



**ORIGINAL RESEARCH PAPER**

**Clinical Research**

**ALKALINE DIET: AN ANSWER TO MOST MODERN SO CALLED "LIFESTYLE DISEASES": PART V FACTS ON GRAIN CONSUMPTION, HIGHLIGHTS ON WHEAT AND WHEAT PRODUCTS WITH A CASE PRESENTATION OF A 32 / 38 / 68 YEARS OLD FEMALES SUFFERING FROM OSTEOPENIA / OSTEOPOROSIS REVERSED BY ALKALINE DIET**

**KEY WORDS:**

**Dr. Vidushi Agrawal**

DHMS (Mum), HMD (Lon), MSc DFSM (IGNOU)

**ABSTRACT**

Those who have read the last 4 articles, my readers would have known by now that Alkaline Diet is the subject that I promote, not because it is my passion, however seeing the effects of it on my patients and me and also the same is in conjugation with science. In this article, I am covering the topic on the consumption of grains, especially WHEAT AND WHEAT PRODUCTS; I shall cover Rice & rice products in papers to come ahead.

- In this paper, I am presenting cases, how a case of osteopenia / osteoporosis in 32 / 37 year old females could be reversed by incorporating an Alkaline Diet Regime & regular monitoring of Vitamin D intake (which is not available other than sunshine or Vitamin D drops or Vitamin D injection)

**Just once again reiterating on the alkaline – acidic food; it should be in the ratio of 80:20**

Though the grains especially wheat is being extensively consumed; the health effects are quite debatable. Some think they are an indispensable element of a healthy diet, while others think they cause damage. Some health experts consider that we should avoid grains as far as possible.

**So, let us understand and feel the practical aspect and take decision by self. The three most commonly consumed types of grains are wheat, rice and corn.**

In this article, we will first understand the truth about grains. Then we will also look at facts on Wheat as a grain.

**INTRODUCTION**

What are grains or cereals? Grains or cereals are small, hard dry seeds. Whole grain consists of: Bran, Germ and Endosperm (**I am currently not getting into the contents of these layers**)

The function of these grains is usually to develop more new vegetation after germination; hence these seeds are highly protected, so that they should not be damaged easily, even on consumption by human digestive system. These grain seeds also contain anti – nutrients, that make the nutrients present in them difficult to be used by human system if consumed in the original form. Also, these nutrients prevent the assimilation of minerals obtained through other sources. Phytate content of the grain binds to minerals like iron, zinc, and manganese & prevents their absorption.

However; through ancient methods like soaking, fermentation, germinating / sprouting, these grains deactivates the anti – nutrients (phytic acid) and free the minerals for the absorption by the body. Also, phytic acid being a powerful anti oxidant may help in reduction of blood sugar, insulin, cholesterol and triglycerides and hence important in reducing the risk of heart diseases, diabetes and also weight gain

**There is another theory which says that every species is meant to eat only that food in cooked form** which can be had in raw form. For example: when we feed birds with grain, they do not cook and eat it. They break it with their beaks and consume it directly. The wild animals do not cook their meat after hunting, but eat them directly. Hence, the grains / pulses / legumes those can be consumed after minimal processing of soaking and sprouting, we should ideally consume only those grains, not others. It is said that humans by nature are not adapted to consuming grains and are incapable of processing them in the system.

Now we shall talk about Wheat. Wheat is mainly composed of carbohydrates.

- Both white and whole wheat rank high on glycemic index
- The most common fiber in wheat bran is arabinoxylan (70%), which is a type of hemicellulose. The rest is mostly made up of cellulose and beta-glucan
- The modern version of wheat is very different from the ancient crop
- The newer high yield wheat which was a part of the green revolution, is full of genetic changes and by scientists seem to inflame human system, and activate auto-immune diseases

Cardiologist William Davis, MD – author of the book "Wheat Belly" along with other experts believe that anyone giving up just

not on gluten but wheat altogether could enjoy tremendous weight loss and health benefits, no matter whatever type of wheat it may be: organic / stone ground / home baked / sprouted.

Through advertisements / clever marketing gimmicks, we have been brainwashed into thinking that we need whole wheat as part of our daily diet. However, the truth is, whole wheat is full of sugar, whether in bread or pasta form or as an ingredient in canned soup or frozen dinners, taking us on a passageway toward type 2 diabetes.

**So, first let us understand what is Modern Wheat?** Modern Wheat was created because it promised to feed millions of starving people around the world. However, due to genetic changes, it has made us fat and sick. Let us now consider the difference between the old and the new crop

**Difference between old and new wheat crop:**

- We eat dwarf (small) wheat, the product of genetic manipulation and hybridization that created short, stubby, hardy, high yielding wheat plants with much higher amounts of starch and gluten and many more chromosomes coding for all sorts of new odd proteins.
- The old fourteen chromosome had Einkorn wheat codes for small number of gluten proteins and those that it does produce are the least likely to trigger celiac disease and inflammation. The new dwarf wheat has twenty-eight or twice as many chromosomes and produces a large variety of gluten proteins, including ones most likely to cause celiac disease

**The 2 major differences of this dwarf wheat are that it contains**

1. It contains High levels of Super Starch – amylopectin A that is super fattening.
2. It contains a form of Super Gluten that is super-inflammatory

**Hence, because of this, the shortcoming is: 2 slices of whole wheat bread raise your blood sugar more than two tablespoons of table sugar**

**Result of eating Modern Wheat and Wheat Products**

1. There is no dissimilarity between whole wheat and white flour. In people with diabetes, both white and whole grain bread raises blood sugar levels
2. **Frail or weak bones**
  - a. Grains are the only plant foods that generate acidic by-products. Therefore, when the body is chronically acidic, it

starts pulling calcium carbonate and calcium phosphates out of the bones to maintain a healthy pH, hence, eventually become demineralized, taking us towards osteoporosis and fractures

3. Gluten is that sticky protein in wheat that holds bread together and makes it rise. Because of high amount of Gluten being formed, it can trigger inflammation, obesity and chronic disease in five major ways.
  - a. It triggers body-wide inflammation triggering insulin resistance,
  - b. The above causes weight gain and diabetes, as well as over 55 more disease conditions
  - c. A NON-gluten glycoprotein or lectin (combination of sugar and protein) in wheat called wheat germ agglutinin (WGA) is found in highest concentrations in whole wheat and this additionally increases whole body inflammation

**A major study in the Journal of the American Medical Association: hidden gluten sensitivity was shown to increase risk of death by 35 to 75 percent, mostly by causing heart disease and cancer**

Just because something is gluten free, doesn't mean it is healthy, one should be aware of processed foods which claim to be gluten free, as they are high in glycemic index or load and equally damaging

**Let us understand scientifically how increased risk occurs when gluten triggers inflammation spreading throughout your whole body.**

- It damages the gut lining.
- All partially digested food particles inside the intestine get across the gut barrier and are exposed the immune system.
- About 60% lies right under the surface of layer of cells lining the gut or small intestine.
- Immune system starts attacking these foreign proteins leading to systemic inflammation that then causes heart disease, dementia, cancer, diabetes and more
- During this process, antibodies tasked with attacking the lectin intruders become confused by their similarity to certain proteins associated with organs in our body, including the pancreas and thyroid gland
- The follow-on from all the above causes diseases like hypothyroidism, diabetes, obesity & many more
- Additionally, through one more research conducted by Dr. Alessio Fasano, a celiac expert from the University Of Maryland School Of Medicine discovered a protein made in the intestine called "zonulin". This is increased by exposure to gluten.
- Zonulin breaks up the tight junctions or cement between the intestinal cells that normally protect the immune system from foreign proteins.

Hence, what do we do? **Should we avoid grains? (individual call)**

There's much to be said both for and against grain as a component of our diet. Hence, how should we analyze of what we are eating?

- **If a food or drink makes you feel lousy, don't consume it.**
- Listen to your body.
- The change to grains was accompanied by a marked decrease in dental health that shows up clearly in the archaeological record
- What about just eating animals? Well, if those animals eat plant foods, the toxins accrete in their tissues. So, yes, animal foods contain the same naturally occurring toxins.
- Millets ragi, jowar, bajra impart a lot of nutritional benefits, primarily being free of gluten, avoids **(not completely prevents)** the diseases caused due to gluten in the system

**Methods / Research Methodology / Material / Case Presentation**

I have cases of different age groups of 3 females. The reason I put the case of 3 females here for osteoporosis is because females are more prone to osteoporosis than men

They are of ages 32 / 38 / 68. The younger females were diagnosed

with Osteopenia (one stage prior to osteoporosis) and the Elderly female was diagnosed with Osteoporosis. However, with an appropriate proportion of Alkaline: Acidic Diet (80:20), the younger females got normal BMD within a period ranging from 9 months to 14 months and the senior citizen female reports came closer to normal in the similar time frame Hence, if we follow a correct dietary pattern, not only Diabetes (HBAC1 reports) can come to normal levels (which I have shown in case presentations in the previous articles), but also diseases like osteoporosis / osteopenia can be reversed, which are thought to be normal with age

**LITERATURE REVIEW & CONCLUSION**

The problems with wheat that have been discussed above are real, scientifically validated and by avoiding them in diet, I have got favorable results for patients; hence tried and tested by self on innumerable patients (first-hand experience).

Additionally, millets are also nutritionally superior to other major cereals because they are rich in dietary fibers, resistant starches, vitamins and essential amino acids. Grains are not essential except that small amount fills the stomach, and there is no nutrient in the grains that one cannot get from other foods. **In short, we do not require grains to survive.**

**ACKNOWLEDGEMENT**

I am extremely thankful to my patients, who have allowed me to use their reports to show that osteopenia / osteoporosis, which are considered irreversible conditions, how alkaline diet can improve and bring back to normal / near normal reports of **NON – SURGICAL ORTHOPEDIC HEALTH ISSUES** without intervention of any medication / minimal intervention of the supplements

I am presenting a case of a 68 year old woman, whose BMD reports were showing osteoporosis, which has brought her to Osteopenia level by adopting the alkaline diet pattern. Also, presenting cases of 2 younger females in their early and late thirties, by following an alkaline diet pattern, how the osteopenia stage was reversed back to Normal Bone Density.

Hence, Alkaline Diet, has a positive effect on both young and old, however the speed of recovery may vary depending upon every individual's healing capacity, age & extent of inclusion of the alkaline – acidic diet pattern

**The diseases presented are different however the diet is the same – Alkaline: Acidic diet in the ratio of 80: 20**, showing that every sphere of the body is affected positively by following the Alkaline: Acidic Diet in proper ratio.

**REFERENCES**

1. <https://www.healthline.com/nutrition/foods/wheat#section2>
2. <http://healthyeating.sfgate.com/wheat-flour-contain-carbohydrates-6304.html>
3. <https://www.rodalewellness.com/health/surprising-reasons-to-give-up-wheat/slide/8>
4. <http://drhyman.com/blog/2012/02/13/three-hidden-ways-wheat-makes-you-fat/>
5. <http://www.thehindu.com/sci-tech/agriculture/take-a-grain-check-theres-more-to-the-indian-diet-than-polished-rice-and-wheat/article22429984.ece>
6. <https://www.sciencedirect.com/science/article/pii/S2352618115000438>
7. <https://www.precisionnutrition.com/should-you-avoid-grains>
8. <https://www.thealternativedaily.com/do-you-need-grains-survive/>
9. <http://wholehealthsource.blogspot.in/2008/07/grains-and-human-evolution.html>
10. <https://food.ndtv.com/food-drinks/a-bite-at-a-time-foods-traditions-from-ancient-india-1206447>
11. <https://www.healthline.com/nutrition/grains-good-or-bad>
12. [https://www.huffingtonpost.com/mark-sisson/grains-and-health\\_b\\_3468528.html](https://www.huffingtonpost.com/mark-sisson/grains-and-health_b_3468528.html)
13. <https://www.novomed.com/integrativemedicine/humans-never-meant-eat-grains/>
14. <https://nutritionfacts.org/2016/11/15/the-natural-human-diet/>
15. <https://www.thealternativedaily.com/do-you-need-grains-survive/>
16. <https://www.healthline.com/nutrition/grains-good-or-bad#section8>
17. <https://www.precisionnutrition.com/all-about-grains>
18. <https://ucdintegrativemedicine.com/2016/08/busting-whole-grain-myth/#gs.MnDcD68>
19. <https://www.foodrenegade.com/how-to-eat-grains/>
20. <https://oldwayspt.org/traditional-diets/why-traditional-diets>
21. <http://psychologyofeating.com/ancestral-eating/>
22. <https://www.healthline.com/nutrition/6-shocking-reasons-why-gluten-is-bad#section6>