

The Protein Efficiency Index

WHAT IT IS ... WHY IT'S IMPORTANT

In order to understand the significance of the Protein Efficiency Index, it's helpful to look at how other indices are being used to make meaningful evaluations among different alternatives. A good example of the usefulness of such an index is comparing publicly-traded corporations as potential investments.

Imagine two companies. Company A has \$10,000,000 in annual gross sales while Company B has gross sales of only \$5,000,000. Which is the better company for investment purposes? If you said Company A based solely on the fact that it had twice the gross sales, you are a stockbroker's dream. Anyone who invests in any company based solely on the gross sales of that company is probably making a terrible mistake.

Suppose further that you knew each company's annual net profits. In our example, suppose Company A has net profits of \$1,000,000 and Company B also has net profits of \$1,000,000. Now which is the better company? On the basis of these two related pieces of information (gross sales and net profits), Company B now looks like the better choice. It produced the same \$1,000,000 in net profit with only half the sales of Company A.

Before you rush off to the brokerage office, however, it might be nice to know how efficiently each company used its available resources. A good measure of this is called the Return-on-Investment.

Suppose in our example Company A was able to achieve its \$1,000,000 in net profits with an investment of only \$5,000,000 while Company B's owners had invested ten times that amount (\$50,000,000) to achieve the same \$1,000,000 profit. Now you can see that Company A is achieving a 20% return on its investment (the \$1,000,000 profit divided by the \$5,000,000 investment) while Company B is achieving only a 2% return for its investors (the \$1,000,000 profit divided by the \$50,000,000 investment). Call your broker and tell him you want to take a closer look at Company A.

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Another familiar index is the fuel efficiency of automobiles. If a car salesman tells you that his model is a better choice because it can go 350 miles on a tank of gas while the other car you're considering can only go 300 miles, that might sound pretty impressive. It would be a whole lot less impressive, however, if you knew that his model had a 35-gallon gas tank and the other model had only a 15-gallon tank.

The first car has a range of 350 miles but a fuel efficiency of only 10 miles per gallon. The second car has a less impressive range of 300 miles but a much, much better fuel efficiency of 20 miles per gallon. From the standpoint of fuel efficiency, the second car is clearly superior.

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The Protein Efficiency Index is a useful method for comparing meats and other protein sources. It provides an easy-to-understand way to compare the positive inputs (protein) against the negative inputs (saturated fat). To calculate the Protein Efficiency Index of a meat, simply divide the amount of protein per serving by the amount of saturated fat in the same serving. The higher the Protein Efficiency Index, the better.

A meat which has high levels of protein but also has correspondingly high levels of saturated fat may not be as good a protein source as it first appears. The negatives may outweigh the positives.

If Beefalo just had more protein or less saturated fat than other alternative meats, it might still be a good choice. But Beefalo has BOTH ... higher protein and less saturated fat. It's the best of both worlds!

	PROTEIN <small>GRAMS OF PROTEIN PER 100 GRAMS OF COOKED MEAT</small>	SATURATED FAT <small>GRAMS OF SATURATED FAT PER 100 GRAMS OF COOKED MEAT</small>	PROTEIN EFFICIENCY INDEX <small>RATIO OF PROTEIN TO SATURATED FAT</small>
PORK	27.30	6.22	$\frac{\text{Protein}}{\text{Saturated Fat}} = \frac{27.30}{6.22} = 4.39$
BEEFALO	30.66 HIGHEST	2.68 LOWEST	$\frac{\text{Protein}}{\text{Saturated Fat}} = \frac{30.66}{2.68} = 11.44$ BEST
CHICKEN	27.57	3.79	$\frac{\text{Protein}}{\text{Saturated Fat}} = \frac{27.57}{3.79} = 7.28$
BEEF	27.33	6.85	$\frac{\text{Protein}}{\text{Saturated Fat}} = \frac{27.33}{6.85} = 3.99$