

Food choices & climate change

Ultimately, we need to conserve and build agricultural soil and to maximize food production on each acre. Such goals mitigate climate change by favoring the sequestration of carbon.

These criteria are in opposition to the current commodity agricultural goals and methods, which have allowed soil degradation in order to maximize the production of single crops. This current system is causing excessive loss of carbon into the atmosphere and is exacerbating climate change.

Thus, we can check whether a food choice is good for the environment by checking out its effect on the soil where it is grown, and whether total food crop production is maximized in that soil.

Let's consider the effect of choosing to eat wheat foods in the whole grain form, complete with bran and germ:

- Whole wheat agriculture needs to be organic to avoid contamination of bran and germ with toxic farm chemicals, so leading to the use of large-plant wheat types such as landrace varieties that are full size and capable of themselves shading out weeds in an organic system.

- Large-plant wheat varieties have large root systems that are valuable for their enhanced capacity to sequester carbon and build soil. These large plant wheat varieties are therefore valuable when used in rotation with other soil nutrient improver plants such as legumes and oil-seed brassicas.

- The universality of the need to conserve and build soil with organic rotations means that wheat can usefully be grown as part of locally appropriate mixes of basic food crops in most of the world. There are appropriate wheat varieties that exist for most regions in the world.

- The ideal soil regenerative system involves animal pasture in rotation with grains, legumes and oilseed crops to optimize weed control and provide constant carbon sequestering cover to the land.

- Whole wheat flour contains all of the bran and germ from the original grain. Inclusion of bran and germ in our human diet will help to eliminate the costly chronic diseases: diabetes, cardiovascular disease and colon cancer. Currently bran and germ are removed from our flour. Instead wheat bran and germ are used as major ingredient in animal feed. This means that **if we choose to eat our wheat flour whole, animals will need to be pastured in order to be adequately fed.** It will no longer be cost effective to confine animals in feedlots.

Choosing to eat none or much less eat beef, and pasture feeding many fewer animals as part of a regenerative organic rotation system, instead of feeding them in a feedlot, allows for an increased sequestration of carbon and mitigation of climate change.

- The concept of the need to increase wheat yields becomes moot when it is appreciated that currently 25% of the wheat crop in the form of bran and germ, is diverted for animal feed. Instead, if humans ate 100% whole wheat foods including bran and germ

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as the base of the diet, then there would essentially be 25% more wheat available for human consumption. It will be much more meaningful to consider the possible increase in total of all food that can be produced per acre in a soil regenerative organic rotation system.

- Grain such as wheat, is a staple food primarily because it can be stored as grain for more than a year, indeed it can be stored for several years. Thus, grain is available from storage year-round and is an insurance against famine.

- Whole wheat flour is preferred to be freshly milled, hence the need for 100% whole wheat mills of all sizes to produce this flour locally. Ideally therefore, clean grain for local milling for whole wheat flour needs to be stored locally, which also has the advantage of enhancing food security locally.

- Localization of enterprises associated with the basic staple wheat, means that localized employment will be created. The infrastructure for local grain, involves grain handling (cleaning, storage, distribution, marketing, seed handling), milling and baking, pasta making etc. Employees in a job-creating localized grain infrastructure will have a reduced commute, and so reduce their use of climate damaging fuel.

In conclusion, the choice to eat wheat in the whole grain form has colossal implications: A vastly improved environment with happier and healthier people, living in more localized viable economies. Couple the choice to eat wheat only in the whole grain form, with a decision to eat very much less meat or no meat at all, and you will be making a truly major contribution to preventing further climate change.