

# Australian feed ingredient database for poultry nutritionists



## Feed is the greatest production cost for the chicken meat industry.

Accurate nutrient specifications are essential for nutritionists to formulate diets that meet the nutritional requirements of chickens and minimise costs.

The database was compiled with data generously donated from 12 Australian and international feed companies, online databases and scientific literature. It is grouped by Australian and global data, contains 42 different ingredients, with 102 nutrient specifications per ingredient.

What makes this database unique is that it includes sample sizes and standard deviations.

## Why standard deviation and sample size is important

The standard deviation and sample size are included in the database because it indicates the quality and accuracy of the data. A greater variation (high standard deviation) often means a higher level of uncertainty in the nutrient specifications of diet formulations. To counteract this, the sample number must be higher to reflect a more accurate mean value.

This database identifies values that are either 90 or 95% accurate, based on the standard deviation and sample size for each feed ingredient. Values that do not have this level of accuracy highlight where more samples are needed.

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Having this information easily accessible will help nutritionists make the right decision on the quality of the data.

## Sampling for improved accuracy

Only 13% of Australian feed ingredient data has enough sample numbers for the mean value to be at least 90% accurate. To increase the accuracy of Australian information, this database identifies where more samples are needed.

There are many ways to collect samples and the sampling method can affect the accuracy of the nutrient content and variability within the information collected. When recording and reporting feed ingredient data, reporting the way that samples are collected is just as important as the data.

Having access to more accurate information will assist Australian poultry nutritionists achieve more precise diet formulations, improve production efficiency and reduce safety margins and feed costs.



The Australian feed ingredient database contains:

- 42 feed ingredients
- 102 nutrient specifications
- data on Australian and global ingredients

More information can be found on the [Chicken Meat RD&E website](#)

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