

Supplementary data to publication in “Journal of Dairy Science” (DOI:

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**Impact of different dietary regimens at dry-off on performance, metabolism, and immune system in dairy cows**

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### **Supplemental Figure Captions.**

**Supplemental Figure S1.** Dry matter intake (DMI) in dairy cows from d -12 until d +6 relative to dry-off. Cows were either fed concentrates rich in crude protein (Nitrogenic; n = 14), carbohydrates (Glucogenic; n = 14), or lipids (Lipogenic; n = 15). At d -3 before dry-off, feed restriction was applied to half of the cows in all dietary treatments. Data are mean values  $\pm$  SEM. Filled symbols indicate the control groups, empty symbols represent the restricted groups of the respective dietary treatments. Different letters indicate a significant difference ( $P < 0.05$ ) within the restricted (a,b,c) or control group (A,B,C) over time (3-d intervals). A significant difference ( $P < 0.05$ ) between the restrictive and respective control group at the same interval is marked with "\*".

**Supplemental Figure S2.** Milk protein content in dairy cows from d -12 until dry-off. Cows were either fed concentrates rich in crude protein (Nitrogenic; n = 14), carbohydrates

(Glucogenic; n = 14), or lipids (Lipogenic; n = 15). At d -3 before dry-off, feed restriction was applied to half of the cows in all dietary treatments. Data are mean values  $\pm$  SEM. Filled symbols indicate the control groups, empty symbols represent the restricted groups of the respective dietary treatments.

**Supplemental Figure S3.** Milk fat content in dairy cows from d -12 until dry-off. Cows were either fed concentrates rich in crude protein (Nitrogenic; n = 14), carbohydrates (Glucogenic; n = 14), or lipids (Lipogenic; n = 15). At d -3 before dry-off, feed restriction was applied to half of the cows in all dietary treatments. Data are mean values  $\pm$  SEM. Filled symbols indicate the control groups, empty symbols represent the restricted groups of the respective dietary treatments. The letters x and y indicate a significant difference ( $P < 0.05$ ) between d -4 and d -1 relative to dry-off in the restrictive groups.

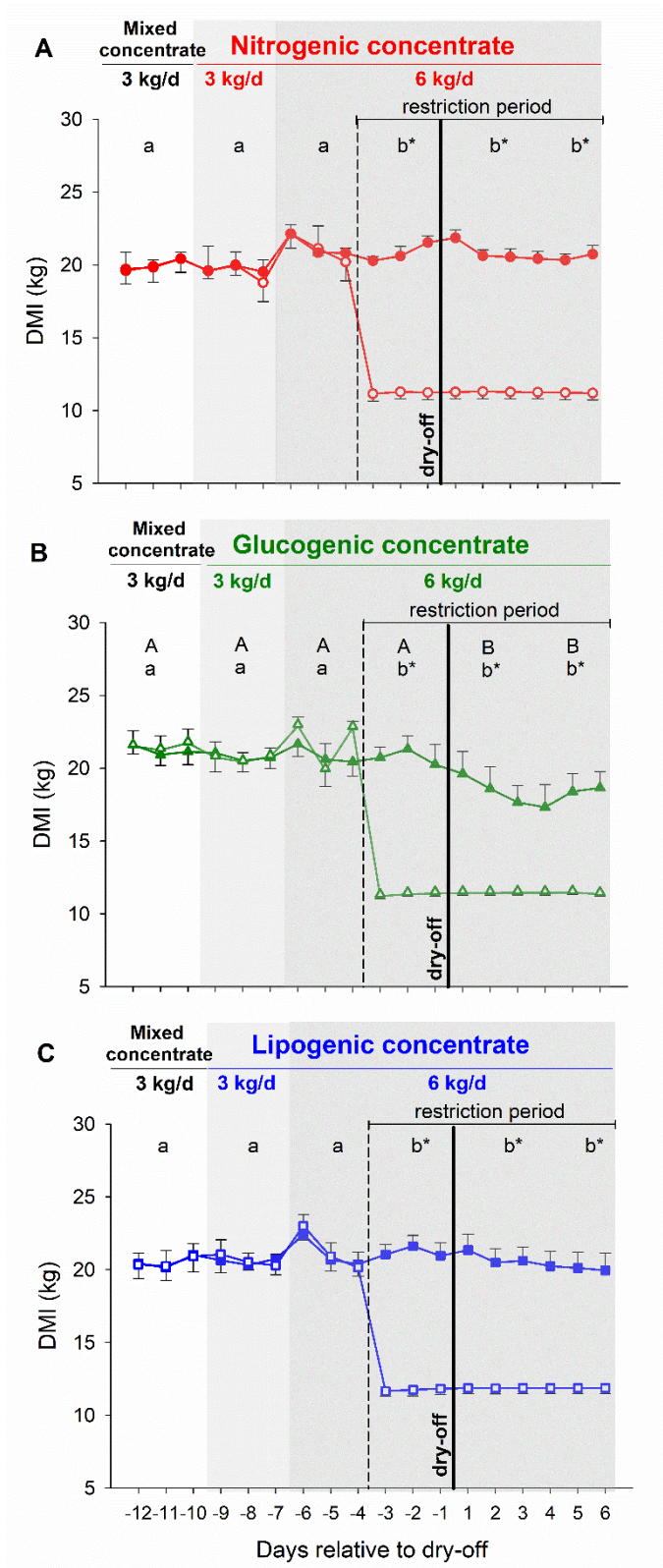
**Supplemental Figure S4.** Milk fat:protein ratio in dairy cows from d -12 until dry-off. Cows were either fed concentrates rich in crude protein (Nitrogenic; n = 14), carbohydrates (Glucogenic; n = 14), or lipids (Lipogenic; n = 15). At d -3 before dry-off, feed restriction was applied to half of the cows in all dietary treatments. Data are mean values  $\pm$  SEM. Filled symbols indicate the control groups, empty symbols represent the restricted groups of the respective dietary treatments. The letters x and y indicate a significant difference ( $P < 0.05$ ) between d -4 and d -1 relative to dry-off in the restrictive groups.

**Supplemental Figure S5.** Milk sodium content in dairy cows from d -12 until dry-off. Cows were either fed concentrates rich in crude protein (Nitrogenic; n = 14), carbohydrates (Glucogenic; n = 14), or lipids (Lipogenic; n = 15). At d -3 before dry-off, feed restriction was applied to half of the cows in all dietary treatments. Data are mean values  $\pm$  SEM. Filled

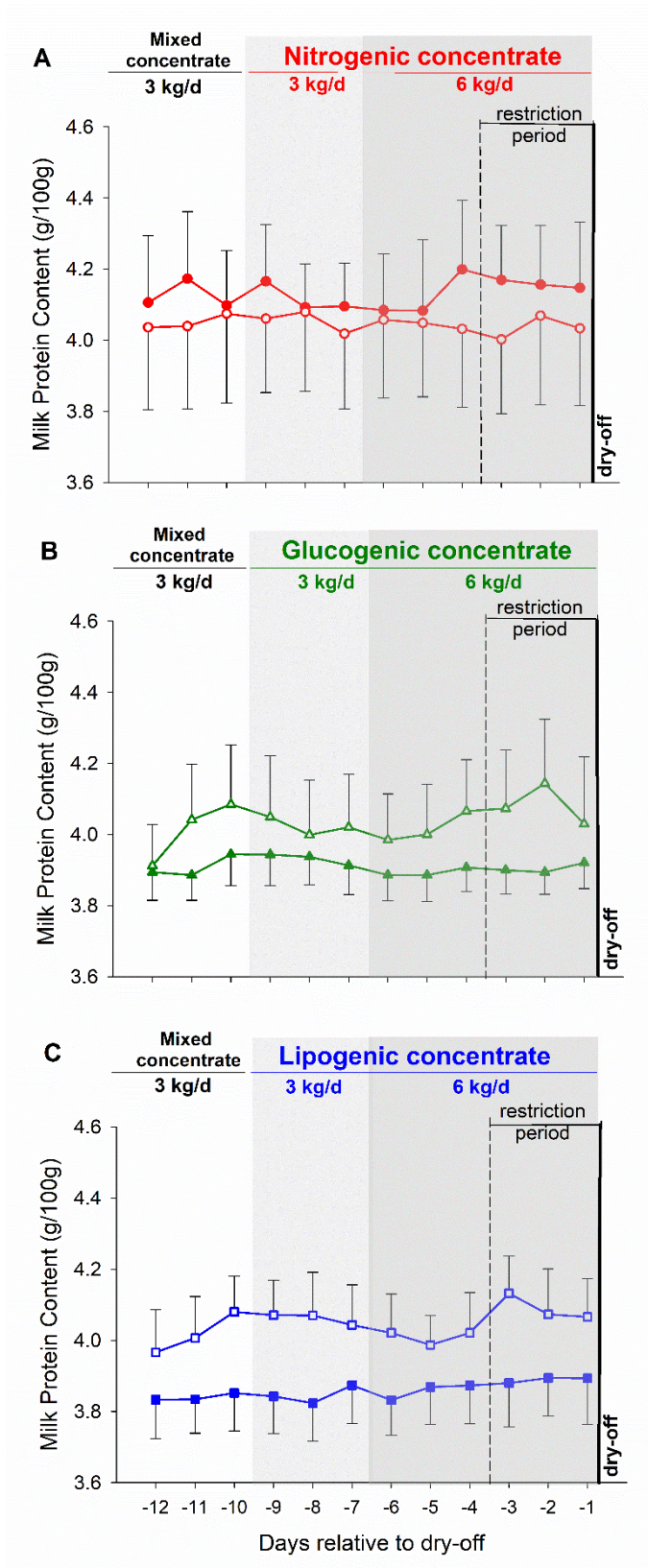
symbols indicate the control groups, empty symbols represent the restricted groups of the respective dietary treatments.

**Supplemental Figure S6.** Milk potassium content in dairy cows from d -12 until dry-off. Cows were either fed concentrates rich in crude protein (Nitrogenic; n = 14), carbohydrates (Glucogenic; n = 14), or lipids (Lipogenic; n = 15). At d -3 before dry-off, feed restriction was applied to half of the cows in all dietary treatments. Data are mean values  $\pm$  SEM. Filled symbols indicate the control groups, empty symbols represent the restricted groups of the respective dietary treatments. The letters x and y indicate a significant difference ( $P < 0.05$ ) between d -4 and d -1 relative to dry-off in the restrictive groups. A significant difference ( $P < 0.05$ ) between the restrictive and respective control group at the same interval is marked with "\*", while tendencies ( $P < 0.10$ ) are marked with "#".

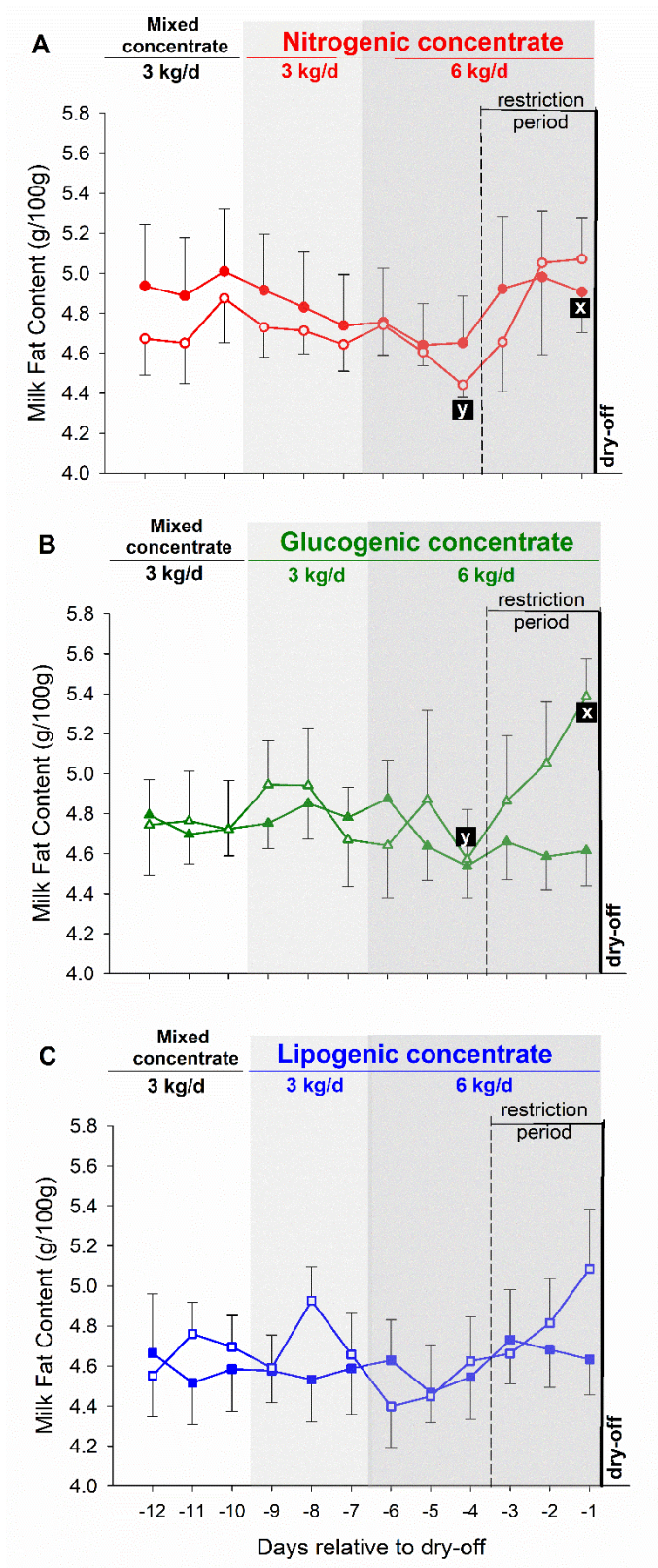
**Supplemental Figure S7.** Milk chloride content in dairy cows from d -12 until dry-off. Cows were either fed concentrates rich in crude protein (Nitrogenic; n = 14), carbohydrates (Glucogenic; n = 14), or lipids (Lipogenic; n = 15). At d -3 before dry-off, feed restriction was applied to half of the cows in all dietary treatments. Data are mean values  $\pm$  SEM. Filled symbols indicate the control groups, empty symbols represent the restricted groups of the respective dietary treatments. A significant difference ( $P < 0.05$ ) between the restrictive and respective control group at the same interval is marked with "\*", while tendencies ( $P < 0.10$ ) are marked with "#".



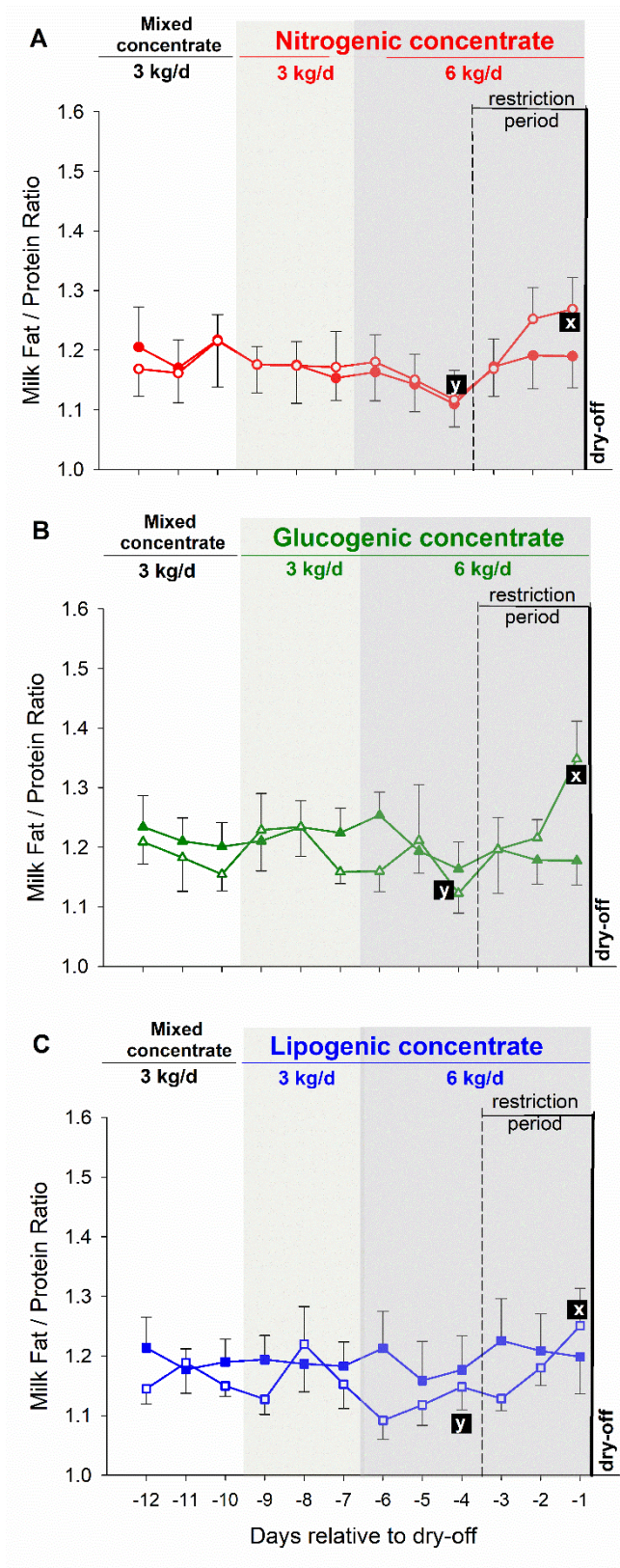
**Supplemental Figure S1.**



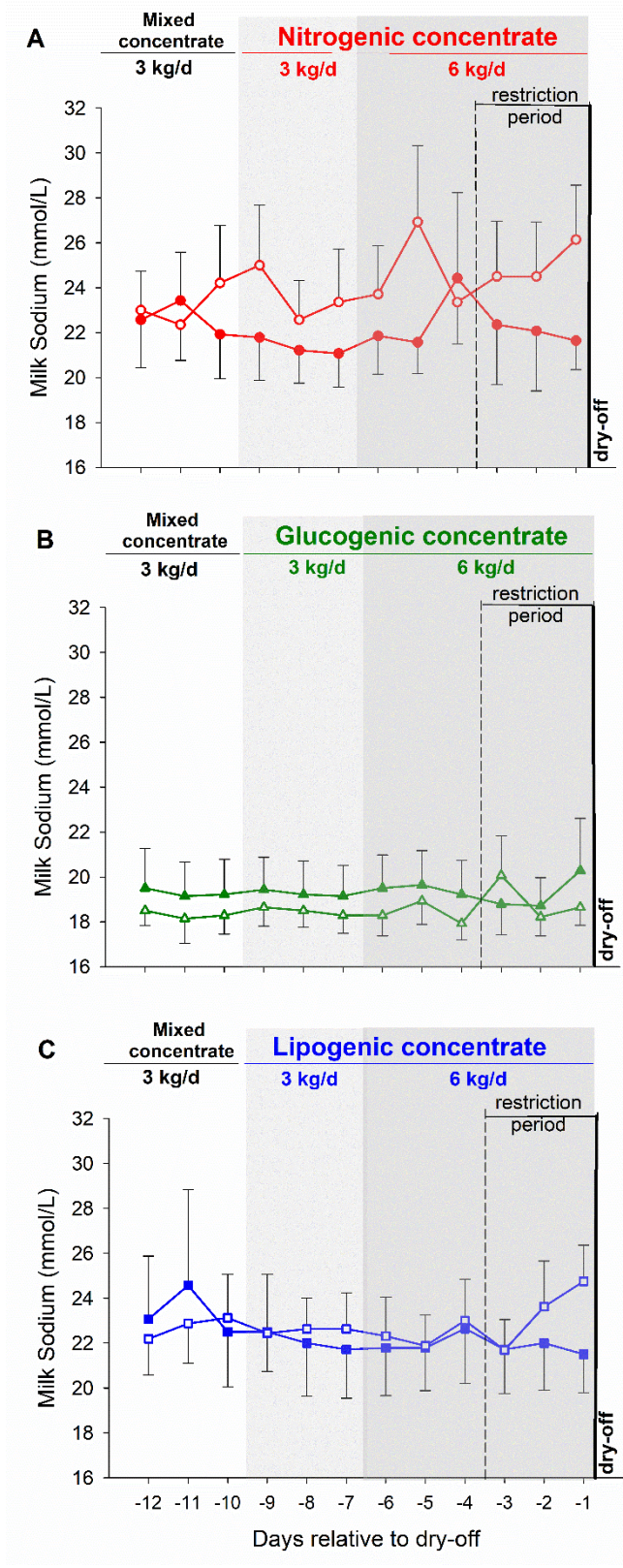
**Supplemental Figure S2.**



Supplemental Figure S3.

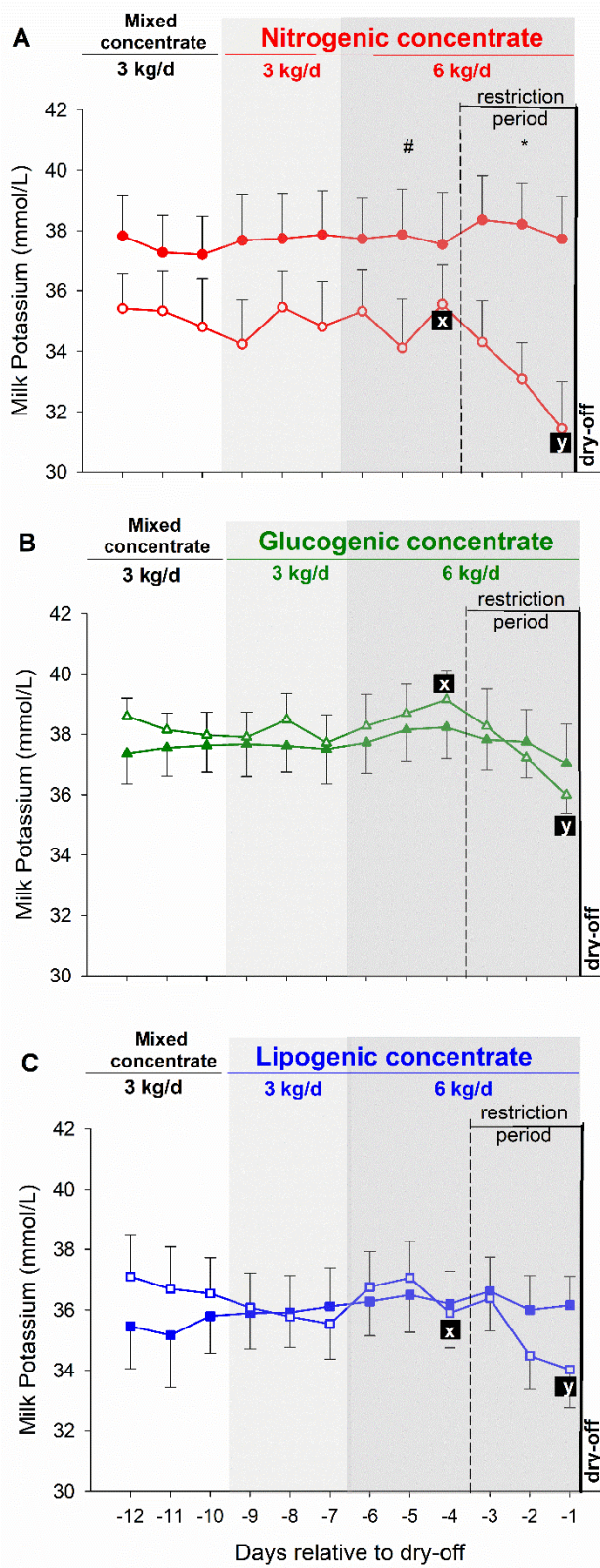


Supplemental Figure S4.

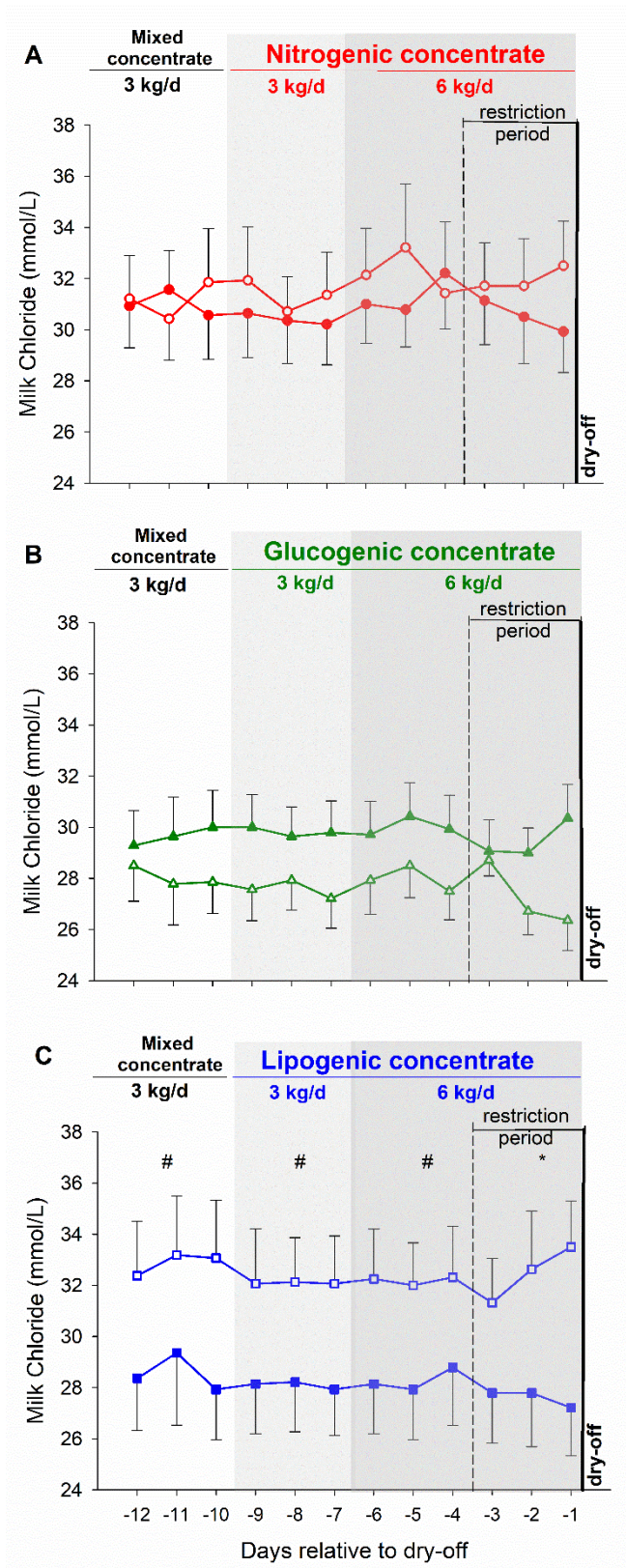


Supplemental Figure S5.





**Supplemental Figure S6.**



Supplemental Figure S7.