



A summary of the information presented
in this documentary viewed June 29 2016.

Prepared for you by Ann Taylor

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What's with wheat?

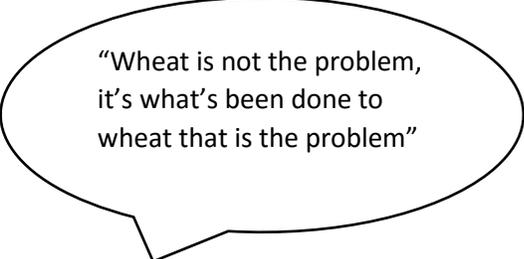
This documentary www.whatwithwheat.com.au was produced by Australian nutritionist Cyndi O'Meara (www.changinghabits.com.au) with input from her own personal and professional experience and that of 14 experts in their field in medicine, nutrition, regenerative agriculture and skin care.

I have summarized and synthesized the key issues and commentary (including quotes in thought bubbles!) from this documentary to help keep this information in our minds so that we can continue to think and take action that can help improve our health, food quality and environmental care.

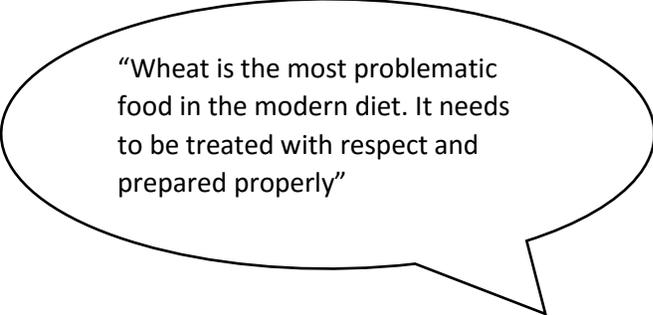
At the end of this document I have included hyperlinks to more information about the experts providing the information in this documentary. It is always important to do your own research from credible sources.

Healthily yours

Ann Taylor



"Wheat is not the problem, it's what's been done to wheat that is the problem"



"Wheat is the most problematic food in the modern diet. It needs to be treated with respect and prepared properly"

What *has* been done to wheat?

- Hybrised wheat proteins are indigestible and gluten/gliadin damages the lining of the intestine
- It is contaminated with agricultural chemicals and glyphosate (active ingredient in Roundup)
- It is processed with lots of additives
- It is no longer cultured/fermented to remove anti-nutrients and irritants naturally contained in wheat (and other grains)
- AND we're eating far too much of it!

Insidious prevalence of wheat: it is in everything: food, medications, supplements, skin care products, many household goods

And the health consequences?

- Increasing rate of coeliac disease (CD) and non-coeliac-gluten-sensitivity (ncgs)
- Link between all known autoimmune (AI) diseases and gluten
- Extreme health crisis in children.

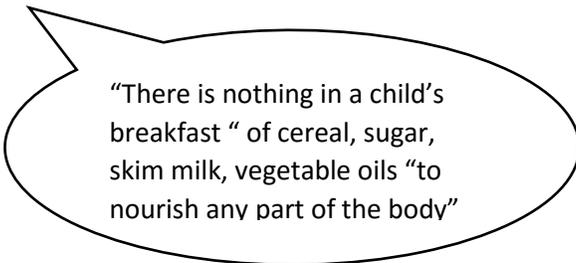
History of wheat production

Demonisation of animal foods and fat

Dr Kellogg (John Harvey Kellogg) sanatorium advocated a plant based, high fibre diet.

Breakfast cereals were developed as a shelf stable food to increased availability of calorific foods. Processing removed natural nutrient content, requiring fortification with synthetic nutrients that are produced in chemical laboratories or mined from the ground.

Ancl Keys Seven Countries Study demonized fat and cholesterol as a cause of cardiovascular disease (CVD)*, but this study omitted to include the data from 15 other countries that did not support his hypothesis. His theory motivated the thinking that fat is bad ☹ and carbs are good ☺ – and consumption of breakfast cereals soared!



“There is nothing in a child’s breakfast “ of cereal, sugar, skim milk, vegetable oils “to nourish any part of the body”

*An alternative assessment of his data suggested that it was the concurrent reduction in sugar consumption that helped reduce CVD.

Housewives in 1970’s/1980’s wre “seduced out of the kitchen” with prepared, processed foods.

Commercialization of wheat production

Norman Borlaug*, “father of the green revolution”, was responsible for developments leading to mechanization and commercialization of wheat production:

- ➔ Post WWII warfare chemicals used instead as agricultural chemicals in synthetic fertilisers
- ➔ Stimulated shift to monoculture (single crop) production, which requires more chemicals to protect unhealthy plants, less resistant to diseases and pests in the absence of integrated production
- ➔ Monoculture of grain crops displaced production of everything else (animal farming and diversified fresh food)

*FYI: Awarded Nobel Peace Prize in 1970 for a lifetime of work to feed a hungry world. More info here” (http://www.worldfoodprize.org/en/dr_norman_e_borlaug/about_norman_borlaug/)

Hybridisation of wheat

Norin wheat from Japan, a native short-straw variety, was hybridized with different varieties from the United States to breed high yielding, fertilizer responsive varieties¹. The shorter stem carried more wheat and produced less chaff (but chaff has value as bedding for livestock).

Plant YIELD was prioritised over plant (and soil) HEALTH

New varieties were easier to grow ➔ more profitable ➔ global overproduction of wheat (690 million TPA, enough for 11 billion people, in a world of about 8 billion people ➔ major vested interest in making wheat the foundation of human diets.

¹ <https://dl.sciencesocieties.org/publications/cs/abstracts/8/6/CS0080060686?access=0&view=pdf>

Result? People have become fatter and more diseased.

Introduction of dietary guidelines

Grains shifted from top of food pyramid (eat least of) to bottom of food pyramid (eat most of) because “poor people can’t afford a diet based on fruit and vegetables, meat and seafood”, and

pitched to the agricultural community as an effective way to market their product.

It was “created by politicians, protecting the interests of the wealthy”.

We’ve been “gorging ourselves on limitless availability of grains”

This was the “most perverse recommendation ever conceived”

“Not based on any nutritional science or clinical or medical observation”

Other uses of wheat and wheat byproducts

Subsidized crop = cheap ingredient → “wheat is in everything”

- Cosmetics e.g. as emulsifiers, emollients, surfactants,
- Medications
- Supplements e.g. Vitamin C = ascorbic acid made from wheat (or corn or soy)
- Additives
- Preservatives
- Flavourings
- Glucose, dextrose = wheat based sugars

“wheat is used in 80-90% of the skin care industry”

Regenerative, integrated farming versus monoculture, chemical farming and CFOs

Mixed integrated farms grow healthier plant food, more resistant to pests and disease, and containing more nutrition for the community they feed.

Animal manures are recycled to fertilise soils naturally to grow more nutritious plants

When animal and plant food production is separated:

- CFOs = concentrated feeding operations → animal manures create dead zones
- Chemically fertilized soils → create dead zones → soils and food crops deficient in vital minerals, trace elements and micronutrients

“There is no animal-less ecology”

Modern agriculture has sterilized soils → loss of soil microbiome (bacteria) that regenerates soil → rapidly increasing erosion and desertification

Chemical contamination of wheat

At least 10 applications of chemical sprays are used from sowing to harvest, including hormones

- to make them sprout
- make stalks strong
- make them come into seed at the same time
- PLUS Fumigants in the warehouse
- AND then added chemicals in food processing.

Mention made of Albert Howard in 1943: more info here <http://www.westonaprice.org/health-topics/a-history-of-organic-farming-transitions-from-sir-albert-howards-war-in-the-soil-to-the-usda-national-organic-program/>

Roundup

Widely used still in agriculture, gardens, parks, sports grounds

Active ingredient is glyphosate, which “causes a train wreck in the body” i.e. multiple different problems by destroying beneficial gut bacteria:

- digestion becomes very difficult
- our ability to access certain minerals through chelation is impaired
- our ability to utilize vitamin D is downregulated
- gut flora become unbalanced – with pathogenic bacteria outcompeting beneficial gut flora.

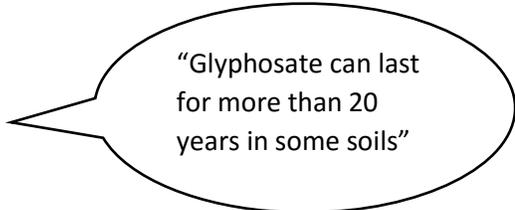
We have “10X more bacteria than human cells” (about 100 trillion bacteria in our microbiome) – and therefore should be VERY concerned about the adverse effect of glyphosate on bacteria.

Glyphosate disrupts the shikimate pathway in our bacteria – with adverse effects on our endogenous gut production of vitamins, including folate and vitamin K, and synthesis of neurotransmitters, critically important for the health of our nervous system.

More explanation here: <http://wyebrookfarm.com/an-interview-with-jeffery-smith-and-dr-stephanie-seneff-glyphosate/>

Do you use Roundup? Read this:

<http://www.abc.net.au/news/2016-02-16/councils-still-using-herbicide-that-probably-causes-cancer/7168464>



“Glyphosate can last for more than 20 years in some soils”

Glyphosate is also linked to methylation defects and may be implicated in autism:

DNA methylation is an epigenetic mechanism used by cells to control gene expression.

Methylation of DNA depends on (the amino acid) methionine, which is depleted by glyphosate. Hypomethylation (i.e. under methylation) in the brain is linked to autism.

Detrimental effects of wheat

... can be highly individual.

Accumulation over time → increasing inflammation → manifests in many different ways e.g. fatigue, joint pains, skin conditions, AI diseases, weight gain, gut disorders

Possible epigenetic changes caused by toxic chemicals

1940's plague of locusts in Iowa US → wheat and corn sprayed with arsenic (Ar) and DDT introduced by 1945.

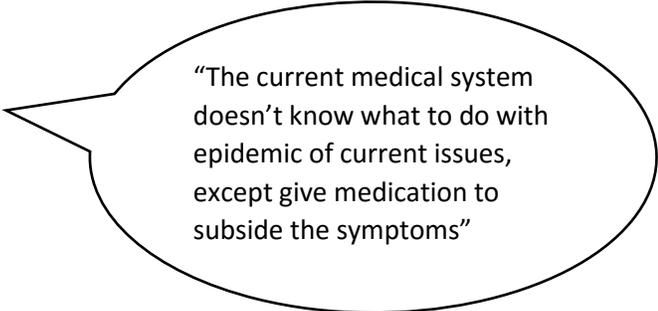
DDT now banned (read about DDT health effects here <http://www.panna.org/resources/ddt-story>)

Cyndi O'Meara's family history of hemophilia in relatives born AFTER introduction of these sprays – potential trigger for genetic changes.

The quality of our microbiome (all the microorganisms in our body) is passed on through the generations. Genetics are passed on through our microbiome.

Epidemic of chronic disease

The world has exchanged infectious disease for chronic disease, including diabetes, obesity, coronary artery disease (CAD), autism, dementia, cancer – and a myriad of other manifestations.



“The current medical system doesn't know what to do with epidemic of current issues, except give medication to subside the symptoms”

Poor families subsisting on starch diets without balanced nutrition are also developing diabetes.

“Perfect storm” for chronic illness = destruction of soil/plants + destruction of our ability to digest (wheat) + nutrient deficient diets + inflammatory compounds + neurotoxins + poor lifestyle choices (inadequate sleep, meditative calm, stress management)

Fructose malabsorption

Fructose eaten in complexed form as in whole fruits is balanced with millions of other essential food substances. Excess fructose in isolation of these balancing substances can become toxic.

Fructans in wheat is digested into fructose.

By disrupting the shikimate pathway in our gut bacteria, glyphosate suppresses the ability of these bacteria to break down fructose. Excess fructose is processed into fat by colonic bacteria producing gas (bloating and pain aka irritable bowel disease). If there is insufficient colonic bacteria to metabolise all of this fructose, the excess is reabsorbed and delivered to our livers, where it is synthesized into fat, leading to fatty liver or elevated LDL cholesterol in our blood

Benefits of bifido bacteria

“Children at high risk of CD because of genetic markers are less likely to develop CD if they have high levels of bifido bacteria”, which helps us digest grains and breaks gluten down into amino acids.

Evidence of higher levels of bifido bacteria in children eating dairy + wheat and lower bifida in children on dairy free diets.

Bifido bacteria are very sensitive, easily destroyed by

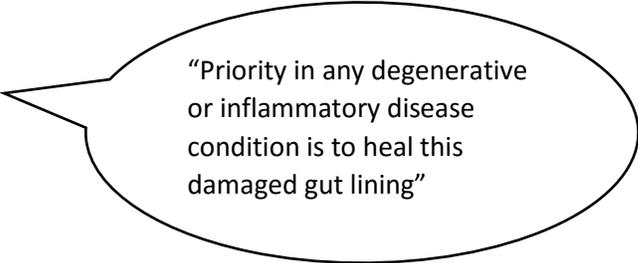
- Antibiotics
- Pasturisation

Raw milk is the best source of Bifido bacteria (Note: Cold pressed raw milk now available to buy from Harris Farm Market).

Leaky gut

Gluten divides into gliadin, which cannot be digested further into individual amino acids.

Gliadin damages the cells lining the intestine (enterocytes), causing our guts to become leaky i.e. they allow undigested proteins to get into our blood stream, where they provoke an immune response – associated with food allergies.



“Priority in any degenerative or inflammatory disease condition is to heal this damaged gut lining”

The damaged enterocytes also expose their “insides”, which includes an enzyme (which is a protein) called transglutaminase (TTG). The complex glyphosate-gliadin-TTG molecule is an allergen that our bodies don’t like, and hence make antibodies against TTG to get rid of it! However it’s difficult to be rid of. It is often deposited into

- Skin → eczema, dermatitis etc
- Our brains → white plaque → brain problems e.g. headaches, dementia
- Our guts → gut inflammation
- Joints → arthritic diseases

Symptoms of an adverse gluten response can manifest within 10-15 minutes of exposure. Hence considered to be neurologically based i.e. the whole nervous system is affected: brain, spine, nerves going to every cell in the body → symptoms can appear anywhere and people are affected differently!

Symptoms commonly presented by children with gluten intolerance:

Stomach aches – regurgitation – gastric reflux – headaches and migraines – eczema and itchy skin – chronic constipation or diarrhea – impaired growth – irritability – ADHD

Neurological consequences of ncgs

Headaches are related to gluten sensitivity

Resource: The work of Prof. Marios Hadjivassiliou who has written extensively about gluten and cognitive and mood issues, including schizophrenia (<https://www.youtube.com/watch?v=SoO9AS7-eQA>; <http://www.acnr.co.uk/pdfs/volume2issue6/v2i6reviewart2.pdf>)

Diagnosing CD and ncgs

There are diagnostic tests for CD and wheat-allergy, but NOT for ncgs. This can only be assessed through an elimination and challenge protocol.

Autoimmune (AI) diseases

Risk of developing an AI disease affected by:

- genetics
- environment
- integrity of your gut lining.

There are more than 100 different types of autoimmune diseases, and the prevalence is “soaring” (17% of the US population)

In autoimmune disease, our bodies have “lost intelligence” to distinguish between self (own body tissue) and non-self (foreign proteins, viruses, bacteria) resulting in an immune system that reacts to one’s own body tissue, which may be thyroid, joints, brain, kidneys, heart, blood vessels, pancreas etc.

An *association* between gluten and AI diseases has been found in every study considered.

Believed that a gluten intolerance *may* be part of every AI disease

If you have an AI disease,
“ditch gluten 100%”

“Leaky gut is at the
beginning of every AI illness”

“70% of genes involved in health and
longevity are controlled by factors that we
can control, diet being very important”

Turning ON genes for health

Our gene profile is actively interacting with the food we eat, our lifestyle, how much sleep we get, our level of stress. We have control over this genetic expression, moment to moment.

“Listen to your body” and
“Fix your own health”

The challenge of giving up grains and avoiding gluten

Addictive properties

Casein (dairy protein) and gluten (wheat protein) are addictive!

They are converted in our livers to caseomorphin and gluteomorphin, which have opioid effects in our brains (<https://drjosephalaimo.wordpress.com/2011/06/23/caseomorphins-and-gluteomorphins-%E2%80%93-the-food-opioids/>) → cravings for more!

When someone is addicted to highly palatable, nutrient deficient foods, it is very difficult to explain to them how detrimental these foods are.

Gluten-free (G/F) alternatives

DO NOT eat processed gluten-free foods – they are high in carbohydrates (grain and starch alternatives and sugar), additives, flavorings, preservatives. These cause havoc on our gut bacteria, provoking inflammation.

Beware of marketing misinformation! G/F certified products are allowed to have 20ppm gluten (which allows for cross-contamination in the production facility).

If you gluten intolerant, you want zero gluten to avoid your immune system creating gluten antibodies.

To be zero gluten, you need to

- know where each of the ingredients are coming from
- make food from scratch
- avoid reliance on medications and supplements.

Skin care alternatives

For chemical and gluten free skin care, consider products made from cold pressed oils and essential oils.

Check your medications and supplements

Ask pharmacists and doctors and any of your health care providers about the medications and supplements they are prescribing and do your own research if necessary.

These resources may be helpful:

<http://www.auspharmacist.net.au/ebulletin/vol48/eb48-8.pdf>

<http://www.nps.org.au/publications/consumer/medicines-talk/pre-2008/mt10/what-else-is-in-the-tablet2>

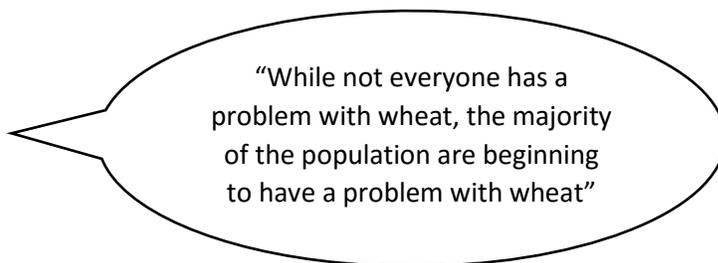
Gluten-free trial

Give up grains for 30 days and consider your health improvements! Going G/F allows you to recognize underlying conditions.

A gluten challenge may then cause an acute, exaggerated response – revealing the underlying condition,

Recovery time can vary widely – from a few days only to a week to 10 months.

If it's a wheat intolerance, you may be able to reintroduce wheat (or other gluten-containing grain products) after enough time has been given to allow affected immune cells to die off.



Best to choose organically grown (i.e. chemical free) ancient grains (not hybridized), properly prepared (freshly ground whole grains and fermented) e.g. organic sour dough bread.

Each person needs to figure out what the best thing is for themselves.

Reported benefits of being gluten-free

Women: lose weight easily → happier with body image!

Men: improved libido! → happier too!

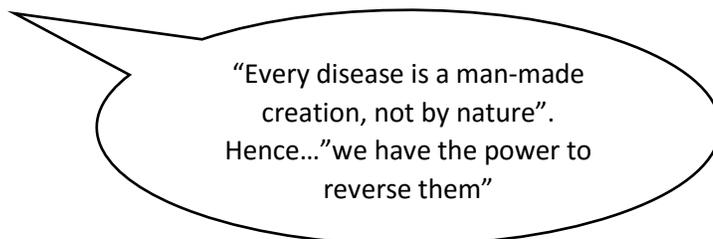
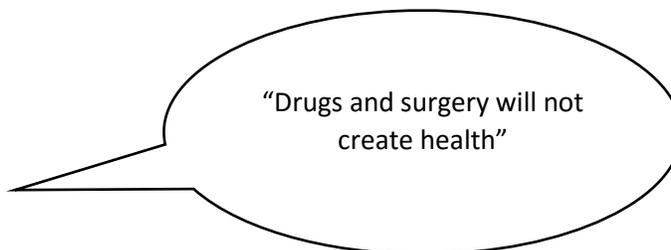
How to create health

Change your diet and lifestyle

- Eats lots of vegetables
- Eat sufficient protein (not lots)
- Move your bodies
- Have a supportive social network
- Have a meditative practice
- Have a loving family.

And, says Pete Evans:

- eat really delicious food, and
- change our conversation away from what we can't eat to the amazing foods we CAN eat!



Ecological and ethical considerations

Production of grains and sugar uses a lot of land to grown crops that are causing ill-health. Do we really need to eat them?

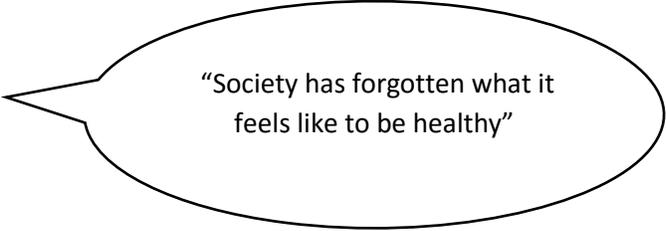
Why not abandon toxic chemicals, change to ecological agriculture and renew soil fertility by recycling organics.

Take an active role in knowing how your food is produced

- Know where your food is coming from
- and how is it processed
- Have a backyard veggie garden

Reference made to the town of Todmorden, where “food trees and food is grown instead of pretty trees and flowers”. More info <http://www.incredible-edible-todmorden.co.uk/>

The biggest roadblock to change



“Society has forgotten what it feels like to be healthy”

How healthy do YOU feel?

Interviewees

Dr Terry Wahls	Reversed her multiple sclerosis: https://www.youtube.com/watch?v=KLjgBLwH3Wc http://terrywahls.com/
Dr Stephanie Seneff	Senior research scientist, whose research focuses on the relationship between nutrition and health https://people.csail.mit.edu/seneff/
Sally Fallon Morell	Author of the book “Nourishing Traditions” and president of the Weston A. Price Foundation http://www.westonaprice.org/about-the-foundation/welcome-from-sally-fallon-morell/
Pete Evans	Advocate for paleo diets https://thepaleoway.com/
David Perlmutter	Neurologist who advocates a gluten free diet for a healthy brain http://www.drperlmutter.com/
Dr Natasha Campbell-McBride	Developed the GAPS protocol (Gut and Psychology Syndrome) http://www.doctor-natasha.com/
Mark Sisson	The man behind http://www.marksdailyapple.com/ who is an extremely fit >60 yo – living a “primal lifestyle”. Read more about him http://www.marksdailyapple.com/about-2/mark-sisson/#axzz4Dm0J5vzA
Joel Salatin	Regenerative farmer from the US, http://www.polyfacefarms.com , also doing great outreach work here in Australia http://www.youthfoodmovement.org.au/ This documentary “Polyface” should be good viewing! http://www.polyfacefarms.com
Sarah Ballantyne	Advocates a paleo approach to overcoming autoimmune diseases http://www.thepaleomom.com/the-autoimmune-protocol
Professor Rodney Ford	Food allergy specialist http://drrodneyford.com/
Sayer Ji	Researcher, author, and lecturer on natural and integrated health http://sayerji.com/ founded Greenmedinfo.com, an open access, evidence-based resource www.greenmedinfo.com
Dr Vandana Shiva	Environmental activist based in Delhi http://vandanashiva.com/
Kim Morrison	Founder of Twenty8 essential oil based skin care range of products http://www.twenty8.com/why-twenty8