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The distribution of vitamin-B in the wheat kernel.

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Foods containing various percentages of wheat and wheat derivatives, and comparable to each other in their content of all known dietary essentials except such quantities of vitamin-B as might be present in the wheat product used were fed to mice; and the rate of growth on these foods was observed.

When the entire wheat kernel was thus used as the source of vitamin-B in the diet, admixtures of from fifteen per cent. (Marquis spring wheat), to forty per cent. (Minnesota winter wheat), were required to insure growth at a normal rate.

The approximate concentration of vitamin-B in each of the milling products from a single lot of winter wheat was estimated. The "patent flour" contained no appreciable vitamin; the "first clear" and "second clear" displayed about the same concentration as the unmilled grain; the "low grade flour" and "bran" were about twice as rich; the "standard middlings" (which included the portion containing most of the embryo) were four times as rich as the entire grain.

"Hand-dissected" portions of grains, representing more nearly the true *structural* divisions of both spring and winter wheat were also investigated. Vitamin-B was found in both embryo and endosperm. The *concentration* in the embryo was several times as great as that in the endosperm; but owing to the small percentage of the entire kernel represented by the embryo, the *absolute quantity* of vitamin-B contained therein was not more than a sixth of the total amount in the grain. No difference could be detected between "hand-dissected" and "commercial" embryos. The presence or absence respectively of the embryo in the two ends of the grain, when fed separately, did not appreciably affect the concentration of vitamin-B in these two portions.