

WHEAT – THE STAFF OF LIFE

The origins of wheat stretch back to the “Fertile Crescent” in the Middle East. The chance combination of two wild grasses over 9,500 years ago produced a new grass with plump grains and a set of chromosomes from both parents. Around 3,000 years later, probably on the edge of a field of this tetraploid wheat, another cross occurred to produce our modern wheat—*Triticum aestivum*. This new species most importantly carried genes for the elastic protein (gluten) that allowed baked products to rise when set with yeasts, and then retain that light and airy shape when baked.

To provide this bounty, wheat gave up a brittle rachis with the result that its seed was retained on the stalk, rather than being dispersed. This was a successful strategy for the plant as each year wheat now produces around 20 thousand, million million seeds (2.0×10^{16}) or 650 million tonnes. A good deal for its survival as well as ours.

The archeological evidence suggests that civilization and wheat-growing co-evolved, although it seems uncertain if growing wheat led to settlements or that settlements grew up around culturally important sites such as Göbekli Tepe in southeastern Anatolia. At that site it is thought that wheat was brought into these settlements as the area became hunted out. Whatever the start, the extraordinary spread of wheat to Greece and India 8,000 years ago, Germany and Spain a thousand years later, and then to England 5,000 years ago and China 4,000 years ago, now sees wheat grown on more land than any other commercial crop.

Rightly so that bread—made from wheat—is called the “staff of life.” As a staff or walking stick, wheat provides support to our human family and contributes mightily to food security. But in turn, the wheat plant also needs support, and a balanced supply of nutrients is vital to ensure that the grain is wholesome and nutritious. The balance between nitrogen and sulfur is vital for baking quality, phosphorus and calcium for strong teeth and bones, and zinc derived from grain is particularly important for healthy children. The good nutrition growers practice on their wheat crops flows through to produce a healthy community.

So whether it is as chapatti, a steamed bun, a baguette, some noodles or a slice of bread, good nutrition from the staff of life is supported by good crop nutrition in the field.



BETTER CROPS

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A stylized, handwritten signature in black ink, appearing to read 'Rob Norton'.

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