

Animal husbandry basics

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Agenda

Animal husbandry basics

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 2. Digestion in ruminants
2. Monogastric animals
 1. Poultry
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 3. Chicken anatomy
 2. Pigs
 1. Production cycle of pigs
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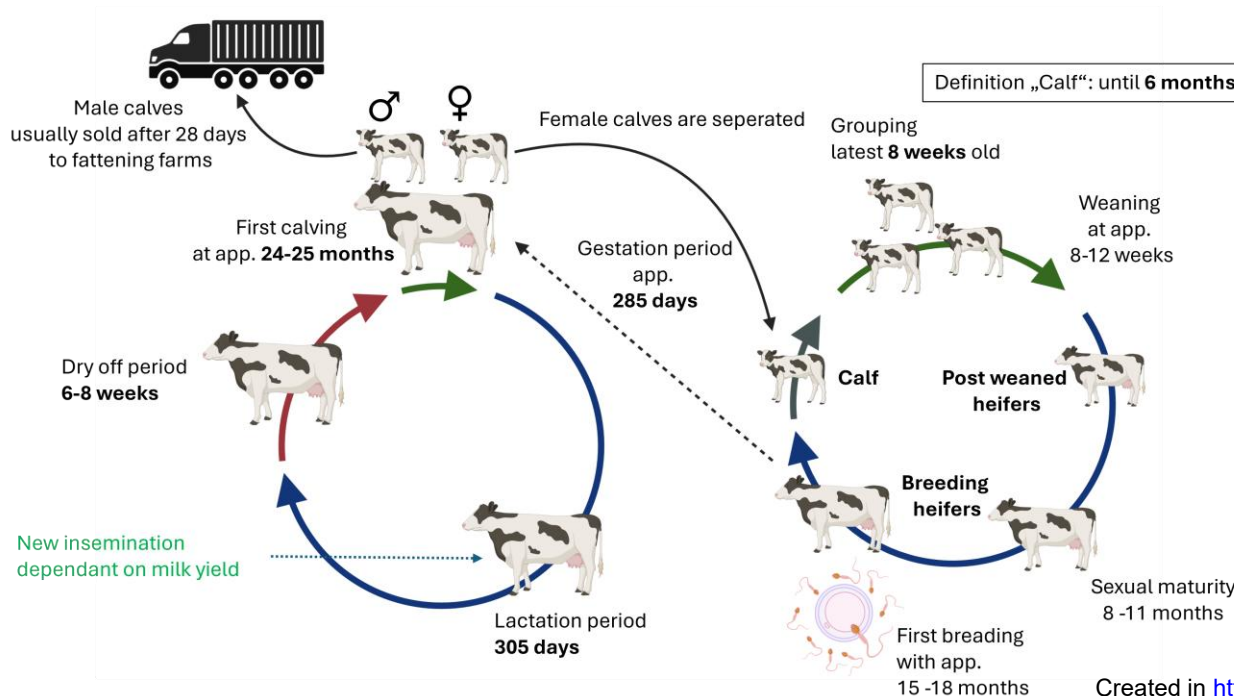
Ruminants

The distinctive feature of ruminants is their digestive system. It consists of three forestomachs and a 'normal' single-chambered stomach. The forestomachs are able to break down fibre-rich substances that are indigestible to animals with a single-chambered stomach. The rumen, one of the four forestomachs, is home to bacteria that can break down hard-to-digest carbohydrates, such as cellulose (with β -glycosidic bonds). Ruminants include, for example, cattle, sheep and goats.

In the case of cattle, a distinction is made between two categories: dairy cows for milk production and beef cattle for meat production.

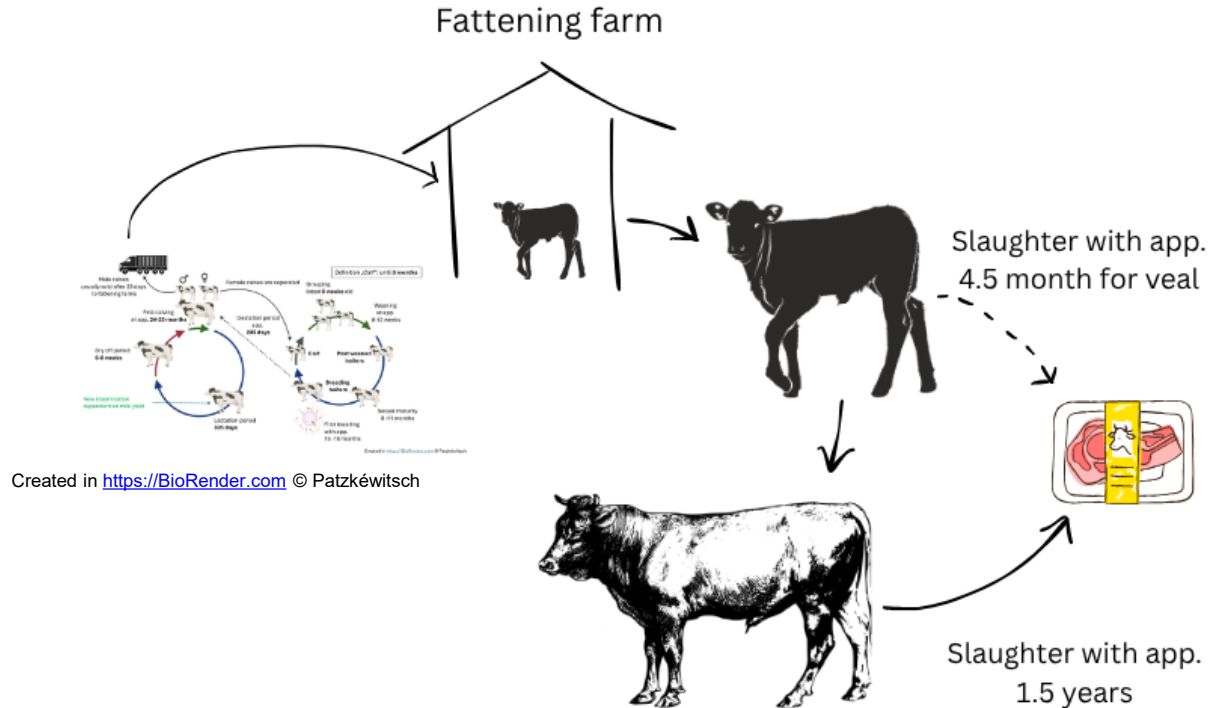
Ruminants - Production cycle of dairy cattle

Production cycle of dairy cattle: example Germany

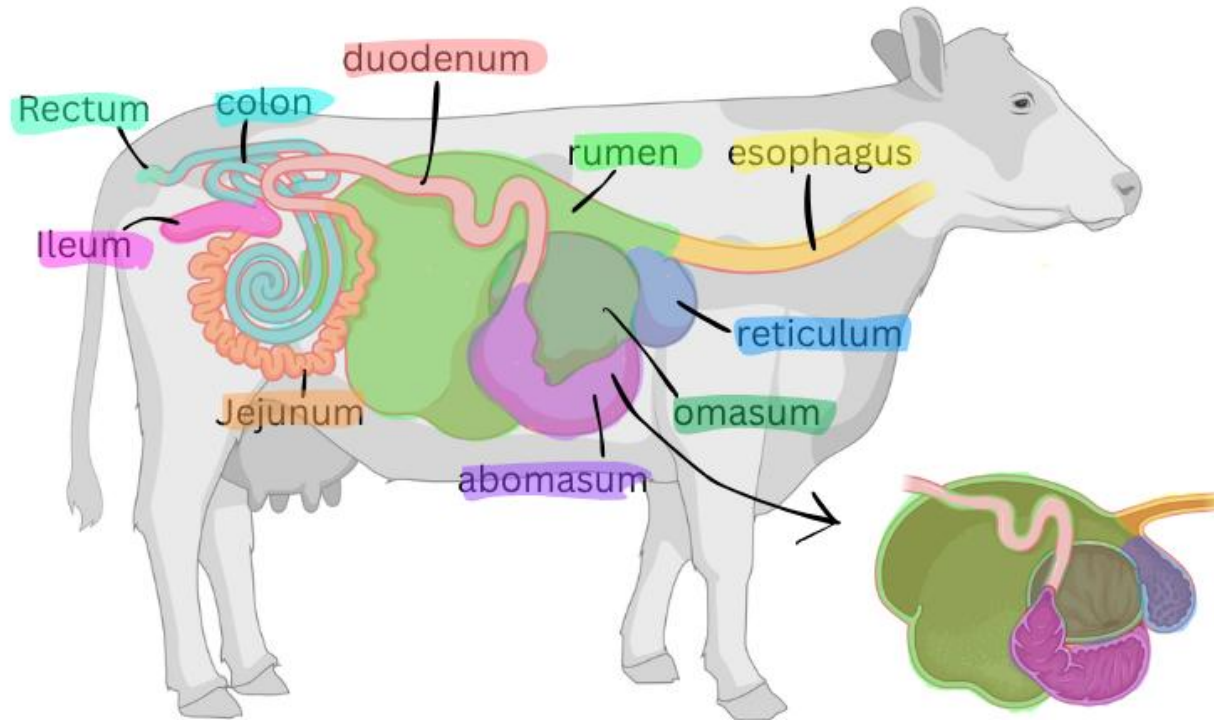


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Ruminants - Production cycle of beef cattle



Ruminants - Digestion in ruminants



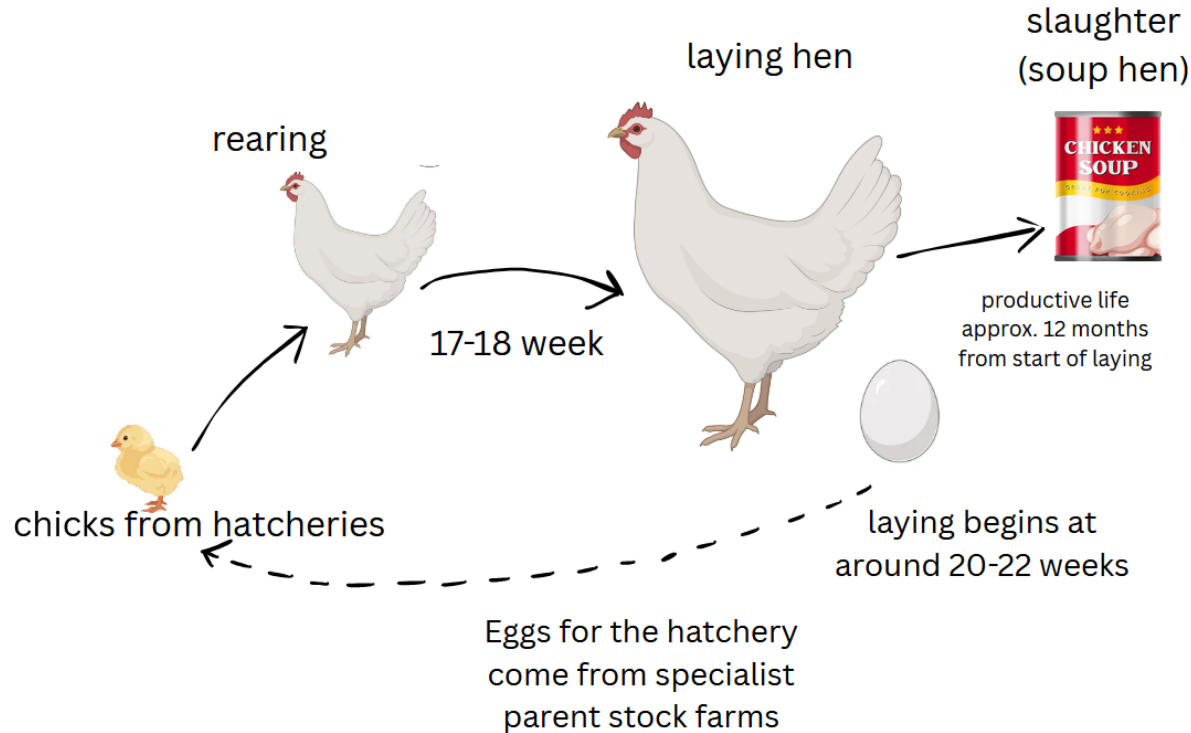
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Monogastric animals - Poultry

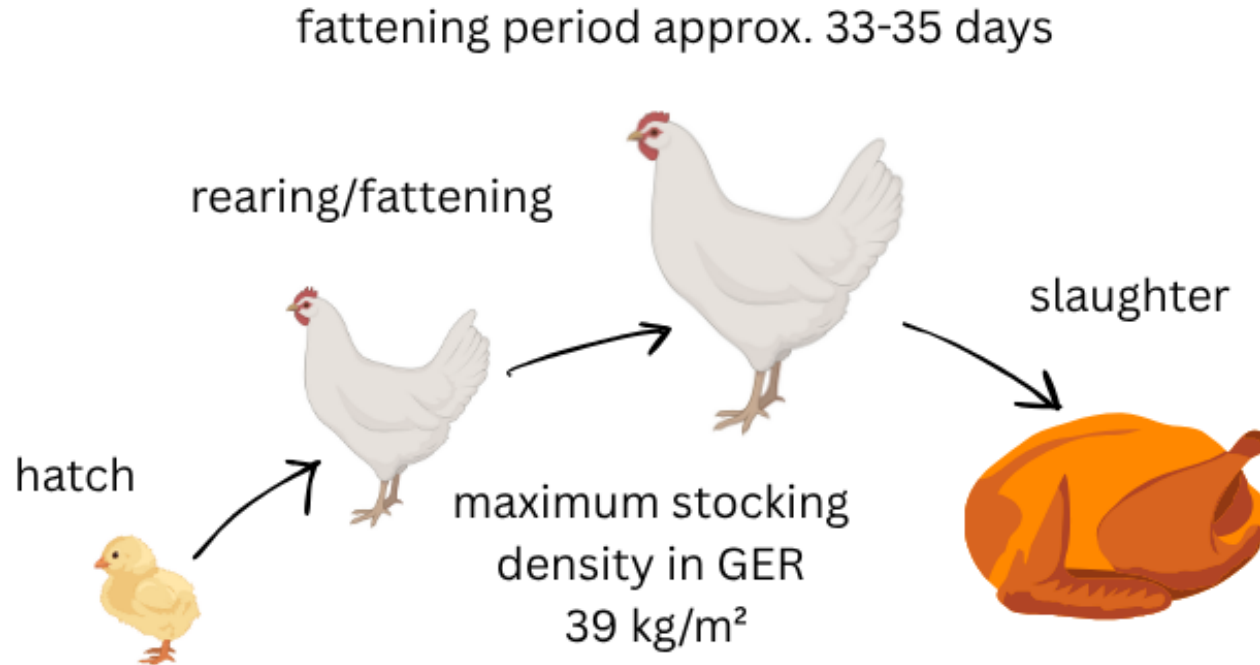
Poultry are monogastric animals. This means that, like humans, they have only one stomach. The stomach contains glands that release enzymes capable of breaking down easily digestible carbohydrates (containing alpha-glycosidic bonds). There are two main ways in which poultry is utilised. On the one hand, laying hens lay eggs; on the other, broiler poultry can be used for meat production.



Poultry - Production cycle of laying hen

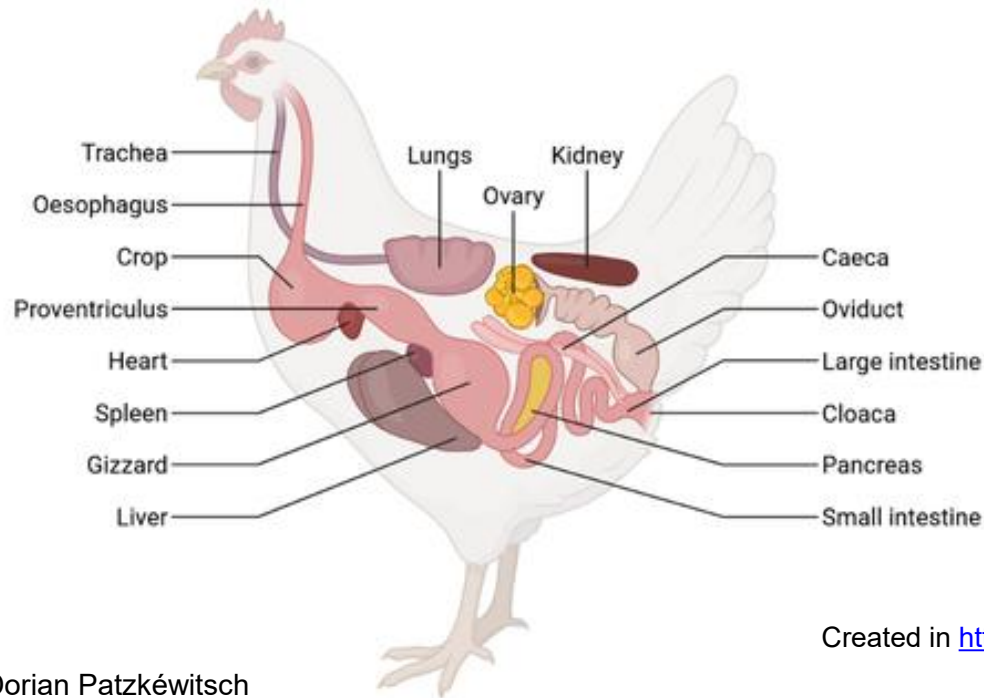


Poultry - Production cycle of broiler chicken



Poultry - Chicken anatomy

Chicken Organ Anatomy



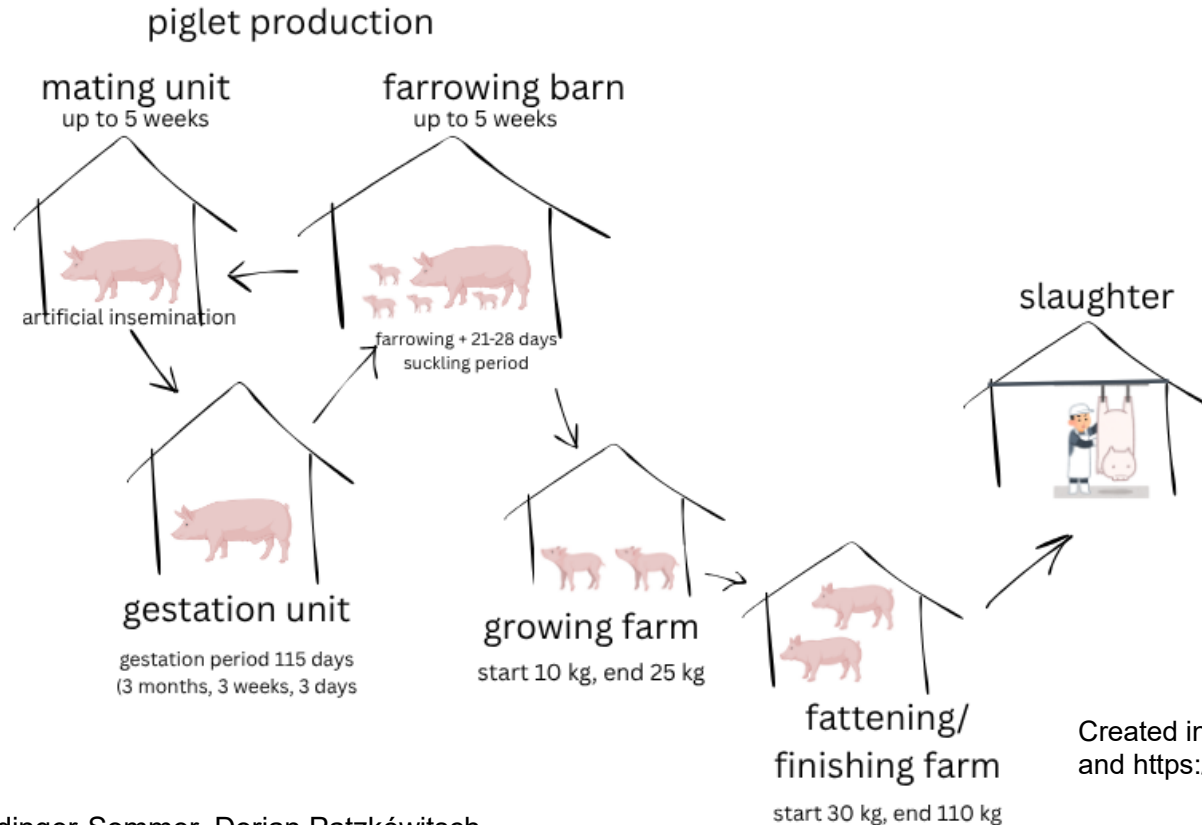
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Monogastric animals - Pigs

Pigs are also monogastric animals. Pigs are primarily reared for meat production. However, pig farming is divided into two sectors: there are farms that keep breeding sows and specialise in piglet production, and there are farms that purchase piglets from these farms and fatten them up to slaughter weight. In some farms, both sectors are combined.

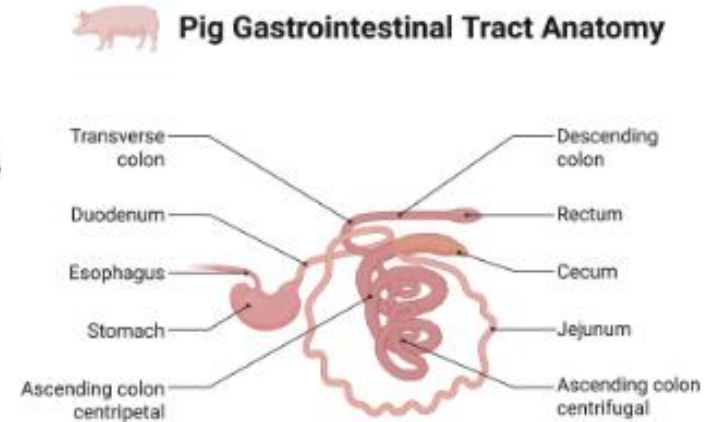
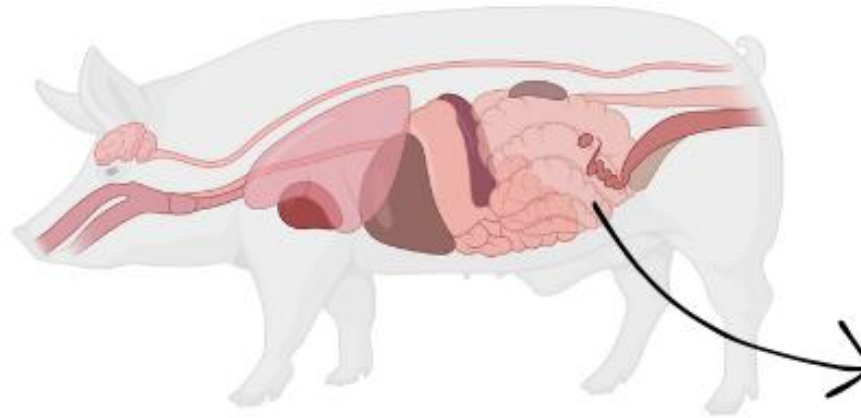


Pigs - Production cycle of pigs



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Pigs - Gastrointestinal tract of pigs



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Thank you very much for your interest!

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