



Australian Export Grains Innovation Centre



Australian barley

for broiler poultry

Australian barley is a proven, high-quality feed grain. Australian feed barley is suitable for all classes of poultry.



Key benefits of Australian barley for broiler poultry

- ✓ Australian barley is suitable for all classes of poultry, and with its low mycotoxin contamination may be less risky than corn.
- ✓ Australian broiler performance is world-class and this can be achieved using barley (corn is not essential for high performance).
- ✓ Australian barley is low in mycotoxins, usually harvested dry and stored well.
- ✓ Australian barley is higher in fibre than corn or wheat which lowers its metabolisable energy content but this can be offset with added fat, and the fibre has positive benefits for gut health.

Because of its lower energy than the other major feed grains, barley is more suited to breeders and layers rather than broiler feeds, however barley is commonly used in broiler feed when economic, using added fat to maintain energy density.



Production and export

Australian barley growers have built an international reputation for producing high-quality, clean and food safe grain which is highly sought after worldwide.

Australia is a major barley exporter, supplying **30–40%** of the world's exported malting barley and **20%** of global feed barley.

Australia produces **9–12** million metric tonnes (mmt) of barley each year.



Storage and processing

From the grower to the exporter, the Australian barley industry is committed to the highest standard in product performance to meet the requirements of international customers.

Australian barley has low moisture content (**8–12%**) with long storage viability and is highly regarded globally. Mycotoxin risk is low.



Nutrition

Starch is the main contributor to Metabolisable Energy (ME). Australian feed barley is **49–56%** starch. Barley starch digestibility is high, similar to corn. The indicative average ME for Australian feed barley with enzymes is **2,900 kcal/kg as-fed (12% moisture basis)**.



Australian barley has higher fibre than corn and wheat, which can be beneficial for gut health.

Australian barley has a **protein average of about 10%** as-fed, which is at least **2% higher than corn**, but often lower than wheat. When barley replaces corn, its higher protein and higher essential amino acid content within the protein means that less protein from other sources (soybean meal) is needed.





Opportunities to use barley in broiler diets

Australian broilers are commonly fed with **20–30%** barley and performance is world-class.

Asian broiler diets could utilise similar levels of barley.

Australian feed barley is an opportunity worthy of consideration in Asia for all poultry feeds.

Suggested maximums:

- Starter **10%**
- Grower **25%**
- Finisher **30%**

Barley has a high soluble non-starch polysaccharide (NSP) content and β -glucanase and xylanase should be included to improve broiler performance and gut health, and reduced litter moisture. Insoluble fibre in barley may improve gut function and health.





Things to consider

- ✓ Know your barley quality.
- ✓ Use the correct enzymes.
- ✓ Start with low barley levels and increase gradually to allow gut microbes to adjust to the barley substrate.



Feature	Unit	Corn	Barley	Wheat
ME broiler	kcal/kg	3,350	2,900 ¹	3,200 ¹
Protein	%	8	10	11
Starch	%	64	50	58
Oil	%	3.5	1.9	1.9
Fibre total	%	9.1	19.9	13.2
Pigment	Yellow	Present	Nil	Nil
NSP enzyme	Added in feed	?	β -glucanase + xylanase	Xylanase
Mycotoxin	Risk	?	Low	Low
Pelletability	FPQF ²	5	5	8

¹ Enzyme Assisted

² Feed Pellet Quality Factor



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