

Wheat makes you sick! Bread makes you sick!

These and other statements in the best seller 'Wheat Belly' written by William Davis and bluntly taken over by many other believers and related social media news:

- Wheat gluten makes you addicted because it contains opioid components. When you stop eating you get withdrawal symptoms
- Gluten makes you fat!
- Gluten causes cancer, diabetes, heart disease, Alzheimer, epilepsy, ADHD, autism and many other problems...
- Gluten alters mood and causes mental "fogginess." and depression
- Gluten causes sleep disturbances
- Elimination of wheat from the diet is associated with disease cure and mitigation including
- Many other falsified claims and statements in this book

TRUTH>>>>

- 1. NO EVIDENCE for any of the above***
- 2. Not a single food authority, medical/health professionals agency/association in the entire world who supports these statements or any of these arguments to refrain from wheat consumption***
- 3. No answer to the question how it is possible that wheat causes always all of this but not in billions of individuals who do not suffer and do not care at all for eating wheat.***
- 4. Interesting to hear that Davis would like to write about evidence-based science (which he shows he is not able to) does not because he feels that when doing that nobody would be willing to read his books → which means in fact that nobody would be interested to buy his books. CONCLUSION it is not science, it is not evidence-based advice to consumers, it is sales that count. So, better create stories based on belief you do that, otherwise no show, no glory, no money.***

How come that so many people follow this and buy his books. Well people love stories! Have a look at the documentary made by CBC news: 'The War on Wheat - the fifth estate': <https://www.youtube.com/watch?v=eO3cIrNEuIc>

For all the believers and followers this documentary and inherent confessions of Davis may be an inconvenient truth about how people are being misled, while paying money for informational lies.

The above, however, does not mean that wheat related disorders and adverse reactions do not exist.

Wheat allergy (WA): As is the case with any type of plant protein, also wheat protein can cause allergy in some individuals. Figures for WA amongst children vary from <0.1% to 1%, depending on age and country. However, a large meta-analysis has shown that the general prevalence is at most approximately 0.2%. Generally speaking, about half of children 'outgrow

a food allergy over time'. Depending on the type of allergy, this percentage can be lower (peanut) or higher (milk). With regard to WA, studies show that more than 80% of children have outgrown their WA by their 8th year, and 96% before their 16th year. It explains why the number of adults with WA is only 0,25%.

Celiac Disease (CD)

During digestion, the wheat gluten-protein fraction named gliadin is broken down to peptides which can be further degraded to amino-acids that are taken up by the gut cells. However, not all peptides are degradable by human enzymes and some of these can cause immune reactions and inflammation in individuals that have a specific genetic fingerprint. Approximately 25-40% of the global population expresses the genetic haplotypes HLA-DQ2 or DQ8 which results in susceptibility to CD. This percentage differs for different regions. It is estimated that only 4% of individuals with this genetic predisposition DQ2 and DQ8 actually develop CD. Seen this relatively small percentage, there must other factors that, when having the genetic predisposition, trigger the initiation of the disease. In this respect, timing of first gluten exposures at a young age, the dose of the (initial) gluten exposure, disease or drug/alcohol related changes in intestinal permeability as well as exposure to antibiotics and viral infections have been proposed to play a role in causing the disease initiation.

Non celiac wheat sensitivity (NCWS)

During recent years a third group of people has been classified who experience symptoms after eating wheat products, but have been diagnosed NOT to suffer from either WA or CD. Mostly these individuals are self diagnosed wheat intolerant/sensitive. This appears to be unreliable. For example a recent study with 392 patients complaining of gluten-related symptoms, found that 26 of these patients (6.63%) were affected by having CD, 2 patients (0.51%) had WA and 27 were diagnosed to suffer from NCWS (6.88%). The remaining 337 patients (85.96%) did not experience any change of symptoms with a gluten-free diet. The authors conclude that self-perceived gluten-related symptoms are rarely indicative of the presence of NCWS. In NCWS individuals, irritable bowel syndrome (IBS)-like gastrointestinal symptoms and extra-intestinal complaints occur, which improve on a gluten-free diet. This group of patients is referred to as "non-celiac gluten sensitivity" (NCGS), or the more recently, "non-celiac wheat sensitivity" (NCWS). Recently NCGS was defined as follows: one or more of a variety of immunological, morphological, or symptomatic manifestations that are precipitated by the ingestion of gluten in individuals in whom CD has been excluded.

However, despite the word "gluten" in the currently most cited definition "NCGS", it is far from certain that the gluten is the (main) cause of the symptoms observed. Accordingly, the new term "NCWS" was broadly adopted since it was noted that gluten (NCGS) may not be the real cause.

Current estimates of prevalence are scarce and range from 0.5 to maximally 10% of the population.

Wheat and health related disorders reviewed.

See the following open access publications:

Fred Brouns Jan 25, 2020

Fred BROUNS, Gonny VAN ROOY, Peter SHEWRY, Sachin RUSTGI, Daisy JONKERS. *Adverse reactions to wheat or wheat components. Comprehensive Reviews in Food Scicene and Food Safety, Vol 18, July 2019. **Open access-free down load** → doi: 10.1111/1541-4337.12475*

RUSTGI Sachin, Peter SHEWRY, Fred BROUNS, Lomme DELEU and Jan A. DELCOUR. *Wheat seed proteins - factors influencing their content, composition, and technological properties, and strategies to reduce adverse reactions. Comprehensive Reviews in Food Scicene abd Food Safety, Vol 18, 2019. **Open access-free down load** → doi: 10.1111/1541-4337.12493.*

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