

# GM Food Newsletter

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## King of the farm

Once upon a time, there was an animal farm. In the animal farm lived the "King Cattle" who was proud of the top quality beef and excellent milk production of its breed. The "King Cattle" was living happily until one day, something happened to change its status in the farm...



**King cattle :** Moo Moo, who are you? I have not met you before. Why do you look almost the same as me?

**Small king cattle :** Moo Moo, haven't you heard about me? I am a cloned cattle made to "be" the same as you. I have joined this farm just a few days ago.

**King cattle :** (Surprised) What? What is it supposed to mean?

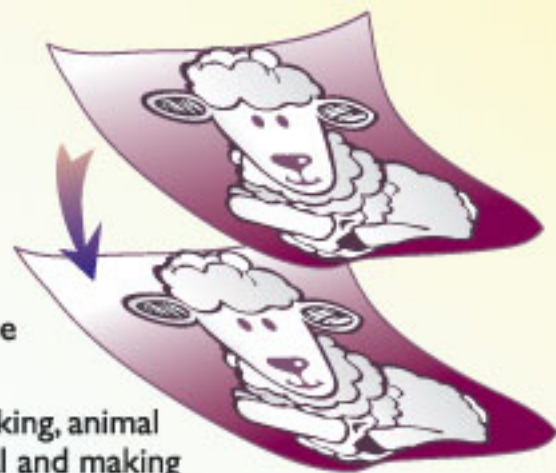
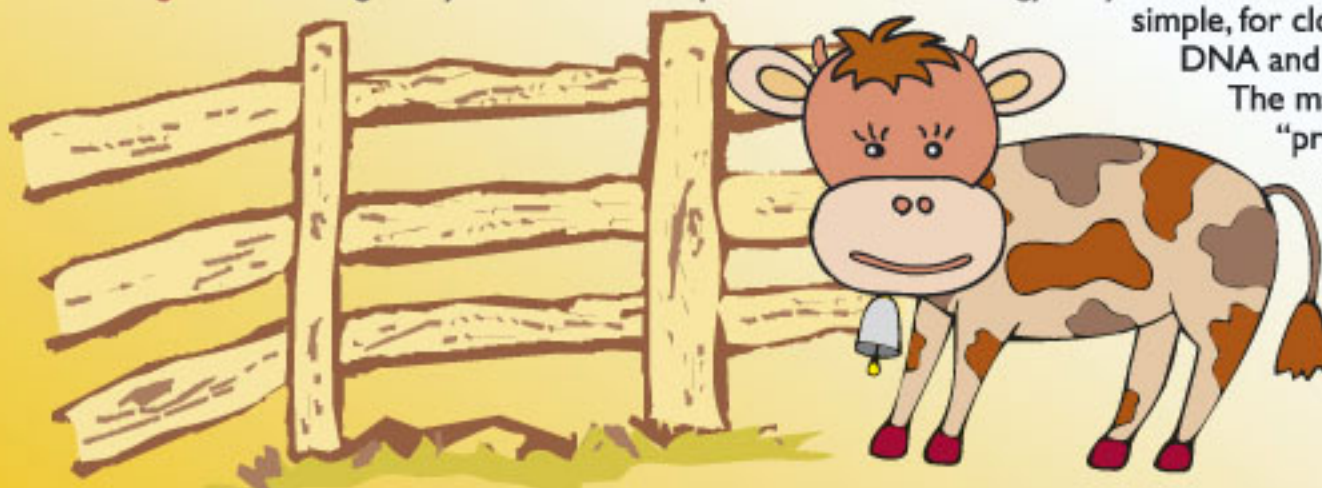
**Small king cattle :** Well, since it seems you know very little about "cloning", which is a type of modern biotechnology, let me explain a little bit more. I am produced by a technique called "animal cloning". Have you heard of the sheep named Dolly?

**King cattle :** Oh, yes! I learnt from my neighbour sheep that Dolly was a cloned sheep born in 1996 in Scotland. I am not sure how she was born. You meant she was a product of animal cloning!

**Small king cattle :** Yes, exactly. She was a product of animal cloning. Simply speaking, animal cloning is a process of taking a full set of DNA from an animal and making copies of it, so that identical twins of that animal can be made. So it explains why I look almost the same as you.

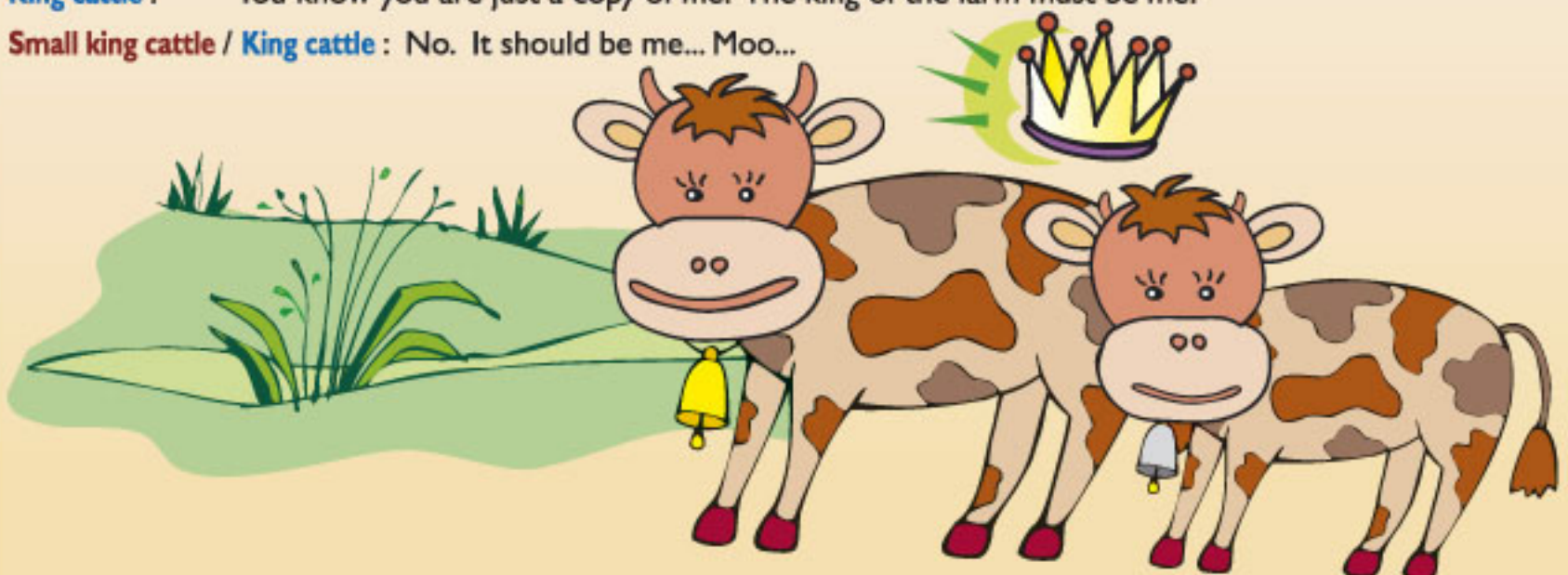
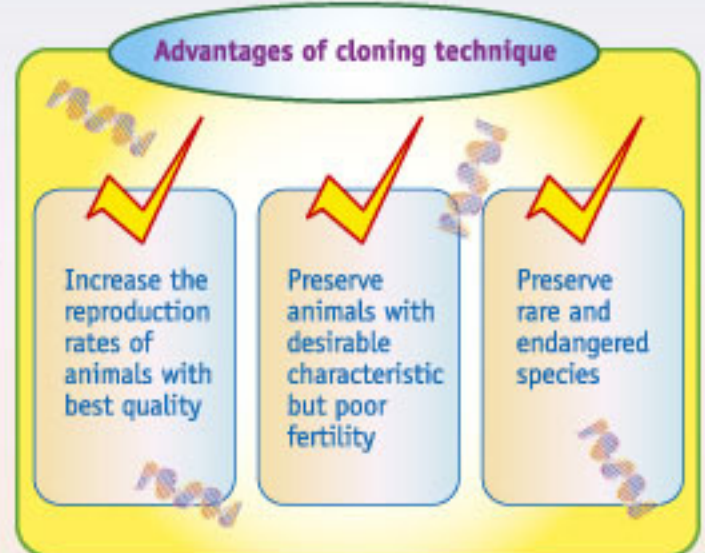
**King cattle :** Wait a minute, I'm still confused. I understand that our feed, like corns, are "genetically modified". Is genetic modification the same as cloning?

**Small king cattle :** Though they are both developed from biotechnology, they refer to different techniques. To make it simple, for cloning, you obtain a set of DNA and make "photocopies" of it. The main purpose of cloning is to "preserve" some good qualities. But for genetic modification, small sequences of DNA are inserted to "inherit" some desirable characteristics.





- King cattle :** Oh, I just can't believe it!! Our family is proven to be the best cattle breed and we have won so many Awards for this farm. I can't see why there is a need to produce you?
- Small king cattle :** Of course, there are some advantages. Cloning is a technique that can increase the reproduction rates of animals with best quality, preserve animals with desirable characteristic but poor fertility, and preserve rare and endangered species. Your best qualities are inherited in me now.
- King cattle :** Are you sure? Have any of your products been put on the market to test your qualities?
- Small king cattle :** Due to the high cost, cattles like me are only used for breeding rather than meat production for the time being. However, in the future, when the technology becomes cost-effective enough, our meat may be introduced into the market. As a product of animal cloning, I feel that I am superior to you.
- King cattle :** You know I am the authentic one, and there is absolutely no risk from eating me. Are you sure you are as safe as me for human consumption?
- Small king cattle :** Well, I know scientists have been conducting research in this area. Recent research has found evidence that beef and milk derived from cloned cattles, like me, are safe for human consumption.
- King cattle :** Umm... You should bear in mind that cloning is a new technique, so close monitoring on the safety of food derived from cloned animals is needed. In fact, some inspectors will visit our farm this afternoon to check whether all of us are healthy.
- Small king cattle :** I don't think there will be a problem for me to pass the check-up. I am the best. The king of the farm must be me.
- King cattle :** You know you are just a copy of me. The king of the farm must be me.
- Small king cattle / King cattle :** No. It should be me... Moo...



For more information on GM food, please visit our website

[www.fehd.gov.hk/safefood/gmf/index1.html](http://www.fehd.gov.hk/safefood/gmf/index1.html)