like grains, plant-based oils, poultry, and eggs are rich in omega-6 lipids. Omega-3 fatty acids are not as commonly consumed. However, not all omega-3 fatty acids are equal. There are actually 11 different types that are obtained from plants or from other animal food like fish.

Omega-3 fatty acids are indispensable cellular building blocks. The nutrients must be ingested as food or nutritional supplementation. There are no enzymes in the body that can convert other fatty acids into omega-3 fats. If you don't eat them, you won't get

them. In the absence of omega-3 fatty acids, our body must use less desirable fatty acids as surrogates (omega-6 fatty acids or even saturated fats), leading to compromised cellular integrity and overall health.

Along with other lipids, essential fatty acids are extracted in the small intestine, absorbed into circulation, and travel through the body. Once transported into cells, essential fatty acids serve numerous functions. They influence membrane fluidity and may be involved in the regulation of neuronal firing. They are also transformed into many other molecules involved in anti-inflammatory effects.

Overfed and undernourished

Most everyone would agree that most of the Western population is overfed in calories, refined carbohydrates, saturated and hydrogenated fats and omega-6 oils. Yet many people are deficient in vitamins, minerals, fibre and have a state of perpetual fatty acid deficiency.

Throughout history men and women have ingested an approximate equal proportions (1:1 ratio) of omega-6 to omega-3 fatty acids. The relationship between these two omegas are critical because they balance each other and regulate thousands of metabolic functions through biochemical pathways. Nearly every biological function is connected with the delicate balance between these fatty acids. Omega-3s are involved in the control of inflammation, cardiovascular health, myelin sheath development, allergic reactivity, immune response, hormone modulation, IQ and behaviour. A seemingly minor, yet major change in the omega balance has had absolutely deleterious health effects.

Some say omega-3s are “good” and omega-6s are “bad”. In fact both are essential to health, but the balance between these is very important. Dominant omega-6s in the body can create a situation that promotes chronic inflammation, propagation of cancer, heart disease, stroke, diabetes, arthritis and auto-immunity disorders. Most researchers describe a correct balance of omega-6 to omega-3 as 1:1 to 3:1 or even 4:1. But it has been found that most people on the Western diet have a balance of 20:1. This is caused by a diet of highly processed and refined foods, supermarket vegetables oils which are highly refined with toxic chemicals, and also domestic animal meats.

How to find omega-3s

Where do omega-3 fatty acids come from? The most fundamental source is green vegetation – the phytoplankton in the ocean

and the green leaves on the land. Plant eating animal have the omega-3 concentrated in their cell membranes and fat tissue. Carnivore eating animals also tend to concentrate omega-3 in their fatty tissues. Wild ocean fish also have an abundance of omega-3. The herbivore animals that are domesticated as livestock for human consumption were designed by their Creator to eat green vegetation, and not the grain on which livestock is currently raised. Livestock grow faster, fatter and cheaper grown on grain. Unfortunately, their tissue is high in omega-6 fatty acids in contrast to range fed animals that are rich in omega-3. Eggs, once a good source of omega-3s have also fallen victim to progress. Chicken, like cattle fed a diet deficient in omega-3s lay eggs also deficient on omega-3s. Wild herbivores that graze in grasslands and are not fattened on grains have omega-3 in their tissues.

It has long been known that once flaxseed and other grains are crushed they soon turn rancid. This is because their oils oxidize rapidly. The husks and germ of grain first began to be removed in the mid-1700s in Great Britain, thereby extending their shelf life but removing their vital nutrients in the seed-rich foods. The development of expeller presses has allowed the mass extraction of oil from seeds such as corn, sunflower and safflower. Since then and more so in recent years it has been promoted that these so called wonderful oils would prevent heart disease and are very healthy – which is far from the truth. These vegetable oils are rich in omega-6 and low in omega-3 fatty acids. As industrialization permeated all aspect of food production, the main focus was shelf life rather than nutritional value.

Hydrogenation

Refined food manufacturers soon learned that adding omega-3s significantly decreased the shelf life of the expelled oils because they quickly oxidized, and therefore the marketability of the product. Another problem was created when manufacturers began to hydrogenate their oils. This process turns liquid vegetable oils into semi-solid fats. The beauty of flaxseed is that it is not solid at room temperature, thus it remains fluid in cell membranes. In order to produce a vegetable shortening that is solid at room temperature vegetable oils must be partially hydrogenated. To add hydrogen to the unsaturated bonds of vegetable fatty acids, manufacturers heat the oil in the presence of a catalyst (for example nickel) and bubble hydrogen gas through the mixture. The result is man-made “plastic fat” and is used to give processed foods a particular texture and desired mouth feel that western palates have cultivated and find desirable.

Composition of flax

Interest in flaxseed consumption is often related to its high dietary fibre, protein, mucilage and other health promoting compounds, but its real value lies within its omega-3 fatty acid and lignan content. These constituents of flaxseeds are potential factors in reducing risk of heart disease, stroke and high blood pressure as well as diabetes, cancer, autoimmune disease and almost all types of inflammatory conditions.

The phyto (plant) nutrients slow down the development of breast, prostate, colon and other tumours in humans. When you use flaxseed you soon discover that when combined with water or liquid it has a gel like property. It is very viscous and when this mucilage is eaten, it is believed to slow down digestion and absorption of starch, resulting in lower levels of blood glucose and insulin and normalizes other endocrine responses.

Apart from the omega-3 content of flax, emerging science has begun to focus on another healing element found in the fibrous shell or husk of the flaxseed. These phytochemicals have been isolated and it has been found that after ingestion, they have special cancer –fighting and preventative compounds called mammalian lignans.

Lignans help fight cancer

Lignans are a type of plant compound known as polyphenols (micronutrients found in plants) and are most abundant in flaxseeds, although they’re also found in other seeds (like sesame seeds), berries, fruits, vegetables and whole grains. When you consume lignan precursors, bacteria in your gut convert the “plant” lignans into “human” lignans, including enterodiol (END) and enterolactone (ENL), which have weak estrogenic activity.

This can be beneficial for women’s health, because if you have naturally high estrogen levels, the weak “estrogens” from lignans may bind to some of your estrogen receptor sites, thereby actually reducing total estrogen activity. On the other hand, if your estrogen levels are low, lignans may help to supplement your levels to promote a more optimal balance. Its effect on hormonal balance is just one way these plant compounds may benefit your health.

The anti-estrogenic effects of lignans (i.e. their ability to block the effects of estrogen in some tissues) could potentially help reduce the risk of hormone-associated cancers – breast, uterine, ovarian, and prostate. According to a review published in *Critical Reviews in Clinical Laboratory Sciences*: “Experimental evidence in animals has

shown clear anticarcinogenic effects of flaxseed or pure lignans in many types of cancer.”

There is also research suggesting that postmenopausal women who have a high intake of dietary lignans have a 15 percent lower risk of breast cancer compared to those with a low intake. Analysis of 21 studies similarly found high lignan exposure may be associated with a reduced breast cancer risk in postmenopausal women, and a study of thousands of Canadian women also revealed lignan-rich flaxseed intake is associated with a reduction in breast cancer risk.

Risk reduction for certain cancers

Could taking flaxseed each day keep breast and prostate cancer away? It has been found that if you consumed flax seed or flaxseed oil for no other reason than cancer prevention you would be doing a wonderful thing for your health. In particular, flaxseed holds a special role in prevention of pancreatic, colon, breast and prostate cancers as well as prevention and spread of melanoma.

While consuming the correct fats prevents cancers, it must be stated that studies show that the absence of margarine, a dangerous source of trans fatty acids is important, researchers have found a high incidence of breast cancers in rodents fed a diet high in margarine. (As an aside, someone reported placing pieces of butter and margarine out in nature. The butter disappeared as it was food to insects, ants, and the many microorganisms found in nature. The margarine remained untouched for months. All nature knows it is not a good food)

Three of the lignans found in flaxseeds can be converted by intestinal bacteria into ENL and END. These have direct effects on our hormonal balance and in this way may play an especially important role in hormone-related cancer. The relationship between flaxseed intake and cancer risk is complicated, furthermore, by the important and variable role of gut bacteria in converting the lignans in flax into ENL and END. This conversion process involves many different enzyme-related steps provided by a complicated mix of gut bacteria.

The link between cancer and nutrition is becoming increasingly irrefutable as more and more research studies link a bad diet with virtually every type of cancer. If people made simple dietary changes, scientists estimate that there would be at least a 60-70 percent decrease in breast, colon, and prostate cancers, as well as a 40-50 percent decrease in lung cancer.

Flaxseed, also known as linseed, is an ideal source of dietary fibre, omega-3 fat, and lignan. Actually, it is the richest source of lignan on earth. It has lignan levels that are 100-800 times higher than any other plant source. Lignan has been shown in many studies to reduce the size of cancerous tumors in rats and mice, and has been used with success in treating both breast and prostate cancer in humans. That means flaxseeds are more potent than virtually any other plant source when preventing and fighting cancer.

Lignan content of food

- micrograms per 100g

Lignan food sources	Lignan content
Oil seeds and nuts	
Flaxseed	301,129
Sesame seed	39,348
Sunflower seed	891
Cashew	629
Peanut	94
Poppy seed	10
Breads and grains	
Whole grain flaxseed bread	12,474
Multi-grain bread	6744
Rye bread, dark	320
Rye bread, light	301
Wheat bread, whole grain	121
Wheat bread, refined	83
Wheat bread, white	18
Currant/raisin bread	104
Wheat, wholemeal	210
Wheat, white flour	27
Rice, whole grain, boiled	40
Rice, white, boiled	7
Macaroni, white, boiled	15

Other examples of flaxseed being effective in treating and preventing cancer include:

- Mice that were fed flaxseed with high properties of lignan not only shrank their cancerous tumors, but their offspring became less susceptible to carcinogenesis even when they didn't consume any flaxseed themselves.
- In one study, lignan was extracted and added to the diet of mice that had been previously given a chemical carcinogen to cause cancer. All of mice that were treated with this extraction reduced the size of their tumors by 46%.
- Women reduced risk of estrogen-related cancers.
- Reduced risk of metastasis of cancerous tumours.
- Reduced hot flashes.
- Reduced bloating.
- Reduced breast tenderness.
- Regulated menstrual cycle
- Improved nail strength.
- Improved skin texture and appearance.
- Improved hair sheen and appearance
- Lack craving for fat-laden junk foods.
- Helped significantly men with prostate cancer when taking 30 grams of flaxseed

per day.

- Significantly reduced the tumor growth rate for mice with human breast cancer cells.
- Omaha researchers found that mice receiving 10% flaxseed supplementation were able to reduce melanoma tumors by as much as 63%.

The research supports the idea that flaxseed, particularly flaxseed with high quantities of lignan is beneficial for not only preventing cancer, but treating it when it occurs. One important thing to note is to make sure that you get flaxseed with high properties of lignan. Sometimes when flaxseed oil is pressed, the lignan is removed, so be careful of this when adding flaxseed to your diet.

Cardiovascular benefits

The primary omega-3 fatty acid in flaxseeds—alpha-linolenic acid, or ALA—can be helpful to the cardiovascular system in and of itself. As the building block for other molecules that help prevent excessive inflammation, ALA can help protect the blood vessels from inflammatory damage. Numerous studies have shown the ability of dietary flaxseeds to increase our blood levels of ALA, even when those flaxseeds have been ground and incorporated into baked goods like breads or muffins. The ALA in flaxseed has found to be stable for at least 3 hours of cooking at oven temperatures (approximately 300F/150C), which makes it available after ground flaxseeds have been added to baked goods like muffins or breads. When flaxseeds are consumed, two other omega-3 fatty acids have also been shown to increase in the bloodstream to help provide inflammatory protection.

In an experimental study the life span of rodents that suffered high blood pressure and a propensity for strokes was increased by 17% when given a diet rich in ALA. Their systolic blood pressure was lowered by 20% and their blood platelets were less sticky and less prone to form a stroke causing clot.

Protection of our blood vessels from inflammatory damage can also be provided by the lignans in flaxseeds. These lignans can inhibit formation of platelet activating factor, which increases risk of inflammation when produced in excessive amounts. The overall anti-inflammatory benefits of ALA and lignans in flaxseeds has been further corroborated by studies in which flaxseed-enriched baked goods (like muffins) lead to decreases of 10-15% in C-reactive protein levels. These levels are a commonly used indicator of inflammatory status in the whole body.

Risk of oxidative stress in the blood vessels can also be lowered by flaxseed intake. In addition to being a very good source of the mineral antioxidant manganese, polyphen-

nols in flaxseed provide measurable antioxidant benefits. Decreased lipid peroxidation and decreased presence of reactive oxygen species in the bloodstream have both been associated with flaxseed intake in amounts of approximately 2 tablespoons per day.

Intake of flaxseeds has also been shown to decrease the ratio of LDL-to-HDL cholesterol in several human studies and to increase the level of apolipoprotein A1, which is the major protein found in HDL cholesterol (the “good” cholesterol). This HDL-related benefit may be partly due to the simple fibre content of flaxseeds, since 2 tablespoons of ground flaxseed provide about 4 grams of dietary fibre.

Although direct studies on flaxseed and blood pressure are limited (and mostly confined to flaxseed oil versus ground flaxseed), numerous studies have shown the ability of increased omega-3 fatty acid intake to help regulate blood pressure and to help reduce blood pressure in persons who have been diagnosed with hypertension. With its excellent content of the omega-3 fatty acid alpha-linolenic acid (ALA), flaxseed can help us increase our overall omega-3 intake and, by doing so, at least potentially decrease our risk of high blood pressure.

Antioxidant and anti-inflammatory benefits

It is important to realize that the antioxidant and anti-inflammatory benefits of flaxseed do not apply only to the cardiovascular system. Both oxidative stress and excessive inflammation are often related to deficient intake of antioxidant nutrients and are common risk factors for a wide variety of health problems. These problems include development of insulin resistance, type 2 diabetes, asthma, obesity, and metabolic syndrome. There is preliminary evidence that either whole flaxseed intake or its constituents can decrease risk of all the problems above by increasing our anti-inflammatory and antioxidant protection.

When we think about antioxidant-rich foods, the first foods that come to mind are typically vegetables and fruits. Yet according to recent research, flaxseeds also belong high up on our list of antioxidant-rich foods. When flaxseeds are compared with other commonly eaten foods in terms of their total polyphenol content (polyphenols are one very important group of antioxidants), flaxseeds rank 9th among 100 commonly eaten foods. Flaxseeds turn out to be significantly higher in polyphenol antioxidants than fruits like blueberries or vegetables like olives. The antioxidant benefits of flaxseeds have long been associated with prevention of cardiovascular

diseases and have recently also been tied to decreased insulin resistance.

Diabetics

Diabetes is a chronic disorder involving carbohydrate, fat and protein metabolism, and characterized by high levels of sugar in the blood and subsequently the urine. Syndrome X is the name that doctors have applied to the symptoms that lead to full onset of adult diabetes. Flax oil can help to stop syndrome X before it becomes full-fledged adult-onset diabetes. There is now real hope that omega-3 fatty acids like those found in flax can have an extremely positive influence on the health of diabetics.

A report from the Annals of the New York Academy of Sciences shows that diets high in omega-6 fatty acids produce insulin resistance. However supplementing with omega-3 fatty acids as found in flax restores insulin sensitivity, even though the diet remains high in other fats. A second study showed that diets rich in omega-6 fatty acids induce far greater weight gain than those diets that emphasize omega-3 fatty acids. In this study, all groups ate the equivalent amount of calories and grams of fat, but the difference between a soy-bean oil diet and one rich in omega-3 fatty acids was the difference in weight between a 225 and a 150 pound man (102 and 68 kg).

It was also discovered that people with low levels of omega-3 and high levels of omega-6 were more likely to be insulin resistant and obese. And as the imbalance became more magnified, so did their weight and metabolic problems.

Support for digestive health

Benefits of flaxseed for the digestive tract – although mentioned earlier – are worth repeating here. The strong fibre content of flaxseeds – including their mucilaginous fibre all help to delay gastric emptying and can improve intestinal absorption of nutrients. Flaxseed also help to steady the passage of food through our intestines. This means that we don’t feel as hungry after eating flax rich food, it has a satiety level. Plus we find our bowels work much better. Finally, the lignans in flaxseed have been of interest to researchers for their potential to reduce cellular changes that could increase risk of colon cancer. This impressive group of digestive tract benefits is likely to receive more attention in future research studies.

Menopausal Symptoms

In women who consume flaxseed oil, studies have shown significant hormonal changes and decreased estradiol levels –

alterations similar to those seen with soy isoflavones. Some women may not gain as many benefits as others, but there continues to be strong interest in flaxseeds and their components as potential aids during management of perimenopausal and postmenopausal symptoms as well as during hormone replacement therapy (HRT).

Many women experiencing early signs of menopause or who have premenstrual syndrome symptoms will benefit tremendously from flax therapy. This is often because women in their twenties, thirties and forties need the primary nutrients of essential fatty acids and natural phytohormones that are lacking in their diets.

A small study showed that twenty-one women who consumed 40 grams of ground flaxseed daily had a significant decrease in the frequency and severity of their hot flashes. The women’s hot flashes were scored over a period of six weeks, and those who took the flaxseed showed a 50% decrease in the frequency of flashes, and a 57% decrease in their “flash score” overall, resulting in major improvements in their quality of life. Participants in the study even noticed improvements in their mood and in joint and muscle pain. 40 grams of ground flaxseed is about 4 tablespoons and contains about 8 grams of fibre.

Another study of 140 menopausal women showed that after three months of consuming five grams of flax per day had significantly fewer and less intense menopausal syndrome symptoms and matched HRT in reducing menopausal symptoms.

Healing mood disorders

There isn’t a person living today whose mood and psychological well-being won’t benefit from omega-3 fatty acids. In some of the most amazing research done today, scientists have discovered that the type of fat one consumes is inextricably linked with your state of mind. Anyone suffering from depression, alcoholism, attention deficit disorder, impulsive and violent behaviour or emotional hostility can benefit from taking omega-3 fatty acids into their diet.

The brain is comprised of 77% water and 10-12% lipids. However this is not the type of fat that is found in the abdomen, thighs or buttocks, this is structural fat that forms cell membranes and governs cellular functions. What’s more, the nerve cells in the brain contain five times more omega-3 fatty acids than red blood cells. It has been found that many people with mood disorders have been starved of this essential fat.

In clinical trials in 44 patients with mental

disorders, it has been found that within two hours of providing two to six tablespoons a day of flaxseed oil, their mood improved and their depression lifted. Added benefits included sleeping better and they were more energetic.

Other studies showed that youth with bipolar disorders and also major depression experienced dramatic improvements with omega-3 supplements. Anger management, aggressive tendencies and even epilepsy also have benefits by supplementation. And if pregnant mothers are given EFAs, the mother's mood improved, the babies had less ADHD, and the children had improved learning, memory and improved attention span when learning. You don't have to be bipolar or depressed to gain the benefits and improve mental health. It seems that omega-3 supplementation will benefit everyone to have better brain function and memory.

Male health

Researchers have found out over the years that deficient in omega-3 fatty acids in sperm cells is one of the biomarkers for impaired male infertility. Supplementation with ALA significantly enhanced semen fertility at 39 weeks. A Belgium study demonstrated similar benefits. The ALA was able to pass through the blood-testes barrier and corrected the deficiency of EFA in sub-fertile men. But fish oil did not achieve a similar result as flax oil.

One study published in 2013 followed 147 men who added flaxseeds into the diet. This study found that the men who had the highest levels of flaxseed nutrients excreted in their urine—an indication of eating and absorbing the nutrients found in flaxseed—had the lowest levels of prostate tumour proliferation. Proliferation refers to how quickly tumor cells are growing and reproducing. Less proliferation is better.

Asthma

Research over the past decade has revealed the connection between the inflammation of the airways and asthma. Asthma is associated with the excess production of pro-inflammatory metabolites, leukotrienes which are secreted as a reaction to environmental allergens. The way to counter this is to enhance the intake of omega-3 fatty acids. Supplementing the asthmatic's diet with one or two tablespoons of flaxseed daily can help provide the foundation to success.

Arthritis

Prostaglandins are natural chemicals in the body with hormone-like qualities. They

affect reproductive processes and are also thought to play a major role in promoting and resolving inflammation in the body. If too much of the omega-6 fatty acid called arachidonic acid is located on the cells membranes, enzymes will convert arachidonic acid into pro-inflammatory prostaglandins. Yet non-inflammatory prostaglandins are produced from omega-3 are introduced, the symptoms of arthritis lessen.

Kidney disease

At the University of Manitoba, Winnipeg, Canada, researchers undertook a study to determine if flaxseed would modify the clinical course and renal pathology in experimentally induced polycystic disease. Flaxseed-fed animals had lower serum creatinine, less cystic change, less renal fibrosis, less macrophage infiltration of the renal interstitium than controls in rats.

In 2001 a clinical trial was conducted to determine whether the kidney-protective effects of ground flaxseed seen in experimental animals would extend to patients with lupus nephritis. The nine compliant patients had lower serum creatinine and microalbumin levels than the seventeen patients who refused to participate.

The missing nutrient

Many vegetarians and vegans are very careful with their diets but are still not experiencing good health. Remember, a diet high in omega-6 but devoid of omega-3 fatty acids causes a disproportionate amount of omega-6 fatty acids to accumulate in both animal and human tissues. This is the foundation for modern degenerative diseases. The important things to remember, is balance

Omega-3 deficiency conditions

Aching, painful joints and muscles
Acne
Allergies
Alzheimer's
Angina
Anovulatory menstrual cycles (no ovulation)
Atherosclerosis
Autoimmune disease
Behavioural disorders
Breast cysts
Breast pain
Cancer and its metastasis
Chest pains
Chronic viral, bacterial, and fungal infections
Cracked nails
Depression
Dry hair and skin
Dry mucus membranes in the mouth, vagina, and other organs

Eczema, psoriasis and other skin conditions
Fatigue, malaise, lackluster energy, lack of endurance
Forgetfulness
Frequent colds and influenza
Heart disease
High blood pressure
High cholesterol levels
Hyperactivity
Immune deficiencies
Inability to concentrate
Indigestion, gas bloating
Inflammatory bowel disease
Inflammatory conditions
Lack of motivation
Learning disabilities
Leukemia
Lupus
Malaria
Malnutrition
Manic depression
Menopausal symptoms
Multiple sclerosis
Neurological disease
Obesity
Osteoporosis
Post partum depression
Premature wrinkling of the skin
Psoriasis
Schizophrenia
Stroke

How to use flax

Flaxseed is the richest dietary source of lignans and crushing the seeds may improve lignans bioavailability. However, because flaxseeds are highly perishable and turn rancid rapidly, you should buy organic whole seeds, and grind them yourself just prior to use (avoid pre-ground versions). Flaxseed oil does not typically contain lignans. You can also use it in smoothies or cooking.

Take 3 to 4 tablespoons of flaxseed daily to benefit from the fibre and omega-3 fatty acids. While there are no reports of flaxseed overdosing, you may experience excess gas and bloating if you eat large servings of the meal because of its fibre and fat content.

A one tablespoon serving of ground flaxseed contains 37 calories and 3 grams of fat. It also provides 2 grams of fibre and 1 gram of protein. In a serving, you get 1,597 milligrams of omega-3 fatty acids. Flaxseed is also a source of magnesium, potassium, calcium, phosphorus and several B vitamins.

Storage

You can grind whole flaxseeds yourself in a coffee or spice grinder. Some food and bullet processors may also grind them. Already ground flaxseed meal is also available to purchase, but it is recommended to avoid this. Because it is highly perishable,

grinding makes the nutrients vulnerable to degradation and they oxidize within 20 minutes of grinding. It is best to grind the seeds just before you consume them. If you grind too much and want to keep it, store in the freezer to keep it as fresh and pure as possible.

Flaxseed oil

Flaxseed oil has many uses. It can easily be switched with other types of oils in salads, sauces, and in a variety of recipes. It can also be added to a shake or smoothie. But it should not be used in cooking. When it is exposed to heat, it can form harmful chemicals. Moreover, it should be stored in a way that protects it from heat, i.e. a refrigerator. This is also important to remember when purchasing it and taking it home. Plus, flax oil has a short life even if stored correctly.

Fresh ground flaxseed has a mild, nutty flavor, whereas rancid flaxseed is marked by bitterness and a sharp, unpleasant aftertaste. Air, heat and light are the main agents of fat oxidation. This means flaxseed left on your kitchen counter in a loosely closed, clear plastic bag will oxidize and go rancid faster than the kind stored in a tightly sealed, non-transparent container that's kept cold (preferably frozen). Because it's possible to grow accustomed to the off flavor of oxidized fats, however, you also should smell flaxseed to assess its freshness. Spoiled flaxseed -- whether whole, ground or in the form of oil -- is typically described as smelling like oil paint or a box of crayons. Any flaxseed products tinged with such odors are past their prime and should be discarded.

In addition to using in food, flaxseed oil can be applied to skin or added to a favorite skin cream to increase moisture in the skin and improve skin health. Moreover, it can be applied to hair to promote shine and growth. Flaxseed oil is also available as a dietary supplement capsule. Dosage will depend on the product.

Who Should Avoid Flaxseeds?

Flaxseed oil is usually safe for most adults when taken by mouth correctly and in the short-term. Large doses can cause diarrhea and loose stools. Allergic reactions are also possible. If you are on medication you will need to check if it is compatible with flaxseed. My research indicates that most people will be benefitted by adding flax to their daily diet, but please check for yourself if in doubt.

The Healing Power of Flax by Herb Joiner-Bey ND
<https://www.healthline.com/nutrition/3-types-of-omega-3>
The Lost Art of Thinking by Neil Nedley MD

Drawing power of flax

using flax as a remedy

Flax seed can be used not just as food, but it is also a remedy. There are records of people in the Middle East make a simple poultice by combining one quarter part ginger root powder with three quarters part of ground flax seed and just adding enough hot water or hot herb tea to make a paste. This mixture was then applied directly to the skin and left there for some time (between 6-8 hours) in order to draw out any pus-filled matter close to the surface. This remedy is wonderful for boils, abscesses and carbuncles provided they have first been lanced with a sewing needle that has been sterilized. It works well for any runny sores or open wounds.

Another way to use flax is soothing and heal irritated tissue. However, this mucilaginous plant has amazing drawing power as it dries. It works better as a poultice than other herbs to pull out broken glass embedded in the skin. Flax rates right up there with clay for drawing out all manner of thorns, splinters or other small items that are stuck in or under the skin. You mix a little water with the flax (ground is best) to make a paste. Mixing just enough to cover the area that needs the poultice, you then apply it over the area with a bandage to hold it in place. When it dries you remove it and apply another poultice, repeating the process as often as necessary to pull the item out. Often it takes just a couple applications unless the item is deep or it is a glass splinter. Glass is usually harder to remove than wood or even metal splinters. In these cases you need to be more persistent.

One or two teaspoons of seeds mixed with water can treat constipation.

A loose poultice of the seeds (you get a better result with ground seeds, but if unable to grind seeds, use whole. Simmer these lightly in water to make a gel like substance. This can be used for chest troubles and diseases like pneumonia, bronchitis and pleurisy.

Another report of a very strong drawing poultice is modifying the amount to triple the amount of flax seed, adding a pinch of cayenne pepper, then moistening it with hot comfrey root tea. This has tremendous power.

Some years ago a man was in rural India where he was stung by a hornet on the foot. An elderly Indian woman attended to his

injury. She soaked his foot in cold water which brought great relief. Next she took three level tablespoons flaxseed powder and mixed it with one tablespoon of ground turmeric powder. She then moistened it with hot lemon juice. The paste was spread over the afflicted area and left there to cool for a few hours, while the foot was rested on a small wooden stool for a few hours. After the dried poultice was washed away, his foot felt better. This is the same treatment for insect bites and stings.

Boiled flaxseed tea

A marvellous tea works incredible healing wonders for lung and throat problems where there is an accumulation of unwanted mucus or inflammation or both. Hacking coughs also benefits from this treatment. Bring 500 mls to the boil and add two teaspoons of flax seed, reduce the heat and permit to simmer, uncovered, for about 7 minutes, stirring occasionally. Then take cover with a lid and allow to steep for another 35 minutes. Strain and drink while still warm. The addition of one teaspoon of lemon or lime juice seems to make this tea more effective. It can be sweetened with a little blackstrap molasses or maple syrup.

Another man complained of a strained back. Later he complained of a severe pain in the lower back which radiated out across the buttocks and down the backs of his thighs and calves. His wife made the flax tea and he had to take one cup of this warm tea every 3-4 hours on an empty stomach. The strained linseeds were placed in a muslin bag and applied, as hot as her husband could bear it, to the lower portion of his back where the pain was the greatest. The poultices were covered with a bath towel to keep in the heat. By next morning his pain was gone. Sometimes if you add a small amount of mustard powder to the flaxseed powder it improves the therapeutic benefits. But a word of caution here. Mustard plasters can actually burn the skin, so start with a small amount at first e.g. ¼ teaspoon mustard powder to 2 teaspoons flax seeds. Some people will be more sensitive than others, so check frequently to make sure it doesn't sting or burn the skin. Remove promptly if this happens. Another trick is to rub oil over the skin prior to applying poultice. If you feel you require more mustard powder, add a little more next poultice. You will get to know how much you need, but be cautious at first.

Spiritual

How Christ Ministered... part 21

The restoration and uplifting of humanity begins in the home. The work of parents underlies every other. Society is composed of families, and is what the heads of families make it. Out of the heart are "the issues of life" (Proverbs 4:23); and the heart of the community, of the church, and of the nation is the household. The well-being of society, the success of the church, the prosperity of the nation, depend upon home influences.

The importance and the opportunities of the home life are illustrated in the life of Jesus. He who came from heaven to be our example and teacher spent thirty years as a member of the household at Nazareth. Concerning these years the Bible record is very brief. No mighty miracles attracted the attention of the multitude. No eager throngs followed His steps or listened to His words. Yet during all these years He was fulfilling His divine mission. He lived as one of us, sharing the home life, submitting to its discipline, performing its duties, bearing its burdens. In the sheltering care of a humble home, participating in the experiences of our common lot, He "increased in wisdom and stature, and in favor with God and man." Luke 2:52.

During all these secluded years His life flowed out in currents of sympathy and helpfulness. His unselfishness and patient endurance, His courage and faithfulness, His resistance of temptation, His unfailing peace and quiet joyfulness, were a constant inspiration. He brought a pure, sweet atmosphere into the home, and His life was as leaven working amidst the elements of society. None said that He had wrought a miracle; yet virtue--the healing, life-giving power of love--went out from Him to the tempted, the sick, and the disheartened. In an unobtrusive way, from His very childhood, He ministered to others, and because of this, when He began His public ministry, many heard Him gladly.

The Saviour's early years are more than an example to the youth. They are a lesson, and should be an encouragement, to every parent. The circle of family and neighborhood duties is the very first field of effort for those who would work for the uplifting of their fellow men. There is no more important field of effort than that committed to the founders and guardians of the home. No work entrusted to human beings involves greater or more far-reaching results than does the work of fathers and mothers.

It is by the youth and children of today that the future of society is to be determined, and what these youth and children shall be depends upon the home. To the lack of right

home training may be traced the larger share of the disease and misery and crime that curse humanity. If the home life were pure and true, if the children who went forth from its care were prepared to meet life's responsibilities and dangers, what a change would be seen in the world!

Great efforts are put forth, time and money and labor almost without limit are expended, in enterprises and institutions for reforming the victims of evil habits. And even these efforts are inadequate to meet the great necessity. Yet how small is the result! How few are permanently reclaimed!

Multitudes long for a better life, but they lack courage and resolution to break away from the power of habit. They shrink from the effort and struggle and sacrifice demanded, and their lives are wrecked and ruined. Thus even men of the brightest minds, men of high aspirations and noble powers, otherwise fitted by nature and education to fill positions of trust and responsibility, are degraded and lost for this life and for the life to come.

For those who do reform, how bitter the struggle to regain their manhood! And all their life long, in a shattered constitution, a wavering will, impaired intellect, and weakened soul power, many reap the harvest of their evil sowing. How much more might be accomplished if the evil were dealt with at the beginning!

This work rests, in a great degree, with parents. In the efforts put forth to stay the progress of intemperance and of other evils that are eating like a cancer in the social body, if more attention were given to teaching parents how to form the habits and character of their children, a hundredfold more good would result. Habit, which is so terrible a force for evil, it is in their power to make a force for good. They have to do with the stream at its source, and it rests with them to direct it rightly.

Parents may lay for their children the foundation for a healthy, happy life. They may send them forth from their homes with moral stamina to resist temptation, and courage and strength to wrestle successfully with life's problems. They may inspire in them the purpose and develop the power to make their lives an honor to God and a blessing to the world. They may make straight paths for their feet, through sunshine and shadow, to the glorious heights above.

The mission of the home extends beyond its own members. The Christian home is to be an object lesson, illustrating the excellence

of the true principles of life. Such an illustration will be a power for good in the world. Far more powerful than any sermon that can be preached is the influence of a true home upon human hearts and lives. As the youth go out from such a home, the lessons they have learned are imparted. Nobler principles of life are introduced into other households, and an uplifting influence works in the community.

There are many others to whom we might make our homes a blessing. Our social entertainments should not be governed by the dictates of worldly custom, but by the Spirit of Christ and the teaching of His word. The Israelites, in all their festivities, included the poor, the stranger, and the Levite, who was both the assistant of the priest in the sanctuary, and a religious teacher and missionary. These were regarded as the guests of the people, to share their hospitality on all occasions of social and religious rejoicing, and to be tenderly cared for in sickness or in need. It is such as these whom we should make welcome to our homes.

These are guests whom it will lay on you no great burden to receive. You will not need to provide for them elaborate or expensive entertainment. You will need to make no effort at display. The warmth of a genial welcome, a place at your fireside, a seat at your home table, the privilege of sharing the blessing of the hour of prayer, would to many of these be like a glimpse of heaven.

There are precious opportunities for those who will make their homes a blessing to others. Social influence is a wonderful power. We can use it if we will as a means of helping those about us. Our homes should be a place of refuge for the tempted youth. Many there are who stand at the parting of the ways. Every influence, every impression, is determining the choice that shapes their destiny both here and hereafter. Evil invites them. Its resorts are made bright and attractive. They have a welcome for every comer. All about us are youth who have no home, and many whose homes have no helpful, uplifting power, and the youth drift into evil. They are going down to ruin within the very shadow of our own doors.

These youth need a hand stretched out to them in sympathy. Kind words simply spoken, little attentions simply bestowed, will sweep away the clouds of temptation which gather over the soul. The true expression of heaven-born sympathy has power to open the door of hearts that need the fragrance of Christlike words, and the simple, delicate touch of the spirit of Christ's love. If we would show an interest in the youth, invite them to our homes, and surround them with cheering, helpful influences, there are many who would gladly turn their steps into the upward path.

Edited from Ministry of Healing ch 27 EG White

Who is in Control?

Part 17 of a series

One reason behind the World Wildlife Decline

Have you ever wondered why we have such a problem with garden pests when trying to grow vegetables and fruit? Could it be that the balance of nature is completely changing, that natural predators are no longer around? Have you ever noticed the decline in birds and insects? Some of us can remember years back to very large flocks of birds flying overhead. Where are they now?

In 2014 it was published that half of the planet's wild animals had been wiped out in the last 40 years. Yet in 2018, according to World Wildlife Fund's (WWF) Living Planet Report, it was changed to a 60% decline in the size of populations of mammals, birds, fish, reptiles, and amphibians in just over 40 years. In freshwater habitats, where drug residues are most commonly found, the researchers found 75% of fish and amphibians had been lost. The report presents a sobering picture of the impact human activity has on the world's wildlife, forests, oceans, rivers, and climate. The Earth is estimated to have lost about half of its shallow water corals in the past 30 years. Dead zones in oceans, blue green algae in lakes are now being reported. It is obvious that many chemicals and herbicides contribute to this, but we shall here look at one specific problem – pharmaceuticals flushed into the environment via human and animal sewage.

In 2012, samples of water were taken across Germany, from the Elbe River, the North Sea, drainage streams from wastewater treatment plants, and drinking water straight from municipal taps. Each sample was tested for the most widely prescribed antidiabetic drug in the world—metformin, which treats high blood sugar by suppressing glucose production in the liver. Humans do not metabolize the drug, so within 24 hours of being swallowed, metformin is excreted from the body essentially unchanged.

It's not surprising that metformin was present in every water sample, including tap water, at concentrations exceeding environmental safety levels. When publishing the results in 2014, the authors concluded that the drug is likely "distributed over a large fraction of the world's potable (drinking) water sources and oceans."

That may be right, but the problem is not limited to metformin. Researchers also found concentrations of pharmaceuticals

in Lake Michigan, where researchers had speculated that any drugs that were present would be highly dilute and not detectable. They found evidence of 32 pharmaceuticals and personal care products in the water and 30 in the lake's sediment. Fourteen of these were measured at concentrations considered to be of medium or high risk to the ecosystem.

Ecologists have long recognized that pharmaceuticals are polluting the environment, but researchers have traditionally focused on just two classes: antibiotics and endocrine-disrupting compounds such as the birth control hormone estradiol. Antibiotics in the environment promote antibiotic resistance in a range of bacterial species, and endocrine disruptors are known to affect development and reproduction in animals.

Metformin was not thought to have either of those effects on animals or fish. But in lab experiments conducted, scientists discovered that male minnows exposed to metformin at concentrations comparable to those of wastewater treatment plants, produce proteins typically found only in female fish, develop feminized gonads, weigh less, and have fewer offspring. The antidiabetic is now one of a growing list of drugs that researchers are realizing pose major ecological problems.

Sewage treatment plants remove some pharmaceuticals from water during basic filtering processes, but many pass through unhindered. Metformin, for example, is stable against common water treatments such as UV light irradiation. And at this point, it is prohibitively expensive to add technologies that can filter out these chemicals.

From sewage plants and landfills, drugs make their way into streams, rivers, lakes, seawater, and even into drinking water. Currently, however, the Environmental Protection Agency (EPA) does not regulate even a single human pharmaceutical in drinking water. An EPA list of pollutants that may make water unsafe, but are not regulated, includes eight hormones and one antibiotic. Metformin is not on the list. There is no legislation that protects our ecosystems at the moment and there are also no regulations for pharmaceuticals in water.

Pharmaceuticals are designed to maintain their strength and quality from manufac-

turer to pharmacy to medicine cabinet, and even sometimes inside the human body. That same stability, unfortunately, prevents many pharmaceuticals from degrading in the environment. Researchers in Sweden have measured concentrations of the anti-anxiety drug oxazepam in sediment cores from the same lake bed deposited over three decades. They measured concentrations in core samples extracted 30 years ago, they found that the older cores and more-recent samples had the same drug levels at the same time depths. Oxazepam hadn't degraded at all over time.

To make matters worse, pharmaceuticals are hard to detect and measure in the environment. Detection methods are improving, however. Early methods used by the US Geological Survey required one litre of water and could identify 15 to 20 compounds, while the latest method measures more than 100 drugs in just a 20-milliliter sample. But searching for individual agents isn't enough. Our modern environment contains a swirling mixture of pharmaceuticals, pesticides, industrial by-products, and a plethora of other chemicals.

And within this chemical concoction, drugs interact with one another, with bacteria, and with basic environmental elements such as water. Chemical and biological reactions can result in a host of new chemicals with new properties. Such metabolites can sometimes be more toxic than their parent compounds.

One drug tested was selective serotonin re-uptake inhibitor (Zoloft), commonly prescribed for depression and anxiety disorders. These chemicals are psychotropic and affect cognition, mood, and behaviour, and they have been shown to affect behavior in aquatic organisms, making them more active, less social, and faster feeders.

Other research has shown how widespread the ecological effects of pharmaceutical pollutants can be. Every summer from 2001 to 2003, researchers in Canada poured a small amount of a synthetic estrogen used in many birth control pills, into an experimental lake in northwestern Ontario. They then measured the effects of the hormone on a diversity of aquatic wildlife, including algae, microbes, zooplankton, minnows, trout, and other fish. Over the course of the experiment—the researchers collected data through 2005—the fathead minnow population in the lake nearly crashed due to reproductive failure. There was a decline in males, and then a decline in fish populations. The males were more feminized and then the fish population crashed. The lake trout and white suckers that relied on the minnows for food also suffered, declining

continued on p10

Products for Sale

- Licorice Root Powder** 200g.....\$12
Licorice root is used to rebuild Adrenal Glands. Suggested maximum daily dose is 1½ tspns
- Maca Root Powder** 200g.....\$17
A great price for this superfood. Great for a diverse range of conditions. Especially good HRT alternative, menopause, PMS, Anemia, Thyroid deficiency, osteoporosis, fertility and increased energy. Organically grown.
- Blood Cleansing Herbal Tea** 200g.....\$13
Contains Buckthorn, Licorice Root, Burdock, Chaparral, Red Clover, Cascara Sagrada, Dandelion, Cat's Claw. Use it long term to help cleanse bowel, liver and blood.
- Barley Leaf Powder** 200g.....\$12; 450g.....\$27; 1kg.....\$55
Loose powder, organic A powerful way to get needed nutrients including beta-carotene, anti-oxidants, proteins, carbohydrates, vitamins, minerals, enzymes and chlorophyll. Has 3 year shelf life.
- Hawthorn Berry Powder** 200g.....\$14
A great tonic for the heart and related circulatory problems. Just add powder to water or juice.
- Comfrey Root Powder** 200g.....\$14
Powdered ready to use as a poultice. Use on bruises, swellings sprains, fractures, chest complaints plus many more uses.
- Comfrey Leaf** 100g.....\$9
To use in poulticing or in oils and ointments. A great healing herb. Has lots of uses
- Afalfa Leaf Tea** 150g.....\$12
Rich in vitamins, minerals and other nutrients that strengthen and maintain health.
- Calendula Flower** 100g.....\$9
Used as a tea for inflammation, or use as a base for ointments and oils
- Cornsilk Tea** 100g.....\$8
A great way to treat bladder infections
- Cayenne Pepper** 200g\$8
Can be taken internally to stimulate circulation, stop bleeding and used as a poultice on the skin to stimulate healing. Heat rating: 60,000 Scoville Heat Units
- Turmeric Powder** 200g.....\$8
Is an antioxidant, anti-inflammatory, blood detoxifier and has many anti-cancer properties plus many more uses
- Activated Charcoal Powder** 250g.....\$25
- Calcium Bentonite Clay** 500g.....\$18 1kg.....\$30
Use internally and externally to detox, heal and draw toxins from your body
- pH papers** \$20
Check your urine or saliva with a roll of pH paper in a dispenser that will measure your saliva and urine from 5.5 to 8.0 A valuable was to check whether your body is acid or alkaline.
- Magnesium Chloride flakes** 250g.....\$7 450g.....\$12 1kg.....\$24
Ideal for baths or making magnesium oil.
- Practical Home Healing by Margaret Wright** \$20
A handbook on simple home treatments and remedies that can be successfully applied at home
- Back to Eden Vegetarian Recipe Book** \$25
Over 350 delicious Vegan Vegetarian recipes that use whole foods, nuts, seeds, grains fruits and vegetables. Recipes avoid many ingredients that are harmful to your health.
- Back to Eden Health Training Manual** \$30
This book teaches how to use God's Health Plan, use simple remedies, hydrotherapy and herbs to relieve suffering. Plus other invaluable information for a knowledge of health.. A great tool to use in learning how to become a true medical missionary.
- Entire Set of Back to Eden DVDs - 14 DVDs for \$50 or single DVD \$4 each**
7 sets of recorded DVDs for sale as an entire collection. No colour label or presentation folder. Each disc will be in an individual plastic sleeve. 7 discs cover the demonstration of healthy vegan recipes. The 7 other discs cover home remedies including poultices, simple hydrotherapy treatments, herbs, the Vegetarian advantage and the attack on our health.

Order by phoning Kaye on 02 6025 5018. Products are packaged in bags (except charcoal).
or order online www.kayesrecipesandremedies.com

Calculate postage: up to 500g costs \$9 postage: up to 3kg costs \$16 postage: up to 5kg costs \$20

Recipes

Flaxseed Wraps

- 1 cup flaxseed - golden or brown which makes 1½ cup flaxseed meal (150g)
- 1 cup water - boiled
- ½ teaspoon salt
- ½ tspn turmeric - optional
- ¼ tspn ground ginger- optional
- ¼ tspn garlic powder- optional
- ¼ tspn onion flakes- optional

Use a blender, food processor or coffee grinder to make flaxseed into a fine meal. In a saucepan, bring the water to boil. Remove from heat, stir in all the spices and salt, then add all the flaxseed meal. Stir immediately with a wooden spoon, until the meal absorbs all the water and forms a dough ball. It takes about 1-2 minutes until the dough forms. If the dough is too sticky, add more meal.

Place the dough ball onto a piece of parchment paper or silicon mat and divide into 4. Place another piece of parchment paper on top to avoid the dough to stick to the rolling pin. Roll out thinly between the paper, about 2-3 mm thick. Take off the top paper and take a round shape like a plate or saucepan lid to cut around to make a nice round wrap. These outside pieces can be also formed into a ball and used.

Place prepared wrap onto a prepared frypan. If you are not using a non-stick pan, rub some oil over the pan. Cook over medium heat for about 2 minutes until you can easily turn wrap. Cook for about 1 extra minute on the other side. Don't over-cook or the wrap will get very crispy like tortillas chips. They have to be dry but remain soft to roll.

Place the cooked wraps on a plate. Serve them cold with filling of your choice or hot - you can also rewarm them in a sandwich press with your favorite filling. Store in the fridge for 3 days, on a plate covered with a plastic wrap, to prevent them from drying out.

This makes 4-5 wraps. You can use other spices you love. It is important to grin the flaxseed freshly for these. Freeze them as regular wraps - make sure you wrap them flat. Slightly re-warm in a frying pan until warm.

Serving: 1 wrap, Calories: 338kcal, Carbohydrates: 18.5g, Protein: 11.6g, Fat: 26.6g, Fibre: 17.3g, Sugar: 1g

Concluded from p 8

in abundance due to lack of food. The minnow's prey—zooplankton and insects—subsequently flourished. Not only were there direct effects on one species, there were direct and indirect effects on multiple species within the lake. Inter-sex frogs have also recently been found in urban ponds contaminated with wastewater. But because the pharmaceuticals are not designed to kill – unlike pesticides – the damage caused to wildlife can be more subtle.

Pharmaceuticals can also accumulate as they work their way up the food chain, exposing predators to higher levels than those found in the environment. Oxazepam had no effect on damselfly behavior, it did accumulate in the insects. And when perch ate oxazepam-riddled damselfly nymphs, the fish retained an average of 46 percent of the drug from the insects. The more damselflies they ate, the more the drug accumulated in the fish. In a separate experiment, the normally shy perch that hunt in schools became considerably bolder after exposure to oxazepam, eating more quickly and leaving their schools more often.

Many of the more than 4,000 prescription medications used for human and animal health ultimately find their way into the environment. They can pollute directly from pharmaceutical manufacturing plants or from humans and animals. As these chemicals make their way into terrestrial and aquatic environments, they can affect the health and behavior of wildlife, including insects, fish, birds, and more.

An Australian study in late 2016 also found that traces of over-the-counter drugs in sewage could present a danger to local agriculture as the use of recycled wastewater for irrigation grows.

What does this mean when we water our garden with water from municipal water supplies? What is the impact of these on our future life? Only God knows. How much longer can our world last? But one thing is sure, that we have uncertain times ahead. Our environment is being poisoned little by little. Are our days numbered? Is our only hope for Jesus to return, take His people home to heaven and then recreate a new earth?

Remember, God knows everything that is happening around us and He has it in His control.

<https://www.worldwildlife.org/pages/living-planet-report-2018>
<https://www.theguardian.com/environment/2014/oct/13/drugs-flushed-into-the-environment-could-be-cause-of-wildlife-decline>
<https://www.greenfacts.org/en/pharmaceuticals-environment/index.htm>

Back to Eden health classes

This term they are to be held at
Kaye's home,
496 Hague Street.
Lavington

**For those who want to
attend classes - remember
write these dates down**

Tues April 30 at 10 am -12 noon
Tues May 21 at 10 am -12 noon

cost \$5

Occasionally dates are changed. To confirm class, phone Kaye 0260255018

Why You Should Never Microwave Your Food

Microwaving is a simple, convenient cooking option for people on the go. The microwave oven has been a mainstay in the US for 30+ years, virtually transforming society and how we view food. But despite its wonders, the question that's been avoided remains: are microwaves the healthiest cooking option? The answer is, of course, no, as there are much better options available that will ensure nutrients will remain in your food.

How Does Microwaving Work?

Before we dive into the research on the possible effects and safety of microwave ovens, let's clarify what a microwave is. A microwave is a form of non-ionizing radiation. As a matter of contrast, ionizing radiation changes the electromagnetic nature of atoms, or ionizes them. This alters the way they interact with other atoms and molecules around them. X-rays, gamma radiation, and nuclear medicine (CT scans, barium swallows, and mammograms) are types of ionizing radiation. Your food is being zapped by high-frequency waves of heat, and some people argue that this radiation can be harmful to your health.

One study by Dr. Hans Hertel explored how microwaves change the molecular structure of food and the effects of that food on the human body. In his study, he found that individuals who consumed the microwaved foods experienced a decrease in HDL cholesterol, a reduced red blood cell count, and fewer white blood cells. Unfortunately, no studies have been conducted since to replicate Dr. Hertel's findings, so it would be reaching to conclude that microwaving does indeed deteriorate health. Still, there are other cooking options that may be far better at retaining the nutritive quality of food.

The Best Cooking Options for Maintaining Nutrition

Microwaving cooks the food at very high temperatures in a very short amount of time. This results in a great deal of nutrient loss for most foods, especially vegetables. Our foods are also subjected to nutrient loss when we boil, fry, or roast our food. Boiling vegetables, for example, leaches most of the nutrients (including antioxidants) into the water. The best option for cooking vegetables that will result in only a minor loss of nutrients is steaming. Sautéing and baking at low temperatures is also a viable option that will retain more nutrients than microwaving, boiling, or frying. Of course, by making the majority of your diet raw, with some added dietary fat to help absorb the

fat-soluble vitamins (A, D, E, and K), you'll ensure a high level of nutrient intake.

Adding To the Toxic Load

When it comes specifically to microwaves, damage to the food itself isn't the only concern. Many microwavable foods are processed and in packaging that contains an assortment of chemicals. Chemicals found in many of these containers include benzene, toluene, polyethylene terephthalate (PET), xylene, and dioxins (known carcinogens). At high temperatures, it is likely that chemicals can absorb into the food, and intake of these chemicals presents a high health risk. What's more, the chemicals in the food themselves are also a cause for concern.

Perhaps one of the most dangerous contaminants in microwavable food is BPA. A watchdog report from the Milwaukee-Journal Sentinel found this estrogen-like plastic leaked from all packaging into the food tested. BPA disrupts normal hormone activity. Infertility, low-libido, cardiac disease, mental disorders, allergies, high blood pressure, and weight gain have all been linked to BPA exposure. The simple fact is, when you use a microwave, you're getting a lot more than the food you eat.

One Final Thought

Over the last 30 years, the science and research has come a long way to understand how microwaves affect proteins, antioxidants, and overall nutrient content of food. We've also learned how many toxins flood our food when zapped in the packaging. Today we shouldn't be surprised by these dangers. Instead of microwaving, stick to raw foods as the primary aspect of your diet. When you do cook, try steaming and baking as your main cooking methods.

<http://www.globalhealingcenter.com/natural-health/why-you-should-never-microwave-your-food/>

Back to Eden were to have had a series of public meetings in Lavington with **Barbara O'Neill** last February which were then postponed to May. Due to unforeseen circumstances, these will be postponed again. We are sorry this has had to happen. Hopefully we will be able to schedule her in again at a later date.