Critique of the meta-analysis subsequently written by the senior author of initial flawed oat bran study

A subsequent meta-analysis concerning the effects of oat bran on cholesterol levels was written by the senior author of the widely publicized flawed study that incorrectly suggested oat bran was without significant effect on cholesterol levels.

There is a tendency for any person to desire to confirm prior opinions voiced in the literature rather than refuting their own prior results. The conclusions of a meta-analysis, like any other study, can be presented with a particular slant. The conclusions of this meta-analysis were presented in such a way as to minimize any contradictions with the initial flawed oat bran study published in 1990.

See right column for a negatively slanted conclusion followed by a positively slanted conclusion for the data from the same meta-analysis.

Differing conclusions for the data from the same meta-analysis:

The results of the meta-analysis by the author of the flawed oat bran study can be viewed as a cup half full or half empty, depending on the bias of the authors. (The conclusions of a meta-analysis like any other study can be presented with a particular bias.)

Negative conclusions of the original authors:

The authors of this meta-analysis conclude that "increasing soluble fiber can make only a small contribution to dietary therapy to lower cholesterol." (Ingestion of 3g of soluble oat fiber resulted in a decrease of .13mmol/L in total cholesterol LDL cholesterol.) They note that soluble fiber from a total of three bowls (28g/bowl) of oatmeal is required to achieve a total of 3 g of soluble fiber.

Alternative positive conclusions for same data:

An alternative positive statement of the conclusions for this same data would be the following:

This meta-analysis indicates that an intake of 3g of oat soluble fiber can result in a 2% reduction in cholesterol, which has been estimated to correlate to a 4% reduction in cardiovascular disease. Similarly, an intake of 6g of fiber can result in a 4% reduction in cholesterol which has been estimated to result in an 8% reduction in cardiovascular disease. This would be a significant benefit to public health.


2. Swain JF, Rouse,IL, Curley CB, Sacks FM. Comparison of the effects of
Specifically, this meta-analysis indicated that 3g of soluble oat fiber can result in a decrease cholesterol of .13mmol/L (5mg/dL), while 6 g of soluble fiber can result in a decrease of .26mmol/L (10mg/dL) decrease in cholesterol.

Additionally, it would be noted that a single standard 40g serving of oatmeal of Quaker Oats Old Fashioned Oatmeal contains 2g of soluble fiber and a single 40g standard serving of Quaker Oat Bran hot cereal contains 3g of soluble fiber per serving.

Both versions of these conclusions are slanted, but in opposite directions.