

Important information in individual records of water consumption of hyper prolific lactating sows

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Background

Approximately 80% of sow milk is water, which makes water a very important element in feeding for high milk production.

Objective

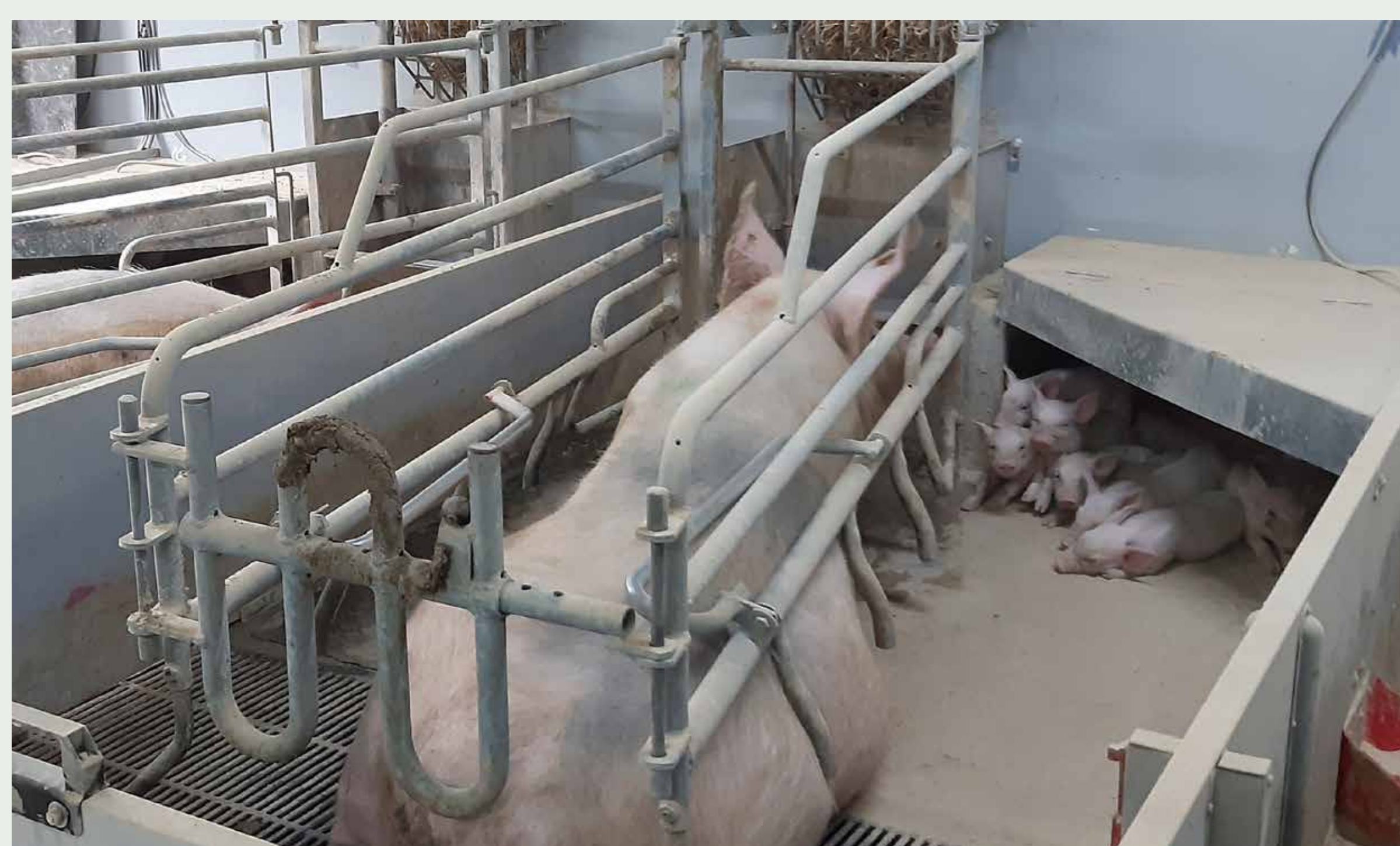
The aim of the present study was to determine normal-level for 24 hours water-consumption for individual sows and variation between sows in a farrowing unit before, during and after farrowing when sows were dry-fed.

Materials and Methods

- During a 12-month-period, data was recorded in a commercial herd with 250 annual sows.
- The sows were primarily first and second parity.
- Average litter size was 18 liveborn piglets and 1 stillborn per litter.
- Records of daily water consumption were registered for sows five days before farrowing until day 21.
- Outdoor temperatures were collected from a nearby weather-station.

Results

- The daily water consumption (median (L/sow/day)) day 4 was 20 L; day 11 it was 25 L and day 18 it was 28 L (Fig. 1).
- The recorded level of water-consumption was higher than reported in older studies but close to the water requirement of sows being dry-fed and nursing app. 14 piglets as the requirement previously have been estimated to be 18 L; 24 L and 26 L at day 4, day 11 and day 18 respectively.
- The increased water-consumption is expected to be explained by a higher feed uptake and a higher milk production than registered in older studies.
- There was an indication that dry-fed sows, which had four or more stillborn piglets in their litter, had a longer period without drinking during farrowing than sows with less stillborn.



- Data indicated that sows with a lower water consumption day 2 post farrowing continued to have a lower water consumption as well as sows with a higher water consumption day 2 post farrowing continued to have a higher water consumption.
- Sows, that the caretakers diagnosed as needing treatment with antibiotic post farrowing (day 0-day 2), appeared to drink a lower volume per drinking and less volume per day the last two days before farrowing.
- The current data did not show a correlation between daily water consumption and number of pigs weaned, however the weight gain of weaned pigs was not recorded.
- The daily water consumption was higher in periods with a constant outdoor temperature above 10°C than in periods with lower temperatures.

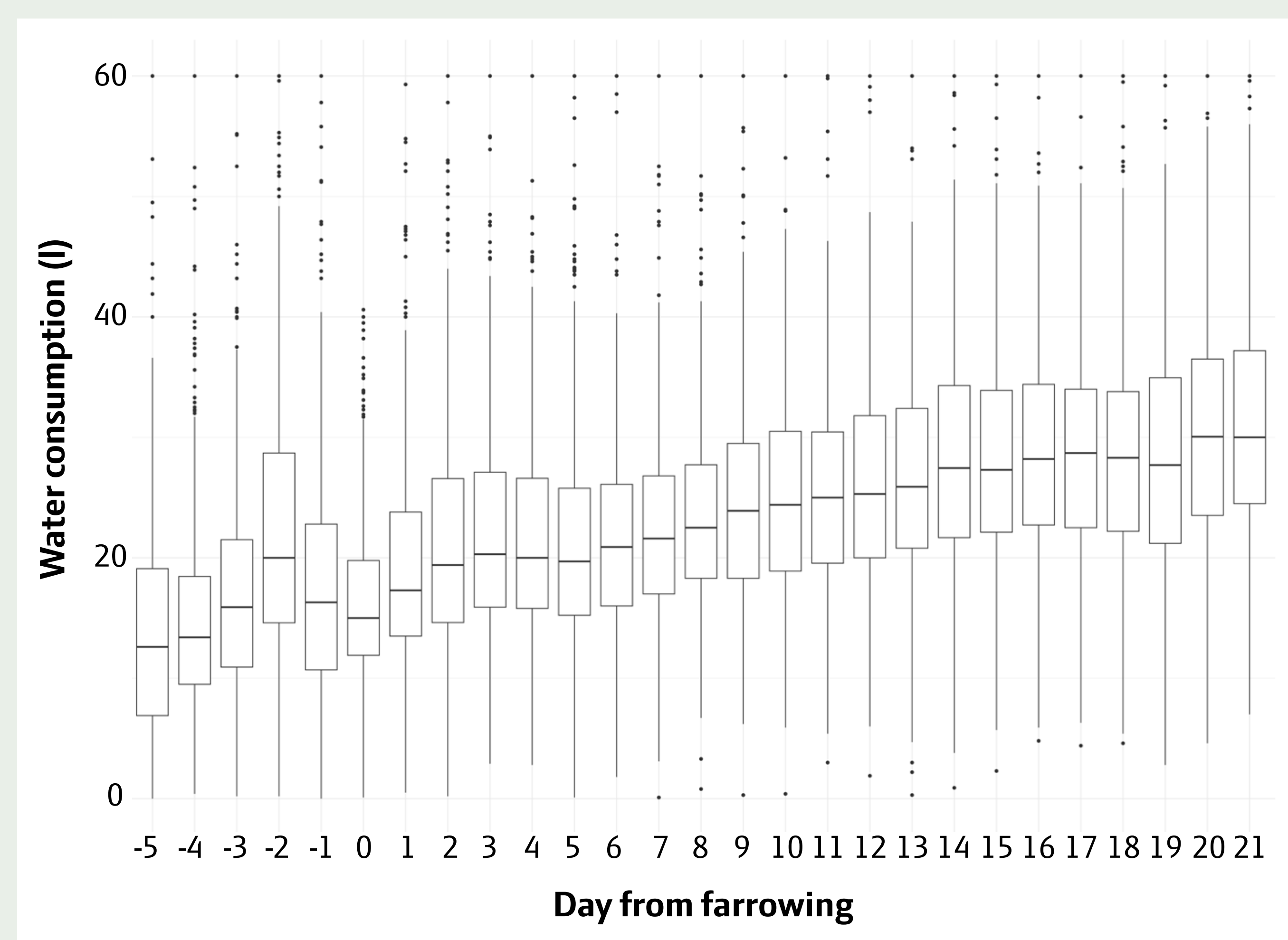


FIGURE 1. Daily water consumption (L/sow/day) from 5 days before farrowing until 21 days after farrowing. Day 0 = day of farrowing. The boxes show 25; 50 and 75%-percentiles

Conclusion

Data indicated daily water consumption as a relevant tool to be used as it is real-time and at individual sow level. For more refined use, data should be collected from more herds and should include weaning weight of litters and consecutive lactations for sows within herds.

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